

hands of the University an additional benefaction of as much as 200,000*l.*, hoping to enable the buildings and design to be fully carried out. It is reassuring to note that these two public-spirited citizens are not allowing their munificent gift of 1913 to fail of fulfilment even in the difficult circumstances of the present time.

THE universities in Australia are apparently suffering, like our own institutions, from an inability to make their incomes meet their expenditures under post-war conditions. At Sydney the University authorities have decided to raise the fees in all the various schools, in some cases by as much as 50 per cent., in order to meet the increased cost of materials. Melbourne University has issued an appeal for 100,000*l.*, towards which it has obtained only the sum of 30,000*l.*, subscribed in small amounts; it hopes to raise a further sum of 20,000*l.* in a similar way, but no large gifts have yet been made. Sir W. H. Irvine, Lieutenant-Governor of Victoria, discussed the situation at Melbourne on January 31, according to a *Times* correspondent, and suggested that wealthy Victorians might well follow the example set by Sir J. Langdon Bonython in South Australia, who has presented the sum of 40,000*l.* to Adelaide University.

We learn from an article in the *Times Educational Supplement* that the Vice-Chancellor of the University of Madras, Mr. K. Srinivasa Iyengar, who is now a member of the Madras Executive Council, laid great stress on the neglect of science and technology in India in his recent convocation address. The careers of 18,500 graduates of the University had been traced, and of this number about 3700 were engaged in teaching, 765 had taken up medicine, while only 56 had devoted themselves to science; the remaining 14,000 were divided between law and Government administrative service, with a big majority for the former. The Vice-Chancellor concluded his account of the statistics he had accumulated with the words: "You will search in vain for any solid contribution to the sum of human knowledge among the magnificent number." These facts have been appreciated by many leaders of Indian thought, and several of the more wealthy men have endeavoured by their munificence and influence to create a stronger feeling for science. The Indian Institute of Science at Bangalore owes its existence to the late Jamsetji Tata, and some eight years ago the late Sir Taraknath Palit made over money and land of the aggregate value of 15 lakhs of rupees (100,000*l.*) to the University of Calcutta for the promotion of scientific and technical education in Bengal. University chairs of chemistry and physics which can be filled only by persons of Indian birth were created from this fund. In 1913 Sir Rash Behary Ghose gave 10 lakhs of rupees (66,666*l.*) to the University for the establishment of chairs of applied mathematics, physics, chemistry, and botany, all in relation to agriculture; these again can be held only by Indians. A year or so ago this gift was supplemented by a further sum of 11 lakhs of rupees (73,332*l.*), given by Sir Rash Ghose for the proposed technological branch of the College of Science. This gift enabled the University to send Sir Prafulla Chandra Rây, the dean of the faculty of science, on a three months' tour of the universities of Great Britain. Sir P. C. Rây is a distinguished chemist who has been closely associated with numerous industrial concerns in Bengal, and he has been appointed to supervise the equipment of the technological department, while four young research workers are being trained in London under the terms of Sir Rash Ghose's gift.

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Calendar of Scientific Pioneers.

February 10, 1868. Sir David Brewster died.—A founder of the British Association and the biographer of Newton, Brewster made important discoveries in optics, for which he was awarded the Rumford, Royal, and Copley medals of the Royal Society.

February 10, 1878. Claude Bernard died.—A great physiologist, Bernard for many years held the chair of experimental physiology at the Collège de France.

February 10, 1891. Sonia Kovalevsky died.—One of the best known of women mathematicians, Sonia or Sophie Kovalevsky studied under Weierstrass, and after her husband's death in 1883 became professor of higher mathematics at Stockholm.

February 11, 1650. René Descartes died.—Born in 1596, and educated by the Jesuits, Descartes served for a while in the Army, and in 1629 settled in Holland, where his principal works were written. He has been called "the father of modern philosophy." He made many improvements in mathematics, and is regarded as the founder of analytical geometry. His theory of vortices, devised to explain the motion of the heavenly bodies, held the field until it was superseded by the Newtonian philosophy. He died at Stockholm, but his remains now rest in Paris. On the pedestal of his statue at Tours is inscribed, "Je pens, donc je suis."

February 11, 1868. Jean Bernard Léon Foucault died.—To Foucault we owe the demonstration, by means of the pendulum and the gyroscope, of the rotation of the earth. In 1850 he showed that light travelled more slowly through water than through air. He was physicist to the Paris Observatory.

February 12, 1787. Ruggiero Giuseppe Boscovich died.—The Society of Jesus has produced many notable workers in science, but none with a wider reputation than Boscovich. He was a mathematician, physicist, and astronomer, and is remembered for the famous theory of matter which he propounded. For some years he resided in Paris. His last days were passed in neglect and misery, and he died insane at Milan.

February 12, 1799. Lazaro Spallanzani died.—Holding various chairs at Modena and Padua, Spallanzani was interested in all branches of science, but his main discoveries related to physiology. He especially studied digestion and fertilisation.

February 13, 1839. Edward Turner died.—The first professor of chemistry in the University of London, Turner made many accurate determinations of atomic weights.

February 13, 1909. Hans Peter Jürgen Julius Thomsen died.—An educationist, administrator, and technologist, Thomsen held the chair of chemistry at Copenhagen. He made long and important investigations in thermo-chemistry, comparable with those of Berthelot.

February 14, 1744. John Hadley died.—A mathematician and scientific mechanist, Hadley produced the first serviceable reflecting telescope and invented the reflecting quadrant.

February 15, 1680. Jan Swammerdam died.—While practising as a doctor at Amsterdam and Leyden, Swammerdam became one of the earliest and most successful entomologists. He especially studied the anatomy of the bee.

February 15, 1736. Stephen Gray died.—The first recipient of the Copley prize of the Royal Society, Gray was a pensioner in the Charterhouse, London, where he made many successful electrical experiments.

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