

Science Siftings

BY 'VOLT'

Making the Left Hand Work.

A good many people never think what a shirker the left hand is. Our two eyes and our two ears and our two feet divide their work equally, or very nearly so, but the left hand only works at what the right hand cannot do alone. In Japan children are trained to use their hands and fingers more carefully than anywhere else in the world. Japanese children can do and make things with their hands that are impossible to American boys and girls, and nearly all of the Japanese, young and old, can draw and write with both hands at once. We could do the same if we had been taught to do so.

Carbon Dioxide in the Atmosphere.

Every ton of coal, it has been found, which is burnt uses up 300,000 cubic feet of air and renders it unfit for breathing. Suppose that there were no danger of exhausting our coal supply, and that we had enough to last for ever; it would only be a few hundred years at our present rate of increase in coal consumption, and incidentally oxygen consumption, until all the atmosphere on the earth's surface would be rendered incapable of sustaining life. However, the consumption of coal at present is returning to the atmosphere the carbon dioxide of which it was robbed when the deposits of carbon were stored away in the coal beds during the carboniferous period. The present proportion of carbon dioxide in the air is about one part in 2500. This would be more than doubled, if it were not modified by vegetable life, by the consumption of the present known coal deposits, and it is stated that a doubling of the quantity in the atmosphere would more than double the rate of growth of plant life.

Wireless Communication Between Moving Trains.

A railophone installation for wireless inductive telephony and signalling to and from moving trains has been laid down by the Stratford-on-Avon and Midland Junction line from Stratford to Kineton, a distance of ten or eleven miles. Miss Marie Corelli performed the opening ceremony on April 20. Experiments made show that while a train is running at full speed through this section conversations can be carried on between the train and the signal-box. The inventor, Mr. Von. Kramer, claims that the railophone provides instantaneous and full communication, whether running or stationary. It is also possible for two trains on the same line to warn each other automatically of their proximity.

The Height of Ocean Waves.

The size claimed for the waves in great ocean storms is often exaggerated, for science has shown that the biggest wave caused by a gale does not exceed 30 feet. Tidal waves have been known to reach heights of 60 feet, but they are an exception. With the increase of size of ocean steamers the point of sight of the passenger has been raised, and it requires the roughest kind of a sea to show a broken horizon from the promenade deck of the newest ocean liners. In these the pitch of the vessel is largely eliminated, although their decks, high above the highest waves of the most severe storms, have been washed by water thrown upward because of the opposition afforded to the advance of a great wave by their hulls. On the decks of the small steamers of past years, where the point of sight was low, the waves often appeared mountainous.

Study of Air Currents.

Until men began to navigate the air and study its currents and movements little attention was paid to the conditions of the upper atmosphere, and such matters as atmospheric tides and top currents completely encircling the earth were of seemingly little interest. Since men have flown, and especially since men have flown and fallen, we have heard a great deal in a vague way of air currents. The moon we know causes the marine tides by its attraction. It draws the water on the surface of the earth toward it in a hump on the side that is exposed to the lunar influence and draws the earth itself away from the water on the opposite side, leaving a corresponding hump of water. The air it seems, is affected in the same way. The layer of atmosphere about the earth rises, falls, and flows more freely than water because it is lighter, so the tide comes more quickly in the air at a given spot than the marine tide. This rise and fall, however, means just as much to the navigator of the air as the tide in the sea does to the sailor and has to be accounted for. The most remarkable current, however, is one constant stream in the atmosphere running from west to east completely around the earth in the upper atmosphere.

Nothing grieves the careful housewife more than to see her good furniture mishandled by careless carriers. If you have to shift, be wise and get a reliable firm like the NEW ZEALAND EXPRESS COMPANY to remove your things. They are very careful, and charge reasonably too. Their address is Bond street....

Intercolonial

A new Catholic Church is to be erected at Ballan, in the diocese of Ballarat, at a cost of £2500.

The census makes the population of Victoria 1,315,000. In 1901 the figures were 1,201,070. The approximate census populations of Melbourne and suburbs, within a radius of 10 miles from the G.P.O., is 591,830, as compared with 496,079 at the census of 1901. These figures also are subject to amendment.

Mother Mary Vincent Cummins, of the Brigidine Convent, Beechworth, Victoria, passed away recently at the age of 74 years. She came from Ireland a quarter of a century ago, and founded the convent over which she presided for nine years. The buildings, which cost £10,000, were planned and erected under her supervision.

The Mother Superior of the Sisters of the Good Shepherd, Mount St. Canice, Sandy Bay, Hobart, died on May 25. She was a native of Mount Gambier, and was in her 50th year. She had been 23 years a member of the Order, which opened a home for penitent women at Hobart in 1893. This foundation was made from Abbotsford, Melbourne.

The Month's Mind of the late Rev. E. J. Luby, P.P., of Brunswick, was celebrated in St. Ambrose's Church in the presence of some forty priests and a large congregation. At a meeting of the parishioners, presided over by the Rev. M. D. Finan, it was decided to expend £400 on a marble high altar, as a memorial to the deceased priest.

While en route to Queensland on a holiday (writes the Armidale correspondent of the *Catholic Press*) the Rev. Father Quealy, of Wellington, N.Z., remained for a few days at the Bishop's House, Armidale, and visited the places of interest in the city and district. Father Quealy has been in indifferent health for some time, and hopes to be benefited by his tour of the north.

High Mass will be celebrated at St. Patrick's Cathedral in honor of the Feast of Pentecost, and in celebration of the seventy-second anniversary of the first Mass celebrated in Victoria, in 1839 (says the *Melbourne Tribune*). Rev. Bonaventure Geoghegan was the celebrant on the occasion, and the Mass was said in an old hay and corn store at the corner of Elizabeth and Little Collins streets, where the Colonial Bank now stands.

Mr. Vernon C. Redwood, ex-Mayor of Toowoomba, has been asked to represent the New Zealand University at the inauguration ceremony of the Queensland University (says the *Catholic Press*). Mr. Redwood, who is a nephew of Archbishop Redwood, of Wellington, has represented Drayton and Toowoomba in the State Parliament of Queensland, but was defeated at the 1909 general election. He is a young man, and one of the most popular men in Toowoomba.

For some considerable time past grave fears have been entertained concerning the health of Rev. Father Matthew Horan, the revered parish priest of Gympie (says the *Brisbane Age*). When it became known that the Rev. Andrew Horan, parish priest of Ipswich, had journeyed to Gympie, the fears concerning the health of his brother were heightened. The many friends of the Rev. Father Matthew Horan, however, will be gratified to learn that he had so far recovered as to be able to assist Bishop Duhig in administering the Sacrament of Confirmation to 372 candidates at Gympie.

The West Australian Government (says the *Catholic Press*) is making arrangements to try and secure some of the tens of thousands of Irish emigrants who are crossing the seas every year—mostly for the United States of America. Last year 32,623 men and women left Ireland for other countries, and they were mostly the young, virile and strong. Colonial Secretary Connolly, of W.A., has carefully explained that the wishes of himself and his Government are not to deplete Ireland, but to gain the ears of those already determined to go to America, and point out to them the superior advantages of life in the western part of Australia over life in the United States or Canada.

The credulity of Dr. Rentoul as a witness in controversy touching Catholic doctrine and practice has been shattered by his modus operandi in reading into the decree *Ne Temere* words not to be found there (writes the Melbourne correspondent of the *Freeman's Journal*). Subsequently he was forced to admit that his 'translation' was a 'paraphrase' by Dr. Crozier, a notorious fanatical Orangeman. In closing the correspondence, the Very Rev. Dean Phelan, V.G., who has come out of the fight easily first, said: 'I now part company with Dr. Rentoul on this question. I shall not inflict any punishment more severe than to present him unmasked to your readers, clad in the tattered garments forged for him by Dr. Crozier. How can we blame the flock pastured by such shepherds for unreasonable anti-Catholic feeling when the doctrines of our Church are "translated" for them by Dr. Crozier and "paraphrased" by Dr. Rentoul?' The *Argus* closed its correspondence with the fourth letter of the Dean's, and that was only fair, as Dr. Rentoul opened the battle, which has proved so disastrous to him as an historian and a theologian, lowering his prestige to a very considerable extent.