BOOK REVIEWS

First Annual Report on Stress. By Professor Hans Selye. 1951. Pp. 511, approx. 3,000 refs. Acta Inc., Montreal. (\$10, 80s.)

In this volume Professor Selye has given us yet another proof of his remarkable qualities. By a feat of superb organization he has collected over 3,000 publications relevant to his subject which appeared during 1951. These have been classified, extracted, and incorporated into something which is part review, part medical index. The format is original and it is essential to read the preliminary chapter which explains how the volume should be used.

In the concept of stress and the diseases of adaptation, the pituitary growth hormone (STH) now figures prominently as a supporter of the mineralo-corticoids (M-Cs) against ACTH and the gluco-corticoids (G-Cs) in the endocrine balance, and with variations in target responsiveness and the participation of other organs the concept becomes one of considerable complexity which can be adapted to fit most contingencies. Bodily and enzyme systems, metabolic processes, and disease entities are dealt with in detail in the various chapters; the clear subheadings and the arrangement whereby references appear in brief at the bottom of each page allow one to pick out those relevant to any particular subject in a minute or two. Thus this volume should be invaluable as a source of reference.

Each of the special chapters contains some masterly logical exposition, of which the following is a typical example:

It is specially important to keep in mind that the "Diseases of Adaptation" theory of rheumatoid arthritis does not necessarily presuppose an absolute increase in M-C production, but merely an increased M-C activity. The latter may result (a) from an absolute increase in M-C production, (b) from a relative decrease in G-C production with a consequent rise of the M-C/G-C ratio, (c) even in the absence of any change in corticoid output, increased M-C activity can result, through changes in metabolism which specifically sensitize or "condition" the tissues to M-Cs (e.g. increased STH production, Na retention).

I have quoted at length to illustrate the real quality of the writing, which is not easily described. The author's experiments upon rats are continually brought in to illustrate these arguments which form the main material of the book.

In the introduction, where the author is expounding his "scientific credo" with one of the diagrams with

which this book is freely illustrated, he says "examine your own and *all* other pertinent data critically" and then "eliminate the untrue and unimportant". The interpretation of data may often be incorrect but it surely requires a special credo to classify data into "true" and "untrue".

J. H. KELLGREN.

Symposium on the Influence of the Hypophysis and the Adrenal Cortex on Biological Reactions. Held by the Swiss Academy of Medical Sciences under the auspices of the Council for the Co-ordination of International Congresses of Medical Science, World Health Organization, American-Swiss Foundation for Scientific Exchange, Inc., and CIBA Pharmaceutical Products, Inc. 1952. Benno Schwabe Verlag, Basel. Pp. 228, 75 illus., 28 tables. (16 Swiss Frs).

This is the published record of a symposium held in Zürich, from September 30 to October 2, 1951, under the auspices of the Swiss Academy of Medical Sciences. It provides a fairly complete summary of the influence of the hypophysis and the adrenal cortical glands on the physiological and pathological processes of the human body, so far as they have at present been determined. Many of the contributors are well known; amongst the British contingent were Prof. G. W. Pickering and Dr. D. A. Long (*London*), and Dr. P. H. G. Gell (*Birmingham*). Dr. R. Levine (*Chicago, Ill.*) opened the symposium with a survey of the functions of the adrenal cortex as a regulator in tissue reactions. Dr. G. Sala and his team from Milan spoke of their experimental studies with cortisone. The problem of the relationship of hyaluronidase to the aetiology and progress of collagen diseases, and the effect of cortisone on the tissue synthesis of acid mucopolysaccharides were dealt with by Drs J. Seifter (*Philadelphia, Pa.*) and L. L. Layton (*Baltimore, Md.*), and Drs C. Holten and K. Lundbaek (*Aarhus, Denmark*) read an interesting paper on metabolic and renal diabetes produced by the administration of ACTH.

Professor G. Miescher, the President of the Swiss Academy of Medical Sciences, who wrote the foreword (in English, French, and German), pointed out the need for basal research regarding the site of action of the adrenal steroids, and sounded the necessary warning that the results of experimental work performed on the lower animals were not necessarily applicable to man.

This is a useful presentation—largely in English—of a number of valuable reference papers not published elsewhere. W. S. C. COPEMAN.