

is the doubtful character of the evidence for man in America at dates of the order claimed; the instances cited are well known—Santa Rosa Island, Tule Springs and Lewisville—but Mr. Brennan does not make it clear that they are very far from commanding wide acceptance as evidence of the presence of man. As to subsequent contacts, opinions differ a good deal about their extent, but he is a bold man who will have no contact at all by way of the north Pacific, either in the last stages of the Wisconsin glaciation when the Bering Straits were dry or later in boats. To deny such contacts on negative evidence in a very imperfectly explored area, when one is prepared, as the author is, to entertain the idea of a land bridge to bring the makers of Clovis points across the Atlantic to become the Solutreans, is to show a ridiculous lack of balance.

This is not an archaeological text-book. Readers who have knowledge of American archaeology may find parts of it stimulating and a good deal exasperating. Those who do not should take it with a large grain of salt.

G. H. S. BUSHNELL

### The Searching Mind in Medicine

By William A. R. Thomson. Pp. 187+25 plates. (London: Museum Press, Ltd., 1960.) 21s. net.

A SERIES of talks, by leading authorities, on the External Series of the British Broadcasting Corporation has been converted into an attractive book by William A. R. Thomson, the editor of *The Practitioner*. Because of the pace with which changes are taking place in modern medicine, however, little remains of the original articles, although Thomson acknowledges the inspiration of the broadcasters and continued help to ensure that his material is accurate and up to date.

The articles are varied and, besides the not unexpected topics of antibiotics, viruses and the effects of radiation on man, the author deals openly and factually with the biochemistry and chemotherapy of cancer. Perhaps too much is made of existing knowledge to show causal relationship between behaviour and physique, but the chapters on memory and learning, the problem of ageing, life at low temperatures and climate and working efficiency will be of interest not only to non-medical readers but also to general practitioners whose reading may have been somewhat circumscribed. The text is concise and carries an air of authority of one who has dug deep for his facts. It is perhaps a little unfortunate, therefore, that Thomson sometimes fails to apply a searching mind to his own beliefs and gets hoist with his own petard. His statement, for example, that "the exceptional handler of men—whether doctor, army officer or teacher—has a shrewd idea of what manner of man an individual is by looking at him" would be accepted by all except those who had subjected their 'shrewd ideas' to the process of statistical investigation.

KATHLEEN M. HAWKINS

### Understanding Weather

By Sir Graham Sutton. (Poleon Book, No. A469.) Pp. 215+4 plates. (Harmondsworth, Middx.: Penguin Books, Ltd., 1960.) 3s. 6d.

IN this welcome book the Director-General of the Meteorological Office makes no claim to have written a comprehensive account of the science of

meteorology, and indeed certain aspects of the subject—like air masses and fronts, basic elements of our everyday weather experience—are rather scantily treated. He is not much concerned either with geographical influences, such as the distribution of land and sea and the great mountain ranges, on the global circulation. Also while there is an excellent chapter on micrometeorology (as might be expected), local weather is strangely neglected (although plate 3b refers to a "sea-breeze front" which is nowhere mentioned in the text).

These omissions accepted, here nevertheless is an authoritative and up-to-date guide to a great deal of current thinking in meteorological science. Almost half the book is devoted to an account of modern methods of forecasting. This begins with the conventional techniques of synoptic analysis and forecasting, and goes on to Sutcliffe's development theories and Rossby's long waves (for which the way has been well prepared in earlier pages); the author then proceeds to numerical forecasting, from Richardson to the electronic computer (only here does an occasional mathematical equation intrude into an otherwise descriptive treatment), and finally offers a sober assessment of the possibilities of long-range forecasting. As an exposition on a popular level of the professional meteorologist's approach to his subject, this little book is excellent value.

M. PARRY

### Comparative Anatomy

By Prof. William Montagna. Pp. x+397. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1959.) 48s. net.

THIS is a well-planned book which introduces the student to the important principles of comparative anatomy, organogenesis and embryology. The author first deals with the characteristic features of vertebrates and the development of the body plan and body tissues. Then follows a short chapter on the Chordata, including useful tables. The skin is next considered, then the endoskeleton, the muscular system, the digestive system, the circulatory system, the respiratory system, the excretory system, the reproductive system, the sense organs and the nervous system. Finally, there is a short chapter on the endocrine glands.

In most of the chapters there is a general introduction, then the development of the system is described and thereafter the comparative anatomy in amphioxus, cyclostomes, fishes, amphibians, reptiles, birds and mammals. At the end of each chapter there is a helpful summary and a short bibliography. The author has rightly emphasized embryology more than is the usual practice in a book of this kind, since developmental events give a better understanding of anatomical detail. There is also a useful glossary at the end of the book.

The book is written well, the descriptions are simple and easily understood, and there are numerous well-labelled illustrations and photomicrographs. It is indeed more difficult to write a simple account of important principles than a detailed text-book and in this the author has truly succeeded. He is to be congratulated on producing a useful, easily read, short account of comparative anatomy which should be of great value to the student. The publishers, too, are to be congratulated on their excellent production of this volume.

T. NICOL