

## Science Siftings

By 'VOLT.'

### Electricity in Switzerland.

Owing to the large amount of water-power in Switzerland, electricity can be applied to good advantage and at low cost for heating buildings, and it is stated that it is also being used in a number of instances for the heating of churches. Among these are the churches of Walfhalden, Schwellbrunn, Arosa, Sils, Brugg, Aengst, and others.

### A Sun-Power Plant.

An interesting report concerning irrigation by sun power is made by the British consul at Alexandria, who comments on the arrival from Philadelphia of the Shuman sun-heat absorber, which was tested and found to be satisfactory. The plant is being erected at Meadi, near Cairo, and will be used to pump water from the Nile to irrigate the surrounding land. In Egypt both coal and other kinds of fuel are expensive, but plenty of sunshine can be relied upon at all times of the year, so that the experiments with this practical sun-power plant will be of much interest to agricultural enterprise.

### A Novel Idea.

It has been reserved for a Dutchman to carry the penny-in-the-slot machine to its extreme limits. He has invented an automatic physician. In appearance the machine is a dignified man, the front of whose waistcoat is pierced with a number of openings, over each of which is inscribed the name of one of the commoner ailments to which humanity is subject. You put a penny in the slot set apart for your particular illness, and out pops a small quantity of medicine. This automatic doctor may be consulted by the sound as well as by the sick, for one of the slots delivers a 'refresher and tonic' distilled from wholesome herbs. The idea is certainly ingenious.

### The Composition of Food.

The substances found in foods are usually classified as water, protein, fat, carbohydrates and ash. Protein is an inclusive word for the chief substance in food which the body can use in rebuilding itself as use wears it out. Carbohydrates are the fuel of the body. They are converted at once into heat and energy, or if there is a surplus they are often stored in the body in the form of fat, to be used when nourishment is less abundant. Fat is also fuel, a more concentrated form of fuel than the carbohydrates. A certain quantity is stored in the body as a reserve heat supply. Ash stands for the mineral matters which are used in our bodies for building bones and teeth, and for a few other purposes. These minerals are for the most part building materials, but are not so important as protein, and are needed in smaller quantities.

### Wireless Stations.

France having planned to erect in her colonies a chain of wireless stations by means of which messages can be sent around the world, other countries are engaged upon similar projects for their colonies, especially Great Britain. The route chosen will take in Gibraltar, Malta, and Alexandria in the Mediterranean region, then Aden, Bombay, Colombo, and Singapore in the Indian Ocean region. From here the messages will reach Australia and will then be sent by different posts to Montreal and Glace Bay, crossing the Atlantic to Clifden. There will be branches from this general course so as to reach the Cape and other parts of the African coast, and also China, by way of Singapore, with one post located at Hong Kong. Germany is also at work upon an enterprise for connecting Berlin with the African colonies and the Pacific possessions. Messages will be sent across Africa from the east to the west coast. Italy also proposes to make connection with Africa, with one station at Pisa and others at Massauoh and Tripoli.

## Intercolonial

Rev. Father Power, of Sandgate, Queensland, who is about to pay a visit to his native Waterford, has been presented with a purse of sovereigns by his parishioners.

His Grace the Archbishop of Sydney on Sexagesima Sunday blessed and opened a new convent school at Erskineville, which, with price paid for site, had been erected at a cost of close on £2600.

Rev. Brother J. M. O'Dwyer, who had been principal of the Christian Brothers' College, Adelaide, for five years, has been transferred to Melbourne, where he has been appointed principal of the College of the Order in Victoria Parade.

In the cause of justice to all, and in the promotion of everything that is good for the Australian people, and for the Commonwealth itself, a move was made on Sunday, January 26, when the provisional committee of the Catholic Federation waited on his Grace the Most Rev. Dr. Kelly, Archbishop of Sydney, and received his approval and blessing on this work. Bro. P. S. Cleary (Warden-general of the A.H.C. Guild) and provisional president of the Federation, introduced the committee to his Grace.

The death occurred recently of Mother Mary Sebastian Whyte, Superior of the Convent of Mercy, Mornington, Victoria. She entered the Convent of Mercy, Fitzroy, in 1872, at the age of 17. In 1880 she was appointed mistress of novices, which office she held until the death of the foundress, Mother M. Ursula Frayne, in 1885, when she was elected Superior. She filled that position for twelve years, and during that time was successful in raising £8000 for the building of the chapel there, also £500 for a marble altar. In 1891 she visited Ireland, and returned with twelve postulants. In 1898, Mother Sebastian founded the convent at Mornington, and it was there that she passed away, after being an invalid for six years.

On Sunday, January 26, the Right Rev. Dr. Dwyer, Bishop of Maitland, blessed and opened the new school, to be conducted by the Sisters of St. Joseph, at Dungog. The building cost £649, and £135 was collected at the ceremony, the Bishop giving £20. His Lordship uttered a word of warning to the authorities against the dangers of trying to educate the young without religion, which could only bring about what it is doing in England—empty benches in those churches which adopt secularist schools; what it is producing in France, a youthful population notorious throughout the world for youthful criminality. The system of public instruction would be frankly denominational for those who believed in religion, and purely secular for those who did not.

The inaugural meeting of the Victorian State Council of the Catholic Federation was held on Saturday evening, January 25, at the Federation offices, Elizabeth street, Melbourne. There was a very large attendance of metropolitan and country delegates. The election of officers resulted as follows:—President, Mr. Frank E. O'Connell; vice-presidents, Messrs. W. L. Bowditch, M.A., and W. P. McMahon; treasurer, Mr. R. A. Warming, LL.B.; general secretary, Mr. T. J. O'Brien; hon. assistant secretary, Mr. E. J. Hayes; recording secretary, Mr. J. J. Cantwell; additional members of executive, Dr. A. L. Kenny, K.C.S.G., Dr. G. R. Baldwin, Messrs. W. J. A. Doherty, J. T. McInerney, Campbell Douglass, LL.B., J. E. Batchelor, and W. G. Browne. On the motion of Mr. T. J. O'Brien, seconded by Dr. A. L. Kenny, it was resolved 'That branches be requested not to elect any member of Parliament on any council in connection with the Federation, nor to permit any member of Parliament to speak at any meeting in connection with the Federation.' Very gratifying reports were received regarding the progress of the movement throughout the State, and it is confidently anticipated that a membership of at least 100,000 will be reached in Victoria this year. A resolution was carried heartily congratulating the Catholic people of New South Wales and New Zealand on the establishment of the Federation, and conveying best wishes for complete success.

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