

Science Siftings

By 'Volt'

Arctic Gray Geese.

A remarkable instance of migratory organisation is afforded every year by the gray geese from the Arctic circle, which come south to the Outer Hebrides during October and return to the Arctic zone in early spring. For several days previous to the migration the birds congregate at one spot, and one may see on such occasions thousands of the geese lining the shore and packed so closely together that there is scarcely room for them to move. At length one of the older birds, evidently the king of the flock, rises into the air; simultaneously the waiting birds give vent to wild shrieks, but make no attempt to rise until a peculiar call is given by the leader overhead. Then some fifty birds take wing and form themselves into a solid triangular phalanx, three birds in line forming the apex, and swiftly they follow in the wake of the leader towards the north. Having seen this contingent well on its way, the leader returns, and another fifty birds immediately place themselves under his guidance. This process is repeated until the whole assembly is on the wing to its northern destination.

Crop Forecasting.

Strong evidence of a periodicity in the cereal crops of Eastern England has been found by Dr. W. N. Shaw, Director of the Royal Meteorological Office, in the statistics for 1885 to 1905. A good year follows a bad one in very regular alternation, and a maximum average seems to be reached once in eleven years, with a minimum average at an intermediate period. In 1894, in 1896, and 1898, for instance, the yield was abundant, while in 1893, 1895, and 1897 it was deficient. A year of greatest average was 1885, and 1896—eleven years later—was another; and in 1886 and 1897 low points were reached. Dr. Shaw has noticed that there is an intimate relation between the rainfall of the autumn months and the wheat harvest of the following year. From such considerations he computed that the eastern counties of England would produce 31.9 bushels of wheat per acre in 1905, and the returns at the end of the season showed an actual yield of 32 bushels per acre.

The Origin of Tinfoil.

Tinfoil, or silver paper, which is used the world over for wrapping cigars, chocolate, cakes of yeast, etc., owes its origin, like the telephone, to America. A New York man over fifty years ago gave a good deal of time to an unsuccessful attempt to cover iron bolts with copper. Such bolts would have taken the place of the costly ones of pure copper. The man, though, could not make them. But in the beating out of the copper he hit on the idea of beating out tin. He beat it out between sheets of lead, and the beautiful, flexible, silver paper he obtained achieved an instant popularity. Tinfoil, or silver paper, is now beaten from pure tin exactly as gold leaf is beaten from pure gold. It is usually rolled in sheets four feet long by six inches wide. It is perfectly easy, with a little beating, to double the length and breadth of these sheets without adding any new material to them.

Light and Disease.

The value of light as an agent in curing diseases is becoming increasingly recognised. The latest development of the idea is the assertion of a medical man that the clothes worn by consumptives should be of a color which will allow the light to penetrate the body. White materials, it is found, are the best for this purpose, and consumptives are consequently advised to clothe themselves in snowy raiment, either of linen, velvet, cotton, or cloth. Silk, however, is barred. Next in curative value comes blue, but it is far inferior to white. Materials of black, red, yellow, or green are said to be useless, as they prevent the passage of the germicidal rays.

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Intercolonial

The 'Advocate' states that the Right Rev. Mgr. Norton, who has been appointed Bishop of Port Augusta, is a convert to the Faith.

Victoria's population is increasing. The estimated population of the State on March 31, 1906, was 1,222,944—610,765 males, 611,279 females; on June 30 it was 1,226,239—613,218 males, 612,821 females—thus showing an increase of 4186 persons. The natural increase during the quarter was 4145, and the excess of immigration was 41.

The Rev. Father Griffin, who for ten years held the position of parish priest of Albury, was recently presented by the public of that place with a valedictory address and testimonial on the occasion of his transfer to Gannam. The address was accompanied by a purse of sovereigns, subscribed by people of all denominations.

The Governor of West Australia, Sir Frederick Bedford, has proved himself a good friend to the Christian Brothers' College since his arrival in the Western State. This year his Excellency has sent two valuable and suitable prizes for the annual sports, one being a solid silver cup standing eight inches in height, the other a curiously designed travelling silver cup, accompanied by an autograph letter.

The new Christian Brothers' schools at Kalgoorlie were opened on Sunday, September 30, by the Bishop of Perth (Dr. Gibney). The schools will be in charge of the Rev. Brother Duggan, who was for six years principal at Nudgee College, near Brisbane. The schools cost about £2000, close on £600 of which had been subscribed up to the date of the opening ceremony.

A Melbourne firm (says the Sydney 'Freeman') has exposed the fact that a powder trust in England refuses to sell powder to Australia, and that this country has been obliged in consequence to buy its powder from Germany. Of late the English combine has compelled three German firms to refuse to supply Australia with even an ounce of powder. Isn't it about time we started to make our own powder and shot?

The death is announced of Brother Donoghue, who passed away at the Christian Brothers' High School, Warrnambool, on October 2, at the age of 63 years, forty of which he had spent as a Christian Brother. Brother Donoghue was a native of Kerry. In early manhood he felt a call to devote himself to God as a religious teacher, and, in generous response, entered the Novitiate of the Christian Brothers. Having received the necessary training in the duties and exercises of religious life, and in his special work as a teacher, he taught in various centres in Ireland, notably Waterford, Tralee, and Belfast. Later on he was ordered by his superiors to Australia, and has since labored successively at St. Kilda, Dunedin, Ballarat, and Warrnambool.

The appointment of the Very Rev. Father John H. Norton, V.G., to the See of Port Augusta gives Australia (says the 'Catholic Press') three native-born Bishops, and they are all comparatively young men. His Lordship Dr. Dwyer, the Coadjutor-Bishop of Maitland, is only 48 years of age, and is a fine advertisement for the climate of New South Wales, for he was born in Albury, and save for some years of study in Ireland and Rome, has spent his life here. The Right Rev. Dr. Kelly, the Bishop of Geraldton, was the second Australian-born priest to be elevated to the episcopate, and he is about one year older than Dr. Dwyer, being born in Newcastle, Western Australia. He, too, made his studies abroad, being ordained at All Hallows in 1883. Ballarat is the birthplace of Dr. Norton, who saw the light about 45 years ago.

St. Augustine's new church, Balmmain East, will be one of the largest and finest churches in New South Wales—exclusive, of course, of the cathedrals—when completed, and as it is to replace the older structure to which cling many historic memories of the pioneers of Catholicity in this country, its erection is of interest (says the 'Catholic Press') not only to the parishioners of Balmmain East, but to the people of Australia. Hence, there was a gathering of some thousands from all parts of Sydney to witness the laying of the foundation stone of the new building, which was performed by his Eminence Cardinal Moran on Sunday afternoon, October 7. The church when completed and fully furnished will cost about £7000, and is in hand. Nearly £1000 were received at the ceremony.