The Academic Assistance Council is coming to an end in its emergency form, but we and our friends will endeavor to make it remain unforgotten. May we hope that the continuation of our scientific work—helped in no small measure by its activities—will be an expression of our gratitude?

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SCIENTIFIC BOOKS

GENETICS TEXTS

The Principles of Heredity. By LAURENCE H. SNYDER, Sc.D. D. C. Heath and Company. 1935. xiii + 385 pp. $3.00.

Principles of Genetics and Eugenics. A Study of Heredity and Variation in Plants, Animals, and Man. By NATHAN FASTEN, Ph.D. Ginn and Company, New York. 1935. $2.80.

WITH the development of the science of genetics there has been a tendency on the part of writers of text-books on the subject to retain all the old and include all the new. Snyder's "Principles of Heredity" certainly covers a lot of territory for an elementary and presumably one-semester course, but the material is presented in such a logical, clear and scholarly manner that a competent teacher should be able to go far with it. A student attempting to master it alone would doubtless have difficulties, but it is obviously not intended to be so used. The problems given at the ends of the chapters are well chosen and together with the selected references will be very helpful to the discriminating teacher.

The material is frankly presented with a human bias; but although, as the author says, "human characters have been used wherever feasible as the source of data," other material constitutes a goodly portion of the book, and there are even special chapters on "The Genetics of Domestic Animals" (12 pages) and "The Genetics of Cultivated Plants" (18 pages). It is really remarkable how much is covered in this space. The condensation of the physiology of reproduction of different phyla of plants into less than ten pages (including illustrations) is really a feat, but the student will doubtless need either previous knowledge or adequate help in order to master it.

The general plan of the book does not depart greatly from the conventional. After presenting simple (monohybrid) Mendelian inheritance, there is a chapter on the physical background (cytology), after which dihybrid and modified ratios, sex-linkage, lethals, multiple allelomorphs, etc., are taken up in much their usual order. The human interest is concentrated in the last four chapters, which deal respectively with the inheritance of physical and physiological traits in man, of mental traits in man, eugenics and the analysis of human family histories. The last will probably seem rather special for a general text, but may prove useful for those students especially interested in human inheritance. The author states in the preface that "it is the frank purpose of the book to arouse and hold the interest of the student and to stimulate his thoughts along lines of genetic principles and their consequences." With proper instructional guidance it seems admirably adapted to the purpose.

The book is clearly printed with a refreshing number of new illustrations. It is remarkably free of both factual and typographical errors. There is no glossary, but an adequate index.

Fasten's "Principles of Genetics and Eugenics" is avowedly "an elementary text for students who desire accurate knowledge and up-to-date information in genetics and eugenics," but is apparently intended to make somewhat of a popular appeal. While it is presumably sufficiently up-to-date for elementary purposes (although in the discussion of the nature and location of genes there is no mention of the evidence from salivary chromosomes), there is an unfortunate number of cases in which the facts are inaccurate or give the impression of being so from the way in which they are stated. Thus in describing Mendel's experiments with tall and short pea plants (p. 171), to state that the tall plants, "when mated together," gave only tall scarcely conveys the idea of self-pollination, which is the only practicable method of making the test. Again, even Mendel with all his industry and patience would have found it a too tedious process to test the genotype of tall individuals by the use of a *back cross,* as stated on page 173. And on the next page it is stated that Mendel also studied the cross of peas with "seed coats yellow and seed coats green"; if such were the case Mendel would have had difficulty in explaining the segregation in the seeds on the F_1 plant. The various eye colors in man are attributed to different degrees of brown and *blue* pigment, which would seem to be merely a slip were it not repeated a page or so later. And without intending to be captious, one suspects that Davenport was rather more than "of the opinion" that the height of the individual is determined by the length of the component parts of the body!

In spite of these defects, however, the text presents a wide range of interesting material. Much emphasis is placed on eugenics, and while this part leans a bit towards propaganda, the author is on the whole conservative in his recommendations.

The extensive glossary appears to have been prepared with considerable care and the text is well indexed.

L. J. C.