

Steroid Hormones and Tumors

Tumorigenic and Antitumorigenic Actions of Steroid Hormones and the Steroid Homeostasis; Experimental Aspects. By Dr. Alexander Lipschutz. Pp. xi+309. (Baltimore, Md.: Williams and Wilkins Company; London: Baillière, Tindall and Cox, 1950.) 46s. 6d. net.

PROLONGED or excessive dosage with oestrogen may lead, in either sex, to hyperplasia or metaplasia of certain tissues. This effect, like other effects of oestrogens, can usually be prevented by the simultaneous administration of progesterone or androgens. Allowing for the large number of gonadally active steroids now available, and for the possibility that certain of the growths induced by oestrogens may ultimately become neoplastic, it will be seen that there is here a prolific field of research.

Among those who have worked in this field, Lipschutz and his colleagues occupy a very prominent place, and their extensive and systematic contributions are summarized in the book under review, especially on experimentally induced fibromata. Lipschutz's thesis is briefly as follows. Production of abnormal growth by oestrogens requires that the stimulus shall be not only prolonged but also continuous. Such continuous oestrogenization can easily be effected experimentally, but in the normal animal is usually prevented by homeostatic mechanisms, notably by the capacity of the liver to inactivate oestrogens. Before any of the oestrogen-induced tumours can be regarded as neoplastic, they must be shown to be autonomous, irreversible and independent of the original stimulus. Unless and until that point is reached, the growth can be inhibited by the simultaneous administration of other steroids which antagonize oestrogens. Lipschutz also directs attention to the fact that to a lesser extent the same thesis applies to androgens. The book ends with a useful discussion of the causes and effects of endogenous hormone imbalance.

Prof. Lipschutz is to be congratulated on having written an informative and stimulating book which will be most useful to those who wish to get a sound grasp of this complicated subject. A. S. PARKES

Physical Chemistry for Schools and Colleges

By H. L. Heys. New edition revised. Pp. 453. (London: George G. Harrap and Co., Ltd., 1952.) 9s. 6d.

MR. H. L. HEYS'S gift of clear exposition and his avoidance of advanced mathematics have long made this book popular with teachers and particularly suited to the average pupil taking the former Higher School Certificate or equivalent examinations.

To the difficult task of bringing the text into line with such of the present-day theories as can be presented at school-level, and at the same time retaining the simplicity of treatment, Mr. Heys brings a commendable courage and a sound critical judgment. Thus he introduces and justifies the Brønsted-Lowry conception of acids and attempts to apply it; but he avoids the theory of Lewis. Again, besides discussing the covalent and co-ordinate bonds, he repeatedly shows their relation to chemical behaviour. Besides adding a new chapter in which he has grouped some related phenomena under the heading of "Electrochemical Series", Mr. Heys has extended almost every section, as well as bringing

in additional topics such as chromatography, the structure of metals and over-voltage. As a consequence, the size of the book has been increased by 117 pages. The revision has been thoroughly well done, and the book can be strongly recommended.

Les biocatalyseurs

Par Prof. Max-Fernand Jayle. Tome 1: Enzymes, substrats, vitamines et hormones. Pp. 260. (Lons-le-Saunier: Impr. M. Declume, 1951.) 950 francs.

THIS is, in fact, the first volume of a treatise on biochemistry, and deals with the biochemical reactions of living organisms and the agents which assist them. (A second volume is announced which deals with clinical biochemistry, especially of blood and urine.) This book can be described as an excellent elementary account which medical students and students of biochemistry and physiology could read with profit. It is up to date in many directions, for example, in giving what is known about the structure of insulin. Some 'anti-vitamins' are mentioned; but no account is offered of natural antibiotics—possibly because their mode of action is still obscure. The book suffers greatly from a complete absence of references. Many names are mentioned, but nothing to indicate where the student could look for further information.

Atlas of Human Anatomy

By Franz Frohse, Max Brödel and Leon Schlossberg. Explanatory Text by Dr. Jesse Feiring Williams. New edition. Pp. 88. (London: George Allen and Unwin, Ltd., 1952.) 16s. net.

THIS new revised edition of the "Atlas of Human Anatomy" reproduces, in pocket size, the Frohse-Brödel wall charts and the Leon Schlossberg's supplementary charts. In addition, there is a short explanatory text by J. F. Williams.

Most of the illustrations are reproduced in colour; but, in many instances, they have been reduced too much to be of any real value. One or two of the new illustrations, for example, those on pp. 63 and 66, are made very much too large for the details they show. A number of the illustrations, such as the upper figure on p. 55, are confusing. No explanation is given of what structures have been removed.

The text in many places is very vague and often inaccurate; for example, on p. 20 the following statement is made: "The left ventricle pumps blood over the entire body (page 41) except the lungs which are supplied by the action of the right ventricle". Many statements are made which are much too generalized, even for a book of this description.

W. J. HAMILTON

The Chemical Technology of Dyeing and Printing Vol. 2: Substantive, Basic, Acid and Pigment Colors, Aniline Black, and Dyestuffs for Acetate Rayon and Synthetic Fibers. By Dr. Louis Diserens. Translated and revised from the second German edition by Paul Wengraf and Herman P. Baumann. Pp. xii+446. (New York: Reinhold Publishing Corporation; London: Chapman and Hall, Ltd., 1951.) 96s. net.

THIS is by no means a 'readable' book, though it may be of value to the practical man as a collection of recipes and instructions which appear to be authentic and are certainly specific in detail. The price alone seems likely to limit its sale to those who will find it of practical value in their everyday work.

S. M. NEALE