

Science Siftings

By 'Volt'

Wandering Poles.

In addition to the variation of the earth's axis produced by the precession of the equinoxes, occupying a period of 25,868 years, it has been shown by Peters (1844) and Nyren (1873) that there is also a periodical shifting of the axis of rotation relatively to the earth's surface. This produces a continuous variation of latitudes, a fact which had been suspected by Bessel so early as 1817. Prof. Albrecht, who has summarised the results of different observers, finds that since 1890 the earth's pole has described an irregular spiral around a mean position from which it does not deviate more than 0.3 degrees (three-tenths of a second of arc). Mr. S. C. Chandler concluded that the variation is composed of two terms, one having a period of fourteen months and the other of a year.

With an Alarm Clock.

An ordinary alarm clock may be made, at any time wished for, to perform various useful services, such, for instance, as unbolting a door. Detach the hammer of the alarm, if you do not wish it to ring the bell, fix the clock firmly in a box fastened to the wall, and set the alarm overnight for, let us say, seven o'clock. Attach a line to the stem of the winding handle of the alarm. Keeping the line taut, attach its other end to the knob of the bolt to be unfastened. At seven o'clock next morning the alarm will 'go off,' of course without sounding the gong. While it is so doing, the handle will revolve, and by winding in the line as it does so will thus unbolting the door. Other adaptations of the same idea will occur to many persons.

Miniature Marvels.

Almost any commonplace object, magnified under a good lens, will reveal astonishing and unsuspected form, structure, and life. For instance—

Insects of various kinds may be seen in the cavities of a grain of sand.

Mould is a forest of beautiful trees, with branches, leaves, and fruit.

Butterflies are fully feathered.

Hairs are tubes filled with pith and ornamented on the outside with scales.

The surface of the human body is covered with scales like a fish. A single grain of sand would cover 150 of these scales, and yet a scale covers about 500 pores. Through these narrow openings the perspiration forces itself like water through a sieve.

Each drop of stagnant water contains a world of creatures swimming with as much freedom as whales in the sea.

Vitality of Seeds.

A highly interesting and well authenticated account is given by Landreth, of an instance of persistent vitality in seeds. Lieutenant Greely, commander, of the Franklin Bay expedition, which sailed north in 1881, took out seeds of various vegetables. Some of these were sown at Fort Conger, 80 degrees 44 minutes north, but the attempt was not successful. This station was abandoned in 1883. In 1899, sixteen years later, the abandoned station at Fort Conger was discovered by Lieutenant Peary, commander of the North Polar expedition. Among other things found was a packet of radish seed in an open box in the attic of the fort. These seeds had been exposed during sixteen years to a winter temperature of 60 to 70 degrees Fahrenheit below zero. The seeds were sent home and remained until the spring of 1905, when they were sown, and 50 per cent. produced perfectly normal plants. The original seed was harvested certainly not earlier than 1880, and consequently was twenty-three years old when sown. The question is raised as to whether the electrically charged atmosphere, so constant in the northern regions, has the effect of prolonging germinative force. It has been observed that the atmospheric electric currents add quite 100 per cent. to the rapidity of plant growth, and to the development of color and strength of perfume.

The people of Armidale were delighted when they heard that Bishop O'Connor had appointed the Very Rev. Father M. Tobin, his private secretary and Administrator of St. Mary's Cathedral, Dean of Armidale. There is no more popular priest in the diocese than the new Dean, and none more zealous or energetic.

Intercolonial

The Very Rev. Father O'Donohoe, the administrator of the parish of Hamilton, in the Maitland diocese, and one of the most popular priests in Australia, had a royal welcome home from his travels recently. People gathered from all parts of the district, and the Sacred Heart schoolroom was quite unable to accommodate the numbers that thronged to his reception.

The Right Rev. Dr. Olier, S.M., Vicar-Apostolic of Central Oceania, has returned to Sydney from his visit to Rome. He is accompanied by three priests, one for his own diocese, and two for the missions under the control of the Very Rev. Father Bertroux, S.M., Prefect-Apostolic of the Southern Solomon Islands. Dr. Olier will remain in Sydney for a month before resuming his voyage to Tonga.

Mr. T. J. Fitzpatrick, well known in life assurance circles, has returned to Sydney after an absence of nearly six years in the United Kingdom, during which time he held an important position as organising inspector for one of the large offices. On leaving London Mr. Fitzpatrick was presented with a very handsome illuminated address and pair of silver-mounted field glasses by the members of the Irish Club.

The Rev. Father T. O'Reilly, of Parramatta, received a very warm welcome home after an absence of a year in Europe and America. The demonstration took the form of a gathering in the grounds of the presbytery, which were brilliantly illuminated. Over a thousand persons were present. In fact, nearly all the parish was there, as well as representative townspeople of all denominations, and several priests from neighboring parishes.

Campbelltown turned out with all its enthusiasm to welcome the Rev. Father James Dunne, P.P., home after his twelve months' holiday tour in Europe, America, and New Zealand. He was publicly welcomed at the Town Hall, the Mayor (Alderman F. Moore) presiding over an attendance that filled the building to overflowing. An illuminated address to Father Dunne was read, and the Mayor presented it, together with a cheque for £100.

His Lordship Dr. O'Connor, Bishop of Armidale, had a splendid reception on his return to his diocese from his trip to the old world. People gathered from far and near to greet him, and messages of welcome home were forwarded from all parts of the Commonwealth. The presentation from the laity exceeded £1000, the priests' gift of a carriage cost £200, and the nuns' gift of harness and horses and a magnificent silver tea and coffee service amounted to about £150. The public reception took place in the Armidale Town Hall, and was a night long to be remembered.

The movement for the presentation of a purse of sovereigns to the Very Rev. Father Connolly prior to his departure from Broken Hill on his projected trip to India, his native land, has says the 'Barrier Miner') had a most successful issue. The response that has been made to the suggestion of the presentation is an eloquent testimony to the high esteem in which Father Connolly is held by people of all creeds and classes in the city in which he has lived and worked so long. The purse, which consisted of 100 sovereigns, was presented to Father Connolly at the Town Hall, where the Mayor (Alderman T. Ivey) presided. The Bishop of Wilcannia (Dr. Dunne) and several non-Catholic clergymen and prominent citizens were present.

His Lordship Dr. Dunne, Bishop of Bathurst, on his return from his visit to Europe had a great welcome at the Bathurst Railway Station, but refused the public demonstration which the people of the diocese desired to tender him. The pupils of St. Mary's College, of his cathedral city, prepared a quiet little greeting, to which his retiring disposition could take no exception, but which at the same time would demonstrate their joy at having their beloved Bishop among them once again. This greeting took the shape of a musical evening, in which Celtic tunes and airs predominated. After the music his Lordship the Bishop warmly thanked the children for their welcome, and he said that he was never so happy as when he was at home in Bathurst. He now felt quite young and full of life and vigor, and he hoped he would be long spared to minister among them. On the Sunday following his return at SS. Michael and John's Cathedral Dr. Dunne furnished a large congregation, with an interesting account of his travels.