

could be dispensed with without injury to the rest. They may be laid aside in course of time, one by one, as mechanical ingenuity devises new and better plans to take their place, and to meet the new and larger wants of other generations. But as the present age looks back with respect and veneration to the creation of those monuments of engineering science of which little more than ruins or even historic records remain, so will the generations which succeed us look on these, our works, as worthy, and as having contributed in no small degree to the greater and more general civilisation to which we hope those who follow us may attain.

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

CAMBRIDGE.—The following courses of lectures and practical work have been announced for the present term by the Special Board for Physics and Chemistry:—

Chemistry.—Prof. Liveing, General Principles; Prof. Dewar, Physical Chemistry, advanced; Mr. Main (St. John's), Organic, elementary; Mr. Pattison Muir (Caius), Organic, advanced; Metals, elementary; Mr. Scott (Univ. Lab.), Physical, elementary; Mr. Lewis (Downing), catechetical.

Practical Chemistry.—Prof. Liveing, Spectroscopic Analysis; Mr. Sell and Mr. Fenton, Quantitative Analysis; Mr. Robinson, Analysis of Water and Food. The University, St. John's, Caius, and Sidney College Laboratories will be open for practical work.

Physics.—Lord Rayleigh, Current Electricity and its Practical Applications; Mr. Trotter (Trinity), Electricity and Magnetism, elementary; Mr. Atkinson (Trinity Hall), Heat and Hydrostatics, elementary; Mr. Shaw (Emmanuel), Physics, elementary and advanced. Practical work at the Cavendish Laboratory, with advanced demonstrations.

Mineralogy and Crystallography.—Prof. Lewis, with practical demonstrations.

Mechanism.—Prof. Stuart, with practical work at the mechanical workshop.

The Special Board for Biology and Geology have published the following list of lectures for this term:—

Physiology.—Prof. Foster, elementary; Mr. Lea (Caius), Chemical Physiology, advanced; Mr. Langley, Physiology, advanced; Mr. Hill (Downing), second M.B. class.

Zoology and Comparative Anatomy, and Animal Morphology.—Prof. Newton will lecture on Evolution in the Animal Kingdom; Mr. Sedgwick, Practical Morphology, elementary and advanced; Dr. Hans Gadow, Morphology of Ichthyopsida, advanced.

Botany.—Dr. Vines (Christ's College), General Elementary Course, and Advanced Physiology.

Geology.—Prof. Hughes, Geology of France, Switzerland, and Italy; and Pleistocene Geology, with special reference to Prehistoric Archaeology; Dr. R. D. Roberts (Clare College), Physiography and Class Work; Palaeontology and Petrology by a Demonstrator; and Field Lectures, by special notice.

SOCIETIES AND ACADEMIES

SYDNEY

Royal Society of New South Wales, June 6.—Charles Moore, F.L.S., vice-president, in the chair.—Two new members were elected, and 156 donations received. The following paper by Mr. Peter Beveridge was read:—On the aborigines inhabiting the great lacustrine and riverine depression of the Lower Murray, Lower Murrumbidgee, Lower Lachlan, and Lower Darling.

PARIS

Academy of Sciences, September 24.—M. Blanchard, president, in the chair.—The death was announced of M. Joseph A. F. Plateau, Correspondent of the Section of Physics, who died at Ghent on September 15. A summary of the scientific work of the illustrious *savant* was given by M. Faye.—The death was also reported of M. Thuillier, a member of the Egyptian Cholera Commission, who fell a victim to the disease at Alexandria on September 19.—Note on solar spectra, with the results obtained with the mineral salt refringent apparatus described in the *Comptes Rendus* of September 4, 1882.—Remarks by M. Gaudry on some specimens of extinct Siberian mammoths ob-

tained by him during a recent visit to Russia, and now submitted to the Academy. The specimens consisted of some hair mixed with wool and a piece of skin taken from the mammoth brought to St. Petersburg by M. de Maydell in 1871.—On a new and more general case of the problem of the resistance of an elastic rod, and one of its applications, by M. Maurice Lévy.—On the action of the turbine used to set in motion the electric generator at Vozille-Garc, by M. Marcel Deprez.—Additional note on the probable epochs of earthquakes, by M. J. Delauney. The author replies to the objections recently urged against his theory by M. Faye, and formulates the following law:—Most cosmic and terrestrial meteorological phenomena, and especially the great seismic disturbances, seem to occur when the great planets pass through certain longitudes, notably those of 135° and 265°, or thereabouts.—Observations on the small planets 159, 199, 218, and on the Pons-Brooks Comet, made at the Paris Observatory (equatorial of the West Tower), by M. G. Bigourdan.—Observations on the planet 113 Amalthea, by M. Perigaud.—On the induction due to the variation in intensity of the electric current in a plane circuit and in a cylindrical solenoid. Two laws analogous to those of Biot and Savart, by M. Quet.—Researches on the dispersion of light, by M. C. E. de Klercker.—On the distribution of the potential in liquid masses of determined form, by M. A. Chervet. Two cases are dealt with: (a) that of a rectangular plate of indefinite length; (b) that of a liquid mass limited by two vertical parallel planes.—Terrestrial magnetism; solution of the problem of the determination of the magnetic meridian by the compass itself on board iron ships, by M. E. Bisson.—On the composition of the substance known as gelatino-peptone, which is obtained by the action of the gastric juice on gelatine, by M. P. Tatarinoff.—Fresh observations on the tubercles and roots of *Phylloglossum Drummondii* (Kunze), by M. C. Eg. Bertrand.—On the influence of external pressure on the absorption of water by roots, memoir by M. J. Vesque.

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