

Science Siftings

By 'Volt'

Animal Instinct.

Man might often take from the lower animals a lesson as to the care of himself when ill. All sorts of animals suffering from fever eat little, lie quiet in dark, airy places, and drink quantities of water. When a dog loses his appetite he knows where to find dog grass which acts as a purgative and emetic. Sheep and cows, when ill, seek certain herbs. Any animal suffering from chronic rheumatism keeps as far as possible in the sun. If a chimpanzee be wounded he has been seen to stop the bleeding by a plaster of chewed-up leaves and grass.

Earth Currents.

Mr. J. A. Harker read a clever paper before the Physical Society describing some experiments on earth currents conducted at Kew Observatory. He referred to the investigations made some years ago with regard to the earth currents produced by electric traction schemes, and the disturbances they cause on the self-recording magnetic instruments kept continuously running to register the variations in the declination and the horizontal and vertical forces. Two large earth plates were buried about four feet deep and two hundred yards apart, and connected through a photographic recording voltmeter of high resistance. On the traces given, the effect of the trains on the Central London Railway, whose nearest point is about six miles distant from Kew, was strikingly shown.

The Wishbone.

The wishbone in birds is called by scientists furcula and is in reality the union of what are in man the two separate collar bones. These in the bird receive the brunt of the strokes of the wing that turn the creature in its flight. Few realise the strength of stroke of the bird's wing. It is said that a swan has been known to break a man's leg by a blow of its wing, and in like manner the wing beatings of the larger birds are dangerous if they strike the head or face. If, therefore, a large bird is in the habit of making sudden turns to right or left in its flight it must be fitted with a wishbone competent to withstand the great strain of the wing stroke on one side with no special action on the other side. For this reason we find in the eagle and like birds of quickly turning flight a furcula that is a perfect Roman arch, widely at variance with the Gothic arch, which is the shape of the wishbone of our common fowls. The eagle's furcula is a solid rounded arch, everywhere equally strong and not developing those points of weakness that make our sport of breaking the wishbone possible.

The World's Famous Bridges.

Bridges have played an important part in history, and from the days when Trajan built the bridge across the Danube there has been a steady development in the perfection of these structures.

One of the most peculiar bridges in the world is the tubular suspension bridge across Menai Strait. This bridge consists of two lines of immense tubing, each 1500 feet long, supported by three granite towers beside the shore abutments. This strange bridge is 100 feet above the sea, and weighs 11,000 tons.

The famous Niagara suspension bridge was begun in 1852 and completed in 1855. It is 245 feet above the water and 821 feet long.

The Forth bridge over the Firth of Forth, near Edinburgh, has two cantilever spans, each 1710 feet in length, the longest in the world. The total length of this structure is one and four-sevenths miles, and there were 51,000 tons of steel used in its construction.

The first cast-iron bridge in the world was the Coalbrookdale bridge, England, which was built in 1779.

The famous Brooklyn bridge was begun in 1867, and not finished for nearly seventeen years. Its total cost was about 15,000,000 dollars.

There have been several London bridges. There was one at the end of the tenth century, and another in 1014 built of wood. In 1176 Colechurch began a stone bridge across the Thames, which was not finished until 1209. The new London bridge was begun in 1824, and completed in seven years at the cost of £300,000.

Our citizenship, our religious and political rights are guaranteed, but the guarantee demands the fulfilment of duties equally sacred. Obligation and duty are co-ordinate with rights and privileges. Fast tending to decay is the society where men are indifferent to religious, social, and political duties.

Intercolonial

On the occasion of Archbishop Kelly's feast day, the children of St. Benedict's School, Sydney, presented his Grace with an address and a piece of silver plate.

The new convent buildings at Kyneton (Vic.), now being erected, involve an expenditure of about £5000 for the present. The whole of the design will be completed as funds are provided.

Mr. E. W. O'Sullivan, ex-Minister of Public Works of New South Wales, was presented the other day with an address and purse of £1050 by his many friends and admirers.

Dr. Clarke, the Anglican Archbishop of Melbourne, in laying the foundation stone of the Trinity Grammar School at Kew the other day, said: 'The Roman Catholics believed in education, and showed their belief in deeds.'

One of Sydney's oldest residents, Mr. William Byrne, died at his home, Princes street, on Saturday, October 13, at the age of 98 years. The deceased's parents arrived in Sydney in the fateful year of '98, and the late Mr. Byrne was born in 1808.

When opening a floral fete at St. Mary's Hall, West Melbourne, the other day, the Right Rev. Mgr. McKenna, V.G. (Geelong), referred to the remarkable generosity of the people of that parish, who had paid no less a sum than £32,000 off the church debt, leaving only £8000 to be liquidated.

His Eminence Cardinal Moran laid the foundation stone of a new church at Granville on Sunday, October 14. The new church will seat a congregation of about 400. The Rev. Father Grace, pastor of the district, stated that the total cost would be about £850.

Sir Philip Fysh and Lady Fysh celebrated their golden wedding at Hobart a few Sundays ago. Thirty-five descendants, four of whom journeyed from England for the occasion, sat down to the wedding breakfast. The presents were numerous. Congratulatory messages were received from England and all parts of the Commonwealth.

His Grace the Archbishop of Melbourne in his admirable address on the Tempe slanders on Sunday evening, October 14, after reading the Government Inspector's report on the South Melbourne Orphanage, said: I have asked the Government before, and I now repeat the request, that the Government should send its inspectors to examine all our Catholic schools. I make this request on my own behalf and on behalf of the other Catholics of Victoria.

Sir John Quick, M.L.A., delivered an address on Sunday, October 14, at Bendigo, in which he emphasised the importance of private charity. Some people, he said, thought it should be the duty of the Government to provide for the poor. That was a very miserable kind of charity, and he hoped that a poor rate would never be necessary in that country. The Government should assist, but it was the duty of every citizen to remember his private obligations. Australia might be regarded as one of the most charitably-disposed countries in the world. There were 304 hospitals throughout Australia, and of these 53 were in Victoria.

No executive act of the Deacon Government has (writes the Melbourne correspondent of the Sydney Freeman's Journal) given so much and such general satisfaction here as the elevation of the Hon. Henry Bourne Higgins, to the High Court Bench. Mr. Henry Bourne Higgins, K.C., was born in Newtownards, Ireland, and arrived in Melbourne as a youth in 1870. His education commenced in Dublin, and was completed at Melbourne University, where he gained scholarships in languages, logic, history, political economy, and Shakespeare. Always taking an interest in politics in a philosophical spirit, his first active campaign was in 1893, when he was returned for Geelong. Mr. Higgins was elected to the Federal Convention, and when the first Federal election was held in 1901, he was returned for Northern Melbourne. At the second election he was again successful, and when Mr. J. C. Watson formed his Labor Ministry in 1904, Mr. Higgins was appointed Attorney-General. He has been a member of the University Council since 1887, and in 1904 founded a scholarship for poetry at the Melbourne University. Mr. Higgins is, of course, one of the leaders of the Equity Bar.