

Science Siftings

By 'Volt'

The Vastness of British Coalfields.

The total known coal production of the world is something like seven hundred and ninety millions tons per annum. Experts state that, even at this rate of production, there is sufficient coal to last for thousands of years. Some faint idea can be gathered from these figures of the enormous quantity of coal there is on this planet; at the same time, there is the statement made by Sir Robert Ball that all the coal on the earth would not supply the sun's heat for one-tenth of a second.

Travelling Through the Air.

M. Santos-Dumont is having built an aeroplane as well as a flying machine. The former will be a sort of an arrow, nearly 50ft. long, having a head 26ft. broad at the base. On the shaft will be fixed two silk wings, having a total surface of 236 square feet, stretched on a bamboo frame and curving slightly downwards at the sides. The passenger will be seated in a basket beneath the double wings, below which will also be a 24 h. p. motor working two propellers, each 6½ft. diameter. Finally, an articulate tail will act as rudder.

An Expensive Book.

What is regarded as the greatest of all illustrated books has just been completed. Only 100 copies have been printed, which have been sent to American and foreign museums, to the Kaiser, the Czar, the Mikado, the Emperor of China, Queen Wilhelmina, and the Prince of Wales. The book is a catalogue of Mr. H. R. Bishop's collection of plates, bequeathed to a Metropolitan art museum. It contains 150 full-page water-color drawings, etchings, and lithographs, and 300 pen-and-ink sketches. The text was contributed by thirty writers renowned in scientific and art circles, and the illustrations are by Japanese and Chinese artists. The book has cost £20,000 to produce.

New Wireless System.

A despatch from Wilkes-Barre, Pennsylvania, under date May 12, says:—The underground wireless telegraph system, invented by Father Joseph Murgas, was pronounced a success to-day by Frederick Muckley, who has been associated with the inventor for some time. Experiments have been going on between this city and Scranton, a distance of eighteen miles, for six months or more, and several difficulties which delayed them have been overcome. During the last several days they have reached such a point that, according to Mr. Muckley, the underground wireless system is now an assured success. Waterproof shafts two hundred feet deep were sunk in this city and Scranton and over wires run to the bottom of each were sent and received, by the aid of the instruments invented by Father Murgas, messages between the two cities. These shafts, it is stated, are deep enough for sending messages a thousand miles. It is now proposed, soon as some details are completed, to conduct experiments between New York and London.

Flowers and Insects.

To prove his contention that insects are attracted to flowers irrespective of the colors the various blooms possess, Professor Plateau, of Ghent, has conducted some novel experiments. Some time ago he devised a method of research with the aid of artificial flowers, but his conclusions were objected to on the grounds that artificial flowers were too unnatural to be the means of reliable results. To completely prove his case, Professor Plateau has recently conducted some experiments with the aid of mirrors. A mirror was placed behind the plant in flower, so as to give a good reflection, and the insects coming to it were carefully observed. It was found that, with very rare exceptions, the insects went straight to the real flowers, and occupied themselves on them without paying any attention to the reflections. The few insects out of the very large number observed which flew against the glass on arrival were seen not to be attracted by the reflections, but to be taking the mirror for an open passage. A few insects again, which threw themselves against the glass after visiting the real flowers were those which had finished their work, and were about to depart. They too were deceived into thinking the mirror free space. These new experiments in fact considerably strengthen Professor Plateau's conclusion that color plays only a subordinate part in attracting insects to flowers.

Intercolonial

A beautiful monument to the memory of the late Very Rev. Father Le Rennetel over his grave in the Waverley Cemetery was unveiled a few Sundays ago.

The Rev. Father M. J. Gannon, vice-president of St. Stanislaus' College, Bathurst, with which he has been associated for the past sixteen years, has left for Ireland.

Mrs. Catherine M. Ryan, mother of Miss Marie Narelle, died at her residence, Bondi, on July 16. The news came as a great shock to Miss Narelle, who cancelled several engagements, and returned to Sydney to attend the funeral.

The death is reported of the Hon. George Day, K.C.S.G., M.L.C., who passed away at his residence, Petersham, after a lingering illness, on July 13, in the 80th year of his age. He was the son of the late John Day, who was one of four brothers who fought under Nelson at the battle of Trafalgar; the other three were killed on that memorable day.

The new Catholic Training College, Albert Park, Melbourne, which is to be in charge of the Loreto Nuns, will be formally inaugurated on next Sunday. The object of the college is to supply a sound theoretical and practical course of professional training for women who are desirous of adopting teaching as a profession, either as members of a religious community or as seculars.

By the mail which left Adelaide on July 12, the president and treasurer of the Adelaide branch of the United Irish League forwarded a draft for £850 to Mr. J. E. Redmond on behalf of the United Irish League Parliamentary Fund. In a letter accompanying the draft, it is stated that the amount forwarded is mainly the result of meetings addressed by the Irish delegates, Messrs DeLinn and Donovan, in various places in South Australia and Broken Hill, and that it is hoped a further remittance may be sent later.

About 2000 people assembled in the Cathedral Hall, Melbourne, on the evening of July 11, on the occasion of a demonstration organised by the United Irish League in honor of the Rev. Father D. T. Lawton, who has been recalled by the Bishop of the diocese of Ross, and purposes leaving very shortly for his home in the South of Ireland. Dr. N. M. O'Donnell, president of the League, who presided, presented Father Lawton with an illuminated address and purse of sovereigns from his friends and admirers. After referring to the part which Father Lawton had taken in the religious, charitable and social life of the community, the address proceeded: 'We regard you as one of the leading exponents in Australia of Ireland's claims to national self-government, and, moreover, the most zealous defender of all that concerns her good name and fame.'

At the special request of the members of the local Orange Lodge and Protestant Alliance, the Vice-Dean of St. Saviour's Anglican Cathedral, Goulburn, Archdeacon Bartlett, preached a sermon on 'The Reformation' on Sunday, July 15. In the course of his remarks he addressed some plain words to his listeners:—'It is, he said, 'so easy to find fault, it is so easy to denounce a Church to which we do not belong. But is there not a better, a nobler, course? Do you work for your faith as Romans do for theirs? Are you as loyal, as self-sacrificing, as enthusiastic, as they are? Show us by your loyal adherence to principles that you love and are prepared to work for your Church with the same noble self-sacrifice that Roman Catholics practise towards their Church.' The Sydney 'Freeman' is of opinion that Archdeacon Bartlett will not be invited very soon to give another address to Orangemen, as his remarks were not of the kind expected from him.

His Holiness Pius X. has been pleased to bestow the honor of Domestic Prelate on the Very Rev. Father Corcoran, P.P., Glen Innis, and Vicar-General and Administrator of the Diocese of Armidale, during the absence of the Right Rev. Dr. O'Connor, who is now on a visit to Europe. Father Corcoran has been in the diocese longer than any other priest. He ministered in Armidale for a number of years, and was then appointed parish priest of Tenterfield, where he was extremely popular, and worked faithfully and energetically for the spiritual and temporal welfare of his flock. A few years ago Father Corcoran was transferred to the important parish of Glen Innis. He soon endeared himself to his people on account of his zeal for their interests, and is admired by all classes. The Right Rev. Monsignor has received the congratulations of the priests and people, who are extremely grateful to the Holy Father for recognising Father Corcoran's merit, and the services he had rendered to the Church.