

were known in North Africa, Asia Minor, India and perhaps America at a very early period but that the Eumusae were unknown in these regions until a much later date than we had supposed. I should appreciate any references that I have missed and especially any pre-Christian records from the Malay Peninsula, Siam, Cochin China or the East Indies.

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THE COLOR-BLINDNESS OF INDIANS

THE department of psychology of the University of Denver has begun a preliminary study of color-blindness of Indians. In the spring of last year (1929) we tested 390 Indians of the southwest with the Ishihara test for color-blindness, and found seven red-green blind, but none definitely totally color-blind. This is an incidence of not more than 2 per cent. Only one was a female. It is planned to visit nu-

merous Indians of the central far-west and administer the same test with the Nela test from the Johns Hopkins University during the spring and fall of this year so as to determine if the incidence of color-blindness among Indians is greater or less than it is among whites.

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THE PRESIDENCY OF THE BRITISH ASSOCIATION

IN the extract on the British Association from the *London Times*, reprinted in *SCIENCE* of April 4 (p. 354), it is stated "if General Smuts becomes president of the London meeting (in 1931) he will be the first president elected from one of the Dominions." It may be noted Sir William Dawson, of Montreal, was president at the 1886 meeting held at Birmingham.

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SCIENTIFIC BOOKS

Methodik der wissenschaftlichen Biologie. Edited by TIBOR PETERFI. Vol. 1, Allgemeine Morphologie, xiv+1425 pp., 1 col. pl., 493 figs. in text. Vol. 2, Allgemeine Physiologie, x+1219 pp., 358 figs. in text. Berlin, Verlag von Julius Springer. 1928. Price (bound), 198 marks.

A PARTICULARLY illuminating insight into the rate of progress in the biological sciences, a layout of their diversification and ramifications and a display of the dominant directions of biological developments can be observed in a comparison of the contents of Peterfi's recent monographic encyclopedia of methods of scientific biology with any book in the fields of methods, say of fifty years ago. The very word biology in the last half century has itself acquired new and wider meanings and has established itself beyond displacement by the quibbles of botanists and zoologists, followers of disciplines diverted from their common interests by the artificial jurisdictions of herbarium and museum. There is really only one biological science, though many avenues approach it. Both the diversity and divergences of these avenues as well as the unity of the science of biology are revealed in this encyclopedia of biological methods.

As an index of the shift in emphasis and selection in biological work now current, possibly some what distorted by editorial guidance, one notes that the entire subjects of botanical and zoological collecting and of museum and herbarium technique are restricted to 148 pages of the total of 2,644, which is less than the space devoted to the care of living plants and animals. There is less occasion for the inclusion of these subjects under "Allgemeine Physiologie."

No one person could possibly function as an expert, and scarcely even as a critical compiler of methods in so diversified a field. Hence Dr. Peterfi has associated with himself in this enterprise no less than forty-two other biological specialists, each of whom is responsible for one or more chapters in this work.

The first volume deals with general morphology, but in a more restricted sense than the extremely comprehensive "Handbuch" of Aberhalden which covers the entire field of the natural sciences. The aim has been rather to restrict the subject to, and to intensify the treatment of, those fields of the natural sciences which are more or less distinctly morphological or which impinge thereon. The first volume is therefore written for morphologists, botanical and zoological alike. It includes the basic methods of morphology, microscopy, the study of cells, tissues and of development.

The volume opens with a 200-page introduction to the mathematical treatment of biological problems by Professor A. Walther, with abundant illustrations of the applications of formulas and graphs to specific biological data. Professor A. Köhler discusses the optics of the microscope and Dr. H. Zocher the ultra-microscope.

The subject of general microtechnique is introduced by Fr. P. Vonwiller with articles on the use of direct illumination and on vital staining, by Dr. R. Keller on electrohistological staining reactions and by Professor G. Levi on tissue culture, while Professor T. Peterfi writes of micrurgie, or the study of cells with the micromanipulator; Professor G. C. Heringa writes