

Science Siftings

By 'VOLT.'

Cloth from Sea-weed.

Samples of cloth manufactured in England by a process recently discovered, from the fibre of a species of sea-weed found in Southern Seas, are in the possession of the Bureau of Manufactures, in Washington. After treatment, the fibre is soft, pliable and strong, somewhat akin to wool and easy to spin. All dyes are readily absorbed except green.

A Swordfish's Prowess.

While repairing a ship recently which had completed a long voyage in Southern waters, a swordfish was found which had successfully pierced a sheathing one inch thick, a three-inch plank, and beyond that four and a-half inches of firm timber. It has been estimated that it would require nine strokes of a hammer weighing 25lb to drive an iron bolt of similar shape the same distance.

A Speed-detecting Device.

An automatic speed-detecting device for automobiles which would seem to be worth the attention of municipalities that are determined to suppress speeding, is thus described: Three lights are to be provided on each car—white, green and red. At a speed of eight miles an hour the white light will show; at fifteen miles, the green; at twenty miles, the red; and at more than twenty miles an hour all the lights will flash a warning that the speed law is being violated.

Storage-Battery Cars.

Several railroads now employ what is known as the Edison-Beach type of car, equipped with storage-batteries. The first cars of this kind were small and adapted only to the lighter kinds of service, but larger and heavier cars have been built, and many are now in use on branch lines of steam railways. One car on the line between Montandon and Mifflingburg, Pennsylvania, has taken the place of a steam locomotive and two coaches. It makes 22 trips a day, whereas the steam train formerly made but two. The new cars seat 42 passengers each, and travel at a speed of from 25 to 40 miles an hour for a distance of 100 miles on a single charge of the Edison battery.

The History of a Wasp's Nest.

A wasp's nest has quite an interesting history attached to it. In spring the queen wasp, on awakening, selects the site for the future wasp city. She then commences to build the nest by forming cells of papier mache. As each cell is completed the queen lays an egg in it. Each day she builds another cell and places in it an egg. As the eggs hatch the resulting grubs must be fed. In a few days, however, the grubs develop into fully-fledged worker wasps, who at once take their share in the building of the nest. They also attend to the feeding of the grubs. A wasp's nest is quite as interesting as a city, and, in fact, is run on the lines of a municipality.

Where Silk Comes From.

Two-thirds of all the silk used in the world comes from China. Wild silk, the product of a silkworm fed upon oak leaves, comes mainly from Shantung and Manchuria. It is coarse in comparison with white and yellow silks, and is manufactured into the tussore of commerce. Pongees are also produced from silkworms fed on oak leaves. Wild silk has recently become more popular owing to the adoption of a new process of bleaching, which allows the material subsequently to be dyed in the most delicate shades of color. Wild silk is said to be the best material for making the 'wings' of aeroplanes. Waste silk comprises a variety of by-products of the industry, obtained mostly from rejected cocoons. Silk piece goods are hand woven by peasant weavers, mainly in the district where the silk is produced. Hence the numerous varieties, each weaver adopting one particular kind of silk. The value of the silk exported from China amounts to about £11,000,000 a year.

Intercolonial

The Rev. P. Brennan, who has managed the *W.A. Record* for the past two years, has resigned, and his Lordship Bishop Clune has appointed Rev. Father Lynch as editor and manager.

Since the news of Right Rev. Mgr. Phelan's appointment as Bishop of Sale was received in Melbourne, he has been the recipient of over a thousand messages of congratulation from all parts of Australia and New Zealand.

All tram traffic records were broken during the Christmas holidays in Sydney. On Christmas Eve the Sydney trams carried 1,130,000 passengers, and on Boxing Day 991,000. A railway record was also established. Not only did the Boxing Day, 1912, passengers exceed the number travelling on the same holiday in 1911 by 26,444, but 13,000 more passengers left Sydney station for the summer resorts during Christmas week than last year.

His Grace the Archbishop (says the *Melbourne Advocate*) has received a cable message from Maynooth, Ireland, in which it is stated that the Coadjutor-Archbishop of Melbourne (Most Rev. Dr. Mannix) has completely recovered from a slight attack of pneumonia, and that on January 26 he will consecrate Very Rev. J. Shiel, who has been appointed Bishop of Rockhampton. Dr. Mannix intends leaving England by the R.M.S. *Orama* on February 15, which is due here on Easter Monday.

At a meeting of the United Irish League, held on December 18 at the Celtic Club, Melbourne, Dr. O'Donnell was authorised to send Home the following two cablegrams, which he accordingly did, on December 23:—'To Redmond, Commons, London.—Heartiest congratulations Home Rulers Victoria to self and party success of Bill for legislative freedom Ireland.—O'Donnell.' 'To Hon. Asquith, Commons, London.—Home Rulers Victoria thank you, Liberal Party, most gratefully; measure of justice Irish nation.—O'Donnell.'

At a recent meeting in Melbourne of the Central Council of the Catholic Federation, the immigration officer reported that since the establishment of the immigration bureau as a branch of the Federation's activities, over 400 Catholic immigrants had been met and cared for. In the case of Catholic girls arriving in Melbourne and having no friends to meet them, arrangements have been made for them to be provided for by the Sisters of St. Joseph at St. Joseph's Providence, East Melbourne, until suitable employment is found for them. Seven Catholic boys arrived from Glasgow by the *Demosthenes*, and situations in Catholic homes had been provided for all of them. Mr. Walsh reported that the immigration officers of the various religious denominations are working in perfect harmony and he expressed his gratitude for the assistance and co-operation he had received from the representatives of the other religious bodies.

The public meeting of Catholics held recently in the Cathedral Hall, Melbourne, for the purpose of making arrangements for a fitting reception to his Grace Coadjutor-Archbishop Mannix, on his arrival in Melbourne, was attended by an enthusiastic body of prominent laymen. Dr. Kenny, K.S.G., was in the chair. The following resolutions were agreed to:—It was moved by the Hon. J. Duffy, K.S.G., 'that a hearty reception be tendered to his Grace.' Mr. R. Clereham moved 'that a public reception be held in the Exhibition Building as early as convenient after the arrival of Archbishop Mannix, and that the co-operation of the Catholic schools be requested in providing the entertainment.' It was moved by Mr. J. S. Meagher 'that an executive, with Mr. Mornane as hon. treasurer, and Mr. T. J. O'Brien as hon. secretary, be elected. It was estimated that £100 would be ample to cover all expenses. A subscription list was opened in the room and heartily responded to.

The New Skeates

JEWELLERS, &c., 42 QUEEN ST., AUCKLAND. (Opp. Smeaton's).
A New Establishment, New Stock, personally selected from World's
best Manufacturers. Modern goods at Modern Prices. A trial esteemed.

ERNEST G. SKEATES (Late Senior Partner Skeates Bros.).