

Science Siftings

BY 'VOLT'

Swim by Machinery.

A ten-pound swimming machine that may be packed in a suit-case is the invention of a Frenchman. It is a safe and rapid semi-craft for the man who swims or the man who doesn't. At the front of the apparatus is a cylindrical metal float, with conical point and a depending rudder. At the rear is another metal float, with stirrups actings upon a propeller, the two ends connected by a wooden bar, on which the swimmer lies as if on the water, kicking with his feet and alternately pushing and pulling with a cross handle-bar just back of the forward float. The swimmer on the swimming machine gets a maximum of exercise while making a speed impossible to the ordinary swimmer on the open water.

How Cats Fall.

A scientist has constructed an ingenious model to show why a cat in falling invariably alights on its feet. This model, roughly speaking, consists of a cardboard cylinder wherein are stuck four rods to serve for legs, together with a tail devised on similar principles. The object of the experiment is to show that a feline's peculiar faculty depends on the rotation of its tail with sufficient vigor. This faculty is one especially developed by climbing and leaping animals, such as members of the cat tribe, monkeys, squirrels, rats, and most lemurs. As mentioned, the tail plays an important part in the turning process. According to the investigator, all tree-inhabiting monkeys have long tails, and there is not the slightest doubt that these tails are of great aid to all climbers in enabling them to turn in the air. The tail also serves as a balancer, as evidenced in the case of a squirrel, which may be seen walking along a tightly stretched wire or string, swinging its tail from side to side, much after the manner of tight-rope walkers balancing themselves with a pole.

A Chemical Fire Extinguisher.

Remarkable results were obtained in a series of tests of a chemical fire extinguisher invented by the Abbé Daney. The tests were carried out at Lyons in the presence of the maire, military commanders, fire brigade chiefs, and the military sappers and engineers, as well industrial representatives. A pyramid of boxes filled with inflammable material impregnated with oil was erected to a height of thirty-five feet. The structure was set on fire, and when the entire mass was blazing a special apparatus threw on it a shower of dark liquid mixed of gases and salts. The fire was instantly extinguished, and on close inspection no trace of fire was found anywhere in the enormous mass. Then showers of oil and inflammable essences were thrown on the heap, fire was applied once more, and it was found that the oils and the essences alone burnt. Everything which had been touched by Daney's extinguisher remained incombustible, and when the oils had burnt out the mass was found intact, as after the first fire. The *Debats* says that 'the test was absolutely conclusive, and the modest clergyman is to be felicitated without reserve on an invention which at last makes us "master of the fire."'

The Mud-nest Builder.

Flamingoes are perhaps the most curious and picturesque birds in the world. Their long necks, legs, and heavy beaks seem out of all proportion to their bodies, and the rosy plumage of the adult bird is very beautiful. The flamingo is the only member of the stork tribe which builds a mud nest. The foundation for this is often laid in as much as fifteen inches of water, and rises above the surface, a pile of no mean size. Some remote and desolate spot is chosen, and here hundreds of birds build their nests and rear their young. Most of the nests hold their eggs, some only one; and the incubation of these is delayed so long that before they are hatched the water has dried up, leaving the nests as mounds of mud and fibre along the edge of the lake. On the top of the nest the parent sits, with its long legs doubled up, and projecting behind her for some distance beyond the tail. The egg, which has a greenish blue shell, is protected by an outer thick chalky coat, which can be removed. The plumage of the young flamingo is white, with here and there brown touches, and the bill is nearly straight. The characteristic crooked beak of the adult does not appear till the bird has nearly matured. These birds can walk, swim, or fly, but they are never so happy as when wading knee-deep in water. There is a European variety in the south of France and Spain, but the grander specimen comes from Equatorial Africa.

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Intercolonial

A series of farewells to priests of the archdiocese of Sydney, leaving for Ireland, took place on February 8. The parishioners tendered a farewell to Rev. Father M. Rohan, of St. Augustine's, Balmain; and the Rev. Fathers Dowling (Botany) and J. O'Gorman (Pymont) were similarly honored by their respective parishioners.

His Lordship Bishop Carroll laid the foundation stones of the new convent and schools at Smithtown, on Sunday, January 29. There was a large gathering at the ceremony. In the afternoon he laid the foundation stone of the new presbytery at Kempsey. Many hundreds were present, and a collection amounting to £650 was taken.

His Eminence the Cardinal (says the *Freeman's Journal*) will probably leave Sydney for Western Australia by the Orsova on March 1. The consecration of Dr. Clune, C.S.S.R., by his Eminence, has been fixed for St. Patrick's Day, at Perth. His Eminence will probably be joined on the way by the Bishops of Goulburn and the Archbishop of Hobart.

Speaking at the opening of St. Ignatius' new school for boys at Richmond, his Grace the Archbishop of Melbourne, said that of the two classes of opponents of justice to the Catholic body in the matter of education—the secularists and the sectarians—he preferred the former. Those agitating for Bible lessons in the State schools were simply asking for a subsidy to teach the Protestant religion. A leading Protestant paper, the *British Weekly*, declared that to grant the request of the sectarians without satisfying the Catholic claims was untenable.

At the conclusion of the blessing of the foundation stone of the new Cathedral, Armidale, on Sunday, February 5, his Eminence Cardinal Moran, who performed the ceremony, said:—'I promised Bishop O'Connor £50 now, and £50 when the cathedral was completed, but his Lordship said, "You had better give me a £100 now, for you may be in heaven when the building is finished." I think his Lordship is a wise man,' added his Eminence, to the accompaniment of universal laughter, 'and I will give him the £100 now.'

The following clerical changes have been made in the archdiocese of Sydney:—The Rev. Fathers M. Rohan (Balmain), R. Collender (Surry Hills), P. Dowling (Botany), J. O'Gorman (Pymont), have left for a trip to Ireland. During their absence the parishes will be administered as follows:—Rev. Father P. Brody, Balmain; Rev. Father J. McDermott, Surry Hills; and Rev. M. Sherin, Botany. The Rev. J. Hyland, now at Queanbeyan, will be stationed at Pymont; and the Rev. M. Hogan, recently returned from a trip to the Homeland, will take charge of Queanbeyan.

The Very Rev. Thomas Lawless, C.M., of Ashfield, passed away on February 2 at St. Vincent's Presbytery. The deceased, who was 48 years of age, was born at Collon, County Louth. Father Lawless, while still a student, became a member of the Vincentian Congregation, and was later raised to the priesthood at Clonliffe College, by the Most Rev. Dr. Walsh, Archbishop of Dublin. For six years he professed mathematics and classics at St. Patrick's College, Armagh. Sent by his superiors to Australia in 1897, he remained for five years attached to the staff at St. Stanislaus College, Bathurst, and thence he was transferred to the Vincentian House of Missions, Malvern (Vic.). From that centre he was engaged for some years in giving missions throughout Victoria and Tasmania. In 1905 he was appointed parish priest at Ashfield, and local Superior of the Vincentian community. For a short period prior to his death he held the office of Provincial of the Vincentian Fathers in Australia.

The foundation stone of St. Mary's Cathedral, Armidale, was blessed and laid on Sunday, February 5, by his Eminence Cardinal Moran, assisted by their Lordships the Bishops of Armidale, Goulburn, Lismore, Maitland, and Rockhampton. About two years ago his Lordship Dr. O'Connor instituted the movement to erect the Cathedral, and at the first meeting held in connection with the project a sum of £3000 was subscribed. A tour of the diocese made on behalf of the new Cathedral resulted in a sum of £10,000 being on hand prior to the commencement of the work. The Cathedral will be of brick and stone, and the contract price is close on £22,000. On his arrival in Armidale on the day prior to the ceremony his Eminence was tendered a public reception in the Town Hall, at which the Mayor presided, and was presented with an address by the Catholics of the town. At the conclusion of the blessing and laying of the foundation stone on Sunday Bishop O'Connor appealed for subscriptions towards the Cathedral fund, and made a beginning by handing in his own cheque for £1000. The priests of the diocese subscribed £1222, and his Eminence the Cardinal gave £100. At the banquet which was held later on in the Town Hall his Lordship Bishop O'Connor stated that the subscriptions at the ceremony amounted to £5000, which, with the amount previously in hand, totalled £15,000.