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MICROPALAEONTOLOGICAL EVIDENCE ON THE AGE OF THE CLARA GROUP (SOUTH-EAST IRELAND)

SIR,—The micropalaeontological investigations of specimens from the Clara Group which were mentioned in an earlier publication (Tremlett, 1966)—and also some from the nearby Dunganstown Sandstone—have now been completed by one of us (C. D.) on material collected by the other (W. E. T.). Although the results are not by themselves conclusive, nevertheless when considered in conjunction with earlier palaeontological information from Clara rocks, they give useful evidence on the period to which the group belongs.

Six specimens were examined from the Clara Group—four from the eastern flanks of Trooperstown Hill, ranging from 3 m (10 ft) above the base of the group, where it rests unconformably on Knockrath rocks, to some 150–180 m (500–600 ft) up into the group (Tremlett, 1959a, Fig. 2), and two from the Parkroe brachiopod locality (1959a, p. 61). All are similar in containing only sparse, highly carbonized and damaged sphaeromorph acritarchs, 7–50 μ in diameter. The absence of more elaborate acritarchs and other microfossils is regarded as evidence of a pre-Arenig age. Similar material has been obtained from Pre-Cambrian and Cambrian rocks elsewhere but not from any Ordovician samples (C. D.). The presence of brachiopods in these rocks (Tremlett, 1959a, p. 61) appears to rule out a Pre-Cambrian age (Glaessner, 1966). Hence a combination of the micropalaeontological and macropalaeontological evidence supports the previously advocated Cambrian age (Tremlett, 1959a, 1966) of the Clara Group.

Micropalaeontological material was also obtained from 2 km (1¼ miles) south-west of Glenealy at the outcrop of a silty layer in the Dunganstown Sandstone, a bed previously taken to mark the base of the Ordovician succession (Tremlett, 1959a, p. 59; 1959b, p. 19). This includes *Micrhystidium* cf. *shinetonensis* and large specimens (70–130 μ) of *Leiosphaeridia* sp. in abundance, both indicating an Upper Cambrian–Ordovician (or even younger) age. Fragments suggesting chitinozoa (*Conchitina*) occur, but none can be confidently identified. A few opaque discs may be damaged *Baliosphaeridium* (Ordovician or younger). The assemblage does not match precisely any known elsewhere.

The lithological similarity of the Dunganstown Sandstone to the Arenig rocks of other parts of south-eastern Ireland and its apparent stratigraphical position in the succession between the Clara Group and the Caradocian volcanic rocks of the Rathdrum area (Tremlett, 1959b, p. 19) still appear to provide the best available evidence of the age of this bed. For the Clara Group, however, a group having no known counterpart in other parts of south-eastern Ireland outside southern Co. Wicklow, this new micropalaeontological evidence indicates an upper age limit which, taken in conjunction with the lower limit fixed by brachiopods, confirms the previously advocated Cambrian age.

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