

Science Siftings

By 'VOLT.'

Diseases of Metals.

Metals suffer from contagious diseases analogous to those of living beings. Among these diseases one of the most striking is that called 'tin pest.' Sometimes a block, a plate of metal or tin attacked by this disease crumbles and falls into dust, and sometimes warty protuberances appear on the surface of the metal. Various other metals suffer from a disease that manifests itself by a spontaneous recrystallisation. The most remarkable cases occur with lead and hard-drawn brass. These diseases are not due, as has been thought, simply to moisture. Temperature plays a part in producing them. The most extraordinary fact, perhaps, is that the 'tin pest' is capable of spreading by contagion.

Manufacture of Automobiles.

Few people believe that a single factory in Detroit produces 200,000 automobiles a year, or more than half of the entire output of the country. The *American Machinist* in a series of articles proves that the achievement of this concern as a wholesale producer of automobiles amounts to one complete car every forty seconds by the clock! Against this production, which necessitates the handling of 1,000,000 lbs. of material per day, the total output of locomotives in the United States is only 15 per day, or 4513 annually. The Ford industry, with the single exception of the United States Steel Company, is the largest in this country (says *America*). The plant covers 65 acres and employs 15,000 men, the daily payroll being between £6000 and £7000. Over a million and a-quarter pieces a week or on an average of five tons a day of small parts are shipped to this factory.

Eight Thousand Miles in Fifteen Seconds.

On June 3 her Majesty Queen Mary sat in her boudoir at Buckingham Palace, with Princess Mary by her side, and her private secretary (Mr. E. W. Wallington) in attendance, and by pressing a button electrically opened at Weston, Ontario, in the neighborhood of Quebec, a hospital for consumptive children, which she had graciously consented should bear her name. A pre-arranged signal conveyed the intelligence that she had done so, and the whole operation from the instant of informing her Majesty that the time had arrived to press the button to the realisation that the opening had been accomplished, occupied only 30 seconds. The actual time of the two journeys of communication, forward and return, was fifteen seconds, and as it is estimated that the distance is four thousand miles from London, allowing for indirect routes and deviations in the line of cable, the signal sent to Ontario was received and acknowledged over some 8000 miles in a quarter of a minute.

Animal Rip Van Winkles.

It is a well-known fact that birds and many animals migrate before winter to milder climates to keep themselves warm. The bat, tortoise, dormouse, and other animals could migrate easily if they had a mind to, but they have another way of getting the same result. These animals are veritable Rip Van Winkles, and are counted among the best winter sleepers. So deep is the lethargy of a dormouse that if this little creature is awakened suddenly and put near a fire his pulse beats so slowly that he is lifeless in a few minutes. While asleep he is kept alive by the surplus food he has eaten in the autumn, and which is stored up in his body as fat. Frogs and toads are even sounder sleepers and approach nearer to a lifeless condition in sleep than any other animal life except certain fish. For in them the heart beating stops and breathing in the ordinary way is impossible. During this time the breathing is carried on through the pores of the skin. These strange samples of torpor are also caused by lack of food during the bitter cold. For in countries where excessive heat and drought prevail there are numerous instances of torpor that are quite as profound as that exhibited by the winter sleepers.

Intercolonial

On Saturday last, June 14, his Lordship Bishop Gibney celebrated the golden jubilee of his ordination (says the *W.A. Record*). By the express command of the venerable jubilarian the event was kept very quiet. A number of friends who were aware of the jubilee visited 'Lourdes,' Vincent street, Highgate, to offer their congratulations, and a large number of messages arrived from former college companions and other well-wishers who were unable to be personally present. It is fifty years ago since Bishop Gibney was ordained at the great foreign missionary College of All Hallows, Dublin, for the diocese of Perth, which then comprised the whole of West Australia—or the Swan River Settlement, as the colony was at the time styled. After a half-century of devoted missionary and pioneering work, his Lordship now enjoys a well-deserved respite from the worries and anxieties of the world.

When the South Australian Corps of Veterans waited on the Archbishop at Glen Osmond on May 1, and presented him with an address of congratulation on the celebration of his silver episcopal jubilee, his Grace promised that he would, as he had kindly done on previous occasions, entertain them at luncheon at an early date. This promise was fulfilled on Saturday afternoon, June 21 (says the *Southern Cross*), at the Aurora Hotel. The day chosen was a most appropriate one, as it was the 100th anniversary of the battle of Vittoria, won by the Duke of Wellington in the Peninsula War. The luncheon was given to celebrate the 48th birthday of his Majesty the King, as well as the centenary of Vittoria.

Rev. Father Carr, who, with Rev. Father O'Meehan, has been for some time in Australia collecting funds for the new Cathedral, Galway, informed the representative of a Brisbane paper that he was delighted with the result of his appeal, both in Victoria and in Queensland. His expectations had been more than realised. Before leaving Ireland on his mission to Australia he heard nothing but praise of the generosity of the Australian people. As a result of his appeal, the Bishop of Galway will have the satisfaction of receiving a gift of £7000 towards the great work he has undertaken in the erection of the new Cathedral. Father Carr said that he and Father O'Meehan intended to leave for New Zealand early in August, and would from there proceed to America, where he desired to visit some friends.

The Town Hall, North Melbourne, was filled with a representative assemblage on Tuesday evening, July 8, when Rev. Father John Norris was entertained at a conversazione in honor of the silver jubilee of his ordination to the priesthood. The Most Rev. Dr. Mannix (Coadjutor-Archbishop of Melbourne) presided, and amongst those present was his Lordship the Bishop of Sale. Presentations were made by the clergy and laity. In the address presented by the laity it was stated that owing to Father Norris's efforts during the past ten years £15,000 had been expended in the parish (St. Michael's, North Melbourne). Father Norris's early studies were made at Mount Melleray. He afterwards studied at St. John's College, Waterford, and then proceeded to Maynooth, where he was ordained on June 24, 1888. Father Norris came to Melbourne in that year. He was attached to the following parishes:—St. Kilda, Woodend, Williamstown, Elsternwick, West Melbourne, and Geelong. On his return from a visit to Europe he was appointed assistant priest at St. Kilda East, whence he was appointed pastor of the new parish of St. Michael's, North Melbourne.

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