peace as well as in war, to its intended readers— "scientists, engineers, managers, and statisticians". One may wonder how much the middle two, at least, of these groups like the presentation, and might not have preferred the technical notes concluding some of the chapters to have spread to cover most of the exposition, leaving a simple introduction in each case to summarize the article. This would, however, have meant still more editing to meet a rather speculative requirement, for many engineers and industrialists have by now recognized the value of statistical techniques and do not need to be so spoon-fed. Perhaps before long even the claim in the preface that "the chemical, physical and engineering sciences are, on the whole, distinctly backward in the statistical planning of experiments and the analysis of empirical data, at least by comparison with the social, biological, and agricultural sciences" (compare the war-time success of biologists in the kindred subject of operational research) will no longer be tenable.

M. S. BARTLETT

## FRENCH PALÆOLITHIC ART

Le centre préhistorique de Ganties-Montespan (Haute-Garonne)

Par Félix Trombe et Gabriel Dubuc. (Archives de l'Institut de Paléontologie humaine, Mémoire 22.) Pp. 128. (Paris : Masson et Cie., 1947.) 1,200 francs.

THIS Mémoire of the Archives de l'Institut de Paléontologie humaine deals with palæolithic art discovered in the side galleries of an underground river by Monsieur Casteret in 1922. Near the little village of Ganties in the region of Saint Gaudens to the south of the River Garonne there occurs a sort of natural reservoir at the base of a low chain of limestone hills which separate Ganties from another little village, Montespan. During æons of time the waters which accumulate in the 'reservoir' have filtered through the limestone hills, eventually forming an underground river which comes out at Montespan to form a small tributary of the Garonne.

During the exceptionally dry summer of 1881 the water in the 'reservoir' fell so low that the underground river was for the first time disclosed and partially explored. Since then the water always stood too high and no further exploration was possible until 1912, when an artificial entrance was made. In 1922, however, Monsieur Casteret dived under a siphon at the Montespan exit and started to explore the underground river from that end. In some dry side galleries he came upon examples of palæolithic art-engravings, clay tracings and modelling, etc.—and these have now been made more accessible. In the vicinity are some rock-shelter 'homes', where traces of upper palæolithic man's handiwork, including some examples of the 'home' art, have been found.

Monsieur Casteret found no strikingly beautiful works of art, nor do paintings occur; no lovely painted bisons like those in the cave of Niaux, which is not so very far away, were discovered, but the finds are none the less of considerable interest. Some of the engravings, judging by their style, were probably the work of Aurignacian man, as too were most of the tracings in clay which recall closely those of the cave of La Clotilde in northern Spain. The rest of the engravings would seem to be early Magdalenian in date. The discovery of the body of a cave bear modelled in clay raises some interesting problems.

It had no head and it would seem may have been used as a stand over which the skin and head of a real bear could be thrown. This appears to have been used as a target, and many of the arrows, penetrating the skin, have left marks in the clay underneath.

The volume gives a full account of the site and the history of the discovery, and the prehistoric art is fully described and illustrated. As is true for almost all the *Mémoires* of the Archives de l'Institut de Paléontologie humaine, it is indispensable for the student of prehistory, and this is especially true if his interests are particularly focused on the upper palæolithic art. M. C. BURKITT

## BRITISH TRADE UNIONISM

British Trade Unionism Six Studies by P.E.P. Pp. vii+184. (London: P.E.P., 1948.) 15s. net.

In several broadsheets, notably that on "Output and the Worker", in April 1945, "Inside the Unions", in May 1946, and "Framework of Collective Bargaining", Political and Economic Planning has already examined problems confronting the trade unions and their position in a society organised for full employment. The present report carries that examination a stage further. It is primarily a factual study of British trade unions and their place in industrial relations, and is intended rather to provide a firm foundation for the future study of policy than to indicate solutions to the numerous vital problems which it brings into the light of public discussion. The wider interest of the study, moreover, is derived from the relation of the inquiry and the discussion it seeks to stimulate to the larger problem of active democracy on which Planning is simultaneously engaged.

The six studies comprising the present volume cover first the structure of the trade unions, their size, hierarchy and the characteristics of union membership at the three levels distinguished in the earlier broadsheet: the national officials, the active branch membership and the rank and file. emphasizing the dynamic human relationships, this study makes a welcome contribution to a wider and more sympathetic understanding of the unions on the part of the general public. This contribution is the more important as much of the second study is perforce purely descriptive, and the outline it gives of the formal machinery of negotiation loses something of this vital human touch because it is compressed to a mere sketch. The balance, it is true, is redressed by a concluding section which stresses the underlying similarities of the main types of machinery and the effect upon them of the increasing concern of government with wage levels.

In the third study the part played by the trade unions in the determination of wages is brought out, the factors determining wages are indicated and some of the implications of the social redistribution of income and of a national wages policy are briefly reviewed. The latter part of this study covers such other subjects of negotiation as hours and overtime, demarcation of crafts, apprenticeship and the like. The fourth study, entitled "The General Staff of Labour", describes the work of the General Council of the Trades Union Congress, the evolution of a central trade union policy and the relations of the