

Science Siftings

By 'VOLT.'

The Elephant's Trunk.

Naturalists consider the elephant's trunk the most marvellous miracle of Nature. It contains over four thousand muscles—a great many more than are found in the entire human body. By aid of these muscles the trunk will uproot trees or gather grass, lift a cannon or a nut, kill a man or brush off a fly. It is as useful as a hand with all its fingers to supply the elephant with food, and, being hollow, is used as a suction pump. No other animal has a single member or organ so perfect and so useful.

Big Guns.

The first of the largest guns ever constructed in the United States has just been removed from the workshops of the Washington Navy Yard, preparatory to being mounted on one of the Dreadnoughts. It measures 53 feet 6 inches in length and weighs 65 tons. It has cost £15,000, and an additional £11,000 will be expended for the mounting. The shell discharged by the gun weighs 12½ cwt. Including the shell and powder, it costs £140 for each discharge. The shell is effective at a distance of 12 miles.

Proposed African Inland Sea.

That vast area of the earth's surface which stretches across Africa from west to east and southwards from Fezzan to Lake Tchad has often inspired the speculations of engineers as well as dreamers. At one time it was popularly supposed to be one unbroken surface, and that by letting in the sea it might become useful as a means of communication from one part of the continent to another. This, however, is not the case. Even if it were, it is questionable whether the creation of a great inland sea would not be disastrous. Professor E. Etchegoyen, a French engineer, favors such a scheme, as did Captain Roudaire in 1874 and Mr. Donald Mackenzie in 1877, but on a more or less limited scale. In geological ages a large portion of the desert was undoubtedly under water, but since then the land has risen above its ancient level. Supposing, nevertheless, that the flooding of the Sahara were possible, what would happen? Professor Mollendorff, of Munich, says 'the flooding of the Sahara would make the climate of France and Germany sub-Arctic, while England and Belgium and Denmark would be almost uninhabitable.'

The Migration of Birds.

The *National Geographic Magazine* contains a most interesting article by Wells W. Cooke on 'Our Greatest Travellers: Birds that Fly from Pole to Pole; and Birds that Make 2500 Miles in a Single Flight.' It gives the principal routes used by birds in their migrations between North and South America, together with much collateral information. Some birds (says *America*) travel by day and some by night. Some make their journey in short stretches, others in long ones. As an instance of the latter class, the American golden plover, when the weather is propitious, flies without rest or pause from Nova Scotia to South America, a distance of 2400 miles. In stormy weather it makes emergency stop-overs at the Bermundas and the Lesser Antilles. The Pacific golden plover, however, travels the same distance, from Alaska to Hawaii, across an islandless sea where a stop is impossible. The Arctic tern breeds in Greenland, and spends the winter within the Antarctic Circle, and thus travels almost from Pole to Pole. It takes scarcely twenty weeks for the round trip of 22,000 miles, and must make at least 150 miles a day on an average. During eight months of the year the bird lives where the sun does not go below the horizon.

Day after day our staff is engaged handling baggage, forwarding parcels, passing entries. Necessarily, they become very expert. When you employ us you get the benefit of these specialists and your work is done promptly, economically.—N.Z. EXPRESS CO., LTD.

Intercolonial

On the Sunday prior to his death Cardinal Moran officiated at the laying of the foundation stone of a new presbytery at Chatswood. The Rev. Father W. Barry, on behalf of the parishioners and the people of the district, extended a hearty welcome to his Eminence.

The new three storied wing of the Christian Brothers' College, Perth, has almost reached completion—all now required being the carrying out of minor details. The building as it now stands is an imposing pile, capable of accommodating 200 boarders and 300 day boys.

The Hon. J. G. Duffy, K.S.G., has more than once urged present and past pupils of convent schools to study political questions of the day (writes the Melbourne correspondent of the *Freeman's Journal*). Their non-Catholic sisters were making full use of the franchise in the interests of their party, and it was the duty of Catholic women to keep themselves abreast of the times, so as to be ready to exercise the franchise wisely and intelligently. A movement in Bendigo shows that organisation in this respect is rightly valued. The ex-pupils of Girton College have founded an association for political education.

Mother Mary Hyacinth Donnellan, one of the foundresses of the Dominican Communities in Australia, passed away peacefully, fortified by the rites of Holy Church, early on the morning of August 11, at 'Santa Sabina,' Strathfield. The deceased was a native of County Westmeath, Ireland, received her education at old St. Mary's, Cabra, entered the Dominican Order at St. Mary's, Kingstown, and was one of the pioneer band brought out by the late Dr. Murray, in the year 1867, to found the first Dominican Convent in Australia, St. Mary's, West Maitland, New South Wales. Throughout her long religious life, Mother M. Hyacinth was a zealous promoter of the cause of education, and her interest in the work of the schools was unaltered through recent years of declining health. She was in the 69th year of her age and the 52nd of her religious profession.

The Very Rev. P. O'Hare, of Ararat, speaking recently at a social gathering, referred to the great sacrifices which the Catholics of Victoria had made on behalf of education. He said that, making all allowances for the Catholic children who were still attending State schools where it was impossible to establish Catholic educational institutions, the Catholic people of Victoria forfeited by not being able to accept State education during the last 36 years over £4,500,000. The speaker quoted from the last *Commonwealth Year Book* that the expenses to the State of educating each child at the State schools at the present time in Victoria amounted to £6 1s 8d, while the total expenditure in Victoria at the present time on State education was about £900,000 per year. The Catholics were at the present time 23 per cent. of the population, and of that £900,000 they must contribute in taxes something like £207,000. Making allowance for the Catholic children still attending the State schools, their net forfeiture must be between £160,000 and £170,000 per year at the present time. There were, he said, 40,000 Catholic children being educated in Catholic schools in Victoria, and taking the average expenditure per child at the State schools, if the children who are now being educated by the Christian Brothers and Nuns and private Catholic teachers in Victoria were sent to the State schools, the expense of these children to the State would be between £240,000 and £250,000. The State, therefore, was benefited by this amount by the general sacrifices that the Catholics of Victoria were so heroically making at the present time; and these added to what they forfeited through not being able to accept the present State school system of education makes the enormous sum of over £400,000 annually.