

The Moths of South Africa

By Prof. A. J. T. Janse. Vol. 1: Sematuridæ and Geometridæ. Pp. xi+376+15 plates. 35s. Vol. 2: Geometridæ (concluded). Pp. v+448+15 plates. 35s. (Pretoria: University of Pretoria, 1932-1935.)

FAUNAL lists of the Lepidoptera Heterocera do exist, but their gross inaccuracy renders them almost valueless; and the number of comprehensive works presenting a really precise critical revision of the known moths of any particular part of the world is deplorably small. The only publication that deals in any way extensively with the moths of Africa is Seitz's "Macrolepidoptera of the World", but this excludes the Pyralidæ, a family on which Prof. Janse specialises, and the other small moths covered by the somewhat unsatisfactory term Microlepidoptera.

There is no complete work treating of the moths of Africa, and a valuable step in the direction of filling this gap is made by Prof. A. J. T. Janse in the two volumes before us. It is true that, of the forty-odd families which have to be investigated, Prof. Janse has only so far produced an account of the Geometridæ, but this is one of the largest families of moths, and only a glance through these two volumes is needed to convince anyone of the vast amount of accurate work the author has put into this treatise, and the vast task which still confronts him.

One feels that some of the author's otherwise excellent figures lose clarity through his lavish use of doubtfully necessary heavy shading, but in the majority of cases he has shown the important features clearly.

Scenery and the Sense of Sight

By Dr. Vaughan Cornish. Pp. xii+111+9 plates. (Cambridge: At the University Press, 1935.) 7s. 6d. net.

THE appreciation of scenery may be due to an association of ideas or it may be the outcome of physical satisfactions of the eye. The latter, as Dr. Vaughan Cornish notes, are apprehended as emotions and not as local sensations, and thus are liable to escape recognition. In this small volume, the author has expanded with his accustomed fluency of exposition a subject that he has made his own, the relation between æsthetic impressions of scenery and the habits of the eye. The eye unconsciously exercises a selective process among the constituent features of a view and thus gives an impressions of enjoyment. Thus, for example, the apparent enlargement of the setting sun is due to a reduction of the field of vision, and the dwarfing of mountainous scenery upon near approach is related to an unconscious enlargement of the field.

Dr. Cornish illustrates his theme by admirable accounts of scenic impressions gathered during years of travel in many parts of the world, and illustrates them by his own freehand sketches. It is a book that is full of suggestion and is conspicuous as an attempt at the scientific analysis of scenic appreciation, a beginning of a subject of great complexity.

Race, Sex and Environment:

a Study of Mineral Deficiency in Human Evolution. By J. R. de la H. Marett. Pp. 342. (London: Hutchinson's Scientific and Technical Publications, 1936.) 21s. net.

THE accumulation of knowledge has made specialisation inevitable. The different branches of science tend more and more to advance along lines which become narrower and deeper. It is refreshing, therefore, to read a book which draws upon many different sources of scientific knowledge for the study of a problem of wide interest.

In this ambitious anthropological study of the interplay of life and environment, the author, who is evidently primarily a geneticist, seeks an explanation for the physical and mental evolution of man in the biological distribution of the mineral elements, especially calcium, phosphorus and iodine which are essential constituents of living matter. According to the highly speculative hypothesis advanced, the available supply of these has been an important factor in the evolution of the race.

The book could be easily criticised. In some parts neither the argument nor the phraseology is as lucid as it might be, and there are several inaccuracies, which is not to be wondered at in view of the very wide range of scientific data brought in to support the argument.

The value of the book lies in its original ideas, and in the number of interesting problems which it raises, without offering any very satisfactory solution.

Microscopic Objects: How to Mount Them

By Jean C. Johnson. Pp. viii+144+9 plates. (London: The English Universities Press, Ltd., 1935.) 3s. 6d.

THIS small book evidently incorporates the results of practical experience, and is eminently one for the amateur and lone worker. A summary is given of methods for the preparation and mounting of a number of objects for microscopy—insects and their parts, diatoms, Foraminifera and Radiolaria, crystals, rock and metal sections, blood and bacteria, and animal and vegetable tissues, together with a full account of section cutting. A few pages on ciliates, flagellates and rotifers would have been a useful addition.

The information given is generally clear and detailed enough for all purposes. Under Leishman staining, the directions read as though the diluted stain is to be washed away immediately after dilution. The Ziehl-Neelsen staining of bacteria is not at all clear; and for decolorising, the strength of the "strong . . . acid in water" is not given. In washing tissues after corrosive sublimate fixation, the addition of tincture of *quinine* is recommended—it should be *iodine*. The Van Gieson stain, so useful in histology, is not mentioned. The book is illustrated with diagrams, and with a number of excellent plates of photo-micrographs of mounted objects.

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