

of British sediments from pre-Cambrian to Recent (so far as they have been investigated) was attempted, and general deductions were drawn. In addition, the problem of the stability of minerals was considered, and the more important rock-forming minerals (excluding authigenous) known to occur in ancient sediments (about 60), those confined to recent deposits (about 10), and those not known in sediments (about 20), were listed. Finally, certain unexplained problems arising from investigations were considered, and an attempt was made to indicate the future possibilities of research.

## CORRESPONDENCE.

### EOCENE MOLLUSCA FROM NIGERIA.

SIR,—Your review in the August number of that admirable production, the third Bulletin of the Geological Survey of Nigeria, draws attention to the first important step in our knowledge of the palæontology of the Southern Provinces, a step which, but for the existence of the Udi Coalfield, might have been indefinitely postponed. The elucidation of the composition and structure of the infilling of the Cretaceous and Tertiary bay which stretched from the Oban Hills on the east to the neighbourhood of Abeokuta on the west is of importance, not merely from the scientific standpoint, but also from the economic. In the second Bulletin of the Survey on the “Geology of the Western Railway”, by Messrs. Wilson, Bain and Russ, Eocene beds are recorded south of the crystalline rocks whereon stands Abeokuta. These beds are correlated with the Lignite beds of Asaba on the Niger to the N.E. In 1911 Mr. Bullen Newton, in the *Annals and Magazine of Natural History* (ser. 8, vol. viii), made mention of a possible Eocene fauna, including one fragment having a Cretaceous facies (p. 194), collected in the Ijebu district some 60 miles east of the Western Railway, and an *Orthophragmina* limestone of middle or upper Eocene age from a spot still further eastwards.

Chance alone was responsible for the discovery of the orbitoids. From Bende a lower or middle Eocene echinoid has been described by Professor Hawkins.

In view of these facts it would seem that in spite of the thick overburden of the Benin Sands and the heavy handicap of dense forest and undergrowth, it may still be possible to demonstrate the main structural lines of the Tertiary beds, and by so doing to arrive at an intelligent conclusion as to the best location for an experimental well for petroleum, which is of such enormous importance. The great extension of the Eocene sea is clear, but it is of considerable interest to ascertain whether the Oligocene or Miocene is represented before the bituminous and locally fossiliferous Ijebu Series of late Pliocene age is reached. Doubtless, knowledge will follow in time; meanwhile Dr. Falconer, the officers of the Survey, and Mr. Bullen Newton are to be congratulated on the three excellent Bulletins so far published.

JOHN PARKINSON.

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