

With the progress of work on sediments has come a realization that, striking and obvious differences of mineral content are the exception rather than the rule in British rocks. The mere enumeration of mineral contents is likely to be no more diagnostic of a sediment than it is of an igneous rock, and Professor Boswell has emphasized more than once the necessity of using the varietal characters of mineral species in discussions of provenance and distribution. The determination of the percentages of the more commonly occurring species will be an invaluable supplement to such work. There is still a not unnatural disposition among field geologists to look askance at a method which they cannot themselves employ and which is liable to be marred by a subjective factor. The adoption of the percentage method should do much to reassure them.

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PLANT PETREFACTATIONS IN THE PENNANT ROCK.

SIR,—Following the announcement by Mr. Robert Crookall (GEOL. MAG., LXII, Oct. 1925, p. 480) of the occurrence of well-preserved petrified plant remains in the Pennant rock near Bristol and Caerphilly we have to record the presence of similar material in the Pennant rock near Swansea. We have found it in abundance at Cockett quarry, and a few fragments in a quarry on the north side of Town Hill. We have examined a number of specimens both by cutting thin sections and by the new technique mentioned below. So far the structural material investigated is wood of the dadoxylon type, frequently with a layer of coal, apparently representing the cortex. We wish also to report that we have extended the metallographic method of etching a polished surface which has proved so successful with coal (Seyler, *Fuel in Science and Practice*, iv, 56, Feb., 1925) to mineralized plant petrefactions. The results are particularly good with calcareous material such as "coal-balls", but we have also modified the method for the specimens discovered by us at Cockett quarry, in which the petrifying material is largely ferruginous. We hope to publish details of the method and results shortly.

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