

## Science Siftings

### BY 'VOLT'

#### Oil as a Motive Power.

Dr. Dresel, speaking at a conference of naval architects, confirmed the rumors that in some unrevealed corner of the world an oil-propelled battleship is building. He was not, however, at liberty to give details. He said that fully 250 ships, for both the navy and the merchant service, were either fitted or were being fitted with oil engines, and that if some 9000-ton freighters now building in Hamburg were successful, there would be a revolutionary tendency towards the adoption of oil as a motive power.

#### A New Alloy.

A new alloy, said to be compounded principally of copper and aluminum, is placed on the market under the name of cupros. In color it resembles gold, polishes readily, acquiring a brilliant lustre, and is, consequently, well adapted for ornamental purposes. Its coefficient of resistibility to chemical influence is high; it is immune to atmospheric conditions, salt water and air, and even to sulphuric, hydrochloric, and acetic acids. It can be easily tooled, rolled, and drawn into wire. The tensile strength has been measured up to 80,000 pounds per square inch. In weight it is 8.11 times that of water.

#### Machine-made Silk Embroidery.

The adaptation of an ordinary sewing machine to the making of silk embroidery has been taken up by the Chinese of Hong Kong and in other places in South China with considerable enthusiasm, and although the idea was put into execution only a little over one year ago, the progress made in producing really handsome machine work is notable. It is the Chinese ladies of the better class who are learning to make embroidery, and in Canton, for instance, some of the more wealthy ladies have organised classes in their respective residences in order to further study the art, for it is not only simply a matter of the machine doing all that is required, but much scope is left for the individual in designing as well as color shading. The work is done chiefly on Chinese raw silk (at the beginning Japanese was used), and comprises all manners of designs—scenery, bird life, flower studies, emblematical scrolls, etc.

#### Seaweed.

When we see the tangled masses of seaweed washed up on the beach, we little conceive that it has any commercial value. The fact is that on the British coast 400,000 tons of seaweed are collected every year. From the kelp into which it is burned chemists manufacture iodine and bromide, besides valuable chlorides and silicates. Thousands of Japanese and Chinese almost live on seaweed. France collects 8,000,000 pounds yearly, which is used in the manufacture of mattresses. The Irish convert seaweed into valuable jellies, and make other useful foods out of it. All along the coast of Nova Scotia the farmers collect what is known as Nova Scotia eel grass, which is shipped daily to Boston, to be used in the wadding of airtight, noiseless floors, besides making the finest of filling for upholstery and serving other useful purposes. Thousands of farmers make money out of collecting the grasses and marine substances that grow along the shores. By a wise provision of the law, nobody is allowed to fence it in, at least below high-water mark.

#### Manila Hemp.

As is generally known, the growth of hemp is the foremost industry of the Philippines. More Americans have taken up this business than any other one thing, because it requires less capital. The hemp plant belongs to the banana family, and Manila hemp thrives nowhere else in the world. The Philippine fields supply the entire world with raw hemp for manufacture into rope and cordage. In view of these conditions (says *Cassier's Magazine*) one would naturally judge that factories for working up the raw product are numerous. But such is not the case. It is very doubtful if there were more than a dozen rope-works of any nature in existence when the Americans landed. And at present there is but one modern factory in Manila, that being owned and operated by Americans. A number of British firms, who have branch offices in Manila and agents throughout the provinces, do most of the buying and exporting. Exports aggregate anywhere from 200 to 300 millions of pounds annually, more than half of which comes to the United States. It is estimated that the average value of the total production is £6,000,000. Until a year ago hemp had always been stripped by hand—a slow and wasteful process. It is cleaned by having a number of native laborers drag the stocks across a knife provided with iron teeth, thus separating the strands from the pulp. No sooner had the Americans arrived than inventors commenced to devise means to do this work by machinery, getting out a better grade of hemp, wasting less, and accomplishing more in a given time. Several of these inventors have been successful, and the machines are now doing excellent work, thus increasing the output. The tensile strength of machine-stripped hemp is nearly 50 per cent. greater than that of the hand-stripped.

## Intercolonial

Bishop Olier, S.M., Vicar-Apostolic of Central Oceania, who spent some weeks in Sydney recuperating, sailed for his episcopal centre in Tonga on April 25. Accompanying him are two Marist Sisters, destined for duty in the missions of the Tongan Group.

Ven. Archdeacon Smyth, of Perth, W.A., has been granted an extended holiday by Bishop Clune. He will spend it in Europe. For the past eleven years he has labored in the Westralian capital almost without respite, his work during the past few years being specially trying. The citizens appreciate him, and intend making him a presentation.

At the annual district meeting of the H.A.C.B. Society in Geelong (Victoria) it was stated that the total funds of the society in the State amounted to £72 210, the various funds in the district and branches showing an increase of over £5000 during the year. The total number of members (all classes) on the books of the society at date was reported to be 10,101, made up as follows:—Male branches, 7851; ladies' branches, 2106; juvenile branches, 144, being an increase of 429 members for the year.

The Rev. Father James Rouliez, M.S.H., until recently of the Sacred Heart Monastery, Kensington, has arrived in Western Australia, where he joins Rev. Fathers Goodman, M.S.H., and Tyler, M.S.H., at Leonora, in the Geraldton diocese, of which parish the Missionaries of the Sacred Heart have taken charge at the request of Bishop Kelly. Father Goodman was for some time stationed at Randwick, and Father Tyler was transferred from duty in the diocese of Christchurch, New Zealand, to the new mission in the West.

The fact (says the *Brisbane Age*) that his Grace the Archbishop, in consequence of feeble health, has been unable to officiate at the foundation or opening of churches in country districts, where, in addition to the ceremonies, there would be the physical strain of travelling, and that under similar circumstances Confirmation has been administered in this diocese by Bishop Duhig of Rockhampton, has naturally been the subject of sympathetic consideration among many observant people. His Grace certainly maintains his mental vigor and keenness of faculties for which he has always been noted. But it is an open secret that his bodily health and strength are in a weak condition. When we consider how many years of continuous arduous duty he has performed—as a professor in St. Lawrence O'Toole's Seminary in Dublin, then as a zealous priest in Queensland, and subsequently as Archbishop of Brisbane—when we consider this long life of continuous pastoral labor, and also consider his advanced years, we cannot but admire the sound and hardy constitution and the zealous energy which have so long sustained him under the wearing bodily strain of ever active priestly and episcopal ministration. We believe that under these circumstances his Grace is desirous of having the assistance of a Coadjutor-Bishop, and will take the preliminary course necessary for getting the Holy See to make the appointment. In fact it is quite possible that his Grace is already moving in the matter—but of all this nothing whatever is definitely known.

Judge Murray, Lieutenant-Governor of Papua, who has been absent in Europe for the past ten months, returned to Sydney by the *Matarom* last week (says the *Catholic Press*). He made the voyage mainly to see his wife and family, who reside in England, also his eldest son, who lately received a commission in the Leinster Regiment bound for India. The Judge hadn't seen this son for ten years. Ireland was visited by his Excellency, who spent a fortnight with some relatives in Limerick, the birthplace of his father, the late Sir Terence Aubrey Murray, one-time Speaker of the New South Wales Legislative Assembly. He had an audience with Pope Pius X. in Rome, after which he went to Marseilles, whence he sailed for Singapore, on his way back to New Guinea. Mrs. Murray accompanied him as far as Java. It was in Marseilles he heard the rumor of the massacre of Staniforth Smith and the Government exploring party in the wilds of Papua. He did not believe it, however, knowing the people and the country so well. He was uneasy until he reached Singapore, where he was informed of their safe return. Judge Murray goes on to Papua in about a month. Judge Murray was educated at Oxford, where his brother, Gilbert, is now Regius Professor of Greek, and with whom he stayed for a time during his sojourn in England. His brother's health is not good, and he talks of coming to Australia. Before going to New Guinea as Acting-Administrator in 1904, the Judge was Colonel of the Irish Rifles Regiment, and one of Sydney's leading barristers. He also acted as Judge here. He is a devout Catholic, a great athlete, a champion amateur boxer, and an expert swordsman. As Lieutenant-Governor of Papua he combines the offices of State Governor and Chief Justice, and is the principal official link between the Territory and the Governor-General. He is an Australian, a strong man physically, and as popular in New Guinea as in Sydney. His administration of the Territory has been most successful.