

Science Siftings

By 'Volt'

Effects of Nitrogen on Plants.

Nitrogen is so vital to the growth of plants that large sums are expended for fertilizers rich in that element. So far chemistry has done nothing effective in the way of obtaining nitrogen from the atmosphere.

The Spectroscope.

In the field of astronomy the spectroscope is often more serviceable than the telescope, for by its means have been discovered dark, planet-like bodies which revolve about stars and which a telescope thousands of times more powerful than any we now possess could never reveal.

Miners of the World.

More than half the total miners of the world were in 1901 engaged in getting coal. Great Britain employing over 833,000, the United States 594,000, Germany 543,000, France 171,000, Belgium 138,000, Austria 119,000, and India nearly 93,000. The total output of coal was 886,000,000 tons, of the estimated value of more than £295,000,000.

Dreadnought's Masts.

Two remarkable masts have been fitted to the battleship Dreadnought. They are unlike anything ever fitted to a battleship before, and together with the two great funnels, through each of which a coach and four could be driven with ease, they give the ship a most formidable appearance. The masts are tripods pure and simple, supporting the stations aloft, from which the fire of the powerful 12in. guns may be directed.

Strength of the Ant.

If a man had the strength of the ant he could lift 500 times his own weight. Thus if the standard weight of a man were 150 pounds, he could lift without due exertion 75,000 pounds. Think how such a condition would affect the labor problem or how it would express itself in the question of peace and war beyond the wildest dreams! And if an ordinary man was so strong how marvellously more able would be a Sandow of that race of Samsons!

The Height of the Clouds.

The highest clouds rise on an average to a height of nearly 30,000 feet. The middle clouds keep at from about 10,000 to 23,000 feet above the surface of the earth, the lower clouds seldom lower than 1000 or higher than 7000 feet. The cumulus clouds float with their lower surface at a height of from 4000 to 5000 feet, while their summits frequently extend upward to a height of 16,000 feet. The tops of the Alps are often hidden by clouds of the third class, while those of the other classes are frequently seen shooting up the ravines like sheets of smoke.

New Mitraillease.

France's new mitraillease, which is now being manufactured at St. Etienne, will naturally be a great advance on the weapon from which the French hoped so much in the war with Germany. This was a kind of pepper-box which vomited bullets with a harsh, grinding noise, and was much dreaded by the Prussians until they discovered the limits of its powers. The mitraillease was apt to exhaust all its energies within a small area, and it is recorded that a Prussian infantryman once received no fewer than twenty-three bullets—and survived!

Persons having land, houses, or other property to dispose of, or who are about to purchase same, would do well to consult Messrs. A. R. Hardy, & Co., Stafford street, Dunedin.

Mr. J. M. Casey has commenced business as mercer, hatter, etc., at 40 Princes street, Dunedin, where he hopes to receive a fair share of public patronage, especially as it is his intention to keep a very superior stock, and to charge only moderate prices.

The attention of our readers is directed to an announcement which appears in our advertising columns this week about the 4th Great Cash Prize Distribution for Stand-Out tea coupons. The competitors are advised to send in their coupons to the Proprietors at Dunedin by the 15th inst.

Intercolonial

A farewell to the Irish envoys was to take place in the Cathedral Hall, Melbourne, on November 27.

The Lord Mayor of Melbourne's allowance for the coming year has been fixed at £1500.

The Rev. J. G. O'Rourke, late of Pekina, has been appointed to the charge of the Petersburg parish in succession to the Right Rev. J. H. Norton, who has been appointed Bishop of Port Augusta.

The Rev. Father Callanan, who has been transferred to Coraki, was presented on the occasion of his departure from Cowper with an address and purse of sovereigns.

The community of the Sisters of Mercy at Hamilton had to mourn the loss of one of their most valued members in the death on November 15 of Sister Mary Claver Higgins, in the 41st year of her age, and 25th of her religious profession.

Having been advised by his doctor to take an ocean voyage, Sir William Manning has decided upon a trip to Europe next month. Accompanied by Lady Manning and Miss Manning, Sir William will leave on December 8.

The Irish envoys invited a number of gentlemen to dinner at the Australian Hotel on November 16, to meet his Eminence the Cardinal. Mr. Joseph Devlin, M.P., presided, having on his right the Cardinal, and on his left Mr. John Hughes, M.L.C. (Vice-President of the Executive Council).

Owing to persistent illness, the Rev. A. Hurley has been obliged to resign the rectorship of Mildura. He is at present in St. Vincent's Hospital, and is likely to have to submit to a severe operation. The rev. gentleman has the sincere sympathy of his fellow-priests, and of the people amongst whom he so zealously labored, in his great affliction. The Rev. H. McCauley has been appointed to Mildura.

The Hibernians farewelled Messrs. Joseph Devlin, M.P., and J. T. Donovan, the Irish envoys, at a complimentary conversation in the Cardinal's Hall, Sydney, on November 15, when they were presented with souvenirs to commemorate the happy days they spent amongst the brethren of the Society in Sydney. The Hibernians, with their friends, gathered in such numbers that the big hall at St. Mary's was not able to accommodate all.

Mr. Devlin's last words on leaving Sydney were from the railway-carriage window to a representative of the 'Freeman.' 'I should like you,' he said, 'through the columns of the "Freeman" to express the unbounded gratitude of Mr. Donovan and myself to Mr. T. Dalton for his constant kindness to us since our arrival in Sydney. His hospitality and other inestimable personal acts to secure our comfort and aid our mission will be deeply-cherished memories of our Australian visit.'

His Eminence Cardinal Moran, accompanied by the Right Rev. Mr. O'Haran, visited Goulburn on November 17, and on the following day blessed and opened the new orphanage at Kenmore. His Eminence was assisted by the Right Rev. Dr. Gallagher, Bishop of Goulburn, and the Right Rev. Dr. Dwyer, Coadjutor-Bishop of Maitland. At the conclusion of the ceremony his Eminence delivered an address on charity. The orphanage and site cost altogether about £5,600. The collection at the opening ceremony totalled close on £560. The institution is now free of debt.

Fifteen thousand people attended the Catholic demonstration at the Exhibition Building and Oval, Melbourne, on the King's Birthday. The celebration opened with a procession of 5000 boys and girls from the Catholic schools, headed by St. Augustine's Orphanage (Geelong) Band (now the premier Band of the Commonwealth). A liberal programme of sports was carried out, and a grand united concert, in which 2000 children took part, was given in the concert hall. His Grace the Archbishop, Very Rev. Dean Phelan, Very Rev. John Ryan, S.J., Very Rev. Dean Hegarty, Very Rev. N. Quilter, and some forty others of the clergy graced the proceedings. The Cathedral Hall fund will substantially benefit from the celebrations.

The annual retreat for ladies at the Convent of the Sacred Heart, Wellington, begins on Monday evening, January 7, and ends on January 12. Those desirous of attending should apply to the Rev. Mother Superior.