

# Science Siftings

## To the Centre of the Earth.

If a hole was bored through the earth's centre, what would happen to a body which falls down the hole? The question is discussed at length by M. Camille Flammarion, the great French scientist, in the *New York Herald*. The first thought, he says, is that as the force of gravity is nil at the centre of the earth, the body would come to rest there; but this assumption is false, he points out, for the momentum acquired in fall would suffice to carry it past the centre to the surface of the earth on the other side. Then there would be a series of similar falls—a perpetual oscillation between one end of the earth tunnel and the other. It would take about nineteen minutes to reach the centre, where its speed would be 31,300 feet a second, and in one hour sixteen minutes it would have returned to its starting point. Of course, if it started from a point high above the sea level it would emerge from the tunnel at the other end.

## A Peculiar Industry.

There are many peculiar industries and trades, but probably one of the most peculiar of these is a pearl oyster farm. Japan, the land of odd objects, dwarf trees, and ancient temples, boasts of possessing such a farm. The pearl oysters are found more or less along the whole coast. There are some localities famous for producing them in quantities, and many fine pearls have been obtained. There was a time when fishing for these precious shells was carried to an excess, so that the yield of pearls dwindled to almost nothing. To overcome this difficulty the desirability of cultivating the pearl oyster was suggested. Experiments were carried out with great success, the result being that to-day the pearl oyster farm has millions of pearl oysters on its culture ground, and is able to place annually a large crop of pearls on the market. This pearl oyster farm is in the Bay of Ago, on the Pacific side of Japan. The bay, like all in which the oyster grows in abundance, is a very quiet piece of water with a most irregular, highly broken up coast line full of deep running inlets and coves, affording most favorable shelter. The farm is arranged in two parts, the first part containing the young up to the age of three years, and the second part holding those that are over that age.

## Sound Shadows.

One would naturally suppose that a loud and continuous sound could be heard at about equal distances in all directions, in the absence of wind, and if no large solid body interposed. Repeated experiments have shown that this is not true, and that mariners who trust to their ears alone when they are on dangerous coasts guarded by fog signals run a great peril. 'Sound shadows' are formed, within which the ear detects no trace of the signal, although the whistle may be blowing with full force, and the sound may be perfectly audible on all sides of the shadow. Sometimes the cause of a sound shadow can readily be discovered, as, for instance, in the existence of a bluff just behind the whistle. In such a case the sound appears to ricochet like a cannon ball bounding over the water; in other words, it may be audible at one mile, inaudible at two miles, audible again at three miles, inaudible at four miles, and so on. But the intervals between the audible and inaudible points may be any other distance, and may also vary irregularly. Then there are sound shadows the origin of which has not been traced, but which doubtless are due to some peculiar condition of the atmosphere.

## Complicated French Clocks.

The clock of Lyons Cathedral is a wonderful piece of mechanism, and the legend describing it is as follows: The cock crows, the bell sounds the hours, the little bells the Sancte Spiritus; the angel opens the gate to salute the Virgin Mary. The two heads of the lions move the eyes and the tongue. The astrolabe shows the hours in its degree, and the movement of the moon. Moreover, the perpetual calendar shows all the days of the year, the feast days and the bissextile. The hours at which the chimes are complete are 5 and 6 in the morning, midday, and 1 and 2 o'clock in the afternoon. The chimes at the other hours are restricted so as not to interfere with the Cathedral services.

Complicated indeed is the clock of Beauvais Cathedral. It is said to be composed of 92,000 separate pieces, according to a French journal. One sees on the fifty-two dial plates the hour, the day, the week, and the month; the rising and the setting of the sun, phases of the moon, the tides, the time in the principal capitals of the world, together with a series of terrestrial and astronomical evolutions. The framework is of carved oak, 26ft by 16ft. When the clock strikes all the 'edifice' seems in movement. The designer intended to depict the Last Judgment. This wonderful work recalls the clock of Strassburg, and is of modern construction. It is the work of a Beauvaisian, M. Verite, who was in the engineering department of the Nord Railway. He died in 1887.

# Intercolonial

His Lordship Bishop Reville, of Sandhurst, is about to visit Rome, and his people have decided on a public meeting in the Town Hall to wish him God-speed. The silver jubilee of his episcopacy occurs next year.

His Grace the Archbishop of Melbourne has promised £1000 towards paying of the debt on the Central Novitiate and training college of the Sisters of Mercy at Ascot Vale. This handsome block of buildings cost considerably over £10,000.

The Rev. Father Cleary, Administrator of St. Peter and Paul's Cathedral, Goulburn, for the past three and a half years, has been appointed to take charge of the parish of Heilly, in succession to the Rev. Father McAroy, who has been transferred to Grenfell.

A meeting of representative gentlemen was held at the Melbourne Town Hall Hotel the other day for the purpose of making arrangements for presenting a suitable testimonial to Mr. T. Monaghan, a veteran Melbourne journalist, who will shortly retire into private life after being connected with the Victorian press for the past 46 years.

The edifying sight was witnessed (says the *Melbourne Advocate*) of 2000 men, young and old, approaching the Holy Table on Sunday morning, November 21, the occasion being the annual demonstration of the Catholic Young Men's Society. The members represented the various branches of the city and suburbs, and came in drags from the more distant suburbs.

The death is reported of Captain D. J. O'Flanagan, of Waverley. The deceased gentleman passed away on November 23, and leaves a widow and one son, Dr. O'Flanagan, of Junee. The late captain, who retired from the British army some years ago, had a splendid record, and served through the Crimean war and the Indian Mutiny. Deceased was a native of Ireland, and was 78 years of age at the time of his death.

On Sunday, November 21, his Grace the Archbishop of Melbourne made an appeal in the Cathedral on behalf of the Sisters of Mercy Central Novitiate, Ascot Vale. In the course of his discourse his Grace said: 'Fully 5000 Catholic children are being taught in the schools of the Sisters of Mercy in this diocese alone. A large number are taught in the dioceses of Ballarat and Bendigo also. These numbers show how important is the stake at issue—how vitally the interests of our schools are bound up with the well-being of this general Novitiate and Training College.'

Mr. Thomas O'Loughlin, K.S.G., of 'Killarney,' Ballarat, appears to be never weary of well-doing. Recently he presented a fine block of land for educational purposes in East Ballarat. At a meeting when the gift was announced, his Lordship Bishop Higgins said it was only another instance of that gentleman's large-hearted generosity in matters that concerned the Church, and he desired to express his lively appreciation of such uniform liberality.

From a reliable source (says the *Freeman's Journal*) we learn that a great change is about to take place in the Order of Redemptorists in Australia. It is stated that the Very Rev. Father Murray, who has been for a long time in charge of St. Alphonsus' Monastery, Waratah, has been promoted to the charge of the Wellington (N.Z.) house of that Order. Father Lynch is to succeed Father Murray, while Very Rev. Father Clune, who is well known in this State, and who was some time ago appointed to the charge of Wellington (N.Z.), has now been appointed to Perth (W.A.) house. The likelihood of losing so zealous and able a preacher as Father Murray will cause a pang of regret to the Catholics throughout New South Wales, but it is at least consoling to know that the mother house at home has seen fit to recognise Father Murray's great work in New South Wales in appointing him to the charge of Wellington.

Every day (says the *Catholic Press*) the Cardinal gives fresh proofs of his energy and vitality. Although entering on his 80th year, he left Sydney last Friday morning, November 19, for Goulburn, where he was the guest of Bishop Gallagher till Saturday afternoon, when he set out for Braidwood by motor car. He was accompanied by Monsignor O'Haran, and when they arrived at Braidwood his Eminence was as fresh as when he left Sydney the previous morning to undertake a journey of nearly 190 miles. Catholics and Protestants vied in doing him honor, and the gathering that met him two miles outside the town was representative of every section of the community. His Eminence's days were busily spent. On Saturday he received an address of welcome, to which he replied in a graceful speech. On Sunday he celebrated the early Mass, presided at the High Mass, attended and spoke at a banquet given in his honor, and in the afternoon opened the new Convent of the Sisters of the Good Samaritan, for which, as well as the induction of the Very Rev. Father McIntyre, his visit was made. On Monday he visited the school and carried out some social duties, and Tuesday morning saw him speeding off to Queanbeyan and Canberra by motor.

**DEAR ME!** Forgotten that SYMINGTON'S COFFEE ESSENCE! Whatever shall I do? Call at the nearest Store and ask. They all keep it.