

Science Siftings

Cutting a Bullet Out of the Heart.

Dr. Maurice Beausseant, who had already extracted a piece of grenade from the right ventricle of a man's heart, told the French Academie des Sciences recently of a second similar operation performed with success. A corporal wounded at Eparges had been treated for peritonitis and then had been operated on for appendicitis. He continued to suffer in various ways for more than a year, when a radioscope revealed the pressure of a shrapnel ball, moving in time to the beatings of his heart. Supposing this to be in the pericardium or sac about the heart, Dr. Beausseant 'went in,' as the surgeons say, and saw that the ball was actually in the right ventricle, near the lower end. The heart was drawn out; its wall was cut open between two loops of wire; the ball was removed and the heart was sewn up again. Six months later the heart had healed so perfectly that there was not a sign of irregularity about its pulsations.

Electricity from Peat.

European engineers are engaged at present in the investigation of methods of utilising peat as fuel in electric stations. Southern Bavaria, for instance, has vast peat fields which would serve to run electric plants of large size and this would give a great reserve of power. The peat bogs lie mainly in the region of the Danube, and are estimated to cover an area of 500 square miles. Supposing the peat layer to be only 3 feet in thickness and the cubic foot of peat to afford but 3 pounds of fuel, this will mean a supply of 50 million tons. With the operation of extracting the peat regularly carried on during the year for 300 days, this can afford 700,000 horse-power in the space of 50 years. The fuel can be burned under boilers or it can be used in special producers to secure a supply of gas for industrial purposes.

A Wonderful Machine Gun.

Referring to a recent article on machine guns, a sergeant in the Australian forces sends us some interesting facts concerning the latest machine gun adopted by the War Office. It is known as the Caldwell machine-gun, being named after its inventor, a mechanic of Victoria, Australia. It can fire at the rate of 1000 shots per minute (it is said the speed has been increased to 1800 shots per minute), has two barrels, which can both be fired independently of the other; and is air cooled, which does away with the necessity for carrying water to cool the barrel while working. Caldwell, according to our correspondent, sold the patent rights of this gun early this year to the War Office for the sum of £65,000 and £5 royalty on each gun manufactured, and has been appointed manager of the workshops where they are turned out at a salary of £1000 a year.

After a Century.

An 'atmospheric' engine that has been in service hoisting coal at a colliery near Rutherglen, Scotland, since 1809, has just been discarded to make place for a steam engine of a modern type. During the 106 years that it was in service this interesting relic of the early days of steam is reported to have given entire satisfaction and to have required no renewals other than that of two spur wheels that were broken by accident. The atmospheric engine represents one of the earliest successful attempts to make practical use of steam power. Steam at a pressure little greater than that of the atmosphere was used, and simply performed the work of pushing the piston to the upper end of the cylinder. In this work it was assisted by a weight hung to the opposite end of the walking beam operated by the piston. As the piston reached the upper end of the cylinder the valve was closed, and the steam in the cylinder was condensed quickly by a jet of cold water. This operation created a partial vacuum so that the piston was forced back to its original position by the pressure of the air, the water being then forced out of the cylinder by the incoming steam at the beginning of the next upward stroke.

Intercolonial

The new Marist Brother Superior, Rev. Brother George, who takes the place of the late Rev. Brother Stanislaus, has arrived at New Norcia, W.A. Rev. Brother George, who comes from the High School, Darlinghurst, has a high reputation as an educationalist.

Rev. Father P. Tighe, S.J., who left early last year as chaplain to the Australian troops, is returning to Sydney. Shell shock, with a heavy attack of influenza supervening, sent him to the south of France by doctor's orders. Though recovering, he is still in an unsatisfactory state of health.

Lady Galway (Catholic wife of the Governor of South Australia) received a telegram recently informing her of the death of her mother, Charlotte Lady Blennerhassett, widow of the Right Hon. Sir Rowland Blennerhassett, who was the fourth baronet. She was the only daughter of the Count and Countess de Leyden. Lady Galway's nephew, Sir Marmaduke Blennerhassett, the present Baronet, was born on November 20, 1902, and succeeded his father in 1915.

The Very Rev. Father J. Lee, M.S.H. (Superior of the Sacred Heart Order in South Australia), has taken up duties as chaplain in the A.I.F., and went into the Mitcham Camp the other day. This has necessitated the appointment of another priest to the Brompton parish, where the members of the Sacred Heart Order are located, and the Rev. Father James Power, of Kensington (N.S.W.), began duties there last week. Rev. Father McFarlane, M.S.H., is acting as Superior.

His Grace Archbishop Duhig opened a new convent at Corinda on a recent Sunday. This convent will be conducted by the Sisters of the Sacred Heart. Corinda is part of the Goodna parish, in charge of Father Stapleton. Up to the present the only school available was the State school, and the Sisters of Mercy have for some years journeyed from Brisbane on Sundays and conducted Catechism classes. The growing needs of this centre, which is on the main railway line between Brisbane and Ipswich, called for a convent, which is now an established fact.

The whole of the proceeds of the celebration of St. Patrick's Day in Adelaide are to be devoted to the liquidation of the Archdiocesan debt. At the request of his Grace the Most Rev. Dr. Spence, Archbishop of Adelaide, a meeting of the District Board of the Hibernian Society and delegates from the branches was held in the Catholic Club on a recent Sunday, for the purpose of making arrangements for the celebration this year. It was decided to hold the religious ceremonies in St. Francis Xavier's Cathedral on Saturday, March 17, followed by a procession, and in the afternoon a sports demonstration on the Jubilee Oval. In the evening the National concert will be held in the Exhibition Hall.

Mother Mary Patrick Hickey, who died recently, was the oldest nun in the Presentation Order in Tasmania. Born in Dublin, she was the daughter of one of the four chief inspectors of national education in Ireland, was at school in Thurles, and professed in the Presentation Convent in Fermoy. She went to Tasmania at the invitation of the late Archbishop Murphy, to be mistress of novices for the new Presentation Community at Hobart, and in 1872 was one of the pioneer Sisters who opened the school in Launceston for Dean Butler, having remained in the community at Launceston ever since. The deceased nun was mistress of novices for many years. She was very widely known amongst the old pupils of the convent, but had been an invalid for about fifteen years. In her seventy-eighth year, she took ill about a fortnight ago, gradually declined, and passed away fortified by the rites of Holy Church.