sulphuric acid in the manufacture of superphosphate. The book discusses some general problems which are not usually dealt with in geological text-books; thus there is a chapter on the world production of minerals, the capital value of the mineral reserves, and the political and commercial control of minerals. The last chapters deal with the relation of the geologist to the exploration and development of mineral deposits, the valuation and taxation of minerals, and mining law.

The discussion on this question includes the author's opinion of the much controverted Apex Law, wherein the mining laws of the United States and Rhodesia differ from those of the rest of the world. Mr. Leith says of the American geologists and engineers that "almost to a man they favour either modification or repeal of the law"; but he recognises that as it has been in force for 50 years, so large a body of vested interests has been established under it that it would now be difficult to make serious changes in it. He remarks on the objections to the present system of the use of expert evidence in law courts and the apparent advantage of selection of experts by the Court instead of by the contending parties; but he thinks the present system on the whole preferable, as the Court might find a sound selection impossible. The intense competition in such inquiries leads to the most intensive study of the problems. The author considers that few scientific treatises on economic geology contain facts better established than the reports of the great cases that have been rendered necessary in America by the imperfections of the Apex Law.

The author's conclusions as to the conservation of mineral resources are that little is to be feared from the actual shortage of supplies, but that the difficulties will arise in their extraction and distribution at a rate adequate to meet the future demand. He explains the use of geology in the late war and discusses the international problems based on mineral resources, which he represents as now in such confusion that it will take the combined efforts of the various governments many years to bring them into order. He says the entire European coal situation is in a state of chaos, and that, "unless there is a miraculous recovery and development of Germany's coal industry, impossible conditions have been imposed."

The volume concludes with chapters on the training of the economic geologist and on the ethics of his profession. The author recommends that the intensive study of geology should be a post-graduate course, that the universities should not give degrees in economic geology, but should leave the maintenance of a high standard, both of knowledge and conduct, to the professional societies connected with geology and mining.

Our Bookshelf.

British Labour: Replacement and Conciliation 1914-21: Being the Result of Conferences and Investigations by Committees of Section F of the British Association. Part 1, on Replacement, Co-ordinated and Revised by Miss L. Grier and Miss A. Ashley; Part 2, on Conciliation, Edited by A. W. Kirkaldy. Pp. xxxv + 266. (London: Sir Isaac Pitman and Sons, Ltd., 1921.) 10s. 6d. net.

AN attempt has been made in the volume under notice to "sum up and co-ordinate" the various reports, issued between 1915 and 1920 by the Economic Section of the British Association, and relating to problems of labour during war-time.

In the first part of the volume, Miss Grier and Miss Ashley have succeeded admirably in their rather difficult work of collation, and the result is to present in small compass a concise history of the industrial adventure of women during the period of the war. The outlines of the story are by now sufficiently familiar: the value of the present contribution lies in the rich store of material, partly statistical, which it offers, and in the conclusions it reaches regarding the future of women in industry. The moral of the story is that while war-time experience has left women more ready to offer their services in production, there has been little permanent modification of industry which would make it possible to utilise those services.

Part 2 of the volume, dealing with conciliation in British Labour, 1914-1921, is somewhat inchoate. It is practically a reprint of reports on the promotion of industrial harmony and on industrial unrest, which had already been published elsewhere, and there is little evidence of selection from the papers and speeches which make up the original reports. Some excision and co-ordination would have added to the permanent value of this section.

The last forty pages of the volume contain a sympathetic discussion of works committees by Mr. C. G. Renold, who deals, with much breadth of vision, with the problems of industrial management involved in the growth of these committees.

Royal Society. Reports of the Grain Pests (War) Committee. Nos. 1 to 10 (in 1 volume). Pp. 23 + 48 (+ 11 plates) + 18 + 20 + 10 + 51 + 52 + 28 (+ 11 plates) + 52 + 16. (London: Harrison and Sons, 1918-1921.)

THE Grain Pests (War) Committee was appointed by the Council of the Royal Society in June 1916, as the result of correspondence with the Board of Agriculture, in which the Board requested the Royal Society to appoint a committee "in relation to the damage done to grain by insects." When established, the committee at once took very active measures to carry out the work allotted to it, and published the results of the investigations which it initiated in a series of valuable reports. Most of the latter have already been noticed in our pages and need no further comment. These reports have now been issued in book form, together with a final brochure (Oct. 1920), drawn up by the chairman, Prof. W. A. Herdman, who has summarised the results of the researches and puts forward certain

recommendations as to future work. The findings of the committee have shown clearly that the whole subject of grain pests is one of great importance to the Empire, and it is recommended that the State should assume a general responsibility for the continuance of the investigations. It is obvious that, if the work is to be placed on a permanent basis, it must be sufficiently provided for in order that it may be carried to its logical conclusion—the practical control of grain pests. The recommendations made for the provision of a nucleus organisation do not involve any large expenditure of money and, in view of the great importance of the conservation of food-stuffs, it is earnestly hoped that the Government will see its way to establish the work along lines suggested by this committee.

A. D. IMMS.

Among Primitive Peoples in Borneo: A Description of the Lives, Habits and Customs of the Piratical Head-Hunters of North Borneo. By I. H. Evans. Pp. 318. (London: Seeley, Service and Co., Ltd., 1922.) 21s. net.

THE part of Borneo described by Mr. Evans is that which is under the control of the British North Borneo Company, and the peoples with whom he deals are three in number: the Dusuns, an Indonesian people speaking a Malayo-Polynesian language, who inhabit the interior; and the Bajaus and Illanuns, immigrants of Proto-Malayan stock who live on the coast. Mr. Evans is a careful observer, and his experience as an official of the company enables him to speak with authority. On many points he is able to correct or supplement our previous information. The peoples he describes present marked contrasts, both in temperament and in culture. The Dusun is an agriculturist, in the main industrious, living in independent village-communities, each under a headman. In religious belief he is an animist, and has a strong and abiding faith in omens. The coastal peoples, on the other hand, are indolent and inveterate gamblers, who, now that their former chief industry—piracy—has been suppressed, earn their living from the sea. They are Mahomedans, but lax, and their religious beliefs embody many survivals of primitive beliefs, of which, unfortunately, Mr. Evans had opportunity to collect only a few examples.

The Island of Rhodes and her Eleven Sisters: or, the Dodecanese from the Earliest Time down to the Present Day. By Dr. Michael D. Volonakis. Pp. xxv+438. (London: Macmillan and Co. Ltd., 1922.) 40s. net.

IN this volume the author gives an account, both historical and geographical, of the twelve islands lying off the western extremity of Asia Minor, for which the term "Dodecanese" has become current since the Italo-Turkish war. Of these, the most important is the island of Rhodes, but to English readers the names of others, notably Patmos, associated with St. John and the Book of Revelations, and Cos, the home of Hippocrates, will be equally familiar. The author, himself a native of the Dodecanese, relies mainly upon literary sources, but has supplemented these by the evidence of archaeology and numismatics, while his intimate local knowledge has proved invaluable in

elucidating his authorities. Owing to the isolation of their insular position, the inhabitants, while taking part in times of crisis in the affairs of mainland Greece, have kept their institutions practically intact from a remote period, notwithstanding successive waves of invasion, and subjection to the Knights of St. John, the Turk and the Italian. Hence this description of the islands has a peculiar value, and the author's fuller account of their archaeology and culture here promised will be awaited with interest. The book is exceedingly well illustrated by numerous photographs.

The Machinery of the Mind. By Violet M. Firth. Pp. 95. (London: G. Allen and Unwin, Ltd., 1922.) 3s. 6d. net.

It is stated by the author that this volume is for the edification of those who have neither the time nor the training necessary for the study of standard texts.

Whether such readers will be in the position, at the end of its perusal, to apply its generalisation to the interpretation of their own problems, or be inspired to continue the subject, is doubtful. In less than one hundred pages the author disposes of some of the most fundamental and debatable problems of modern psychology, but naturally there is no clue to their debatable character. It may be possible to compress the general truths of some sciences into a few pages, but none of the biological sciences are in that position, and psychology least of all. In a few lines the technical terms, sensation, percepts, concepts, images are used but not explained, while complex is used in two different senses. Analogy is useful in its place, but is very much over-used here; nor is it scientifically sound to give as evidence in a later chapter, what has been merely asserted in an earlier one. In short this book is little more than an expanded dictionary of some frequently used psychological terms with the drawback that the order is not alphabetical.

Human Traits and their Social Significance. By Dr. Irwin Edman. Pp. xii+467. (London: Constable and Co., Ltd., n.d.) 15s.

THE work under notice is designed to serve as a general introduction to the problems of contemporary civilisation. The author feels that in attempting to interpret the conditions of life under which we live the psychological point of view is too frequently overlooked, and yet it is most important. Following Dr. McDougall and Prof. Thorndike, he describes the fundamental activities which are man's endowment, his primitive instincts, their environmental modification and development, the individual difference in endowment and the part played by language. While emphasising the innate character of many of man's actions and aims, the author realises that there is also in man the power to reason and to put before himself ideals which he considers desirable; such ideals when embodied in social customs, institutions, and speech become powerful motives.

The style is clear and the whole book is easy to read and should prove of value to the historian, economist, and the student interested in the complexities of life. The subdivision of each chapter, however, into paragraphs with a heading in heavy type seems unnecessary, and is a hindrance rather than a help.