sub-species are described as new, and a new genus, *Calyptophyllum*, is erected for the reception of two of the Millipedes.

PARIS.

Academy of Sciences, February 27.—M. Emile Bertin in the chair.—M. E. I. Fredholm was elected Correspondant of the Academy for the section of geometry, and M. Henri Jumelle Correspondant of the Academy for the section of botany.—T. **Carleman**: The series $\Sigma\frac{A_\nu}{z-a_\nu}$.—S. **Sarantopoulos**: A theorem of M. Landau.—E. **Cartan**: A generalisation of the notion of curvature of Liemann and torsional space.—P. **Fox**: Measurements of stellar parallaxes at the Deadborn Observatory (United States). A table of the parallax of 34 stars, supplementing earlier lists given in 1919 and 1921.—T. **Moreux**: A new theory of the formation of the spiral nebulæ and of the solar system.—G. **Perrier**: Compensation of the differences of altitude of a chain of triangles of the first order. Application to the triangulation of the meridian arc of the equator.—M. de **Laroquette**: Measurement of the mean penetrating power of a bundle of X-rays by a new radio-chromometric method. Ten holes are bored in a sheet of lead, and these receive in turn known fractions (from 1 to 50 per cent.) of the total exposure. Twelve other holes are made in the same plate, and in these sheets of metal are placed discs possessing filtering power expressed in millimetres of aluminium, up to 66 mm. The scale thus obtained has been compared with Benoist degrees and possesses advantages over the latter in having a wider range and in being applicable to all radiations.—P. de la **Gorce**: The measurement of power by the differential dynamometer.—M. **Chapas**: The solubility of the isomeric toluic acids in the three xylenes. The para-acid is very slightly soluble in the three xylenes; the meta-acid is more soluble, but the differences from the ortho-acid are insufficient to form a method of separation.—A. **Poucholle**: Contribution to the study of tempering.—P. **Job**: The electrometric study of electrolysis, under the action of baryta, of some complex amine cobalt compounds.—J. B. **Senderens** and J. **Aboulenc**: The catalytic preparation of the cyclohexanetriols. Pyrogallol in alcoholic solution is rapidly reduced by hydrogen in the presence of nickel under a pressure of 40 to 50 kilograms at a temperature of 140° C. The reduction is complete and the product consists of a mixture of two isomeric pyrogallites (trihydroxy-cyclohexanes). Phloroglucinol, in aqueous solution, undergoes reduction to phloroglucite under similar conditions.—M. **Godchot** and P. **Brun**: Some derivatives of suberone. The products of reduction of suberone by calcium hydride are described and also the preparation of dibromosuberone.—E. **Grandmougin**: The halogen derivatives of the isatins.—A. **Schoep**: Dewindtite, a new radioactive mineral. This mineral is found mixed with chalcolite in the Belgian Congo. It is a lead phospho-uranate of the composition $4PbO$, $8UO_3$, $3P_2O_5$, $12H_2O$.—C. **Jacob**: The structure of North Annam and Tonkin.—J. **Savornin**: Stratigraphical and tectonic observations at the north-east frontier of Morocco.—J. **Thoulet**: The neutral lines of submarine coast sediments. The agitation of the sea sorts out the minerals of the sea floor and the results are permanent, as the same results are always obtained in the same locality.—A. **Němec** and F. **Duchoň**: A new indicating method for evaluating the vitality of seeds by the biochemical method. The method is based on the assumption that the activity of the catalase present is a measure of the vitality of the seed. The catalase is determined by measuring the amount of oxygen evolved by the action of hydrogen peroxide. A table of results for seeds of various dates between 1891 and 1920 comparing the catalase found with the percentage of germination proves the utility of the process.—MM. **Warcollier** and Le **Moal**: The progressive disappearance of free sulphurous acid in preserved apples.—L. **Mercier**: Contribution to the study of the regression of an organ; the vibrating flight muscles of *Apterina pedestris* during nymphosis.—L. **Roule**: A rare genus of deep-sea Japanese fish, rarely found in the North-African Atlantic Ocean.—T. **Monod**: The morphology of the buccal parts in the male of *Akidognathia halidaii*.—A. **Policard** and G. **Mangenot**: The action of temperature on the cellular chondriome. A physical criterion of mitochondrial formations.—H. **Grenet** and H. **Drouin**: A bismuth compound of the aromatic series and its therapeutic activity. An account of the therapeutic action of a phenol derivative containing bismuth, concerning the preparation and composition of which no details are given. Its antisyphilitic action is comparable with that of the arsenobenzines.

Official Publications Received.

Koninklijk Nederlandsch Meteorologisch Institut. No. 106: Ergebnisse aerologischen Beobachtungen, 8, 1919. Pp. xi+113. No. 108: Seismische Registrierungen in De Bilt, 6, 1918. Pp. xiii+84. (Utrecht: Kemink & Zoon.)

Thirty-fifth Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1913–1914. In two parts. Part 1. Pp. 794+xi. (Washington: Government Printing Office.)

Department of the Interior: Bureau of Education. Bulletin, 1920, No. 30: State Laws relating to Education, enacted in 1918 and 1919. Compiled by Wm. R. Hood. Pp. 231. (Washington: Government Printing Office.)

Agricultural Experiment Station of the Michigan Agricultural College. Chemical Section. Regular Bulletin, No. 291: Fertilizer Analyses. By Andrew J. Patten and others. Pp. 109. (East Lansing, Mich.)

Smithsonian Institution: United States National Museum. Bulletin 100, vol. 4: Contributions to the Biology of the Philippine Archipelago and Adjacent Regions. Foraminifera of the Philippine and Adjacent Seas. By Joseph A. Cushman. Pp. 608+100 plates. (Washington: Government Printing Office.)

Canada. Department of Mines: Geological Survey. Memoir 127. No. 108, Geological Series: Beauceville Map-Area, Quebec. By B. R. MacKay. Pp. iii+105 (including 13 plates). Memoir 128. No. 109, Geological Series: Winnipegosis and Upper Whitemouth River Areas, Manitoba; Pleistocene and Recent Deposits. By W. A. Johnston. Pp. ii+42. (Ottawa.)

Report of the Department of Mines for the Fiscal Year ending March 31, 1921. (Sessional Paper No. 26.) Pp. iii+47. (Ottawa.) 5 cents.

Diary of Societies.

FRIDAY, MARCH 24.

ROYAL SOCIETY OF ARTS (Indian Section), at 4.30.—Prof. H. E. Armstrong: The Indigo Situation in India.

ROYAL SOCIETY OF MEDICINE (Study of Disease in Children Section), at 5.

PHYSICAL SOCIETY OF LONDON (at Imperial College of Science and Technology), at 5.—Prof. N. Bohr: The Effect of Electric and Magnetic Fields on Spectral Lines (Guthrie Lecture).

INSTITUTION OF MECHANICAL ENGINEERS (Informal Meeting), at 7.—Capt. R. P. Stanford: Cheap Transport: Heat and Power, with Special Reference to the D. J. Smith Gas Producer.

INSTITUTION OF PRODUCTION ENGINEERS (at Institution of Mechanical Engineers), at 7.30.—E. Fairbrother: Inspection Methods.

JUNIOR INSTITUTION OF ENGINEERS, at 8.

ROYAL SOCIETY OF MEDICINE (Epidemiology and State Medicine Section), at 8.—Dr. J. Brownlee and Dr. M. Young: The Epidemiology of Summer Diarrhœa.

ROYAL INSTITUTION OF GREAT BRITAIN, at 9.—Prof. F. G. Donnan: Auxiliary International Languages.

SATURDAY, MARCH 25.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Sir Ernest Rutherford: Radioactivity (4).

MONDAY, MARCH 27.

INSTITUTE OF ACTUARIES, at 5.—G. W. Richmond: Austrian National Life Tables.

ROYAL SOCIETY OF ARTS, at 8.—G. Radcliffe: The Constituents of Essential Oils (Cantor Lectures), (2).

ROYAL SOCIETY OF MEDICINE (Odontology Section), at 8.—A. Livingston: The Experimental Production of Arthritis.

TUESDAY, MARCH 28.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—Dr. J. W. Evans: Earth Movements (1).

ROYAL COLLEGE OF PHYSICIANS OF LONDON, at 5.—Dr. A. Feiling: The Interpretation of Symptoms in Disease of the Central Nervous System (Goulstonian Lectures), (3).