

THE ROTATION OF THE EARTH RENDERED VISIBLE.

The experiment now being exhibited in Paris, by which the diurnal rotation of the earth is rendered palpable to the senses, is certainly one of the most remarkable of the modern verifications of theory. Although the demonstration by which the rotation of the earth has been established be such as to carry a conviction to the minds of all who are capable of comprehending it, to which nothing can be imagined to add either force or clearness, nevertheless even the natural philosopher himself cannot regard the present experiment without feelings of profound interest and satisfaction, and to the great mass, to whom the complicated physical phenomena by which the rotation of the earth has been established, are incomprehensible, this experiment is invaluable. At the centre of the dome of the Pantheon a fine wire is attached, from which a sphere of metal, four or five inches in diameter, is suspended so as to hang near the floor of the building. This apparatus is put in vibration after the manner of a pendulum. Under, and concentric with it, is placed a circular table, some 20 feet in diameter, the circumference of which is divided into degrees, minutes, &c., and the divisions numbered. Now it can be shown by the most elementary principles of mechanics, that, supposing the earth to have the diurnal motion upon its axis which is imputed to it, and which explains the phenomena of day and night, &c., the plane in which this pendulum vibrates will not be affected by this diurnal motion, but will maintain strictly the same direction during 24 hours. In this interval, however, the table over which the pendulum is suspended will continually change its position in virtue of the diurnal motion, so as to make a complete revolution round its centre. Since, then, the table thus revolves, and the pendulum which vibrates over it does not revolve, the consequence is, that a line traced upon the table by a point projecting from the bottom of the ball will change its direction relatively to the table from minute to minute and from hour to hour, so that if such point were a pencil and that paper were to spread upon the table, the course formed by this pencil during 24 hours would form a system of lines radiating from the centre of the table, and the two lines formed after the interval of one hour would always form an angle with each other of 15°, being the 24th part of the circumference. Now, this is rendered actually visible to the crowds which daily flock to the Pantheon to witness this remarkable experiment. The practised eye of a correct observer, especially if aided by a proper optical instrument, may actually see the motion which the table has in common with the earth under the pendulum between two successive vibrations. It is, in fact, apparent that the ball, or rather, the point attached to the bottom of the ball, does not return precisely to the same point of the circumference of the table after two successive vibrations. Thus is rendered visible the motion which the table has in common with the earth. It is true that, correctly speaking, the table does not turn round its own centre, but turns round the axis of the earth; nevertheless, the effect of the motion relatively to the pendulum suspended over the centre of the table is precisely the same as it would be if the table moved once in 24 hours round its own centre, for although the table be turned in common with the surface of the earth round the earth's axis, the point of suspension of the pendulum is turned also the same time round the same axis, being continually maintained verticle above the centre of the table. The plane in which the pendulum vibrates does not, however, partake of this motion, and consequently has the appearance of revolving once in 24 hours over the table, while, in reality, it is the table which revolves once in 24 hours under it.—*Globe.*

WHAT ARE BIRDS GOOD FOR?

The "American Agriculturist," in answer to this enquiry, relates the following anecdotes:—
In connexion with this subject, we will give an anecdote related to us by Governor Aiken, of South Carolina, of the rice birds. These little creatures gather round the fields at harvest time in countless myriads, and of course consume considerable grain. Some years ago it was determined to make war upon them, and drive them out of the country, and the measure was in some degree successful, as far as getting rid of birds. "What are birds good for?" The rice planter soon found out, for with the decrease of birds, the worms increased so rapidly, that instead of a few scattering grains to feed the birds, the whole crop was demanded to fill the insatiable maw of the army which came to destroy every young shoot, as fast as they sprung from the ground. Most undoubtedly the birds were invited back again with a hearty welcome. Rice cannot be cultivated without their assistance.
A few years ago, the blackbirds in the northern part of Indiana, were considered a grievous nuisance to the farmer. Whole fields of oats were sometimes destroyed, and the depredations upon late corn were greater than can be believed, if told. The farmer sowed and the birds reaped. He scolded and they twittered. Occasionally a charge of shot brought down a score, but made no more impression upon the great sea of birds than the removal of a single bucket of water from the great salt puddle. A few years later, every green thing on the land seemed destined to destruction by the army worm. Man was powerless—a worm among worms. But his best friends, the hated blackbirds, came to his relief just in time to save when all seemed lost. No human aid could have helped him. How thankful should man be that God has given him for his companions and fellow laborers in the cultivation of the earth, these lovely birds. "The laborer is worthy of his hire." Why should we grudge the little moiety claimed by the busy little fellows which followed the plough, and snatching the

worm away from the seed, that it might produce grain for his and our sustenance? "No honest man would cheat a bird of his spring and summer's work."

CHEESE vs. COMMON SHOT.

The greatest ammunition that we have heard of lately, was used by the celebrated Com. Coe, of the Montevideo navy, who, in an engagement with Admiral Brown, of the Buenos Ayrean service, fired every shot from his locker.
"What shall we do, Sir?" asked his first lieutenant, "we've not a single shot aboard, round, grape, canister, and double-headed, are all gone."
"Powder gone, eh?" asked Coe.
"No, Sir; got lots of that yet."
"We had a darn'd hard cheese—a round Dutch one, for dessert at dinner to-day—do you remember it?" said Coe.
"I ought to; I broke the carving knife in trying to cut it, Sir."
"Are there any more aboard?"
"About two dozen. We took them from a drove."
"Will they go into the 18 pounders?"
"By thunder, Commodore, but that's the idea, I'll try 'em," cried the first lieutenant.
And in a few minutes the fire of the old Santa Maria, (Coe's ship,) which had ceased entirely, was re-opened, and Admiral Brown found more shot flying about his head. Directly one of them struck his mainmast, and as it did so, shattered and flew in every direction.
"What the devil is that which the enemy is firing?" asking Admiral Brown, but nobody could tell.
Directly another came in through a port, and killed two men who were standing near him; and then striking the opposite bulwark, burst into splinters.
"By Jove, this is too much; this is some new-fangled Paixhan or other; I don't like 'em at all," cried Brown; and then as four or five more of them came slap through his sails, he gave the order to fill away, and actually backed out of the fight, receiving a parting broadside of Dutch cheeses. This is an actual fact; our informant was the first lieutenant of Coe's ship.—*N. Y. Journal of Commerce.*

The Enterprise, which left the Sandwich Islands, in June last, in search of Sir John Franklin, returned from the Polar regions to Hanalei Kanae, on the 10th of December, and having refreshed there, was on the 29th, only waiting a fair wind to proceed to Hong Kong, thence to return to the Arctic seas in April.

A horrible accident took place at Cologne on the 1st instant. A military magazine, where cartridges were being prepared, exploded while upwards of a hundred men were at work in it. Thirty-six sufferers, sadly scorched and mutilated, were conveyed to the hospital; an officer, two corporals, and seven men were buried under the ruins.
THE ROCKS OF CALVARY.—In Fleming's *Christology* it is stated that an unbeliever visiting the sacred palace of Palestine, was shown the clefts of Mount Calvary. Examining them narrowly and critically, he turned in amazement to his fellow travellers:—"I have long been a student of nature, and am sure the clefts and rents in this rock were never done by nature, or any ordinary earthquake; for by such a concussion, the rocks must have split by the veins, and where it was weakest in the adhesion of parts. "For this," said he, "I thank God that I came to see the standing monument of a miraculous power by which God gives evidence to this day of the divine mission of Christ."

A NEW MAN.—Gennan speculators have got hold of a new subject. It is neither more nor less than a "new man." The story—as we find it related in the *Correspondenz of Berlin*—attests that a stranger was picked up at the end of last year in a small village of the district of Lebas, near Frankfort-on-the-Oder, whither he has wandered no one could tell whence. Such a circumstance could hardly have piqued curiosity in another country; but to a people fond of speculation, and situated far away from the great highways of the world, there was something strange and startling in the fact, that the stranger spoke German imperfectly, and had all the marks of a Caucasian origin. Whether the man was a common impostor, and tricked the village authorities, or whether these worthies began in their usual way to construct a history for him "out of the depths of their moral consciousness," is uncertain; at all events they looked on him as a great prize, and carried him off to Frankfort. On being questioned by the burgomaster of that enlightened city, the stranger said his name was Jophar Vorin, and that he came from a country called Laxaria, situated in the portion of the world called Sakria. He understands, it is affirmed, none of the European languages (except, we must suppose, the broken German), but reads and writes what he calls the Laxarian and Arabian tongues. The latter he declares to be the written language of the clerical order in Laxaria, and the other the common language of the people. He says his religion is Christian in form and doctrine, and that it is called Ispatian. Laxaria he represents to be many hundred miles from Europe, and separated by vast oceans from it. His purpose in coming to Europe, he alleges, was to seek a long-lost brother; but he suffered shipwreck on the voyage—where, he does not know—nor can he trace his route on shore on any map or globe. He claims for his unknown race a considerable share of geographical knowledge. The five great compartments of the earth he calls Sakria, Aflar, Aslar, Auslar, and Euplar. The sages of Frankfort-on-the-Oder, after much examination of the tale and its bearer, have come to the conclusion that it is true. Some men believe things because they are incredible. However, Jophar Vorin has been carefully despatched to Berlin, and is now the subject of much scientific and curious gossip in the Prussian capital. What mystifications hides under the story time will probably show.—*Globe.*
BEAUTIFUL SENTIMENT.—John G. Whittier, the Quaker poet, in writing about Irish Emigrants among us, says: "For myself, I confess I feel sympathy for the Irishman. I see him as the representative of a generous, warm-hearted, and cruelly oppressed people. That he loves his native land—that he cannot forget the claims of his mother-land; that his religion, is dear to him; does not decrease my estimation of him. A stranger in a strange land, he is to me an object of interest. The poorest and rudest has a romance in his history. Amidst all his gaiety of heart and national drollery, and wit, the poor emigrant has sad thoughts

of the 'ould mother of him,' sitting lonely in her solitary cabin by the bog side; recollections of a father's blessing and a sister's farewell; that sister loved so devotedly, are haunting him; a grave-mound in a distant church-yard, far beyond the 'wide waters,' has an eternal greenness in his memory; for there, perhaps, lies 'a darlint child,' or a 'sweet crather,' who once loved him; the New World is forgotten for the moment, but Killarney and the Liffy sparkle before him; Glendalough stretches beneath him its dark, still mirror; he sees the same evening sunshine rest upon and hallow alike with nature's blessing the ruins of the seven churches of Ireland's apostolic age, the broken mound of the Druids, and the round towers of the Phœnician sun worshippers; beautiful and mournful recollections of home awaken within him, and the rough and seemingly careless and light-hearted laborer melts into tears. It is no light thing to abandon one's country gods. Touchingly beautiful was the injunction of the Prophet of the Hebrews: 'Ye shall not oppress the stranger, for ye know not the heart of the stranger, seeing that ye were strangers in the land of Egypt.'

BRITISH AMERICA FIRE, LIFE, AND INLAND MARINE ASSURANCE COMPANY.

INCORPORATED 1833. CAPITAL STOCK—£100,000.

THE Public are most respectfully informed, that the Office of this Institution is REMOVED to No. 33, Great St. James Street, this city, (late Terry's Hotel.) ASSURANCE against Accidents by FIRE; or the dangers of INLAND NAVIGATION, will be granted at the lowest possible rates of Premium, compatible with security to the PUBLIC, and the credit and safety of the INSTITUTION.

The numerous body of influential men, who are interested as STOCKHOLDERS, and the large amount of paid up Capital, invested at interest in this Province, guarantee the liberal adjustment, and the speedy settlement of all equitable claims which may be made upon the Company.

WILLIAM STEWARD, Manager Branch Office.

Montreal, May 8, 1851.

ST. PATRICK'S SOCIETY.



A SPECIAL MEETING of the St. Patrick's Society, will be held at St. Patrick's House, on Monday Evening next, the 12th instant, at HALF-PAST SEVEN o'clock. A punctual attendance of Members is requested.

By Order, H. J. LARKIN, Secy.

Montreal, May 7, 1851.

ATTENTION!

OWEN MCGARVEY, HOUSE AND SIGN PAINTER, GLAZIER, &c. &c. &c.

THE Advertiser returns thanks to his friends and the public, for the liberal support he has received since his commencement in business. He is now prepared to undertake Orders in the most extensive manner, and pledges himself that he will use his best abilities to give satisfaction to those who may favor him with their business.

Graining, Marbling, Sign Painting, Glazing, Paper-Hanging, White Washing and Coloring, done in the most approved manner, and on reasonable terms. No. 6, St. Antoine Street, opposite Mr. A. Walsh's Grocery Store. Montreal, May 7, 1851.

JOHN O'FARRELL, ADVOCATE, OFFICE, — GARDEN STREET,

Next door to the Ursulines Convent, NEAR THE COURT HOUSE. Quebec, May 1, 1851.

H. J. LARKIN, ADVOCATE, No. 27 LITTLE ST. JAMES STREET, MONTREAL.

THE SHIP CHANDLERY BUSINESS heretofore carried on by Mr. FRANCIS MULLINS, will be continued by the subscriber, on his own account solely; who expects by the first arrivals an extensive stock of every article in the MARINE LINE, direct from the best manufacturers.

F. F. MULLINS, No. 67 Commissioner Street, Opposite the Quebec Steamboat Wharf. Montreal, 30th April, 1851.

SEALED TENDERS

WILL be received until THURSDAY, the 15th MAY next, at 12 o'clock Noon, for the finishing and completing of the interior of the CATHOLIC CATHEDRAL in the City of Kingston, according to plans and specifications to be seen at the Bishop's Palace in said City, after the 27th instant, between the hours of 12 and 5 o'clock, P.M. Tenders to be addressed to the Rev. P. DOLLARD, Kingston, and endorsed "Tender for Carpenter and Joiner Work." "Tender for Plaster and Ornamental Work."

One Contract for the whole work would be preferred, and satisfactory security will be required for the due completion of the same.

P. FARRELL, Sec. Building Committee. Kingston, April 24, 1851.

INSPECTION OF BEEF AND PORK.

THE Subscriber, in returning his sincere thanks for past favors, begs to inform his friends that he holds himself in readiness to INSPECT BEEF and PORK for the OWNERS thereof, conformable to the amended Act of the Provincial Parliament of last Session. FRANCIS MACDONNELL. Montreal, 24th April, 1851.

LARD FOR SALE. 100 KEGS FRESH LEAF LARD, averaging 112 lbs. each. JAMES MEGORIAN. Montreal, 23rd April, 1851.

INFORMATION WANTED Of ELIZA DINNING, daughter of Timothy Dinning and Ellen Coleman, who left Quebec in autumn 1849. When last heard of, she resided in Troy, N.Y. Any information respecting her, addressed to her father, in care of the Rev. Mr. Nelligan, of St. Sylvester, C. E., would confer a lasting favor on her disconsolate parents. N. Y. Freeman's Journal and Boston Pilot will please copy.

MONTREAL CLOTHING HOUSE, No. 233, St. Paul Street.

C. GALLAGHER, MERCHANT TAILOR, has for Sale some of the very BEST of CLOTHING, warranted to be of the SOUNDEST WORKMANSHIP and no lumbugging. N. B. Gentlemen wishing to FURNISH their OWN CLOTH, can have their CLOTHES made in the Style with punctuality and care. Montreal, Oct., 19th 1850.

DR. TAVERNIER HAS the honor of informing the Citizens of Montreal, and the Inhabitants of its vicinity, that, having returned from Europe, he will begin anew to attend to practice, on the first of March next. Surgery—in his former residence, No. 2 St. Lawrence main street. Montreal, Feb. 12, 1851.

THOMAS BELL, Auctioneer and Commission Agent, 179 NOTRE DAME STREET, MONTREAL.

SALES OF DRY GOODS, BOOKS, &c., EVERY TUESDAY, THURSDAY, & FRIDAY EVENING.

L. P. BOIVIN, Corner of Notre Dame and St. Vincent Streets, opposite the old Court-House,

HAS constantly on hand a LARGE ASSORTMENT of ENGLISH and FRENCH JEWELRY, WATCHES, &c.

JOHN PHELAN'S CHOICE TEA, SUGAR, AND COFFEE STORE, No. 1 St. PAUL STREET, Near Dalhousie Square.

R. TRUDEAU, APOTHECARY AND DRUGGIST, No. 111 SAINT PAUL STREET, MONTREAL:

HAS constantly on hand a general supply of MEDICINE and PERFUMERY of every description. August 15, 1850.

JOHN M'CLOSKEY, Silk and Woollen Dyer, and Clothes Cleaner, (FROM BELFAST,) No. 33 St. Lewis Street, in rear of Donegana's Hotel, ALL kinds of STAINS, such as Tar, Paint, Oil, Grease, Iron Mould, Wine Stains, &c., CAREFULLY EXTRACTED. Montreal, Sept. 20, 1850.

RYAN'S HOTEL, (LATE FELLERS,) No. 231, St. PAUL STREET, MONTREAL.

THE Subscriber takes this opportunity of returning his thanks to the Public, for the patronage extended to him, and takes pleasure in informing his friends and the public, that he has made extensive alterations and improvements in his house. He has fitted up his establishment entirely new this spring, and every attention will be given to the comfort and convenience of those who may favor him by stopping at his house. THE HOTEL IS IN THE IMMEDIATE VICINITY OF MERCANTILE BUSINESS, Within a few minutes walk of the various Steamboat Wharves, and will be found advantageously situated for Merchants from the Country, visiting Montreal on business.

THE TABLE Will be furnished with the best the Markets can provide, and the delicacies and luxuries of the season will not be found wanting. THE STABLES ARE WELL KNOWN TO THE PUBLIC, AS LARGE AND COMMODIOUS. And attentive and careful persons will always be kept in attendance.

THE CHARGES WILL BE FOUND REASONABLE. And the Subscriber trusts, by constant personal attention to the wants and comfort of his guests, to secure a continuance of that patronage which has hitherto been given to him. M. P. RYAN. Montreal, 5th September, 1850.