

Science Siftings

By 'Volt'

Improvements in Wireless Telegraphy.

It is reported in Berlin that those attending the Wireless Telegraphy Conference are greatly pleased with the success of Valdemar Poulsen's system of wireless telegraphy, which substitutes a continuous flow of energy for the old method of transmission by intermittent sparks.

Rendering Ivory Flexible.

Ivory may be rendered flexible by immersion in a solution of pure phosphoric acid—specific gravity 1.13—until it partially gains in transparency; then it is washed in cold, soft water and dried. It will harden if exposed to air, but may again be made pliable by immersing in hot water.

Pampas Grass Hats.

Half a million straw hats is no uncommon sight to be met with at one time in the hat stores of Mexico. The hats are made of a long pampas grass which grows nowhere else in the world. It is specially cultivated for the hat industry. So rapidly are the hats made that some skilled workmen can turn out ten or a dozen a day, and they are then sent to all parts of the world. They cost about 4d. each to make, and are retailed at from 1s 6d to 4s, and are so durable that it not unfrequently happens that those of an economical turn of mind make a single hat last ten years.

The Elephant's Teeth.

Elephants have no front teeth, and they never eat flesh or any food that requires tearing apart. Eight teeth are all they have, two above and below on each side, huge yellow molars, as wide as a man's hand, and a couple of inches thick. Over these hay or fodder is shifted by the queerest, ugliest tongue in the whole animal kingdom, a tongue that is literally hung on both ends, having no power of movement except in the middle, where it shifts back and forth from side to side, arching up against the roof of the big mouth like an immense wrinkled pink serpent. There is nothing stranger than the working of an elephant's tongue, unless it be the working of his breathing apparatus when he sleeps. Elephants, like human beings, have two sets of teeth, the milk teeth, which are smaller than the permanent molars, fall out when about fourteen years old. These baby teeth, which are nevertheless enormous, are occasionally picked up by circus men among the fodder, and preserved as curiosities.

The Vision of Birds.

Birds have very acute vision, perhaps the most acute of any creature, and the sense is also more widely diffused over the retina than is the case with man. Consequently a bird can see sideways as well as objects in front of it. A bird sees, showing great uneasiness in consequence, a hawk long before it is visible to man. So, too, fowls and pigeons find minute scraps of food, distinguishing them from what appear to us exactly similar pieces of earth or gravel. Young chickens are also able to find their own food, knowing its position and how distant it is, as soon as they are hatched, whereas a child only very gradually learns either to see or to understand the distance of objects. Several birds, apparently the young of all those that nest on the ground, can see quite well directly they come out of the shell, but the young of birds that nest in trees or on rocks are born blind and have to be fed.

Color-blindness.

While glasses cannot fit the color-blind for observing signals at sea or on railways, Herr Pichon, of Cologne, finds that much assistance may be given in distinguishing between colors. Persons having the common form of color-blindness require red and green glasses, as the red glass absorbs green rays and causes red objects to appear lighter than to the naked eye, and the green glass absorbs red rays and adds to the brightness of green objects. Those who are color-blind to yellow and blue can be similarly helped by glasses of yellow or blue. In cases of color-blindness to all colors, three different glasses—red, green and violet—are necessary, and these can be combined in pairs so as to give twelve different shades, making possible very accurate determinations. In a special kind of color-blindness, disease of the retina causes utter inability to distinguish blue, and an affection of the optic nerve makes it impossible to see red.

Intercolonial

His Grace the Coadjutor-Archbishop of Sydney, a few Sundays ago, laid the foundation-stone of a new church at Michelago, which is to be erected in memory of the late Rev. J. H. O'Gorman.

The Rev. Father Gressin, M.S.H., who has been for some years in charge of the Campbell Town Mission (Tas.), has been transferred by his superiors to N.S.W., where he fills the position of pastor of the mission of Bellingen in the diocese of Lismore.

After laboring in Junee for nearly seven years as assistant to the Very Rev. M. Buckley, the Rev. Father O'Leary is (the 'Southern Cross' says) about taking his departure. It is his intention to join a religious Order in Ireland. During his all too short residence here, Father O'Leary has endeared himself not alone to his own people, but to those of other denominations.

During the latter part of October the Irish envoys, Messrs. Devlin and Donovan, held very successful meetings in Newcastle, Maitland, Singleton, Armidale, Gunnedah, etc. Our Sydney exchanges report that arrangements have now been made for the final meetings in Sydney's suburbs. The envoys will address a meeting at North Sydney on November 13, and at Paddington on the following evening.

Dr. N. M. O'Donnell, the president of the United Irish League of Victoria, has forwarded a second draft for £1000 to Mr. J. Redmond. In his letter to the Irish Parliamentary Leader Dr. O'Donnell says: "I am enclosing another draft, this time for £1000—making in all £4000 collected and forwarded from the State of Victoria during the visit of Messrs. Devlin and Donovan. Even this does not represent the full success of their tour here, as about £500 has yet to come. I received a letter from Mr. Devlin to-day from Newcastle, N.S.W., and he speaks in glowing terms of their mission in the Northern States. Queensland will realise £2500, and New South Wales upwards of £6000. Between the Commonwealth and New Zealand the final total ought to exceed £15,000.

The Premier of Victoria has decided to grant Mr. Townsend MacDermott, the father of the Australian Bar, a pension of £1 per week for the remainder of his days. The veteran barrister, who is 89 years of age, was for many years a member of the Legislative Assembly, and held the position of Solicitor-General in 1875 in the Kerferd Government. Mr. MacDermott, who is a graduate of Trinity College, Dublin, has been 66 years at the Bar, and is probably the oldest legal practitioner in the Empire. Shortly after his admission to the Bar he acted as junior counsel to the famous Daniel O'Connell in a celebrated case heard at Dublin.

His Eminence Cardinal Moran, in an address at Liverpool (N.S.W.) on Sunday, October 21, said:—New South Wales is almost the only part of the whole civilised world where charitable institutions receive no aid whatever from the Government. Even in China itself, where the sword of persecution was unsheathed against the faithful, the Government never fails to add its contribution to the sustenance of orphanages which are carried on by the Sisters of Charity in China, and in Turkey—in Jerusalem and Constantinople—these institutions of charity received aid from the Turkish Government. It was really a shameful thing to have to say that this State, here among ourselves in New South Wales, which boasts of being the premier State of Australia, is the only State in Australia that does not aid the orphanages, and the only civilised Government in the world that does not carry on the same work.

The visit of his Eminence Cardinal Moran to Liverpool on Sunday, October 21, was the occasion of a very impressive demonstration by the people of the town and district. The ceremonies consisted of the blessing of the foundation of the additions to the orphanage of St. Anne, the completion of the chapel, and the new asylum for the blind, which form part of the additions, as well as the blessing and opening of the new Convent of the Sisters of Charity. There are at present 58 inmates in the Girls' Orphanage, and the additional blind asylum will accommodate thirty inmates, besides affording accommodation for twenty other inmates at a total cost of £2600. These additions are expected to be finished about March. There are also additions to the chapel of the orphanage. In the High School conducted by the Sisters there are some 34 boarders, and in the infants' school 130 pupils. The High School is conducted by eight Sisters and four governesses.