it was calculated that hydration commenced at ionisations (respectively) of 0·103, 0·57, 0·678, and 0·694.—The formation of certain lakes in the Highlands: Dr. L. W. **Collet** and Dr. T. N. **Johnston**; with a note on two small lakes in the Alps. The paper and the appended note dealt with the characters of certain lakes in relation to their origin as rock basins or barrier basins.—The methods of standardising preparations of the suprarenals: Dr. Isabella **Cameron.**

March 5.—Prof. Crum Brown, vice-president, in the chair.—The igneous geology of the Bathgate and Linlithgow Hills, part ii., petrography: Dr. J. D. **Falconer.** In this continuation of a former paper the petrography of the igneous rocks was discussed under three heads:—(1) the lavas; (2) the contemporaneous intrusions; (3) the later intrusions, chiefly in the form of dykes and sills, and probably of late Carboniferous age.—Three papers dealing with some of the zoological results of the Scottish National Antarctic Expedition were communicated, namely, the South Orkney Collembola: Prof. G. G. **Carpenter**; the Turbellaria collected by the expedition: Drs. J. F. **Gemmill** and R. T. **Leiper**; and the *Echinorhynchus antarcticus*: Dr. J. **Rennie.** The last paper was an account of a new species of parasitic worm obtained from the stomach of a Weddell whale.

PARIS.

Academy of Sciences, April 2.—M. H. Poincaré in the chair.—Photography of the solar protuberances with coloured screens during the eclipse of August 30, 1905: H. **Deslandres** and G. **Blum.** The object of the work was to use coloured screens in order to cut off, as far as possible, all the permanent gaseous radiations of the protuberances. Three screens were used, a green screen transparent from λ 505 to λ 580, a lighter green screen transparent from λ 500 to λ 580, and a yellow screen transparent for the red, orange, and yellow. Owing to the presence of some clouds the scheme could not be carried out completely, but the general results were satisfactory, and the authors recommend the method for use in future eclipses.—The action of the radium emanation on chromogenic bacteria: Ch. **Bouchard** and M. **Balthazard.** There are two groups of chromogenic bacteria; in the first the colouring matter produced remains adhering to the bacterium, in the second the colouring matter becomes diffused throughout the culture medium. The radium emanation is not capable of modifying the chromogenic power of the first group, but exerts a distinct effect on the second group. A detailed study was made of the pyocyanic bacillus, and it was found that, amongst the various biological properties of this organism, the power of secreting pigments was the one most sensible to the action of the radium emanation. The virulence of the organism was also clearly reduced; much larger doses of the emanation were necessary to affect the reproductive power of the organism.—The heart of King Rameses II. (Sesostris): M. **Lortet.** The microscopic characters of the muscle peculiar to the cardiac muscle of the heart were clearly made out.—A new arrangement of the spectroheliograph: G. **Millochau** and M. **Stefanik.** The spectroheliographs at present in use have the disadvantage of registering on the photographic plate all the vibrations produced by the various rolling and rubbing parts used in the construction. In the instrument described an attempt has been made to reduce these effects.—Remark on the preceding note: J. **Janssen.**—The analytical reduction of any system of forces in E_n: P. H. **Schoute.**—Hypertranscendental functions: Edmond **Maillet.**—The most probable numerical value of the ratio ϵ/μ_0 of the charge to the mass of the electron in the kathode rays: C. E. **Guye.** A correction is introduced into the usual formula for deducing the ratio of the charge to the mass of the electron, the effect of which is to reduce the difference between the experimental values of Simon and Kaufmann. This result is favourable to the hypothesis of the identity of the electrons which constitute the kathode rays and the β rays of radium.—The influence of compressibility on the formation of drops: H. **Ollivier.** It is shown that the formation of small liquid drops is largely influenced by the elasticity of the walls and by the compressibility of the liquid; the experimental measurements can be applied to measure the latter.—The halogen combinations of thallium: V. **Thomas.** A thermochemical paper.—The action of some alkaloids with respect to pollen tubes: Henri **Coupin.** Most alkaloids have a very toxic action on pollen tubes. Certain alkaloids, which for a given dose are toxic to the tubes, at a greater dilution may actually serve as food.—The action of carbonic acid on the latent life of some dried seeds: Paul **Becquerel.**—A contribution to the physiology of grafting: G. **Rivière** and G. **Bailhache.**—Some larval forms from the collections of the Prince of Monaco: H. **Coutière.**—The isopods of the French Antarctic Expedition: Mlle. Harriet **Richardson.**—The influence of feeding on the value of the urological coefficients and on the mean weight of the molecule elaborated: A. **Desgrez** and J. **Ayrignac.** The experiments were made on twenty-five healthy subjects, and the effects of varying diet studied. The diets included milk alone; milk, eggs, and vegetables; milk and vegetables; mixed diet, with a little meat; mixed diet, with much meat; and an absolutely vegetarian diet. The results are given in tabular form.—Demonstration of the fibrinogenic function of the liver: MM. **Doyon**, Claude **Gautier,** and Albert **Morel.**—The origin and mode of formation of Oolitic iron minerals: Stanislas **Meunier.**

DIARY OF SOCIETIES.

WEDNESDAY, APRIL 18.

ROYAL METEOROLOGICAL SOCIETY, at 7.30.—Some so-called Vagaries of Lightning reproduced Experimentally: A. Hands.—Note on the Value of a Projected Image of the Sun for Meteorological Study: Catherine O. Stevens.

ROYAL MICROSCOPICAL SOCIETY, at 8.—*Exhibition:* Lantern Slides of Plant Structure prepared by Mr. A. Flatters.

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