

LOWER ORDOVICIAN GRAPTOLITES IN NEW SOUTH WALES.

By R. A. KEBLE, F.G.S., and J. HOPE MACPHERSON.

(Figure 1.)

THE graptolites from Narrandera, New South Wales, in the collection of the Australian Museum, are particularly important as they represent the first undoubted evidence of Lower Ordovician rocks in New South Wales. The late W. S. Dun's statement (1930, p. 76) on examining them that "most of the Palaeozoics between Narrandera and Albury were Ordovician" becomes, therefore, a shrewd generalization.¹ The bed in which they occur is a highly cleaved, blue, andalusite slate, its alteration suggesting the close proximity of an intrusive igneous mass that may limit the

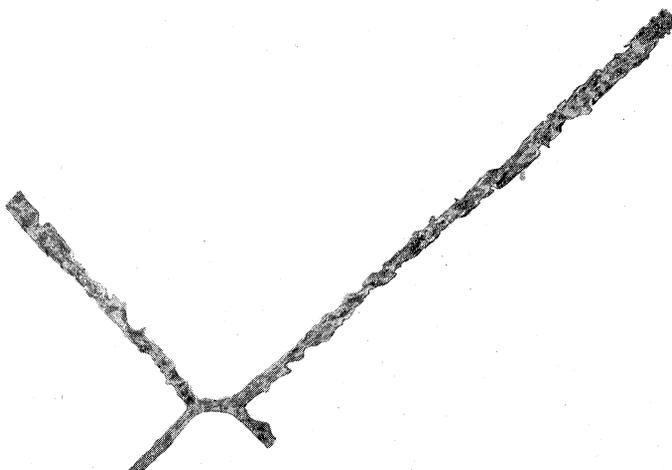


Figure 1.—*Tetragraptus quadribrachiatum* J. Hall. Approximately $\times 3$.
Del. J.H.M.

possibility of finding other beds in the area. They are high in the Lower Ordovician, and, if part of a normal succession, are many thousands of feet above the older members of the Lower Ordovician on which the Victorian goldfields of Bendigo, Castlemaine and Daylesford are located.

Most of the Victorian goldfields occur along known tectonic lines. The Narrandera slates appear to be on the north-western extension of such a line passing through the Victorian goldfields of Harrietteville, Bright and Chiltern. The reefs there are in unfossiliferous slates thought to be of Ordovician age. For that reason, it is desirable

¹ In an unpublished report on "Lower Ordovician Fossils near Narrandera, N.S.W.," dated 25th June, 1930, the late W. S. Dun referred to graptolite-bearing beds in Portions 56 and 57, Parish Corobimella, N.S.W., from which were obtained *Tetragraptus* and *Phyllograptus*, and also fragments of a crustacean, probably *Ceratiocaris*, and of an ophiuroid. He stated: "There appears to be little doubt that this series is an extension of the Victorian Lower Ordovician Belt and that it will be necessary to alter our Geological Map considerably."—EDITOR.