

A boring through 325 feet of Gault at Iford Manor yielded glauconite sand. A discussion of the analysis of this material and of some previously published analyses leads to the formula  $R_2O \cdot (4R_2O_3 \cdot RO) \cdot 10SiO_2 \cdot nH_2O$ .

L. J. SPENCER: Ninth list of new mineral names.

---

## CORRESPONDENCE.

### GAULT AND LOWER GREENSAND NEAR LEIGHTON BUZZARD.

SIR,—I have just had the pleasure of reading Mr. G. W. Lamplugh's paper on the Junction of the Gault and Lower Greensand near Leighton Buzzard (*Quart. Journ. Geol. Soc.*, vol. lxxviii, 1922). Side by side with it I have Dr. Kitchin and Mr. Pringle's paper on the same area (*GEOL. MAG.*, vol. lvii, 1920). Both papers are convincingly written, but obviously the data relied upon by one or other authority must be misleading. May I be permitted to call attention to one or two points which forcibly strike an unbiassed reader? It seems obvious that one has to face in the case of the Shenley Hill Limestone the problems of a "facies fauna". Both sides admit the anomalous character of the deposit whether it is regarded as infra-Gault Clay or as Cenomanian. Moreover, both sides make repeated references to the "continental Tourtias", especially of "Flanders". Mr. Lamplugh likens the Ironstone-breccia of the Chamberlain Barn section to a Tourtia (p. 61). Personally, I cannot recall a Tourtia which answers to the description given of the Breccia. Mr. Lamplugh also remarks: "Correlation with the Tourtias is useless for any narrow and critical demarcation of age, since the Tourtias are known to occur at different horizons where actually intercalated in the Cretaceous sequence; and, where they form the base of that sequence and rest directly on the much older rocks, they are 'condensed' deposits, probably covering a long period, and they then generally contain many fossils not known to occur in beds which lie above the Gault where it is actually present" (p. 75). Sir, in the interests of the sanity of British geology I ask, are these "Tourtias" to be dismissed in this scanty fashion? But a few hours' journey from our own shores one may study a whole succession of "Tourtias", ranging in age from Albian to highest Cenomanian, and even to Turonian and Senonian, the age of which can be relatively and, in most cases, precisely fixed.

In their recent paper on "The Overlap of the Upper Gault in England" (*GEOL. MAG.*, vol. lix, April-May, 1922), Messrs. Kitchin and Pringle remark: "In any attempt to determine the zonal relationships when studying deposits of clay such as the Gault, subject to lateral change to other types of sedimentation, we must be prepared to pin our faith entirely to the fossils. There remains, of course, the recognition of the species appropriate for such an important use and the power to apply this evidence legitimately,

in the scientific sense. These are obviously matters depending entirely on the uniformity of previous experience, and the competence of the individual investigator" (p. 185). Is one to take this as a confession that the zonal work of our palæontologists is, after all, founded purely or mainly on their personal opinions and on their judgments in the selection of facts to be considered and facts to be ignored? Surely a more precise method of working is possible. Taking the case of the Shenley Hill Limestone many of its species occur in the Tourtias. By careful study of the wonderful succession of Tourtias—for example, in the Mons district, where their ages can be relatively and in most cases exactly determined (see Professor Cornet's brief summary in *Proc. Geol. Assoc.*, vol. xxxiii, 1922)—one can naturally eliminate facies fossils and incidentally a great part of the personal factor in the selection of suitable fossils for zonal purposes. To quote but one example. One may see our Albian "zonal" form *Pecten asper* becoming the characteristic fossil of the zone of *Holaster subglobosus*, and, if my memory serves me rightly, a common fossil even in the Senonian further east.

Are we so insular in Britain that we must practically ignore the life-work of our Belgian colleagues but a few miles across the Channel? Publication cannot always keep pace with research, but must our references to the faunas of the Tourtias be restricted to work of more than half a century ago, when we have at hand such magnificent collections as that contained in the *École des Mines* at Mons, or such an unrivalled store of information concerning them as Professor Cornet of that institution would, I am sure, be only too willing to impart?

L. DUDLEY STAMP.

BURMA.

1st June, 1922.

---

## ANNOUNCEMENTS AND INQUIRIES.

Mr. Alfred Bell, c/o F. W. Harmer, Esq., M.A., F.G.S., Cringleford, Norwich, being at work upon the British Pliocene and Pleistocene Oysters, would be greatly obliged for any information bearing upon their distribution. It is especially wanted in regard to the forms present in the West of England, in Scotland, and West Ireland; information of localities, accompanied by specimens, if possible, from shell heaps and raised beaches being of the utmost importance in determining the earlier forms of oyster life in our islands in Pleistocene times.

---