

from North America, presented by Mr. F. W. Stockwell; a Peregrine Falcon (*Falco peregrinus*), European, presented by Mr. Chilton Newburn; a Green Monkey (*Cercopithecus callitrichus*) from West Africa, presented by Miss Ridsdan; three American Red Foxes (*Canis fulvus*), a Golden Eagle (*Aquila chrysaetos*) from North America, six Clapperton's Francolins (*Francolinus clappertoni*) from West Africa, deposited.

SOCIETIES AND ACADEMIES

LONDON

**Chemical Society, Nov. 2.**—Prof. Abel, F.R.S., president, in the chair.—The President announced that the Goldsmith's Company had contributed 1,000*l.* to the recently-instituted research fund of the Society.—Mr. Lupton then read a paper on the oxides of potassium, after which communications were read on certain bismuth compounds (Part III.), by M. M. P. Muir.—On phospho- and arseno-cyanogen, by W. R. Hodgkinson.—A secondary oxidised product found during the reduction of stannic ethide to stannous ethide, by W. R. Hodgkinson and G. C. Matthews; and a preliminary notice on pigmentum nigrum, the black colouring matter contained in hair and feathers, by W. R. Hodgkinson and H. C. Sorby. This black colouring matter is left on digesting the coloured hair or feathers with dilute sulphuric acid, but is present only in very small quantity.

**Zoological Society, November 7.**—Prof. Newton, F.R.S., V.P., in the chair.—The Secretary read a report on the additions that had been made to the Society's Menagerie during the months of June, July, August, and September, 1876.—A letter was read from Dr. Otto Finsch, relating to the supposed existence of the Wild Camel (*Camelus bactrianus*) in Central Asia.—A letter was read from Mr. E. Pierson Ramsay, giving a description of the habits of some *Ceratodi* living in the Australian Museum, Sydney, which he had lately received from Queensland.—Mr. W. K. Parker read a memoir on the structure and development of the skull in the sharks and rays.—Prof. A. Newton made a correction of some of the statements in Canon Tristram's "Note on the Discovery of the Roebuck in Palestine." (F.Z.S., 1876, p. 421).—Lieutenant-Colonel Beddome gave the description of a new species of Indian Snake from Manantawady, in the Wynaad Hills, which he proposed to name *Platyplectrurus hewstoni*.—Dr. G. E. Dobson, communicated a monograph of the Bats of the group *Molossi*.—Dr. A. Gunther, F.R.S., read a report on some of the recent additions to the collection of mammalia in the British Museum, amongst the more remarkable of which was a new form of Porcupine, from Borneo, proposed to be called *Trichys lipura*, and a new Marmoset, obtained by Mr. T. K. Salmon, near Medellin, U.S. of Columbia, to which the name *Hapale leucopus* was given.

**Royal Microscopical Society, Nov. 1.**—H. C. Sorby, F.R.S., president, in the chair.—A paper by Dr. G. W. Royston Pigott on a new refractometer was read by the President and illustrated by drawings and by the instrument removed for the occasion from the Loan Collection at South Kensington.—A paper by the Rev. W. H. Dollinger, on experiments with sterile putrescible fluids exposed alternately to an optically pure atmosphere and to one charged with known organic germs, was read by the Secretary.—A paper by Mr. F. H. Wenham, on the measurement of the angle of aperture in object glasses, was read by Mr. Inghen.

PARIS

**Academy of Sciences, November 6.**—Vice-Admiral Paris in the chair.—The following papers were read:—On an experiment which should be made with a view to the destruction of phylloxera, by M. Em. Blanchard. He advises a general adoption of the method of coating the vines and stakes in winter with coal tar, so as to destroy the eggs lodged in the fissures or under the bark.—Reply to M. Balbiani with regard to migration and egg-laying of phylloxera, by M. Lichtenstein. It is the nutriment and not the interior conformation of the insect that produces the fecundity. M. Lichtenstein does not accept the theory of degenerescence or exhaustion of the females.—Letter to M. Dumas on the products of the winter egg of *Phylloxera vastatrix*, by M. Boiteau.—M. Mouillefert presented some photographs showing the efficacy of treating phylloxerised vines with sulphocarbonate of potassium.—On the efficacy of iodides against saturnine intoxication, by M. Faure. He considers that a work-

man taking 5 to 10 centigrammes of iodide of iron or of potassium daily will have satisfactory results, and not be forced to interrupt his work.—On the results obtained by illumination of photographers' studios with violet light, by M. Scotellari. Violet light acts more rapidly than white or blue, and so requires shorter exposure. Some persons are very impressionable to ordinary light, but not to violet rays. The photographs got with violet rays are better modelled, and have a better finish.—M. Farret communicated results he has obtained in organisation of exercises for remedying Daltonism. These have been established in several schools, and he hopes to introduce them into the army and navy, railways, &c.—Researches on the production of electro-chemical deposits of aluminium, magnesium, cadmium, bismuth, antimony, and palladium, by M. Bertrand.—On a new dynamo-magnetic phenomenon, by MM. Trève and Durassier. A horseshoe magnet of any length is covered on one face with a varnish, or, better, a plate of glass. A cylinder of soft iron is laid on its neutral part. It commences to move towards the poles, and reaches them in a time which is naturally a function of the weight of the cylinder and of the coercitive force of the magnet. Thus the magnetic attraction is exerted over the whole extent of the magnet. A new mode is afforded of estimating the magnetic force by the mechanical work which it has effected. The product of the movable weight by the space traversed, divided by the time, will be the rigorous measure of this force. Determining the force, e.g., for three large and three small magnets, identical in form and weight, containing respectively 0.250, 0.500, and 1 per cent. of carbon, the authors think it perhaps possible to define the unit of magnetic force, or *magnetie*, and to establish its equivalence in kilogrammetres. The phenomenon also helps them to determine the magnetic conductivity of steels in relation to their proportions of carbon.—Examination of wine for fuchsine, by M. Bouillon. He employs hydrate of baryta in excess. It decomposes perfectly the salts of rosaniline, precipitates the colouring matter of the wine, and furnishes, by filtration, liquids of amebrous colour, which do not give persistent emulsions with ether.—Contributions to the anatomy and histology of the Echinida, by M. Fredericq. The nerves and muscles are described. The latter are formed of very thin cylindrical fibres, quite smooth and homogeneous throughout their length. Using various reagents, he could not detect the least trace of transversal striation. The fibres have a fibrillar structure, often with elongated nuclei applied on their surface, but they are without an enveloping membrane. They are birefringent, and are strongly impregnated with colouring matter and osmic acid. The muscles contract strongly under electric excitation, but not so suddenly as striated muscles.—Observation of a bolide, on the night of November 5, 1876, by M. Meunier. A fire-ball, the size of one's fist, was observed near  $\alpha$  of Ursa Major; and behind, its trajectory south to north was traceable as a luminous line, commencing near Capella. The flash was bluish, and appeared brighter than moonlight.

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