a remarkable variety of *Pieris napi* from Woking.—Mr. C. J. Gahan exhibited a microscopic preparation of the antenna of the larva of a beetle (*Pterostichus*), for the purpose of demonstrating the sensory nature of the so-called "appendix" of the antenna. Since he wrote a note describing this structure, a short time ago, he found that Prof. Beauregard had already suggested its sensory character, and was inclined to believe that it was an auditory organ.—Mr. H. Goss exhibited a specimen of *Trogus lapidutor*, Grav., believed to have been bred from a larva of *Papilio machaon*, taken in Norfolk by Major-General Carden. Mr. Goss stated that he sent the specimen to the Rev. T. A. Marshall, who said it was a well-known parasite of *P. machaon* on the Continent, but not proved to exist in the United Kingdom.—Mr. F. Merrifield said he knew this parasite, and had bred several specimens of it from pupæ of *P. machaon* received from Spain.—Colonel Swinhoe read a paper, entitled "The Lepidoptera of the Khasia Hills. Part I." A long and interesting discussion ensued, in which Mr. Elwes, Mr. Hampson, Colonel Swinhoe and others took part.—Mr. W. Bartlett-Calvert communicated a paper entitled "New Chilian Lepidoptera."—Mr. J. W. Shipp communicated a paper entitled "On a New Species of the Genus *Phalacrognathus*."

PARIS.

Academy of Sciences, April 4.—M. Lœwy in the chair.—On the construction of the chart of the heavens; numerical application of the method of attaching neighbouring negatives, by M. Maurice Lœwy.—Remarks on M. Joubin's note relating to the measurement of large differences of phase in white light, by M. A. Cornu.—On the approximate representation of experimental functions between given limits, by M. Vallier.—On the benzeneazocyanacetic ethers and their analogues, by MM. A. Haller and E. Brancovici.—Measurement of the parallel of 47° 30′ in Russia, by M. Venukoff. The parallel was measured from the meridian of Kichinev, near the Roumanian frontier, to that of Astrakhan, on the Lower Volga, the difference of longitude being 19° 11′ 55″·11. The measurements gave 1,446,462 m. for the length of the arc, or 75,336 m. per degree of longitude. But this mean value is not everywhere attained. Between Rostov-on-the-Don and Sarepta the geodetic arc exceeds the astronomical one by 15″·26, whilst between Sarepta and Astrakhan the astronomical arc is the larger by 9″·82. This deviation shows a remarkable agreement with that obtained in the measurement of the 52nd parallel and indicates that the plains of Eastern Russia are formed according to the same geometrical law over a vast area. A comparison of the results for the two arcs, with reference to the length of the meridian measured from the North Cape to Dorpat and the Lower Danube, indicates a polar depression of 1 in 299·65, which agrees closely with that found by Bessel for Germany in 1841 (1 in 299·26), but differs from that of Clarke (1 in 293·46).—Condensation experiments of the acetylcyanacetic acids with the phenols, by M. A. Held.—Synthesis of erythrite, by M. G. Griner.—Action of temperature upon the rotatory power of liquids, by M. A. Aignan. Reasoning from the fact that the oxide of isobutylamyl presents a rotatory power which changes its sign at −30°, M. Colson has concluded that "chemical constitution does not appear to be the preponderating factor in the value or the sign of the rotatory power." But the fact referred to can be explained as the effect of the mixture of a negative and a positive rotating substance respectively. A mixture of essence of terebenthine (left-handed) and camphor (right-handed) was dissolved in benzene, and observed through the 20 cm. tube of the polarimeter in different kinds of light. This mixture changed from negative to positive at a temperature between 61° and 73°C. for red light, between 13° and 33° C. for yellow light, and was positive for all the temperatures for green light, the angle of rotation being 2° 24′ at 13°, and 6° 43′ at 90° C. To explain M. Colson's observation, it is not even necessary to assume that the oxide contains two substances of rotatory powers of different signs. It suffices to admit, as has been done in the case of solutions of tartaric acid, that the molecules of isobutylamyl are susceptible of polymerisation in the liquid state, so that the sign of the rotatory power characterising the molecule of the substance is that observed at the higher temperatures.—Neolithic village of the Roche-au-Diable, near Tesnières, canton of Lorez-le-Bocage (Seine-et-Marne), by M. Armand Viré. In the course of excavations in the valley of Lunain a village was discovered of a type not met with up to now. It consists of a series of ground-works of square huts touching each other, and arranged in a line nearly east and west, forming a very regular street. At the end was a sort of square enclosure of stone, measuring about 2·5 by 3 m., with a door towards the south. Inside it presented a circular cavity, 30 cm. in diameter and 20 cm. deep, which still appeared to contain ashes, and whose clay walls were baked to a depth of about 4 cm. Similar hearths have been found among the Kabyles of Algiers. Near this structure was another, of circular form, built of rough blocks of limestone and sandstone, with a triangular door built of two enormous blocks of sandstone, joining at the top, and leaving a space of 50 cm. at the bottom. This hut also showed traces of cooking operations. A little further on came a series of seven similar huts, followed by two larger ones without hearths, and finally two more like the first. The total length of the village was 114 m. All the masonry consisted of blocks of limestone or sandstone, cemented with clay. A large number of stone and flint implements was found, including half a dozen sandstone hatchets, polished or prepared for polishing. The village is, curiously enough, situated at the very bottom of the valley.

BOOKS AND PAMPHLETS RECEIVED.

BOOKS.—Exercises in Euclid: W. Weeks (Macmillan).—Electrical Tables and Memoranda: S. P. Thompson and E. Thomas (Spon).—Popular Lectures on Scientific Subjects: H. von Helmholtz, 2 vols. new edition, translated by E. Atkinson (Longmans).—Aids to Biology: J. W. Williams (Baillière).—Statics and Dynamics: E. Geldard (Longmans).—Map of River Basins: C. E. De Rance (Manchester, J. E. Cornish).—Telephone Lines and their Properties: W. J. Hopkins (Longmans).—The Birds of Derbyshire: F. B. Whitlock (Bemrose).—Theory of Functions of a Complex Variable: Dr. A. R. Forsyth (Cambridge University Press).—Theory of Structures and Strength of Materials: H. T. Bovey (K. Paul).—Die Thermodynamik in der Chemie: J. J. Van Laar (Leipzig, Engelmann).—Polarisation Rotatoire: G. Foussereau (Paris, G. Carré).—Traité Pratique d'Analyse Chimique et de Recherches Toxicologiques: G. Guérin (Paris, G. Carré).—Forest Tithes, &c.: A Son of the Marshes (Smith, Elder).—Technology for Schools: J. Hassell (Blackie).—A Practical Treatise on Bridge Construction, 2 vols.: T. C. Fidler (Griffin).—The Steam-Engine, 2 vols: D. K. Clark (Blackie).

PAMPHLETS.—Sulla Distribuzione del Potenziale Nell'Aria Rarefatta percorsa dalla Corrente Elettrica: Prof. A. Righi (Bologna).—The Fundamental Theorems of Analysis Generalised for Space: Prof. A. Macfarlane (Boston).—The Imaginary of Algebra: Prof. A. Macfarlane (Salem).—Australian Museum, Sydney: Catalogue of Australian Mammals, &c. (Sydney).—Catalogue of the Michigan Mining School, Houghton, Michigan, 1891-92 (Houghton).

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