

compacted by subsequent flows of olivine basalt. Well-preserved fragments of the stems and roots of a dicotyledonous angiosperm were found in the quartzite.

VIENNA.

Academy of Sciences, November 5.—K. Chudoba: The dispersion of plagioclase. The gray-position-method has already been applied to determine the situation of the optical axes for different wave-lengths in orthoclase. With albite the dispersion of the B-axis is about three times as great as that of the A-axis. Measurements were made with monochromatic light of six different wave-lengths, and the situation of the axes controlled by the right angle method.—B. P. Wiesner: On the function of the germinal gland before puberty; experiments on rats. (I.) Castration of new-born males. The development of sexual characters at puberty is dependent on the endocrine function of the reproductive system. Castration was performed twelve hours after birth, and the after-growth of castrated, one-side castrated, and entire animals compared at various ages. Development continues for a few days only after complete castration; normal and half-castrated animals develop alike. (II.) Spaying of new-born females. In contrast to the males, the normal and spayed females develop alike up to puberty, and only the onset of the œstrus cycle and its periodic recurrence proves the secretory function of the ovary. There is no œstrus in spayed animals, but the earlier stages of the development of sexual characters are independent of the ovary. Details of these researches will appear in *Pflüger's Archiv f. d. ges. Physiologie*.—P. Weiss: The morphological impotence of regeneration tissue. The formation of extremities from tail material from Triton. Transplantation was made from the middle of the tail into the body wall near the fore-limb. Various effects took place—healing over, a small tail, warty lumps or a differentiated limb. The regeneration tissue when young seemed to be undifferentiated, and its subsequent growth was determined by the position into which it was transplanted (morphological impotence). Older material, to a certain degree determined as tail, formed tail after transplanting.—K. Grobber: Attempt at an explanation of the alternation of layers in pearls.—H. P. Cornelius and M. Cornelius-Furlani: Report on geological inquiries on the Insubrisch line in the lower Val Tellina. Two quite different zones occur; in the north, highly crystallised biotite-gneiss with intrusions, and in the south, uniform quartz-phylite.

November 20.—G. Weissenberger, S. Baumgarten and R. Henke: Absorption by charcoal from viscous media.—J. Zellner and others: Contributions to the comparative chemistry of plants, XI. The chemistry of barks. In the barks of Cornus, Tilia and Carpinus, substances have been found such as alnulin, coryliresinol and platanol acid.—J. Braunhauser: The chemistry of heterotrophic phanerogams. Mistletoe berries have been analysed.—A. Huber: Newton's method of approximation.—Skrabal and A. Zahorka: The hydrolysis of acetic acid ester by acids.—J. Pia: The structure of the Alpine middle-trias deduced from the diplopores.—H. Handel-Mazzetti: New Chinese plants (36). Includes species of Aconitum and Corydalis.

November 26.—K. Umrath: On the conduction of irritability in Mimosa. In *M. Spegazzinii* as in *M. pudica* there are several stimulus conducting systems. Three velocities of conduction were found in the leaf and two in the stem.—O. Pesta: Problems of

the hydrobiology in the mountains of the Eastern Alps. Chemical analyses have been made of the waters of mountain lakes.

December 3.—H. Hahn: On a theorem of existence in the calculus of variations, and on the method of arithmetical means in the theory of generalised Fourier integrals.—H. Handel-Mazzetti: New Chinese plants (37). Three species of Pedicularis are described.

December 10.—F. Becke and J. E. Hibsich: On nephelines with zonal structure.

Official Publications Received.

Beiträge zur Natur- und Kulturgeschichte Lithauens und angrenzender Gebiete. Herausgegeben von Prof. Dr. E. Stechow. Einleitung, von Prof. Dr. E. Stechow. Vögel, von Dr. H. Sachtleben. (Abhandlungen der math.-phys. Klasse der Bayer. Akademie der Wissenschaften. Suppl.-Band. Einleitung und 1. Abhandlung.) Pp. 232. Steinzeitliche Funde aus Lithauen, von Prof. Dr. F. Birkner. Parasitische Insekten aus Lithauen, von Prof. Dr. Günther Enderlein. Parasitische Trematoden aus Lithauen, von Dr. L. Scheuring. Biologische Beobachtungen, von Prof. Dr. E. Stechow. (Abhandlungen der math.-phys. Klasse der Bayer. Akademie der Wissenschaften. Suppl.-Band. 2-5. Abhandlung.) Pp. 233-256+6 Tafeln. Die Zweiflügler der Urwaldes von Bialowies, von Prof. Dr. P. Sack. Hymenoptera (Aculeata, Ichneumonidae, Chalcidogastera), von Dr. H. Bischoff. Trichopteren und Ephemeropteren aus dem Bialowieser Wald, von Dr. G. Ulmer. Über Waldbienenzucht in Lithauen und einigen Nachbargebieten, von Dr. H. Klose. (Abhandlungen der math.-phys. Klasse der Bayer. Akademie der Wissenschaften. Suppl.-Band. 6-9. Abhandlung.) Pp. 257-406+9 Tafeln. (München: Verlag der Bayerischen Akademie der Wissenschaften.)

U.S. Department of Agriculture: Weather Bureau. W.B. No. 866: Instructions to Marine Meteorological Observers. (Circular M, Marine Division, Fourth edition.) Pp. x+99+8 plates. (Washington: Government Printing Office.)

Transactions of the Royal Society of Edinburgh. Vol. 54, Part 2, No. 5: Studies in Irregular Nutrition. No. 1: The Parasitism of *Cuscuta reflexa* (Roxb.). By John Thomson. Pp. 343-356+8 plates. (Edinburgh: R. Grant and Son; London: Williams and Norgate, Ltd.) 6s. 6d.

The South-Eastern Naturalist: being the Thirtieth Volume of Transactions of the South-Eastern Union of Scientific Societies, including the Proceedings at the Thirtieth Annual Congress, held at Folkestone, 1925. Edited by A. F. Ravenshear. Pp. lxxxii+126. (London.)

Ministry of Public Works, Egypt: Physical Department. The Lake Plateau Basin of the Nile. By Dr. H. E. Hurst. (Physical Department Paper No. 21.) Pp. vi+75+41 plates+12 charts. (Cairo: Government Publications Office.) 10 P.T.

Proceedings and Transactions of the Croydon Natural History and Scientific Society. Vol. 9, No. 4, February 1923 to January 1925. Pp. xxxiii-xlix+38+187-224+50. (Croydon.) 5s. net.

Department of the Interior: Bureau of Education. Bulletin, 1925, No. 20: Statistics of Kindergartens 1923-24. Pp. ii+7. (Washington: Government Printing Office.) 5 cents.

United States Department of Agriculture. Farmers' Bulletin No. 789: Mushroom Pests and How to Control Them. By C. H. Popence. Pp. ii+6. (Washington: Government Printing Office.) 5 cents.

Memoirs and Proceedings of the Manchester Literary and Philosophical Society, 1924-25. Vol. 69. Pp. 102+xliv+viil. (Manchester.) 12s.

Report of the Institute for Science of Labour, July 1921-June 1925. Pp. ii+35+2 plates. (Kurasiki, Japan.)

Aeronautical Research Committee. Reports and Memoranda, No. 980 (Ae. 193): The Rolling and Yawing Moments of an Aerofoil in Straight Flight. By H. Glauert. (A.S.A. Aerofolis—general, 192—T. 2105.) Pp. 5. (London: H.M. Stationery Office.) 3d. net.

The Institution of Civil Engineers. Engineering Abstracts prepared from the Current Periodical Literature of Engineering and Applied Science, published outside the United Kingdom. Supplement to the Minutes of Proceedings of the Institution. Edited by W. F. Spear. New Series, No. 25, October. Pp. 230. (London.)

Proceedings of the Geologists' Association. Edited by A. K. Wells. Vol. 36, Part 4. Pp. 321-462. (London: E. Stanford, Ltd.) 5s.

City and County of Bristol: The Bristol Museum and Art Gallery. Report of the Museum and Art Gallery Committee for the Year ending 30th September 1925. Pp. 24+5 plates. (Bristol.)

Koninklijk Magnetisch en Meteorologisch Observatorium te Batavia. Verhandelingen No. 14: Regenval in Nederlandsch-Indië (Rainfall in the Netherlands Indies). Door (by) Dr. J. Boerema. Deel 2 (Vol. 2): Kaarten van de gemiddelden jaarlijkschen en maandelijkschen regenval op Java en Madoera, met een kaart der regenstations (Maps of the Mean Yearly and Monthly Rainfall on Java and Madoera, with a Map showing the Position of the Rainfall Stations). Pp. ii+14 Maps. (Wetevreden: Landsdrukkerij.)

Department of Agriculture, Ceylon. Bulletin No. 73: Import of Fertilizers into Ceylon. By Alexander Bruce. Pp. 41. (Peradeniya.) 40 cents.

Scientific Reports of the Agricultural Research Institute, Pusa (including the Reports of the Imperial Dairy Expert, Physiological Chemist, Government Sugarcane Expert, and Secretary, Sugar Bureau), 1924-25. Pp. v+163. (Calcutta: Government of India Central Publication Branch.) 2.4 rupees; 4s.

Annuaire de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, 1925. (91^e année.) Pp. 265+8 plates. (Bruxelles: Maurice Lamertin.)

Government of India: Department of Industries and Labour, Public Works Branch. Triennial Review of Irrigation in India, 1921-1924. Pp. ii+71. (Calcutta: Government of India Central Publication Branch.) 1 rupee; 1s. 9d.