

the development in India, Pakistan, Burma and Ceylon, of the science of palaeontology, palaeobotany and prehistory. As a joint author with J. P. Srivastava, he describes the discovery of Eurydesma beds at Khemgaon Chor-ten and Wak in Sikkim, and of conularia-bearing horizon in the Subansiri Forest Division, North-East Frontier Agency, and indicates the stratigraphic significance of these discoveries.

Otto H. Schindewolf reviews the history of palaeontological societies, and J. B. S. Haldane writes on the biometrical analysis of fossil populations. P. Evans and Y. Nagappa describe the economic applications of palaeontology in oil industry, particularly the use of small foraminifera in correlation. A. Morley Davies compares the "ladder of life" conception of Bonnet with the ramification postulated by Lamarck. Other very interesting original articles by J. C. Troelsen, Bruno Accardi W. E. Le Gros Clark, S. R. N. Rao, J. K. Verma and various others follow.

The get-up of the journal is excellent and all lovers of palaeontology will welcome this inaugural number.

P. R. J.

Books Received

Recent Progress in Hormone Research, Vol. XIII. Edited by Gregory Pincus. (Academic Press), 1956. Pp. 453. Price \$10.00.

International Review of Cytology, Vol. V. Edited by G. H. Bourne and J. F. Danielli. (Academic Press), 1956. Pp. vii + 570. Price \$11.50.

Spot Tests in Organic Analysis, Fifth Edition. By Fritz Feigl. (Cleaver Hume Press), 1956. Pp. xx + 616. Price 55 sh.

The Reactive Intermediates of Organic Chemistry. By John E. Leffler. (Interscience Publishers), 1956. Pp. ix + 275. Price \$6.00.

Technique of Organic Chemistry, Vol. III. Second Edition. Part I. *Separation and Purification*. Edited by Arnold Weissberger. (Interscience Publishers), 1956. Pp. ix + 873. Price \$17.50.

Advance in Carbohydrate Chemistry, Vol. 11. By W. G. Frankenburg, V. I. Komarewsky and E. K. Rideal. (Academic Press), 1956. Pp. xviii + 465. Price \$11.00.

Enzyme Antigen and Virus—A Study of Macromolecular Pattern in Action. By M. Burnet. (Cambridge University Press), 1956. Pp. viii + 193. Price 18 sh.

SCIENCE NOTES AND NEWS

A First Record of *Hepaticites* sp. A Fossil Bryophyta from the Karewas of Kashmir, India

Sri. S. K. Goswami, Department of Biology, Shakumbri Das College, Saharanpur (U.P.), writes as follows:

Fossil Liverworts have been described from the Upper and Middle Coal-measures of Staffordshire and Shropshire (England) respectively by Mr. J. Walton of the University of Manchester. In India the discovery of fossil Bryophyta of the type *Hepaticites* from the karewas of Kashmir has been made by the author for the first time. The specimen of *Hepaticites* was released during the bulk maceration of the lignite collected from the Nichahom-Handwara area of Kashmir (altitude 6,000-10,000 ft.) and is being studied in detail.

European Brewery Convention

The Sixth International Congress of the European Brewery Convention will be held at Copenhagen, Denmark, during June 2-7, 1957. Scientific meetings will relate to the following

subjects: Hops and Foam, Barley and Malt, Nitrogenous substances, Yeast and Fermentation, Oxidation-Reduction and Miscellaneous. Those wishing to attend the Congress are requested to apply for a Registration Form to the Secretary, The Institute of Brewing, 33, Clarges Street, London W1. Registration Forms are to reach the Institute of Brewing not later than 8th April 1957.

Alan Johnston, Lawrence and Moseley Research Fellowship

Applications are invited by the Council of the Royal Society for the Alan Johnston, Lawrence and Moseley Fellowship for research into the problems of human and animal health and diseases and the biological field related thereto. The Fellowship will be tenable at any place approved by the Council of the Royal Society. Applications should be made on forms to be obtained from the Assistant Secretary, The Royal Society, Burlington House, London, W.1, and should be received as early as possible, in any case, not later than April 6, 1957.

New Record for Strength of Materials

A new "world record" for the strength of metals has been established by metallurgists at the General Electric Research Laboratory, U.S.A. Recent modifications of General Electric's methods of making "perfect" iron crystals have produced tiny whiskers with tensile strengths as high as 1,900,000 psi, which is more than 150 times that of ordinary iron crystals and four times that of the strongest steel wire.

General Electric scientists first announced two years ago that they had made extremely strong iron whiskers. Subsequently these methods have been adapted to a variety of other metals, including gold, silver, platinum, nickel and copper. Copper crystals have been made with tensile strengths of 600,000 psi, twenty times as strong as ordinary annealed copper. The newest iron crystals have nearly twice the strength of those made earlier.

Physiological Control of Population Growth

In a recent letter in *Nature* (1956, 179, p. 992), W. K. Whitten observes that while mouse ova collected from the Fallopian tubes at the eight-cell stage develop to blastulae when cultivated in a purified medium, it has now been observed that if progesterone is added to this medium, all ova die when the concentration is 8 μ g./ml. or more. The development of blastulae from tubal ova *in vitro* was also prevented by low concentrations (10 μ g./ml.) of 'Triton' W.R. 1939 and other surface-active agents. In the presence of these substances, the blastomeres, which normally fuse to form a compact spheroidal mass, failed to do so and remained discrete and rounded.

But it was noticed that neither progesterone nor 'Triton' had any action on ova *in vivo*. This may be due to the failure of the substances to reach the lumen of the Fallopian tubes, and it is suggested that if this can be overcome, it may be possible to interrupt the course of pregnancy at the stage of oval cleavage.

Agricultural Society, Calcutta

At the General Meeting of the Society held recently, the following Office-bearers were elected for the year 1957: *President*: Prof. N. R. Dhar; *Vice-President*: Shri Debendra Nath Mitra; *Secretary-Treasurer*: Shri R. M. Datta; *Editor*: Prof. P. A. Sen.

Indian Phytopathological Society, New Delhi

At the Ninth Annual General Meeting of the Society held recently, the following Office-bearers were elected for the year 1957: *President*: Dr. B. L. Chona; *Vice-President*: Dr. R. K. Saksena; *Secretary-Treasurer*: Dr. R. Prasada (1956-58).

Indian Botanical Society

At the Thirty-Sixth Annual General Meeting of the Society held recently, the following Office-bearers were elected for the year 1957: *President*: Dr. S. K. Pande, Lucknow; *Vice-Presidents*: Dr. A. C. Joshi, Chandigarh; Dr. S. Ranjan, Allahabad; *Secretary*: Dr. J. Venkateswarlu, Waltair; *Editor-in-Chief*: Dr. T. S. Sadasivan.

The Royal Society Commonwealth Bursary Awards

Amongst the persons to whom the awards have been made are: Dr. V. R. Rao, Reader in Physics, Andhra University, India, to enable him to study spectroscopic techniques in cytology at King's College, London, and to Dr. S. Basu, Reader in Chemistry, University of Calcutta, to enable him to study the application of quantum mechanics to the solution of problems of chemical reactivity at Oxford.

Award of Research Degree

The University of Poona has awarded the Ph.D. Degree to the following candidates for theses indicated against each: Shri M. B. Deshmukh, "Some Studies in Joshi Effect" (Physics); Shri H. L. Bhatnagar, "Physico-Chemical Studies on Polymer Solutions" (Physical Chemistry); Shri C. M. Deshpande, "Dipole Moment and the Nature of the Chemical Bond" (Chemistry).

CORRIGENDUM

In the note on "Leafy Tuft Disease of Sugarcane", Vol. 26, p. 33, column 1, para 2, should be read as follows: The disease was first noted in May 1943 in Co. 604 at Pusa and has been under routine study because of its very rare occurrence in Bihar. Its symptoms were published by the author in 1951. (*Proc. 1st Bien. Conference Sug. Res. Workers*), etc.