loose polyaene spicules which were also described were wrongly attributed to H. smithil in the figure caption, though not in the text. Zittel appears to have relied on the incorrect caption, since his diagnosis (1880, p. 185) wrongly attributes forms with 6-8 rays to Hyalostelia. Hinde's recognition that the polyaenes do not belong to H. smithii, but to a Tholiasterella (1887-1912, pp. 158-160, 169), was apparently missed by de Laubenfels (1955), whose treatment of *Hyalostelia* follows Zittel. Topotype material of *H. smithii* collected by the writer confirms Hinde's description of the species as a true hexactinellid, and the spicules can be taken as siliceous accordingly.

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# WATER RESOURCES

SIR,—In his review of the "Geology of the Country around Nantwich and Whitchurch" published in the *Geological Magazine* for March-April, 1967 (104, (2) 197-198) Dr. P. E. Kent states "... water is now outside the I.G.S.'s responsibilities but it is not obvious that there will be any other place where the relationship of underground water to the geology is considered ". I should be glad of the opportunity of advising your readers as to the present position of ground-water research at the I.G.S.

The Water Department of the Institute, formed in 1935, was concerned before and during the war with establishing its well record collections and with day-to-day water supply development problems; little basic research work was undertaken. In the post-war years, the increasing use of ground-water resources in the U.K. led to a change of emphasis towards estimation of ground-water resources and regional management problems, again at the expense of basic research. The implementation of the Water Resources Act, 1963, and the associated transfer of staff from the Institute to form the nucleus of the present Geology Division of the Water Resources Board, has resulted in the transfer of ground-water management and development problems in England and Wales to the River Authorities and to the Board. The hydrogeological staff of I.G.S. has been replaced and the Institute is mounting a comprehensive programme of research into the occurrence of ground water, complementary to such consideration as takes place at the Board. Indeed, publication of the Water Supply Papers of the Geological Survey of Great

Britain is continuing in three series (Well Catalogue Series, Research Reports, and Hydrogeological Reports), and consideration is being given to a fourth series dealing with instrumental and similar matters. Publication of hydrogeological maps has also been started with the issue of that for North and East Lincolnshire and will be extended to cover the major ground-water provinces.

Overseas activities are now being undertaken by the Water Department for the first time and although the scale of the present programme is small, it is intended that this important aspect of overseas applied geology shall not be neglected.

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### PRE-CAMBRIAN AND LOWER PALAEOZOIC ROCKS OF CO. WEXFORD

SIR,—In a recent paper (*Geol. Mag.*, 104 (3), 213–221, 1967) we quoted a note by J. W. Baker in the *Welsh Geological Quarterly* (1 (3), 17) in which he stated that the Rosslare Series and its metamorphisms were "pre-Ordovician and not Pre-Cambrian (as previously supposed)". A subsequent issue of the same Journal (1 (4), 14), issued after our paper had gone to press, contained an erratum to Baker's note : it should have read "the Rosslare Series and its metamorphism is Pre-Cambrian not Cambrian as previously supposed ". Baker and we, therefore, agree that the Rosslare Series (= Rosslare Complex) is Pre-Cambrian.

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#### THE SILURO-DEVONIAN BOUNDARY

SIR,-International agreement on the best horizon at which to draw the Siluro-Devonian boundary may be obtained at the International Symposium on the Silurian and Devonian at Leningrad in 1968. In view of the trend of opinion expressed in much recent literature it seems unlikely that the horizon selected will be at or even close to the horizon which has long been accepted as the Siluro-Devonian boundary in the Welsh Marches of Britain, the area where the Old Red System was first defined by Murchison. Indications are that a faunal horizon which will be correlated with some level near to the Downtonian/Dittonian boundary may well be agreed, and, if so, its application to this country will be essentially an academic palaeontological exercise. Historical justification for such a choice will be virtually non-existent, and this may be of little significance to the palaeontological argument, but a recent paper (Holland, 1965) and subsequent discussion of it (Tarlo, 1965) suggest