

Science Siftings

By 'VOLT.'

The Volcano as a Foundry Furnace.

The molten lava of Hawaii's 'lake of fire' is found to have a temperature of about 1800 degrees Fahrenheit, and W. S. Townsend believes that buckets resisting 2000 degrees could hoist and pour it into moulds for bricks and sewer-pipes before it would solidify.

A Wonderful Clock.

The clock of Beauvais Cathedral is said to be composed of ninety-two thousand separate pieces. One sees on the fifty-two dial plates the hour, the day, the week, and the month; the rising and 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 carved oak, eight metres by five metres, or 26 feet by 16½ feet. When the clock strikes all the edifice seems in movement. The designer wished 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, and who died in 1887. The cock crows, angels sound a trumpet at the four cardinal points, imitation of flames appear from the openings of little steeples right and left. A soul, that of the impenitent thief, appears before the Supreme Judge. It is condemned, and a demon armed with a pitchfork seizes it and casts it into the abyss. Next comes the soul of the just. The angels advance and conduct it to the realms of day, sacred strains being heard.

Poison-Gas.

The asphyxiating and tear-producing gases used in the war are made from *sabadilla*, a product exported only from Venezuela, says an American Consular report from that country. *Sabadilla*, meaning barley, is the name of a plant of the lily family, botanically called *Veratrum sabadilla Batatas*, occurring only in Venezuela and Mexico. The highly poisonous seeds have long been used in medicine, and while nothing is known in Venezuela as to the use of the alkaloid produce of the seeds in the making of war gases, it is a fact that *sabadilla* dust irritates the eyes, the throat, and the nose so much that laborers working with it are obliged to wear protecting masks. The first exportation from Venezuela was made to Hamburg 25 or 30 years ago. The foreign demand has never amounted to more than 5000 sacks annually. *Sabadilla* seeds and all preparations compounded from them have been declared contraband by England. The substances produced from the seeds are *cavadin*, or crystallised *veratrin*, an alkaloid, *veratric acid*, and *sabadilline*, which is an amorphous, pleasant-smelling alkaloid that accelerates the beating of the heart.

Centenary of Steel Pen.

It will interest writers to learn that this year we celebrate the centenary of the inauguration of the steel pen. During the 18th century a French mechanic named Arnould tried to replace the quill pen by a very small metal nib, but his effort proved unsuccessful, and it was not until 1816 that his idea was matured by a man named Alexander, at Birmingham, who made the first steel pens. Another factory was started at Boulogne-sur-Mer. The inventor considered himself to be the benefactor of literary people, and he offered his pens as a gift to the famous writers of his time, only asking their autograph in return. Needless to say, this was gladly given, and he very soon had those of the greatest literary celebrities. Since that time the steel pen has been an important factor in the world's ways and workings, but the later invention of the typewriter is superseding it in these days of machinery.

The WORLD'S BEST GARDEN HOSE is the NORTH BRITISH L. OR G. QUALITY. Refuse substitutes. Sold by all ironmongers.

Interprovincial

Major T. M. McInerney, C.M.G. (unattached list), Provost-Marshal for the Victorian Military District, has been gazetted honorary lieutenant-colonel. The *Gazette* notice states that the promotion is made for meritorious service in Australia during the war. He is a brother of Dr. T. P. McInerney, warden of the Melbourne University.

His Lordship, the Right Rev. Dr. Dwyer, Bishop of Maitland, when preaching at St. John's Cathedral on All Saints' Day, reminded the parishioners that it was on that day fifty years ago their late Bishop, Dr. Murray, arrived at the Cathedral, and that the Catholics and diocese had a lot to be thankful for during these years. The late Bishop Murray was consecrated in Dublin on November 14, 1865, and died on July 9, 1909.

The golden jubilee of the arrival of the Presentation nuns in Tasmania was celebrated on November 1, at St. Mary's Cathedral, Hobart, with Solemn High Mass. The occasional sermon was preached by the Right Rev. Monsignor Gilleran, V.G., who outlined the history of the Order. Of the devoted band of Presentation nuns who landed in Tasmania fifty years ago, only one, Sister Evangelist, is to-day in the land of the living. Her pioneer companions, Sisters Mary Xavier Murphy, Stanislaus O'Brien, Regis Murphy, Xavier Beechmor, Joseph Russell, Ignatius Murphy, Benign Keller, Evangelist Cronin, and Martha, all hailed from Ireland.

The present industrial stress was referred to by Archbishop Kelly last Sunday afternoon at Woolwich, N.S.W. 'You see,' he said, 'what strength the democratic Government has none at all. It must have the people at its back; otherwise it cannot carry out its duties. The first duty of the members of any society is the observance of the law.' The Archbishop went on to say that if they did not keep a careful watch, their unions would become tyrants. Let them have men of sound principles at the head of their unions; otherwise they would become like a wild beast seeking its own destruction. Let them avoid any desire to push matters to an extreme, for no one would suffer more than the wage earners and their families.

His Grace Archbishop Carr, Chaplain-General for the Catholic Church in Australia, has received flattering testimonies regarding the valuable services rendered as military chaplains to the A.I.F. by Rev. Father Hearn, S.J., during his two years of service at the front, as well as in the hospitals in Egypt. Lieutenant-Colonel Bennett placed on record the fact that Father Hearn had performed magnificent service, and had been recommended for the D.S.O.; and Lieutenant-Colonel Griffiths, A.A.G. and A.I.F., wrote: 'On parting with Father Hearn, General Birdwood wishes to express the regret of all ranks of the A.I.F. in losing such a friend as they have had in him during the whole period the A.I.F. has been at the front.'

Rev. Father J. F. McCarthy, of St. Brigid's, Red Hill, Brisbane, whose eloquence was of considerable value in the way of securing recruits for the Queensland committee, has a trenchant criticism in the *Daily Standard*, Brisbane, of the unscrupulous and base methods adopted by a bigoted section in Melbourne in posting thousands of documents through Queensland in which it was alleged that the Catholic community had been ordered to vote 'No' on the recent Referendum by the ecclesiastical authorities. 'Never in my time,' writes Father McCarthy, 'even once, was I approached officially or unofficially by an Archbishop or any representative of his, by any ecclesiastical authority, with regard to my views on any question of political interest.' Father McCarthy thus answers for the whole of the priesthood and Catholics of the Commonwealth.

For washing New Zealand woollen manufactures NO RUBBING LAUNDRY HELP is best.