

Genetics and the Origin of Species

By Prof. Theodosius Dobzhansky. (Columbia Biological Series, No. 11.) Pp. xvi+364. (New York: Columbia University Press; London: Oxford University Press, 1937.) 18s. net.

THIS well-designed and lucidly written book by one of the foremost younger geneticists is a thoughtful contribution to the problem of the origin of species. Not only does the author bring forward a clear and balanced statement of the genetical viewpoint, but he also supplies an exposition of recent genetical, cytological and statistical work in a form which is easily assimilated by the non-specialist.

The author divides his subject into (1) changes in the individual, (2) changes in the population, (3) fixation of these changes. Under the first heading are discussed gene and chromosome mutations, and the relation between evidence from the laboratory and that found in the wild. Under the second, a lucid description of the work of Wright, Fisher and Haldane leads to an estimation of the relative importance of selection, population size and variability in evolution. Under fixation of changes the author gives an extended account of polyploidy, hybrid sterility and other forms of isolation. The concluding chapter contains several pertinent remarks on the status of species.

The reassessment of old theories in the light of the experimental evidence is performed with a caution and soundness which will repel only those who are dogmatic upholders of tradition.

This is probably the best recent book for students who have an elementary knowledge of Mendelism, mitosis and meiosis, and who desire to understand the genetical evidence and viewpoints in biological questions.

F. W. S.

Appendix to the Four Volumes of the "Mysore Tribes and Castes" (Index and Bibliography)
By Diwan Bahadur Dr. L. K. Ananthakrishna Iyer. Pp. iv+70. (Mysore: Mysore University, 1936.)

AN ethnographical gazetteer loses half its value if it lacks an index; but the appendix which the late Dr. Ananthakrishna Iyer had added to the four volumes of his "Mysore Tribes and Castes" makes an even more generous provision for the needs of the student. In addition to index and bibliography, his supplementary volume includes a glossary of vernacular terms, and lists of endogamous groups and exogamous clans. Attention is directed to the evidence to be found in these lists of the tendency of endogamous groups to increase, notwithstanding attempts made to bring about union, and the disappearance of totems in favour of gotras of Puranic heroes.

The bibliography would be of much value to students if it were not for numerous errors and omissions of detail due to insufficient preparation and indifferent proof-reading, for which Dr. Ananthakrishna Iyer, who died in February 1937, is probably not responsible. As it stands, it is of little use to anyone who cannot identify many of the references from previous knowledge of anthropological literature.

Manual on Research and Reports:

a Guidebook of Procedures helpful in conducting Investigations and presenting Reports on Subjects in the Fields of the Social Sciences. By the Committee on Research of the Amos Tuck School of Administration and Finance, Dartmouth College. Pp. x+140. (New York and London: McGraw-Hill Book Co., Inc., 1937.) 7s. 6d.

THE steady stream of complaints, of which that by Dr. G. W. C. Kaye in his presidential address to Section A at the British Association meeting in Nottingham is only one of the most recent, regarding the deficiency of science graduates in writing reports and the ability to express themselves in concise and lucid English, has already called forth a number of books intended to correct this defect.

The present manual forms an admirable addition to this literature. It is concise and well written, and although designed primarily for those concerned with economic or social research, the chapters on preparing the manuscript and the anatomy of a report, as well as on guarding against error, and submission to a printer or publisher, can be read with profit by most scientific workers, whether engaged in academic or in industrial research. Many of the points may be seen to be matters largely of common sense, but experience suggests that the careful and thoughtful reading of the chapters on the collection of first-hand information, recording and organizing information, analysis and interpretation of data will well repay most recruits to scientific and industrial research.

Useful, however, as this manual is likely to prove, it is little credit to our educational system that such literature as this should still be meeting a definite need.

Einführung in die Physik

Von Dr. Otto Blüh. Pp. xvi+582. (Berlin: Gebrüder Borntraeger, 1937.) 16 gold marks.

DR. BLUH has written an introduction to physical science which is a valuable contribution to the literature of the subject. His book represents roughly that part of the content of physics which may be assumed to be the property of a well-prepared student for a general honours degree or of a student revising the preliminary stages of his reading for special honours. No topics of serious importance are omitted and the main thesis is developed logically and clearly through some 500 pages, from the first section on "Masse und Messen" to the end of the concluding section of the second part on "Klassische Physik und Quantenphysik". A third part of the volume, some 30 pages in length, is devoted to the subject of the extent and significance of physical knowledge.

Descriptions of physical instruments are terse, clear and confined to essentials; the mathematical arguments are of an elementary kind, involving at most one or two simple differentiations and integrations, and the balance is well kept between the different main sections of physics.

The book will provide good practice for a student anxious to obtain fluency in reading German. A. F.