Science Siftings

BY 'VOLT

Cinemacolor.

Cinemacolor is a new word for a process which preserves the natural color in cinematography. Some of these color pictures have just been shown in the Palace Theatre, and they are certainly remarkable. They are more realistic than the uncolored, and will have the effect of diminishing that flitting, shivering action that is so great a defect in the white and black.

The Inventors of Stoves.

One of the first attempts at making a closed stove of iron was made by Cardinal Polignac in 1709, and seven years later an attempt was made to introduce stoves of this kind into England, but without success, owing to the prejudice of English people in favor of seeing their fire. The Franklin stove was invented by Dr. Franklin in 1745, and a quarter of a century later, in 1771, and during a few years following the discoverer of electricity invented several other stoves, one of which was designed for burning bituminous coal and which had a downward draft and consumed its own smoke. Court Rumford was the next person to make an invention looking to the improvement of stoves and during the ten years between 1785 and 1795 devised several improvements.

The Habits of Wild Beasts.

There are few countries in the world which are richer from the hunter's point of view than coastal Canada. And not only can the sportsman find most excellent shooting and angling in Canada's Maritime Provinces, but also he can still find much of the adventurous element, the element of risk and danger, which is as the breath in his nostrils to your true hunter. Wolves and bears are creatures worthy the sportsman's mettle. The strange, prehistoric-looking moose can prove himself an awkward customer indeed when wounded and at bay. Then there is the great wild cat of Canada. The lynx is one of the fiercest, strongest, and most interesting creatures of its tribe, and its hunting is a wonderful thing to watch. In ordinary circumstances, of course, the lynx will not show fight where humans are concerned; but the writer has known cases in which a big lynx has fiercely defied an unarmed man, and made the latter go about to avoid him. In these cases snow lay deep on the ground, and the great cat was occupied with the carcase of a deer or some other creature it had killed on the track. The hind legs of the Canadian lynx are amazingly powerful, its claws as punishing as those of a tiger, its face, surmounted by its queer tufted ears, expressive of invincible ferocity.

Uses of Roots and Leaves.

Roots and leaves are the life organs of trees. A large part of the roots, however, only serve as conductors of water and food material. The young fibrous roots that are covered by fine hairs are the only ones which take water and minerals from the soil. The trunk and branches simply serve as conductors of food material between the leaves and roots. If the fibrous roots are cut off or exposed so that they dry out, the tree will, in all probability, die. Some trees, like locusts, willows, poplars, etc., have the power of renewing their roots readily. Such trees always transplant easily. Therefore, the first care in transplanting trees is to keep the fibrous roots from drying out, and to protect them from injury during the time which transpires before the tree is planted again. In growing, trees build up a body of cell tissues, make foliage, flowers, and fruit. They take up food material from the soil and air, changing it into cellulose and various other compounds. Like all other plants, trees depend upon moisture, heat, and light as the means of performing their growth. From the soil trees principally get water by means of the fibrous roots. This water is carried to the leaves, through the trunk and branches, being partly used for wood formation on its way and partly given up to the air by the leaves. Minerals are taken only in small quantities, and consist mostly of lime, potash, magnesia, and nitrogen. They are carried to the leaves, where they combine with part of the water in food preparation. A leaf consists of cells, lying closely together and covered by a protection known as the epidermis. Between the cells are small spaces known as intercellular spaces. The epidermis has minute openings which open into the intercellular spaces, allowing the air and other gases to come in contact with the cells. These cells take carbon dioxide and give up oxygen. As oxygen is the gas which we need in breathing, and carbon dioxide the poison which we breathe out, it can readily be seen that every plant or tree is an important factor in the health of plants and animals.

Intercolonial

The ladies of Hobart are making a movement to present a memento to Lady Edeline Strickland upon the occasion of her departure from Tasmania.

Perth (W.A.) had an enthusiastic St. Patrick's Day. After High Mass in the Cathedral there was a procession to the sports ground, where 10,000 people were present. In the evening there was a national concert. Bishop Gibney took part in the procession.

Mr. Sydney Kidman, the Cattle King, has received news by cable that the English company has paid a deposit for the purchase of Victorian Downs, Carlton Hill, and Northcote Stations. The purchase price was £200,000. It is expected that the cattle when mustered for delivery will number about 100,000.

On Sunday, March 28, his Lordship the Bishop of Sandhurst (the Right Rev. Dr. Reville) administered the Sacrament of Confirmation at St. James' Church, Elsternwick, to 140 candidates; and in the afternoon of the same day his Lordship confirmed, at St. Mary's, St. Kilda, 422 candidates, including 100 adults, many of whom were converts.

The following item, cabled from London, appeared recently in the Melbourne daily papers:—Messrs. J. and N. Tait, who are arranging the tour which Miss Amy Castles is to take in Australia, have completed the formation of the company which is to appear with the Australian singer. It includes a tenor, a baritone, a pianist, and a violinist. The tour will open with a concert in Melbourne on August 21.

Of the £707 subscribed by the Hibernians to the funds of the Irish Parliamentary Party—part of the £1000 promised in 1905—when Mr. William Redmond was in Australia—Victoria has contributed £219, New South Wales £186, Queensland £124, South Australia £62, New Zealand £59, Tasmania £30, Western Australia £26. The twenty-five branches in South Australia also contributed their share to this fund, which is made up of shilling contributions.

A few Sundays ago the Very Rev. Dean Phelan, V.G., blessed the additions recently erected at the Abbotsford Convent for the exclusive use of penitents. These comprise a refectory which will seat 500, a class hall, a recreation room, dormitories, reception rooms for visitors, and a new oratory. The buildings have cost over £8000, but the ceremony of opening them was a private one, and no appeal was made to the public for funds. The Rev. Mother says that the number of applications received from penitents was greater in 1908 than in any year since the convent was founded in 1865.

The closing scene of the great demonstration held in Sydney in honor of St. Patrick might be said to have taken place on Monday evening, April 5, at St. Mary's presbytery, when the final committee meeting was held (says the *Freeman's Journal*). His Eminence Cardinal Moran presided. Mr. R. J. B. Stephens read the report and balance sheet. The financial results were considered very satisfactory. A gratifying feature of the report was the announcement that the sum of £80 is available for distribution to each of the following Catholic institutions:—Kincumber Orphanage, Manly Industrial Orphanage, Westmead Boys' Home, Gore Hill Orphanage, Waitara Foundling Home, Baulkham Hills Orphanage, Ryde Orphanage, and St. Ann's Orphanage, Liverpool. The gross receipts were £1100.

The death is reported of Mr. William Dwyer, father of the Right Rev. Dr. Dwyer, Coadjuter-Bishop of Maitland. The deceased, who had been connected with education in New South Wales for close on half a century, was born in Kilkenny in 1834, and having passed through the Dublin Training School was placed in charge of a National School in Kilkenny in 1852. He was selected for educational work in New South Wales in 1855. After spending some years in charge of schools in various districts, he was appointed inspector in 1862, and district inspector in 1889, a position which he held for ten years, when he retired on a pension. How thoroughly Christian and Catholic was the atmosphere of the Dwyer household (says the *Catholic Press*) may be gleaned from the fact that, among the members of his excellent family, three gave themselves to the service of the Church—the first Australian-born Bishop, in the person of the Coadjutor of Maitland; Father Joseph Dwyer, Adm. of Albury; and Rev. Mother Columba, Superior of the Deaf and Dumb Institute, conducted by the Dominican Nuns at Waratah. It is in no way surprising that the home of such a man should have proved a nursery of religious vocations. His own life was permeated with the salt of the religious principle.