

Science Siftings

BY 'VOLT'

Electric Lamp Wires.

On electric arc lamps it will be noticed that the wires which convey the current are nearly always twisted. This is not from any artistic point of view, but is purely for practical purposes. In the case of a break off at a terminal (that is the place where it meets the lamp), if the wire had been straight it would have necessitated the insertion of a new piece of wire or the making of a new joint; whereas, by untwisting a portion of the coiled wire, sufficient is available for the making of a new connection. These spirals also form a more flexible connection, and there is consequently less chance of the wire breaking when subjected to vibration.

The Cork Oak.

The cork oak grows plentifully in Spain, and the peasants make use of the bark to light their houses at night. The bark is placed in a kettle, from which protrudes a spout; and when it is hot enough it give off a gas which burns with considerable brilliancy. If the family sit up late, several kettles of cork bark are used during an evening; but the lighting is not expensive, and the peasant is careful to save the carbonised cork refuse, for he can sell it, as it is known commercially as 'Spanish black,' one of the intensest black-browns known among pigments.

Floating Islands.

Of all passengers carried by ocean currents, floating islands are the most interesting. Many of them have been found voyaging on the Atlantic. These islands were originally parts of low-lying river banks which broke away under stress of storm of flood and floated out to sea. The Orinoco, the Amazon, the La Plata, and other tropical rivers often send forth such pieces of their shores. Some of the bits of land are of large size, and carry animals, insects, and vegetation, even at times including trees, the roots of which serve to hold the land intact, while their branches and leaves serve as sails for the wind. Generally the waves break up these islands shortly after they put to sea, but sometimes, under favorable conditions, they travel long distances.

A Necessary Precaution.

It is said that when the big guns on a battleship are fired, the crew plug their ears with cotton wool and meet the shock on tiptoe and with open mouths. If they did not plug their ears, open their mouths, and stand lightly on their toes the shock would have a disastrous effect. When the big guns roar and the quick-firers rattle, the great battleship trembles from keel to top, and this vibration raises a milky spume on the sea for many yards around. Volcanoes of water and foam rise near the targets where the half iron projectiles vanish. The height of the volcanoes is 173 feet. They linger a long time in the air before collapsing thunderously. A seven-inch shell heaves up a waterspout 102 feet in height.

The Legs of the Elephant.

The legs of the elephant differ from those of more familiar large animals in the fact that the ankle and the wrist (the so-called knee of the horse's fore-leg) are not far above the sole of the hind foot and fore foot (resembling man's joints in that respect), whilst the true knee-joint (called 'the stifle' in horses), instead of being, as in horses, high up, close against the body, strongly flexed even when at rest, and obscured by the skin, is far below the body, free and obvious enough. In fact, the elephant keeps the thigh and the upper arm perpendicular and in line with the lower segment of the limb when he is standing, so that the legs are pillar-like. But he bends the joints amply when in quick movement. The hind legs seen in action resemble in the proportions of thigh, fore-leg, and foot, and the bending at the knee and ankle, very closely those of a man walking 'on all fours.' The elephant as known in Europe more than three hundred years ago was rarely seen in free movement. He was kept chained up in his stall, resting on his straight, pillar-like legs and their pad-like feet. And with that curious avidity for the marvellous which characterised serious writers in those days to the exclusion of any desire or attempt to ascertain the truth, it was coolly asserted and then commonly believed, that the elephant could not bend his legs. Shakespeare—who, of course, is merely using a common belief of his time as a chance illustration of human character—makes Ulysses say ('Troilus and Cressida,' Act II.): 'The elephant hath joints, but none for courtesy; his legs are legs for necessity, not for flexure.'

WITCH'S CELEBRATED HERBAL OINTMENT.

Have you a bad leg with wounds that discharge or otherwise, perhaps surrounded with inflammation and swollen, that when you press your fingers on the inflamed part it leaves the impression? If so, under the skin you have poison that defies all the remedies you have tried, from which, if not extracted, you never can recover, but go on suffering for all time. WITCH'S OINTMENT is a wonderful cleaning and healing agent, which undoubtedly should merit a trial. Price, 1s 6d and 3s 6d. All chemists throughout the Dominion.

Intercolonial

The Hon. John Meagher, M.L.C., was recently received in audience by his Holiness the Pope.

Our Sydney exchanges report that his Eminence Cardinal Moran has completely recovered from his recent indisposition.

The new Federal Ministry comprises one representative of Queensland, two of Victoria, two of New South Wales, two of Western Australia, two of South Australia, and one of Tasmania.

The Rev. J. A. Carr, of Ardrahan, and the Rev. F. W. O'Mahan, of Ballyvaughan, are at present on a visit to Australia for the purpose of collecting funds for the new Cathedral and the Diocesan College, Galway.

The Very Rev. Father Butler, of Cootamundra, has been appointed to succeed the Very Rev. Father O'Dwyer as parish priest at Tumut; and the Right Rev. Monsignor Buckley, of Wagga, has been appointed Vicar-General of the Goulburn diocese.

The Bishop of Maitland, Right Rev. Dr. Dwyer, received an enthusiastic welcome to Dungog a few days ago. He was entertained at a complimentary banquet, attended by leading residents of all denominations, and speeches were delivered by the Hon. W. Bennett, Messrs. W. Brown, P.M., G. S. Waller, and the Rev. Father J. C. Meagher, and others.

Referring to the omission of the Hon. Hugh Mahon from the Federal Ministry, the Sydney *Daily Telegraph* says:—'Mr. Mahon has a record as an administrator. Indeed, he was the best administrator, and the most independent of his officials, of any of the Ministers in the last Labor Government.' Then the *Telegraph* adds:—'The fact . . . is that the ablest administrator which the party possesses is lost to the Ministry.'

Mr. John Burke Ryan, who died on his farm, near Corop, on March 23, aged 85 years, was a member of the Royal Irish Constabulary, under the command of Mr. Robert O'Hara Burke, the well-known Australian explorer. He was in Melbourne in 1860 to wish bon voyage to his old chief on starting for the trip across Australia, from which he was destined never to return. Mr. Ryan spent some years at the goldfields, and about 40 years ago he settled down to farming in the Rochester district.

His Grace the Archbishop of Melbourne has made the following clerical changes in the archdiocese, which were necessitated by the death of the Rev. D. Horan, parish priest of Bacchus Marsh:—Rev. M. Ryan, from Elsternwick to Bacchus Marsh, as parish priest; the Rev. John Gibbons, from North Melbourne to Elsternwick; Rev. M. A. Vaughan, who has been on leave owing to ill-health, to North Melbourne; the Rev. W. Berntsen, from Brunswick to Gisborne; and the Rev. P. Gibbons from Gisborne to St. Patrick's Cathedral.

At Maclean the other day Bishop Carroll, of Lismore, criticised the administration of the State education system, and, in the course of his speech, said:—'Pupils of the Catholic schools are allowed to compete for bursaries in Queensland, but in New South Wales, no matter how talented the pupil of the Catholic school may be, he is debarred by law from the privilege of gaining a bursary. Is that justice? I believe the time will come when all students will be on equal terms, no matter what religious faith or convictions they hold, and the work of the Catholic schools will be justly recognised.'

The Mother Rectress of St. Vincent's Hospital, Melbourne, accompanied by Sister Mary Xavier, left recently on a trip to Europe. The former was the recipient of a purse containing 105 sovereigns, presented by the Sisters and nurses, who entertained the Mother Rectress at a concert, and made the presentation. Mrs. D. Slattery, of East Melbourne, gave the Mother Rectress a cheque for £140, and Mrs. Southall, of Richmond, presented Sister Mary Xavier with a cheque for £100, both these ladies regarding it as a privilege to be the purchasers of return tickets for the Mother Rectress and her companion.

It is just fifty years since the first Sisters of Mercy arrived in Queensland (says the *Brisbane Age*). On his consecration as Bishop of Brisbane, the late Right Rev. Dr. O'Quinn, before leaving for Queensland, undertook the task of obtaining clergy and nuns for the new diocese. In response to his request for a 'foundation' of Sisters of Mercy, Mother Vincent Whitty and six other Sisters from the Mother House of the Order, Baggot street, Dublin, volunteered and thus became the pioneers of the Order in Queensland. The Sisters sailed on December 8, 1860, and arrived in Brisbane on May 10, 1861. To-day only one (Mother Bridgid Conlan) of the gallant little band who so courageously left home and kindred to face privations in a new land survives. Mother Bridgid now controls St. Vincent's Orphanage at Nudgee. The Sisters first occupied a small cottage in St. Stephen's Cathedral grounds, and at once opened a school. There they remained until 1863, when they purchased the residence of Dr. Fullerton, which has since been enlarged until it has become the noble pile which we to-day know as All Hallows Convent.

The only certain protection from the effects of a bad cold or harassing cough is TUSSICURA.

DEAR ME! Forgotten that SYMINGTON'S COFFEE ESSENCE! Whatever shall I do? Call at the nearest Store and ask. They all keep it.