

Science Siftings

By 'VOLX.'

The Strength of a Soap Bubble.

Professor Boys, in a lecture on 'Soap Bubbles and Other Things,' at the Royal Society of Arts the other day, showed that an ordinary soap bubble will support a house sparrow's egg on the rim of a china teacup in such a manner that it will not roll off. With the aid of a basin of soap and water Professor Boys produced an astonishing number of bubbles of every conceivable shape and size—globular, tapering, large and small. Some of them were more than a foot in diameter, and floated through the hall for several minutes without breaking.

When You Fall Far.

It is quite a mistake to think that when a person falls from a great height his heart stops before ever his body touches the ground. Breathing may be suspended for a few minutes, but if artificial respiration is applied at once, life can be restored in many cases. This was proved in America, when a girl fell a distance of 200 feet, with no more serious results than some fractured bones and a few internal injuries. She compares her sensations while falling to the faintness one feels when travelling downwards in a jerky lift. It was only in the moment of landing that she lost consciousness. Doctors assert that such accidents would not so often prove fatal if artificial respiration were more generally tried. Just because the patient's pulse is not beating it is a fatal error to think he must therefore be dead. Treat him as you would a man rescued from drowning, and in nine cases out of ten you will save his life.

What is Horse-Power?

To lift 550lb 1ft in one second requires what is known as one horse-power. Similarly a horse-power is able to raise twice that weight 1ft in twice the time, or ½ft in just that time. Moreover, it can raise half 550lb 1ft in half a second, or 2ft in a second, and so on. Therefore, when we lift one-fourth of that weight, 137½lb, 4ft in one second, we are exerting a horse-power. Accordingly, when a person who weighs 137½lb runs upstairs at the rate of 4ft a second, he is exerting the equivalent of a horse-power. For a man weighing twice that much, 275lb, it would be necessary to climb at the rate of only 2ft a second to exert a horse-power. It is possible to do much more. As a matter of fact, a horse often exerts many times a horse-power. The average horse can draw a waggon up a hill where a ten horse-power engine with the same load would fail. A horse-power does not represent the greatest momentary strength of the average horse, but is a measure of the power which he can exert continuously.

Singing Shellfish.

Contrary to the general belief, fish are not all dumb. Quite a number of them make some kind of noise. The common red gurnard of our coasts, on being hooked and hauled rudely out of the sea, will grunt loudly and indignantly, as a fisherman will tell you (says a Home exchange). It is a strange, croaking sort of noise, such as one might expect a young rook to make. Then there is a fish called the butterman, which is found off the Scottish coast. This fish, which is fat and comfortable looking, about a foot long as a rule, makes a distinct hooting noise from the back of his throat when landed in a net or caught on a long line. A netful of these fish, though they are rather rare, is sometimes caught, and when they are hauled in the chorus of sharp, siren-like hoots is very startling to a stranger. But in Ceylon there is a shellfish, a kind of mussel, which positively sings. In still weather, when the water has ebbed away from the mussel-beds for a few hours, these shell-fish can be heard producing a long, low, fluty sound. How they do it no one knows, but they make a quite distinct attempt at singing; and, as they have no throats, they must produce this

sound by some manipulation of their double shells. The sound is low and not at all unpleasant—in fact, it is rather sweet to the ear on a still summer's night.

Intercolonial

Two former pupils of the Christian Brothers are now Archbishops in Australia:—Archbishop Spence, of Adelaide (who celebrated his 56th birthday on January 13), and Archbishop Duhig, of Brisbane.

The late Archbishop Dunne, of Brisbane, is succeeded by his Coadjutor (Most Rev. Dr. James Duhig), who was appointed titular Archbishop of Amida and Coadjutor of Brisbane with the right of succession in 1912. He was born at Broadford, County Limerick, in 1871, and came to Queensland at an early age. He was educated by the Christian Brothers and at the Irish College, Rome, and was appointed Bishop of Rockhampton in 1905, being then the youngest bishop in the British Empire.

Rev. Father Jorgensen, who died at 72 years of age in Adelaide recently, was for 32 years a keen Lutheran. As a young fellow he took a course of classics at the Copenhagen University, and started business as a pharmaceutical chemist in that country. He came to Australia in 1871, and for a number of years conducted a chemist's shop at Gawler, South Australia. In 1877 he commenced the study for the priesthood. He finished his studies in 1882, at Propaganda College, and, after being ordained, took charge of a mission in Eyre's Peninsula.

During a recent sectarian squabble in Queensland, a letter appeared in one of the daily papers, which contained the following statement: 'Should Bishop Le Fanu, the Rev. Mr. Gradwell, or any other militant Churchman be desirous of making inquiries with a view to ascertain the proportion of Catholics earning in excess of £250 per annum in the various departments, in one at least the result will be an eye-opener. In this department, presided over by a Catholic Minister, there are at present 47 officers receiving salaries in excess of the amount mentioned, and of this number 45 are Protestant, the religion of one cannot be ascertained, and the remaining one is a Catholic.'

On Thursday last (says the *Catholic Press* of January 25) Sir Edmund Barton, senior puisne Judge of the High Court, celebrated his 68th birthday. Every Australian will wish him many happy returns of the day. Since he went on the Bench the public have lost sight of him; and, although he is still alive, he has already become a historical character. Barton always had the good will and support of the Irish in Australia. He was always a Home Ruler. In a conversation in London with a special correspondent of the *Temps*, he said: 'I am not fully conversant with the question of Home Rule; but I realise an undeniable fact. It is that out of their own country the Irish show remarkable capabilities as lawyers, and as members of all the liberal professions. We ask in Australia why the sons of Ireland cannot govern their own country when they are able to draw up and interpret the laws and constitutions of other nations?'

The community received quite a shock last Friday (says the *Catholic Press* of January 25) by the sad intelligence that the Rev. Father Joseph Kelly, who had been in charge of Taree since the death of Father O'Reilly, was drowned on the previous day at Mitchell Island, near the mouth of the Manning River. Memories of the sad death of his brother, Father James Kelly, who was drowned on his way to celebrate Mass near Singleton some few years ago, were revived, and the deepest sympathy was evoked for his third brother in the priesthood, Father John Kelly, of Newcastle—all of them students of St. Patrick's College, Manly, and for their fourth brother, Mr. Thomas Kelly, of Hamilton, and their two sisters, one of whom is a Sister of Mercy.