

Science Siftings

By 'VOLT.'

Preservation of Wood.

During the year 1910, according to the official report just published by U.S. Department of Forestry, 63,266,271 gallons of creosote and 16,802,502 gallons of zinc chloride were consumed in impregnating woods to prolong their lifetime. The zinc chloride used was exclusively a domestic product, whereas the greater part of the creosote was of European importation. Approximately 100 million feet of timber was treated. The creosote treatment was by far the more popular.

Bursting Steel.

An experiment that demonstrated the capacity of steel to endure greater pressure than the hardest stone was made in Germany. Corundum was chosen for the stone, and small cubes of both substances were placed under pressure. A weight of six tons smashed the corundum, but forty-two tons were required to crush the steel. When the steel did give way the effects are described as remarkable. With a loud explosion the metal flew into powder, and its sparks are said to have bored minute holes in the crushing machine.

An Early Airship.

In 1834 a dirigible balloon, 130 feet long, endeavored to fly from France to England. The itinerary, from Champ de Mars to London, was mapped out with great precision, and a multitude gathered to watch the start. The machine failed utterly, whereupon the crowd demolished it in anger. The craft had the form of a monster seafish and was inflated with hydrogen. Within was a second envelope, which, with the aid of pumps, compressed or rarefied the air for ascending or descending as might be desired. There was no motor, and the navigators were to work the steering machinery by hand. The wicker car was built to hold ten persons. This was probably the earliest of airships of the Zeppelin type.

Aids to Astronomy.

Spiders as an aid to astronomy are recognised to such an extent that certain species are cultivated solely for the fine threads they weave. No substitute for the spider's thread has yet been found for bisecting the screw of the micrometer used for determining the positions and motions of the stars. Not only because of the remarkable fineness of the threads are they valuable, but because of their durable qualities. The threads of certain spiders raised for astronomical purposes withstand changes in temperature, so that often in measuring sunspots they are uninjured when the heat is so great that the lenses of the micrometer eyepieces are cracked. These spider lines are only one-fifth to one-seventh of a thousandth of an inch in diameter, compared with which the threads of the silkworm are large and clumsy.

Paper Cones for Cups.

As part of the campaign against the common drinking cup and the diseases which it spreads, a health commissioner suggests the use of paper cones for cups in the absence of an individual cup of more pretentious material. He said that in the schools of Austria the children were taught to carry several sheets of writing paper in their pockets at all times. Then, when a child was thirsty, he could roll one of the sheets into a cone and make a perfectly serviceable cup which could be placed after being used in the nearest waste-paper box. How to roll the cones deftly was taught the children. The tearing of a notch about half an inch long near one end before rolling the cone serves to make the improved cup stronger.

MOUNTAIN KING ASTHMA POWDER.

A powder which gives immediate relief in violent attacks of asthma, bronchitis, etc. Is largely used and recommended by asthmatical people throughout the whole of the colonies. 2s 6d per tin.

Intercolonial

Rev. Father Costelloe, who has been in charge of All Saints' Church, South Broken Hill during the past three years, has left there to take charge of his new parish at Wentworth. At farewell gatherings Father Costelloe was presented with purses of sovereigns aggregating £122.

Mr. C. T. Madigan, a pupil of the Christian Brothers, and the last Rhodes Scholar from South Australia, arrived at Fremantle the other day by the R.M.S. Orvieto. Mr. Madigan is a student of geology, and being anxious to accompany the Mawson Antarctic expedition, he recently proceeded to England to interview the Rhodes trustees and obtain permission to postpone his studies until the return of the expedition. This permission has been granted.

His Grace the Archbishop of Sydney opened and blessed the first House for Retreats for laymen in Australia on Sunday afternoon, November 5, at 'Loyola,' Greenwich road, Greenwich. His Grace, who was accompanied by the Rev. Father E. Brauer, was received by Rev. Father R. J. Murphy, S.J. The members of the A.H.C. Guild and H.A.C.B. Society furnished a guard of honor.

The voting in the Victorian State elections, which took place last week, was heavy, the women exercising the franchise for the first time. A scheme of preferential voting was also introduced. Nine Ministerialists were returned unopposed, and in four constituencies the contest was between Liberals only. The new House will be composed as follows:—Ministerialists, 44; Laborites, 19; Independents, 2. In the course of his policy speech, delivered at Warnambool, the Premier (Mr. Murray) said:—'I propose to give a number of scholarships in private primary schools—the same number, relatively, as those connected with State schools. We feel that children at private primary schools should not be shut out of the advantage which the State schools have. The scholarships will be eligible either in secondary State schools, or in schools approved of by the Department.'

The fourteenth anniversary of the consecration of St. Patrick's Cathedral, Melbourne, was celebrated on Sunday, November 5, before a very large congregation. The music was of a special character. His Grace the Archbishop, in the course of a short sermon, referred with gratitude to the pioneers, to whose brave hearts and heroic sacrifices they owed the beginning and progress of the Cathedral up to the present day. On such an occasion they were forcibly reminded of the men and women by whose ceaseless and splendid generosity the site was secured, the foundations laid, and the Cathedral erected. He would mention specially the late Sir John O'Shannassy, who secured the site; the first Archbishop of Melbourne (Right Rev. Dr. Gould), who gave every penny of his private and public revenue for the building of the Cathedral; and above all the first Vicar-General of the archdiocese (Very Rev. Dr. Fitzpatrick), who was the master-builder of the edifice, and gave not only his last penny, but his life, to the work.

Speaking at the blessing of the new Retreat, 'Loyola,' Greenwich, on Sunday, November 5, his Grace the Archbishop of Sydney referred to the matter of strikes, and inferentially the trouble which had agitated the public mind during the previous week. In the course of his address his Grace said:—'Because of the conditions which Australia had given her people in regard to temporal things, the hours of labor, not only for the pick and shovel man, but for the professional man and the tradesman, the last thing an Australian should do is to strike. Australia should advance. No section of the community should be misled to act against the public interest by striking. A strike put on the brake. It was something like that which got into one's swallow at the table and hindered a person from taking his meat. I do not see that a strike is justifiable in this country, an ecclesiastic though I am. I would raise my voice against them, as I would against the surgeon who would amputate my arm.'