

SOCIETIES AND ACADEMIES

LONDON

Royal Society of Literature, June 22.—N. E. S. A. Hamilton, librarian, in the chair. Mr. W. R. Cooper exhibited a Greek Tablet from the Hay Collection, found by the late Mr. Robert Hay in the Aasaseef, Thebes, about 1823. Mr. Cooper stated that the relic was one of peculiar interest, as it was a palimpsest tablet, upon which had been written, in the bold uncials peculiar to the fourth century, a list of familiar Grecian names, and among them that of Athanasius. This circumstance, and the fact that it was found near to the ruins of a Christian church, where a long inscription in honour of Athanasius once existed, seemed to warrant a belief that the tablet had some connection with that famous bishop, the more so as the name was not a common one in Grecian history, and the characters are unquestionably of the period in which he lived. Mr. Cooper was supported in his views by Mr. W. S. Vaux and Mr. Hamilton, who examined the antiquity with much interest, and supplemented his short paper by some very able remarks of their own.

Quekett Microscopical Club, July 22.—Annual general meeting, Mr. Peter le Neve Foster, president, in the chair. According to the annual report of the committee, which was read, the Club still maintains its popularity and success. It numbers over 500 members, and meets for the prosecution of microscopical inquiry twice a month throughout the year. Mr. Peter le Neve Foster, in vacating the presidential chair which he had so ably filled during the past year, delivered his valedictory address, in which he called attention to various open questions in microscopical science, and which were fields well worth the labour required for their investigation, and which he considered the members might undertake with pleasure to themselves and advantage to the world at large.—Prof. Lionel S. Beale, F.R.S., was elected president for the ensuing year, and Messrs. Henry Lee, F.L.S., Arthur E. Durham, F.R.C.S., Peter le Neve Foster, M.A., and Dr. Robt. Braithwaite, F.L.S., were elected vice-presidents, while Messrs. Allbon, T. W. Burr, F.R.A.S., Witham M. Bywater, and Charles F. White, were elected to fill four vacancies on the Committee.—The proceedings then terminated in a *conversazione*.

Syro-Egyptian Society, July 19.—Messrs. Bonomi and Simpson attended to exhibit and explain a large collection of water-colour and pencil drawings, mostly by the late Mr. Robert Hay, and now the property of his son, Mr. R. J. A. Hay, of Munraw. The sketches represented Egyptian views and antiquities, the most interesting of which were as follows:—A series of coloured views of *Philol* and *Koum Ombos*, taken about 1833, the more valuable as the latter temple having fallen down is now almost completely buried in the Nile alluvium. A series of very elaborately finished drawings of the palace temple of *Medinet Habou*, by the late C. Laver. The original measured plans, sections and details of the Pyramids of Gizeh, by C. Catherwood (to whom and Bonomi we owe the first accurate map of the *Haram es Sherief*). These were accompanied by notes and details of the now famous Sarcophagus in the king's chamber. A large panoramic view of *Thebes* and a folio of sketches near Karnak, in pencil, by F. Arundale. A view of the singular Purple Lake near Thebes, so called from an unexplained phenomenon, viz. that its waters at a certain period annually assume a purple tint. And, lastly, a collection of miscellaneous hieroglyphic inscriptions and mural paintings from the Tombs at Gourna. Many of these, apart from their artistic merit, are deserving notice as being excellent illustrations of the marvellous accuracy obtainable by the use of an almost forgotten instrument, the camera lucida, by means of which, ere the days of photography, the splendid works of Canaletti, Britton, Roberts, and Hay were produced. At the same meeting were also exhibited, by Mr. T. Christy of Fenchurch-street, seven volumes of beautiful photographs from the East, taken in 1869 by M. Felix Bonfils. They represented the present condition of most of the buildings comprised in the Hay drawings, and exemplified in many cases the wanton vandalism of the celebrated Mahomet Ali, who caused many of the then almost perfect temples to be destroyed for the sake of their materials, with which distilleries, cotton factories, and warehouses were erected about the years 1836 and 1840, in fact until the havoc was arrested by a vigorous "Appeal to the Antiquaries of Europe" (1841), by the late G. R. Gleddon, U.S. Consul at Cairo, to whose energy and the united action of the savans of France and

England, the present conservation of the monuments of Ancient Egypt are due.

Zoological Society, June 23.—Prof. Flower, F.R.S., V.P., in the chair. An extract was read from a letter received from Dr. J. Anderson, of Calcutta, containing additional remarks on the dolphin of the Irrawaddi.—Two letters were read from Mr. W. H. Hudson, Corresponding Member, containing remarks on birds observed by him in the vicinity of Buenos Ayres.—Mr. Howard Saunders exhibited and made remarks upon some nestlings of the Booted Eagle (*Aquila pennata*) from Southern Spain.—Dr. J. Murie read a memoir on the anatomy of the walrus (*Trichechus rosomarus*), principally founded upon the example of this animal that had lived for some time in the Society's Gardens in November 1867.—Dr. J. Murie also read notes on a species of *Tania* from the rhinoceros, which he regarded as probably undescribed; and on a case of variation in the horns of the Panolian Deer (*Cervus eldi*). A third communication from Dr. J. Murie contained remarks on *Phoca groenlandica*, its modes of progression and its anatomy.—Mr. R. Swinhoe communicated a catalogue of the mammals of South China and Formosa, with notes upon the various species that he had observed during his numerous travels in those countries. A second communication from Mr. R. Swinhoe contained a list of birds collected by Mr. C. Collingwood during a cruise in the seas of China and Japan, with notes by the collector. The collection was stated to embrace examples of 33 species, amongst which were several of rare occurrence.—A communication was read from Dr. O. Finsch, C.M.Z.S., containing an account of a collection of birds recently obtained in the Island of Trinidad. The collection included 115 species, amongst which were several new to the avi-fauna of the island.—Messrs. H. E. Dresser and R. B. Sharpe read a paper on the Great Grey Shrike (*Lanius excubitor*) and its allies. The differential characters of the various species were pointed out, and special attention was drawn to the Indian Grey Shrikes (*Lanius lahtora*) which was considered to be identical with the Algerian *Lanius pallens* or *dealbatus*.—A communication was read from Mr. J. Brazier, C.M.Z.S., containing notes on the habits of the Grackle of the Solomon Islands, recently described by Mr. Sclater as *Gracula kreffii*.—Mr. J. Brazier also communicated descriptions of ten new species of land shells, collected by Mr. W. F. Petterd in various parts of the Australian region.—Messrs. Sclater and Salvin read an account of several species of birds recently received by M. Boucard of Paris, in collections from Mexico, which were new to the avi-fauna of that country.—Dr. J. E. Gray communicated a paper on some tortoises in the British Museum, with description of some new species.

Ethnological Society, June 27.—Extra meeting, Prof. Busk, F.R.S., in the chair. Sir John Lubbock, Bart., described the opening of the Park Cwm Tumulus, in the peninsula of Gower, South Wales, and exhibited a plan of the structure.—The Rev. Canon Greenwell read a paper on his explorations in Grime's Graves, Norfolk. These so-called graves consist of a large number of pits and galleries in the chalk, excavated in prehistoric times for the working of flint. The explorations led to the discovery of many neolithic flint implements, picks made of the antlers of the red deer, and curiously-sculptured fragments of chalk. Colonel Lane Fox, Mr. Flower, Mr. Fisher, Sir J. Lubbock, and Mr. Dawkins took part in the discussion.—Mr. J. W. Flower exhibited a large collection of specimens from the neighbourhood of Mr. Greenwell's discoveries, including objects of widely different dates, such as palæolithic and neolithic flint implements, a large British urn, and a fine Roman glass bottle. Mr. Boyd Dawkins then gave a verbal abstract of his paper on the discovery of the remains of platycnemism, or flat-shinned people in Denbighshire. Explorations were made in a refuse-heap in a tumulus, and in two bone-caverns, and the human remains thus obtained were exhibited. These proved that platycnemism was manifest in the ancient dwellers in North Wales, as well as in those who buried their dead in the cave of Cro-Magnon in France, and in those whose remains are found in the caves of Gibraltar.—Prof. Busk exhibited and described the peculiarly-formed tibiae, and distinguished two forms of platycnemism, but attached no value to this peculiarity as a race-character.—Several other papers were taken as read, this being the last meeting of the session.

PARIS

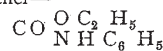
Academy of Sciences, July 25.—M. J. Darboux read a reply to some observations by M. Catalan on his note on the centres of curvature of an algebraic surface. M. Bertrand com-

municated a report on a memoir by M. Massieu on the characteristic functions of various liquids and on the theory of vapours.—A note was read on the mechanical equivalent of heat and on the electro-chemical properties of aluminium, by M. J. Violle.—Father Secchi communicated some further remarks on the spectra furnished by various types of stars.—M. Bertrand presented a note by M. Laussedat on the restoration of a conical sun-dial, from a fragment brought from Phœnicia by M. Renan.—Remarks on the variations of the magnetic needle, by M. Broun, were read; the author cited the decennial differences observed at Munich from 1841 to 1861, and drew from them the conclusion that the western declination increased up to 1855, remained variable in 1856, and then diminished to about 1860, since when there appears to have been a slight increase.—A note by M. H. Gal on the brominated derivatives of anhydrous acetic acid was communicated by M. Cahours. The compound described by the author was dibrominated anhydrous acetic acid, which was obtained by pouring bromide of monobrominated acetyl upon pulverised fused acetate of soda, and distilling the mixture. Its formula is $C^6H^4Br^2O^6$.—A note was read by M. Guyot on the volumetric determination of the soluble fluorides. The author employs a solution of perchloride of iron.—A note by M. Dobroslavine on the fatty matters of the chyle was presented by M. Wurtz; and M. H. Sainte-Claire Deville communicated a note from Professor Cossa, of Udine, giving an account of some experiments made with an amalgam of aluminium, and stating that aluminium acts upon iodide of ethyle in sealed tubes at ordinary temperatures, and that he has prepared aluminium-ethyle by the action of aluminium upon stannæthyle.—M. Faye presented remarks upon some peculiarities of the soil of the Landes of Gascony, in which he noticed especially the characters of the "alios" or impermeable stratum which exists at a depth of one metre from the surface of the soil, and which, in his opinion, was the main cause of the former insalubrity of the Landes. He considered that it was formed by the infiltration of water holding decomposing organic matter in solution during the winter season, and the evaporation of the water in the summer.—M. H. Sainte-Claire Deville presented a note on a schistose rock impregnated with carbonaceous matter, sent by MM. Ravizza and Colomba.—A note was read by M. Dieulafoy on the *Terebratuladipha* limestones of the French Alps, from Grenoble to the Mediterranean. From stratigraphical considerations, the author confirms the results arrived at by M. Hébert upon palæontological evidence.—An extract from a letter by M. Pissis to M. Elie de Beaumont on mountain-systems and on the formation of the desert of Atacama was read.—M. Daubrée presented a note by M. F. Garrigou on the chemical examination of a metamorphosed cement from the Bayen spring at Luchon. A ball of cement which had remained for eighteen years in the hot water (147° F.) of the spring was found to have gained a considerable quantity of silica, some organic matter, and a little fluorine. It contained some "microzymas."—M. de Quatrefages presented a note by MM. F. Garrigou and de Chasteigner on the contemporaneity of man with the cave-bear and the reindeer in the cave of Gargas (Hautes Pyrénées). The remains discovered consisted of a hearth, with flint implements, split bones, &c.—A note by M. Perez on the generation of the Gasteropoda was communicated by M. Milne-Edwards, consisting chiefly of remarks upon the phenomena of copulation in snails.—An extract from a letter of M. de Vallier stated that whilst the general results of the silkworm cultivation in the department of the Basses-Alpes have been deplorably bad, M. Rayband-Lange, following M. Pasteur's rules, has sold cocoons to the value of 64,000 francs.

BERLIN

German Chemical Society, June 27.—F. Sonnenschein has found the oxide of cerium Ce_2O_4 to give characteristic colours with alkaloids. The oxide, when added to strychnine and sulphuric acid, produces a violet colour more stable than that obtained with bichromate of potassium. The oxygen thus developed is in the form of ozone.—C. Graebe and C. Liebermann have discovered that anthrahydrochinone ($C_{14}H_8O.OH_2$) is formed when the chinone of anthracene is fused with potash. By treating bromide of anthracene, $C_{14}H_8Br_2$, with sulphuric acid, bisulpho-anthracinonic acid is formed, which yields alizarin when fused with potash. They have also prepared alizarin-sulphuric acid and tried in vain to transform it by fusing potash into purpurine.—O. Hesse has investigated opium-wax, consisting chiefly of cerotate of ceryl, and of palmitate of ceryl.—W. v. Schneider, by oxidising diamylene, has obtained an acid, $C_7H_{14}O_2$, and an indifferent oil, $C_{10}H_{20}O$.—E. v.

Priwoznik describes tetracetyl bromo-gallic acid and bromacetyl-gallic acid.—P. Wexlsky communicates an easy way of obtaining bichlorinated chinone by treating trichlorinated phenole with nitrous acid: $C_6Cl_3H_3O + O = C_6Cl_2H_2(O_2) + HCl$.—A. Ladenburg describes some chlorinated derivatives of stannotriethyl.—R. Radziscevsky has obtained nitro- and dinitro-derivatives of phenylacetic acid.—Hugo Schiff has observed that phenylcarbamic ether—



yields, by heating, cyanurate of phenyl, diphenylated urea and triphenylated biuret.—A. W. Hofmann has obtained, in an easy way, cyanate of phenyl by treating phenyl-carbamic ether with phosphoric anhydride. The cyanate is slowly transformed into cyanurate. The transformation takes place suddenly when triethylphosphine is brought into contact with the cyanate. As phenyl-carbamic ether when distilled by itself also yields a certain proportion of cyanate of phenyl, the reaction just now mentioned by Schiff obtains a simple explanation. The cyanates of tolyl, of xylyl, and of naphthyl have been prepared in an analogous manner.—Prof. Hofmann then drew the attention of the society to some new lecture experiments, apologising that an experiment formerly described by him as new was not so. The demonstration of the development of heat through crystallisation, by pouring ether upon a supersaturated solution of acetate of sodium, belongs to Faraday. He then poured fuming nitric acid into hydriodic acid gas in a test-tube, which inflamed the hydrogen. H_2S and H_2Se show a similar combustion. A second experiment consisted in heating a watch-glass containing a minute quantity of aniline green. According to experiments instituted by Dove the red copper lustre shown by this substance in reflected light is exactly complementary to the green colour shown in transmitted light. When heated a violet is obtained exactly complementary to the yellow metallic lustre which it shows in reflected light. A third experiment showed the colouring power of aniline red. In one hundred million parts of water added to one part of the colouring matter, the colour may be distinguished, supposing the layer of the liquid to have half a metre's thickness. A white silk thread left in this bath for twenty-four hours exhibits a very decided colour. A fourth experiment was arranged to show the formation of nitrous vapour and nitric acid, by burning hydrogen in air. A balloon of 10 litres capacity was provided with three openings, two of which, opposite each other, were provided with platinum tubes soldered to glass-tubes, and serving to introduce the two gases. The red vapours and the acid property of the water can easily be observed. The fifth experiment, an easy way of condensing cyanogen gas, depends upon a simple apparatus, for the description of which we must refer to the society's reports. Lastly, a pretty experiment to show alternate reduction and oxidation was exhibited. A copper crucible was placed on a triangle, so that it could be heated inside with a strong gas burner. A funnel was placed over it, the tube of which was connected with a hydrogen apparatus. By alternately removing and again approaching the funnel the copper became oxidised and reduced.—N. Limpricht described derivations of meconic acid.—R. Rieth has taken the vapour density of metallic chlorides, arriving at the formulæ of $HgCl$ and $HgCl_2$, $SnCl_2$, and $SnCl_4$, dissociation being out of the question, because tin is scarcely volatile.

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