

rancid and poisonous, and that in spite of the best intentions.

The five chapters on Australian aborigines are instructive, especially where the writer deals with problems of race and physical anthropology. It is a pity that no references to other authorities are given, while the information is obviously not all based on personal field-work. About the Melanesians there are certain extraordinary statements, such as that "the savage lord of creation does little or no work except to make his wife or wives work" (p. 52). Those of us who know the Melanesian at first hand will feel astonished how any one who has visited the islands even on a flying trip could have carried away such an impression.

B. M.

Nauka Polska: jej Potrzeby, Organizacja i Rozwój.
Tom 5. Pp. vi + 553. (Warszawa: Im. Mianowski-ego, 1925.)

La science polonaise: ses besoins, son organisation et ses progrès. Résumé français des articles parus dans le volume 5. Pp. 36. (Varsovie: J. Mianowski, 1925.)

FROM the French résumé of the articles in the larger work in Polish we can learn in outline the needs, organisation, and progress of science in Poland. This is the fifth annual volume which has been issued by the Caisse J. Mianowski, an institute for the encouragement of scientific work. Earlier volumes have dealt with the more urgent scientific needs of Poland, proposals for the allocation of funds, and a report of a congress on scientific organisation. Some of the more pressing problems concern agriculture, health, education, sociology, and geological survey. There are six universities—Warsaw, Cracow, Leopold, Lublin, Wilno, and Poznan, and local scientific societies at Plock, Thorn, Przemysl, and Sandomiez. Conferences have been held on physiography, on museums, on education. There are some foundations, the Academies at Wilno and Zamosc and the astronomical observatories at Vilno, Poznan, Cracow, and Warsaw, and a monument to Copernicus at Warsaw. Information has been collected as to the organisation of science in other countries—in France, Italy, Denmark, Czechoslovakia, and Finland. M. J. Wojciechowski contributes an article on "The co-operation of the state and of industry in scientific researches in England," with references to the articles by J. W. Williamson and Dr. Kenneth Lee in *NATURE* for November 15 and December 6, 1924. There is an evident willingness to co-operate with work abroad. Relations have been cultivated with France, Italy, Belgium, England, the United States, Switzerland, and Czechoslovakia; Poland has been represented at some forty international conferences. Polish savants—about two hundred—have been encouraged to travel. Scholarships are offered to foreign students. Contact has been made with the League of Nations Committee on Intellectual Co-operation.

It appears that, although with restricted finance, an endeavour is being made to prepare the conditions for a scientific advance. For this reason it may be increasingly important to watch the future volumes of this annual. The French abstract is already a useful interpreter. Perhaps in the future English and German abstracts could also be offered.

H. R.

The Mineralogy of Scotland. By the late Dr. M. Forster Heddle. Edited by J. G. Goodchild. Reprinted under authority of Alex. Thoms by the Council of University College, Dundee, assisted by D. E. I. Innes. Vol. 1. Pp. lviii + 148 + 51 plates + 4 maps. Vol. 2. Pp. viii + 250 + plates 52-103 + 7 maps. (Dundee: Frank Russell, 1923-1924.) 15s.

By the publication of these two handsome volumes at so moderate a price, Mr. Alexander Thoms and the Council of University College, Dundee, deserve the thanks of all interested in the mineralogy of Scotland. Heddle's well-known work has, since its appearance in 1901, been an indispensable book of reference for mineralogists and petrographers, and it is satisfactory that so valuable a compilation has not been allowed to suffer the common fate of a mineral index and go permanently out of print.

It is unfortunate, however, that the opportunity has not been taken of removing some of the defects for which the original edition was criticised. The book possesses no adequate index, the first requisite in a work of this character, and in consequence the labour of tracing the descriptions of the minerals and their occurrences throughout the text is as long and irritating as it should have been unnecessary. The complete disregard of recent published work is also to be regretted. Thus, the interesting contributions made to the mineralogy of Scotland by the officers of H.M. Geological Survey working in Mull are not mentioned, and, as a result, the accounts of the mineral occurrences in that island are incomplete and sometimes erroneous.

Despite these blemishes, the book remains a lasting memorial of the enthusiasm and ability of the late Prof. Heddle. It is well printed and produced, and the illustrations are of excellent quality; but it is necessary to warn the reader that not a few of the drawings are examples of artistic crystallographic draughtsmanship rather than actual representations of the crystallography of Scottish minerals.

Substation Operation. By Prof. Edwin Kurtz. Pp. xiii + 261. (New York: McGraw-Hill Book Co., Inc.; London: McGraw-Hill Publishing Co., Ltd., 1924.) 12s. 6d. net.

THIS book is intended to help the workman to understand the principles of substation operation. It is a good attempt at giving somewhat advanced technical knowledge in such a way that it can be readily assimilated. Very little theory is given, and much of the information has been compiled from official American sources. We were interested to read of the care that is taken to protect the operator from shock and burns. Not only has he to wear rubber gloves, but he has to wear leather gauntlets over them. He has also to blow in the gloves to see whether there are any holes in them. In addition he has to put on a leather coat, which must be kept scrupulously clean, and when working with high tension switches he must stand on a stool thoroughly insulated from earth and so constructed that it cannot possibly tip over.

Full instructions are given to revive a man when he has had a shock. The patient is then to be given some stimulant, "such as one teaspoonful of aromatic spirits of ammonia in a small glass of water, or a drink of