

Science Siftings

By 'Volt'

Clock and Fan.

A very singular clock has been made by an ingenious Swiss workman. It consists of a dozen leaves tinged like an ordinary fan. The number of the hour is marked from one to twelve, at the end of each of these leaves. The fan timepiece starts at 6 o'clock, and expands regularly for twelve hours, when it suddenly closes up and starts all over again. The half hour is indicated by the leaf of the fan being only half extended.

Eggs in the nest.

All birds have a systematic arrangement in depositing their eggs in the nest, and there are very few species, if any, in which some peculiarity is not to be seen, if careful observation is made. Many birds so plainly and invariably show a tendency to a set arrangement, that their habit is generally known.

Natural Color of Water.

That the natural color of pure water is blue, instead white, was long ago discovered. The green and yellow tints are said to be due to extraneous substances. Dissolved calcium salts, though apparently giving a greenish tint, due to a fine, invisible suspension, have no effect on the color of the water when precautions are taken to prevent it. The brown or yellow color due to iron salts is not seen when calcium is present.

How Tinfoil is made.

Tinfoil, which is extensively used for wrapping tobacco, certain food products, and other articles of commerce, is a combination of lead with a thin coating of tin on each side. It is made in the following manner:—First, a tin pipe is made of a thickness proportionate to its diameter; proportion not given. This pipe is then filled with molten lead, and rolled or beaten to the extreme thinness required. In this process the tin coating spreads simultaneously with the spreading of the lead core, and continuously maintains a thin even coating of tin on each side of the centre sheet of lead, even though it may be reduced to a thickness of 0.001 inch or less.

The Spider.

The spider has a tremendous appetite, and his gourmandising defies all human competition. A scientist who carefully noted a spider's consumption of food in twenty-four hours concluded that if the spider were built proportionately to the human scale, he would eat at daybreak (approximately) a small alligator, by 7 a.m. a lamb, by 1 o'clock a sheep, and would finish up with a lark pie in which there were 120 birds.

Coffee as a Weather Prophet.

Those who have lost all faith in the 'weather forecasts' are recommended to try a very simple experiment with a cup of coffee and a lump or two of loaf sugar. Having dropped the lumps of sugar into the cup of coffee, carefully watch the air bubbles that rise to the surface. If they suddenly rush from the centre to the side of the cup, be sure that it is going to rain very hard. If the air bubbles assemble in the centre, and then pass to the side of the cup in a deliberate way, you may still be prepared for what the weather forecasts would call 'some showers'. But if the bubbles refuse to stir from the centre of the cup, you may go forth to your labors assured of a fine day.

Manila Rope.

A manila rope, properly laid and lubricated, is as strong, weight for weight, as steel; that is, a steel rod weighs about eight times as much as a manila rope of the same diameter, and has about eight times the strength, the strengths being proportioned to the weights. When used for transmission purposes, it has been found that a manila rope one inch in diameter, is equal to a double leather belt two five-eighths inches in width, so that three such ropes are very nearly equal to an eight-inch double belt. A two-inch rope (says 'Cassier's Magazine') will transmit as much power as a ten-inch leather belt, while the losses from stiffness and creep are estimated as only about one-half with the rope, what they are with the belt.

He is indeed a busy man, who can never find time to find fault.

Intercolonial

The foundation stone of a new church at Wyong was laid on October 6. The church will cost about £450.

A tender for a new church at Gindarra has been accepted. The cost will be £600, and the erection of the church will be started in a couple of weeks' time.

Mr. William Asprey has been selected to fill the post of choirmaster at St. Mary's Cathedral, Sydney, rendered vacant by the death of the late J. A. Delany.

His Grace the Archbishop of Melbourne, blessed and opened a new Convent of Mercy on Rosary Sunday at Casterton. The building cost over £4000.

A new church at Crystal Creek, Murwillumbah, was solemnly blessed and dedicated on Sunday, Sep. 30 by his Lordship Bishop Doyle. The cost of the church was close on £300, and the subscriptions at the ceremony totalled £75.

The Sydney police records for the past year show that while the trams killed eleven persons, and injured 397, motors killed only one, and injured 21 persons. Other vehicles were responsible for only four fatalities, and over 400 injuries.

The foundation-stone of a Catholic church at Coff's Harbor was laid on Rosary Sunday. Archdeacon Walsh addressed the gathering. The new church, which is on a good site, is going up rapidly, and will be opened in about five weeks by Bishop Doyle, of Lismore.

The first Provincial Synod of Victoria, will open in St. Patrick's Cathedral on Sunday, November 17. There will be daily sessions until the following Sunday. The primary business of the Synod will be the unification of ecclesiastical procedure throughout the province of Victoria.

The financial condition of Victoria, as disclosed by the Budget, is a source of much gratification (remarks the 'Advocate'). The fact that the net return from State works, is more than sufficient to pay the interest on our public debt, which amounts to £52,424,989; is the best guarantee for our credit in foreign markets.

When it was proposed to introduce the penny postage on letters in Victoria, (says the 'Advocate') the official reply was that the drop in the revenue would be serious. As a matter of fact, the revenue rose as a consequence of the reduced scale, more people making use of the post office. The same result may be anticipated, when fares and freights are reduced on the railways.

A serious accident happened to the Very Rev. T. O'Farrell C.S.S.R. while proceeding to Cumnock, from Molong to conduct a mission. He was being driven in a sulky by Mr. James M'Cormack, and when some distance from Cumnock the horse bolted. When the animal was pulled up it commenced kicking viciously. Mr. M'Cormack advised the priest to get out. Whilst doing so, he slipped and broke his thigh. Father O'Farrell was taken to Molong and admitted to the private ward of the hospital.

The fine spirit of religious neighbourliness manifested at the beginning of the new Catholic church at Wyong on Rosary Sunday, is worthy of emulation in other localities, (says the 'Freeman's Journal'). That spirit may be exemplified by the fact that, apart from many other generous non-Catholic donations to the building fund, Mr. A. H. Warner presented the committee with the site of the church, besides laying a subscription on the stone; while Mr. G. Goldsmith, another prominent non-Catholic resident, donated £10 10s. to the fund.

Mr. Percy Jones, the brilliant young cornetist and conductor of St. Augustine's Orphanage Band, leaves for Europe in December, to continue his musical studies under the best Continental masters. The efforts made throughout the Western districts of Victoria, on Mr. Jones' behalf (says the 'Catholic Press') have resulted in about £400 being collected, and at a representative meeting held at Melbourne, it was decided to endeavor to bring the fund up to £500. It was resolved to open a subscription list in the metropolis, and to tender Mr. Jones a benefit concert in the Town Hall on November 19.

The D.I.C. Dunedin, call attention to their comprehensive and superior display, of ready-to-wear stock of millinery, coats, blouses, lingerie, costumes, etc....

Mr. J. Casey, Princess St. Dunedin, has just opened up a stock of hard and soft felt hats, straw hats, and panamas, in the newest styles, also ties, caps etc., which are marked at very moderate prices....

DEAR ME! Forgotten that SYMINGTON'S COFFEE ESSENCE! Whatever shall I do? Call at the nearest Store and ask. THEY ALL KEEP IT