to the literature; it provides no substitute for a study of the original papers. The translation is adequate, but there are several typographical errors. There is no index; the compounds are grouped according to the position of the second element in the Periodic Table. L. E. J. ROBERTS

## Prehistoric Man in Europe

By Frank C. Hibben. Pp. xv+317+24 plates. (London: Constable and Co., Ltd.; Norman, Oklahoma: University of Oklahoma Press, 1959.) 50s. net.

NOWADAYS an author should think twice before attempting to describe the whole of prehistoric times in the compass of one volume, even when only a restricted area such as that of Europe is under consideration.

Although the first 102 pages of this book are devoted to the earliest times, one suspects that Mr. Hibben, a resident in America, has interests which lie rather in the post-mesolithic phases of the subject. It might have been wise to have asked some member of the American School of Prehistoric Research at Harvard, which has done so much to further palæolithic studies in Europe, to examine the earlier chapters, as well as the not too well selected bibliography, where the name of Movius is not mentioned and that of Hencken begins with a K, and where in some cases early works only are cited and their authors' later publications on the subject omitted. Mr. Hibben seems somewhat happier in the later part of the book where Bronze Age, Iron Age and Classical cultures are considered.

The illustrations have been kept down to a minimum, but the reason, of course, may well be one of finance; they include a charming photograph of a reconstruction of the Roman Forum in its glory. Of course, there is a lot of information given and the reading is easy, but the book cannot be said, especially as regards the earlier periods, to be a definitive work on the subject. MILES BURKITT

## The Literature of the Social Sciences

An Introductory Survey and Guide. By Peter R. Lewis. Pp. xx+222. (London : Library Association, 1960.) 28s.; 4.20 dollars.

LTHOUGH this book does not claim to be more A than an introductory survey and guide, it covers a wider field than its title might suggest. It is apparently intended for the administrator, the business man, the research worker and the general reader, and it also deals to some extent with library administration. On the strictly sociological side it is somewhat slender in view of its title but here and throughout it is sufficiently strong on the periodical literature to render it probable that the conscientious reader will be guided to what he requires. One exception may be noted on the historical side : the Annals of Science fills a place where the author recognizes that he has provided very slender cover. For the rest, it is difficult to criticize an admittedly selective compilation when the basis of selection is unknown, but it might be observed of the chapter on political science and public administration that it is surprising to find no reference to Sir Ernest Barker's works and that the section on the Civil Service omits too many important books. The style and production of the book are admirable and there is a good index.

Introduction to Symbolic Logic and Its Applications By Rudolf Carnap. Translated by William H. Meyer and John Wilkinson. Pp. xiv+241. (New York: Dover Publications, Inc.; London: Constable and Co., Ltd., 1958.) 1.85 dollars; 159.

T is a welcome sign of the times to have Carnap's book (perhaps the most comprehensive "Introduction to Symbolic Logic" in existence) made available in English at a modest price. This is something of immediate value to the student of symbolic logic, and will carry him right up to the frontier of advanced work. He will not find it easy going, but all the essentials are there. Part 1 deals with the system, and Part 2 with the application.

Broadly speaking, the subject as we know it has existed for scarcely more than a century (though its roots lie further back into history), and the reader will soon realize that the Aristotelean logic of the traditional kind only amounts to a trivial fraction of the whole domain. Strictly, to construct a system of symbolic logic is not to build up a language so much as a skeleton of a language. The bones are clothed by the interpretation of certain signs : it is this process which leads to applied logic, because of the great variety of these interpretations.

One of the objects of this discipline is to eliminate pre-suppositions—especially in geometry—which have crept in unawares, for example, in the long history of Euclid's parallel postulate. Another aim is the establishment of a powerful symbolism such as algebra enjoys. Numerous problems and examples are included.

An application of deep interest is Woodger's attempt to axiomize biology, possibly a major factor for the future development of biophysics.

F. I. G. RAWLINS

## The Use of Stereographic Projection in Structural Geology

By F. C. Phillips. Second edition. Pp. vii+86. (London: Edward Arnold (Publishers), Ltd., 1960.) 16s. net.

THE first edition of this book is well known to structural geologists and a new edition is to be welcomed. This concise and commendably inexpensive book provides geologists with a first-rate introduction to the subject. Dr. Phillips writes so clearly that what in some hands might be a formidable topic is reduced to enviably simple terms. The reader is first introduced to the principle of stereographic projection and is then shown its value as a geological tool. Dr. Phillips has not made any major changes in the text and the new edition differs only in detail from its predecessor. Recent advances are, however, noted and the bibliography has been enlarged.

The proof of the pudding is in the eating, and Dr. Phillips can quite justifiably state, as he does in his prefatory note to the second edition, that "The call for this edition proves that a concise account of these methods is an acceptable and useful addition to geological literature".

It is largely because of the work of Dr. Phillips that such methods are now more widely used by geologists than when this book first appeared. When a third edition is called for, a short review of some of the more interesting of recent applications of stereographic methods to tectonic syntheses might, in my opinion, be useful. J. SUTTON