

Physiological Chemistry of the Bile

By Harry Sobotka. Pp. xii + 202. (London : Baillière, Tindall and Cox, 1937.) 13s. 6d.

THIS volume aims at providing the experimental worker in physiology, pharmacology and experimental medicine with a survey of our present knowledge of the biliary secretion. It is intended to be read, however, in conjunction with a companion volume by the author called "Chemistry of the Sterids". Without reference to the latter, certain sections on the bile acids in the present book are not clear, since the author refers to the rings and carbon atoms of the bile acid structure by numbers; for example, "ring III", " $C_{11} = C_{12}$ "; these sections would be much easier to read if a skeleton structural formula of the bile acids with the rings and C atoms appropriately numbered were included, thus avoiding unnecessary references to the companion volume.

The first half of the book deals mainly and thoroughly with the composition of normal bile, and there is an introductory chapter on the general physiology and structural relations of the tissues involved in bile formation. One feels that a book on the physiological chemistry of the bile is incomplete without at least a brief account of the bile pigments, a discussion of which has been excluded from the present volume. The author, however, disarms criticism by stating that they could not be treated adequately without an extensive exposition of the physiology of the blood pigments and the chemistry of pyrrole derivatives.

The last half of the book deals mainly with the pharmacological aspect, especially with cholagogues and cholagogues. A brief account is also given of bile and bile acids in pathological conditions.

The book should be stimulating to research workers, since gaps and uncertainties in our knowledge of the bile, together with suggested lines of investigation, are clearly indicated and constantly referred to by the author. Many of the earlier results in this field require re-investigation. There is an extensive bibliography, which occupies one quarter of the book. The latter has the merit of satisfying a need and of collecting together in an orderly fashion a large number of scattered data concerning the biliary secretion.

R. T. W.

On Guard against Gas :

an Account of the Principles of Gas Warfare and of the Steps to be taken by the ordinary Citizen to defend his Family. By H. A. Sisson. Pp. 91. (London : Hutchinson and Co. (Publishers), Ltd., n.d.) 2s. net.

IT is a pleasure to turn to a book dealing with poison gas which has been written by an expert who has had personal experience of it not only in the laboratory and experimental ground, but also on the battlefield itself. Major Sisson held an important appointment in the Gas Directorate of the British Expeditionary Force during the Great War, and he has first-hand knowledge of the practical use of gas and can estimate its probable effects if it is employed against a civil population. His opinions, therefore, should carry weight with the majority of people,

who are naturally ill-informed in a matter remote from their ordinary experience and have been grossly misled in the past by sensational writers.

The author considers that gas would be a minor danger in an air raid if people can be made to understand it. Besides being told what precautions to take against it, they ought to learn the reasons for the recommendations made. It may not be possible to make one's home safe against fire and explosives, but it can certainly be made reasonably proof against gas, and scarcely any serious casualties need be expected from it among a fully instructed community.

The book is not intended to be a substitute for the official A.R.P. Handbooks, which the author considers excellent, but to supplement them by giving a more general view of the subject in the form of a connected story. It describes in non-technical language the different kinds of gas that are most likely to be used in air raids and explains their action and the method of 'catching' them in modern respirators. There are also chapters on the experience gained from the Great War in regard to the employment and effects of gas, and on the preparation of gas shelters in the home.

This excellent little book is within the reach of every pocket and it should be widely read, especially by nervous householders.

C. H. FOULKES.

Bio-Politics

an Essay in the Physiology, Pathology and Politics of the Social and Somatic Organism. By Morley Roberts. Pp. xv + 240. (London : J. M. Dent and Sons, Ltd., 1938.) 15s. net.

MR. MORLEY ROBERTS'S study of the social organism, as he admits and indeed proclaims, is based on analogy, specifically on the thesis that the communities of bees, ants and termites, and therefore also human societies, resemble organisms. "Whatever the groups, the laws of organic development which produce order, form, interdependence, and differentiation are everywhere the same." Hence, studies in the pathology of single animals can be applied to the functions of social and national groups. "Where protoplasmic units, however simple or complex, work together in symbiosis or communal life, they can best be considered as organisms, and as such liable to the diseases and disorders which change or destroy them." He is not afraid of carrying his analogies to an extreme. For example: "After what was said earlier on immunity, students of medicine will have no difficulty in thinking that sarcoma, or malignant revolt of various connective tissue elements, may be nearly matched by a revolt of the police."

It would take many pages to explain that Mr. Roberts's assumption of the existence of biological laws of any kind is rash, as the "laws" are no more than abstractions from observations limited strictly to the precise conditions in which they were made, and without wider validity. But he is a writer of great ability, and has collected a large number of interesting facts, so that his book is stimulating and useful.