

Royal Meteorological Society, December 19.—Major H. G. Lyons, president, in the chair.—P. Bolton: The computation of wind velocity from pilot balloon observations. In this problem the required wind velocities occur as the bases of a succession of triangles in which two sides, a , b , and the included angle C are obtained by simple calculations from theodolite observations. To solve such triangles *directly* by the ordinary slide-rule method, the two numbers a , b on the logarithmic scale must be brought into coincidence on the logarithmic sine scale with two angles differing by the magnitude of the angle C . When this has been done the other elements of the triangle can be read off directly. The paper suggests a means of reducing the labour of setting the scales. A prepared chart of logarithmic sine curves is used, which in effect takes the place of the logarithmic sine scale of the slide rule. The other scales are rearranged with the view of reducing the arithmetical work involved in the complete solution of the problem.—E. G. Bilham: The use of monthly mean values in climatological analysis. The objects of the paper are:—(1) To determine to what extent computations based on calendar monthly mean values are vitiated by the fact that the latter are of unequal length; and (2) to provide means of applying numerical corrections on account of errors arising from this cause. The mean month is defined as an exact one-twelfth division of the year, or 30.437 days, and that period is used as the standard to which the results derived from the actual months are reduced. The matter is of special interest in connection with the computation of Fourier coefficients to represent the seasonal variation of a meteorological element such as temperature. Regarding the year as a cycle of 360° , errors arise from the fact that the monthly mean values will in general differ by small amounts from the ordinates of the curve corresponding with 15° , 45° , etc. The corrections to be applied to the original monthly means and to the Fourier amplitudes have been determined. The use of these corrections is suggested as an alternative to the employment of five-day means in cases where special accuracy is required.

CALCUTTA.

Asiatic Society of Bengal, November 7.—Sir Charles Elliot: Zoological results of a tour in the Far East. *Mollusca nudibranchiata (ascoglossa)*. The author describes a new species of Stiliger remarkable in the possession of pointed oral tentacles and tentacular prolongations of the foot. The species was found in pools of brackish water at the edge of the Talé Sap, or inland sea of Singgora, in Peninsular Siam.—S. Kemp: Zoological results of a tour in the Far East. Decapoda and Stomatopoda. In the course of his tour in Japan, China, and the Malay Peninsula Dr. Annandale obtained eighty-five species of Decapoda and Stomatopoda. Considered as a whole, the main interest of this large collection lies in the fact that all the species were obtained in fresh or brackish water. Little attention has hitherto been paid to the habitat of Decapoda, and, as a rule, no indication is to be found in the literature as to whether a species inhabits fresh, brackish, or salt water. Dr. Annandale's collection supplies precise information on this point, and shows that a surprisingly large number of forms have been able to establish themselves in water that is fresh or of greatly reduced salinity.—Karm Chand Mehta: Some observations and experiments on the rust on *Launea asplenifolia*, D.C. The cause of rust on this plant is *Puccinia butteri*. The author has had diseased plants under his observation for a year. He describes the habit and behaviour of the parasite and host, and discusses some microscopic details of the parasite.

NO. 2513, VOL. 100]

BOOKS RECEIVED.

Creative Psychics: The Art of Regeneration. By F. Henkel. Pp. 81. (Los Angeles: Golden Press.) 25 cents.

A Text-book of Inorganic Chemistry. Edited by Dr. J. Newton Friend. Vol. iv., Aluminium and its Congeners, including the Rare Earth Metals. By H. F. V. Little. Pp. xx+485. (London: C. Griffin and Co., Ltd.) 15s. net.

The Cause, Prevention, and Treatment of Cancer and other Diseases. By Lt.-Col. W. H. Hildebrand. Pp. viii+163. (London: Cole and Co.)

James Geikie: The Man and the Geologist. By Dr. M. I. Newbigin and Dr. J. S. Flett. Pp. xi+227. (Edinburgh: Oliver and Boyd; London: Gurney and Jackson.) 7s. 6d. net.

DIARY OF SOCIETIES.

SATURDAY, DECEMBER 29.

ROYAL INSTITUTION, at 3.—Electricity and Electric Currents: Prof. J. A. Fleming.

TUESDAY, JANUARY 1.

ROYAL INSTITUTION, at 3.—The Electric Current as a Heater and Chemist: Prof. J. A. Fleming.

THURSDAY, JANUARY 3.

ROYAL INSTITUTION, at 3.—Electricity as an Illuminator and Doctor: Prof. J. A. Fleming.

CHILD STUDY ASSOCIATION, at 5.30.—Discussion: The Education of the Clever Child: Openers: G. F. Daniell and Miss M. Berryman.

SATURDAY, JANUARY 5.

ROYAL INSTITUTION, at 3.—Electric Dynamos, Motors, Transformers, and Railways: Prof. J. A. Fleming.

CONTENTS.

| | PAGE |
|---|------|
| Education and Organised Thought. By E. W. H. | 321 |
| The Fundus Oculi of Birds | 322 |
| A Naturalist in Costa Rica | 323 |
| Our Bookshelf | 324 |
| Letters to the Editor:— | |
| Labyrinths in English Churches.—Rev. C. S. Taylor | 324 |
| An Optical Phenomenon.—Dr. F. J. Allen | 324 |
| A Traveller in Lapland. (<i>Illustrated.</i>) By Prof. Grenville A. J. Cole, F.R.S. | 325 |
| Stellar Dynamics and Statistical Mechanics. By H. S. Jones | 326 |
| Prof. Franklin P. Mall | 328 |
| Notes | 328 |
| Our Astronomical Column:— | |
| Comets | 332 |
| Union Observatory, Johannesburg | 332 |
| New Zealand Astronomical Tables | 332 |
| Development and Uses of the Static Electrical Machine | 332 |
| The Asiatic Society of Bengal | 333 |
| New French Magnetic Charts By Dr. C. Chree, F.R.S. | 334 |
| Rainfall in Norway during 1916. By R. C. M. | 334 |
| Plant Diseases in the West Indies | 335 |
| Mineral Nomenclature and Colour | 335 |
| A Village Community in Papua. By Sidney H. Ray | 335 |
| Oil Prospects in the British Isles | 336 |
| Experiments on Tribo-electricity | 336 |
| The Relation between Chemical Constitution and Physiological Action. By Dr. F. L. Pyman | 337 |
| University and Educational Intelligence | 338 |
| Societies and Academies | 338 |
| Books Received | 340 |
| Diary of Societies | 340 |

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