covered by their flows. The view that the whole of the Diabase is a "book" of oriented intrusive dykes seems to me to provide insuperable difficulties, but such possibilities must be considered. However, since the formation is dissected vertically for several thousand feet, the thin Diabase sheets, if they are intrusive, might well show systematic differences in texture between points 1,000 feet and 5,000 feet above sea-level. It does seem important to record and analyse the structures so generously presented by Nature, before venturing farther. The network of motor-roads now available would make the recovery of this information a not-too-troublesome task. In the meantime I believe that my original description of "Folded Diabase" should be retained until there is stronger evidence against it.

D. W. BISHOPP.

85 GREENSIDE ROAD, GREENSIDE, JOHANNESBURG.

16th August, 1959.

CARBONIFEROUS LIMESTONE-NAMURIAN JUNCTION IN IRELAND

SIR,—The nature and extent of the non-sequence between the Carboniferous Limestone and the overlying Namurian in Ireland is rapidly being evaluated by many workers, so that a complete synthesis of the phenomenon may shortly be expected. I think, therefore, that it may be worth while to record relevant results derived from a preliminary survey of the Taur-Meelin anticline near the Co. Limerick–Co. Cork border, recently carried out.

In this region the top of the Carboniferous Limestone, seen in a series of dome-like outcrops between Taur and Meelin, is cherty to a depth of about 6 feet below the Namurian junction. Immediately above the limestone occur 60 feet of shales, corresponding to the Clare Shales of Co. Clare and Co. Limerick, above which the facies changes and sandstones and siltstones appear in the succession. West of the village of Taur, poorly preserved *Homoceras* sp. has been collected from the shales 20 feet above the top of the Carboniferous Limestone. It is clear, therefore, that lower beds in these shales are of *Homoceras* age so that the *Eumorphoceras* zones are probably absent here.

Above the Carboniferous Limestone there occur beds of thickness of the order of 1,750 feet, which include coal seam(s?) near the top. Spoil heaps from the old collieries yield shales with impressions of *Reticuloceras bilingue* showing that the succession ranges up into the R_{zb} subzone.

W. H. MORTON.

GEOLOGY DEPARTMENT, THE UNIVERSITY, SOUTHAMPTON. 16th November, 1959.

THE BUGLE PIT, HARTWELL, NEAR AYLESBURY, BUCKS SP(42)793121

SIR,—The Bugle Quarry used to be the type section of the Portland and Purbeck Beds of the Aylesbury neighbourhood (Arkell, 1947, p. 126) and has been regularly visited by geologists since at least as early as 1854. It has long been out of work and has slowly become more and more obscured. Up to about three years ago, quite a good section of the Purbeck Beds could be seen. In 1958 an unexpected *coup-de-grâce* was given by tipping the spoil from extensive main road improvements over the face, which completely hid all exposures with several feet of very mixed inert material, including much sand from the Wealden Beds of the adjacent Stone outlier.

In 1951 the Bugle Pit was notified to the Local Planning Authority by the Nature Conservancy as a *Site of Special Scientific Interest* under the terms of Section 23 of the National Parks and Access to the Countryside Act, 1949. In 1959 the Conservancy approached the land-owners, who kindly agreed to the re-opening of a permanent section, and in September some members of the Geology Department, Queen Mary College, excavated a section on the south-west face of the old quarry, now a thorn-tree covered bank, and it is intended to keep this exposure in good condition.

This section is some 9 feet wide, and exposes the uppermost 8 feet of Purbeck strata, down to within about a couple of feet of its base.

Intending visitors must obtain permission from the tenant farmer, Mr. L. J. Pitcher, Glebe Farm, Hartwell (SP(42)79451208) either at the time or preferably in advance. Apply at the farm buildings between the Bugle Horn Inn and the field gate immediately opposite the by-road signed to Hartwell House. Access is by this field gate and the old track leading into the quarry, and visitors are requested to keep to this track, and to be meticulous in avoiding damage to the agricultural land and crops which, with the old pit, remain in private ownership. They are also asked not to damage the barbed wire which has been strung round the new excavation to prevent cattle falling into it; and to refrain from excessive hammering of this section.

In 1949, V. Wilson (p. 220) recorded algal limestone from the Purbeck Beds. This was not found in the recent excavation, but slabs of similar material occur round some filled-in trial holes in the field immediately to the west of the old guarry face.

> J. F. KIRKALDY, Hon. Sec. Geological Conservancy Council.

DEPARTMENT OF GEOLOGY, QUEEN MARY COLLEGE, MILE END ROAD, LONDON, E. 1. 14th December, 1959.

REFERENCES

ARKELL, W. J., 1947. The Geology of Oxford. Oxford.

MORLEY DAVIES, A., and WILSON, V., 1949. Field Meeting in the Northern Chiltern Hills and Aylesbury District. Proc. Geol. Assoc., lx, 219-221.