

contraception and all that it may mean for the individual and the race is desirable among medical men that it may be judiciously passed on by them to the general public, and this new edition of Dr. Marie Stopes's book will be found to give all the information that may be required.

*Board of Education: Science Museum. Henson and Stringfellow, their Work in Aeronautics: the History of a Stage in the Development of Mechanical Flight, 1840-1868.* By M. J. B. Davy. Pp. 115 + 25 plates. (London: H.M. Stationery Office, 1931.) 5s. net.

THE experiments of Henson and Stringfellow on mechanical flight were of an exceptionally interesting character, and now that much of their apparatus has been secured for the nation, and placed on exhibition in the Science Museum at South Kensington, it is only fit that whatever is known of the men and their activities should be placed on record. Neither of them was included in the "Dictionary of National Biography", and this record, prepared by Mr. Davy and fully documented, will be welcomed by every student of aeronautics wishing to know something of the history of the subject.

Henson was born in 1805 and died in 1888, while Stringfellow was born in 1799 and died in 1883. How they came to collaborate, what experiments they carried out together or separately, and what they actually achieved, are all well told, and the illustrations include not only photographs of their model machines, but also drawings from which it would be possible to construct replicas. If the Aerial Transit Company, launched in 1844 to utilise an invention "which if ultimately successful will be without parallel even in the age which introduced to the world the wonderful effects of gas and of steam", was mainly productive in providing material for the caricaturists, its failure does not detract from the merits of the inventors, whose ingenious and persevering efforts brought them very near to a success which, to-day, we know to have been beyond their reach.

*A Textbook of Physiology.* By Prof. William D. Zoethout. Fourth edition. Pp. 724. (London: Henry Kimpton, 1931.) 18s. net.

THE third edition of this "Textbook of Physiology" was reviewed in these columns only three years ago (NATURE, vol. 123, p. 379; 1929). The fact that a new edition has been called for so soon indicates that the work fills a definite gap in physiological literature. It is a medium-sized textbook, shorter than the number of pages might indicate owing to the size and clearness of the printing. It is intended to present the main facts of physiology in adequate detail, but makes no claim to supplant the larger works. A few references to monographs or reviews are given in each chapter, so that the reader who is interested is put on the track of the literature of different branches of the subject.

The author has taken the opportunity to revise the work throughout, especially the sections dealing with the central nervous system, metabolism, and the endocrine glands; in addition, a number of

new graphs, diagrams, and anatomical illustrations have been added. The application of the facts of physiology to the maintenance of health in man is frequently emphasised. Some paragraphs referring to certain human ailments serve to link the subject with medicine, so that the medical student can realise the importance of his study of physiology for his later clinical work. The book may be recommended to medical students and to others commencing the study of physiology.

*Heredity.* By Prof. A. Franklin Shull. (McGraw-Hill Publications in the Zoological Sciences.) Second edition. Pp. xv + 345. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1931.) 15s. net.

PROF. SHULL'S textbook presents the essentials of Mendelian heredity with special reference to human problems. It is intended for students, the majority of whom have no biological training and do not intend to specialise in that science, reading genetics as part of a general education. The second edition is bulkier than the first (1926), owing mainly to expansion of the chapters dealing with human inheritance. The absence of any mention of natural selection, either in the chapter on the mechanism of evolution or in the index, is surprising; for the chief problem confronting the Mendelian who sets out to explain evolution is to show how progressive modification of a race, continuing through vast numbers of generations, can be brought about by random mutation, and here the hypothesis of natural selection offers at least a plausible explanation. The recent discussions by Haldane, Fisher, Hogben, and others of the effect of selection on Mendelian populations should receive attention in this context, and would also illuminate the chapter on eugenics. G. P. W.

*Die Gift- und Arzneipflanzen von Mitteleuropa: mit besonderer Berücksichtigung ihrer Wirkungen.* Von Dr. Otto Gessner. Pp. viii + 348 + 128 Tafeln. (Heidelberg: Karl Winters Universitätsbuchhandlung, 1931.) 9.50 gold marks.

THIS very useful handbook of poisonous and medicinal plants differs from most other books on a similar subject in the arrangement, the balance of matter in the text, and the illustrations. The plants discussed are not arranged according to one of the well-known taxonomic schemes, but under headings of the chief active chemical constituents, such as alkaloids, glucosides, tannins, and etherial oils. Each group is prefaced by a lucid summary of its more important chemical features. Most of the text is occupied by accounts of the species native to or cultivated in central Europe and used in pharmacy or known to be, or suspected of being, poisonous. Under each species, besides a brief botanical description, the active principles are given, and usually a full account of the pharmacology, including symptoms, physiological reactions, and treatment. The work is accompanied by 128 coloured plates, of varying merit, but the majority botanically excellent and several aesthetically noteworthy, and a long index. W. B. T.