

to do more work to find an index which would be more suitable for South African conditions.

The choice of a 325 mesh sieve for grinding was rather arbitrary. We wanted to obtain material in a relatively reproducible fine state, and again the quantities were not such that we could adopt on an ordinary laboratory scale with this amount of material a process of grinding and repeat tests.

BOOK REVIEW

Non-Ferrous Extractive Metallurgy in the United Kingdom. Price £6.

This volume, which was advertised in the December, 1968, issue of the *Journal* at a pre-publication price of £4, is edited by W. Ryan of Warren Spring Laboratory and published by the Institute of Mining and Metallurgy, London. It is an up-to-date review of the operations of some 50 or so companies whose activities embrace the extraction and refinement of metals in the United Kingdom. Thirty-four metals are discussed, ranging from aluminium to zirconium and also there are chapters on ferro-alloys, non-ferrous alloys, high purity metals and metalloids, the platinum group metals and the rare earths. The sources of the various metals are given, followed generally by a brief description of the primary recovery process. Thereafter the operations of specific companies that deal in a particular metal are described in some detail. Certain metals such as barium, bismuth, gallium, thallium and zirconium are perforce covered very briefly as their commercial application is limited but in other cases, especially aluminium, copper lead and zinc, fairly detailed descriptions and illustrations are provided.

This publication should be of considerable value to students as it presents modern procedures with regard to the refining and uses of the particular metals under review. This information may not be available from text books which in any case tend towards obsolescence. The book should also prove a valuable addition to the bookshelves of practising metallurgists providing, as it does, a schedule of most of the metallurgical companies operating in the United Kingdom.

The quality of the paper and binding, the clarity of printing and illustrations and the arrangement of the subject matter are excellent and are subjects for which the editor and publishers are to be commended.

R.J.A.