

NEW LAMELLIBRANCHIA FROM THE UPPER PERMIAN OF WESTERN AUSTRALIA.

By H. O. FLETCHER,
The Australian Museum, Sydney.

(Plates xxxiv-xxxv.)

Introduction.

In this paper two new genera of lamellibranchia are recognized from the Upper Permian beds of Western Australia. Four species are described from the Wandagee Series, while two are also recorded from the Nooncanbah Series, its northern equivalent in the West Kimberley Division.

The shells are of particular interest as they possess a wide V or chevron-shaped type of ornamentation which is rarely found on palaeozoic shells. They are edentulous, posteriorly-gaping forms, possessing close affinities with mesozoic shells of the Family Pholadomyidae. The two new genera bear a close resemblance to Permian shells recently described from Madagascar by Astre (1934) and also have many points in common with Jurassic shells from the Spiti Shales described by Holdhaus (1913) as *Goniomya* Agassiz and *Cosmomya*, gen. nov.

The specimens with two exceptions were collected by Dr. Curt Teichert, late of the University of Western Australia, at whose request the following paper has been prepared. The material is fairly well preserved but the specimens are in varying stages of incompleteness. The hardness of the matrix in which the shells are preserved prevented any development of internal structures, and the descriptions and conclusions have therefore been based entirely on external characters.

A series of fifteen specimens were collected from the Wandagee Series of the Minilya River district in the North-West Basin. A single specimen (F.38415) was collected by Mr. H. Coley from the same locality, while an incomplete specimen (F.16746) was collected by Dr. H. Basedow in 1914 from Mount Marmion, near Balmaningarra in the West Kimberley Division. The two numbered specimens are in the collection of the Australian Museum, while the remainder are in the collection of the University of Western Australia.

Stratigraphical Position of the Species.

The Wandagee Series immediately underlies the Kennedy Sandstone, which has been placed at the top of the Permian sequence in that area by Teichert (1941, p. 381). Because of the extremely fossiliferous nature of the Wandagee Series, Teichert was able to subdivide it into four stages, each one characterized by a distinct fossil fauna. The stratigraphical positions of the species described in this paper are as follows: In descending order—

Kennedy Sandstone	200 + feet
Wandagee Series	2,600 "
Linoproductus Stage	1,090 "
Highest fossil horizon.	
<i>Undulomya pleioleura</i> , sp. nov.	
Lowest fossil horizon.	
<i>Undulomya pleioleura</i> , sp. nov.	
<i>Palaeocosmomya teichert</i> , sp. nov.	
Schizodus Stage	340 "
Calceolispongia Stage	560 "
<i>Undulomya rugulata</i> , sp. nov.	
<i>Palaeocosmomya teichert</i> , sp. nov.	
Lingula Stage	590 "
<i>Palaeocosmomya teichert</i> , sp. nov.	
<i>P. apilatum</i> , sp. nov.	