J. M. Tanner's work on human constitutional variation and morphology to the experimental, laboratory studies of Barnicot on human pigmentation. There is an emphasis on morphological and anatomical studies which is not surprising, since Weiner, Le Gros Clark, and Tanner are the principal contributors within the field of physical anthropology. One welcomes the extended discussion of research in human population genetics and its role in our science, as presented by Penrose, Stevenson, Mourant, and Barnicot. The interests of the latter in laboratory and experimental studies is especially important at this stage in the growth of physical anthropology.

Two significant topics treated in the hortatory parts of the symposium are physical anthropology as a liberal discipline (J. Z. Young) and the design of "dream" curricula (Tanner and Weiner). Cellular biology—something of a fad at the moment—finds a place even here in a discussion of human biology and medicine (Tanner).

I am disappointed that this publication fails to note important new research areas in physical anthropology. The implications of recent discoveries in human biochemical genetics (the haptoglobin alleles, hemoglobin variants, Gm serum groups, beta-globulin alleles, white-cell antigens) for the training of students and the organization of laboratories are neglected. There is little awareness in the formal papers (the discussions are not included in the volume) that our discipline encompasses the genetics and morphology of nonhuman primates.

The symposium is directed particularly to British problems, and some of the proposals are not necessarily relevant outside Great Britain. Despite these reservations, this book ably demonstrates that British physical anthropologists living in the middle of the 20th century also practice 20th-century science.

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Amid Masters of Twentieth Century Medicine. A panorama of persons and pictures. Leonard G. Rowntree. Thomas, Springfield, Ill., 1958. xviii + 684 pp. $11.50.

The subtitle, "A panorama of persons and pictures," expresses fairly well the nature and content of this highly personalized book. The author, a distinguished physician and now emeritus professor, reminisces on men and events from associations developed during an academic career of some 50 years spent largely at Johns Hopkins Medical School and as chief of medicine at the Mayo Clinic. The attempt—apparently inspired by remarks in one of Winston Churchill's books—is to present the medical developments of the past half century from the viewpoint of a participant. In fact, quoting from Churchill, the author has sought to emulate the method employed by Daniel Defoe in his *Memoirs of a Cavalier,* where European military and political events of the first half of the 17th century are chronicled in the personal narrative of the fictitious "Col. Andrew Newport."

However, this method, to be successful, requires a great literary skill, deep critical understanding, and insight, and above all, the approach must be consistent. Unfortunately this work fulfills none of these requirements. At times it is frankly autobiographical, at others it interjects a series of thumbnail sketches of medical scientists—all of which tends to destroy coherency and relegates it to the category of reminiscences. Further, the work would have been greatly improved by good editing to rid it of repetitions, stylistic imperfections, and the large number of minor errors.

This is not to say that the book will not have appeal. A rich experience and wide knowledge of the medical field provides much of merit which is well presented and will interest both lay readers and members of the author's profession.

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The Grafter's Handbook. R. J. Garner. Faber and Faber, London, ed. 2, 1958. 260 pp. 25s.

The second edition of this handbook retains its commendable objective in presenting the amateur or professional horticulturist with a simple, straightforward discussion of the science of grafting. That it has been brought up to date is evidenced by the inclusion of such topics as gibberellic acid, polyethylene, and mist propagation. The discussion of the recent use of such methods in horticulture and of their immediate application to grafting reflects the progressive attitude of the author. The same may be said of Garner's discussion of the various grafting methods used by virologists in indexing plants for the transmission of virus diseases.

The handbook begins with the occurrence of grafting in nature and antiquity. Succeeding chapters take up compatibility and cambial contact, rootstocks and their propagation, the collection and treatment of scion-wood, tools and accessories, methods of grafting, tree-raising in nurseries, and grafting-established trees, and there is a concluding chapter.

The reader is readily able to follow all instructions by means of 149 line drawings and photographs accompanying the text. A listing of 143 references is invaluable to the professional desiring more detailed information. Many English terms foreign to our horticultural language are defined in the glossary.

The recommended combinations of rootstock and scions cover only pears and plums in the three appendices. This section could be expanded to include other fruits and some of the commonly grafted ornamental woody plants. Information of this type would aid nurserymen in producing compatibly grafted plants of desired habit or vigor.

Garner is to be commended for his clear exposition of the subject-matter of this volume, which documents his 30 years' experience at the East Malling Research Station.

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The Physical Foundation of Biology. An analytical study. Walter M. Elsasser. Pergamon Press, New York and London, 1958. x + 219 pp. Illus. $4.75.

The scientific ideals and, to an important extent, the working structure of biology are governed by established tenets concerning its relations to physics. In this system of faith, physics is the paradigm of what is scientific; and biology at its contemporary best is a rather messy but hopeful kind of physics, the resultant of an inconvenient number of variables and the preoccupation of the better minds with the cleaner aspects of nature. Biologists may feel a bit uneasy about this, especially when they are reflecting upon important biological insights which owe little to physics and which may, as in the case of the evolutionary concepts, have had a considerable impact upon the physical sciences. But, as the cracker-barrel philosophy of biology has developed in the hands of biologists, it has seemed that the alternative would be vitalism, which has been demonstrably sterile.

So pretentious are the titles of books, that many readers encountering Walter Elsasser's *Physical Foundations of Biology* would probably expect to find still another tract on physical pie in the biological sky. This book, by a professor of theoretical physics at the University of California at La Jolla, contains more than the title promises, for it is not merely a highly critical examination of the question "can physics explain biology?" but also a reexamination of the foundations of physics in the light of those potentialities of the physical world that are realized in biological systems.