COMMONWEALTH OF AUSTRALIA

**DEPARTMENT OF NATIONAL DEVELOPMENT**

# BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS

**RECORDS:**

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# MICROPALAEONTOLOGICAL EXAMINATION OF ROCK SAMPLES FROM THE KIMBERLEY DISTRICT, WESTERN AUSTRALIA, COLLECTED BY DR. FRANK REEVES.

by

I. Crespin



15928/65

# MICROPALAEONTOLOGICAL EXAMINATION OF ROCK SAMPLES FROM THE KIMBERLEY DISTRICT, WESTERN AUSTRALIA, COLLECTED BY DR. FRANK REEVES.



## Report No. 1948/13.

No. 615. Dusty Bore, 10 miles north-west of Christmas Creek Station.
Black, micaceous, carbonaceous shale and grey sandstone with foraminifera, crinoid ossicles, brachiopod spines, bryozoa and ostracoda.

Foraminifera: Ammodiscus cf. nitidus Parr.
Hyperammoides cf. acicula Parr.
Crithionina teicherti Parr.
Nodosaria serocoldensis Crespin.
Frondicularia perri Crespin.
Frondicularia woodwardi Howchin.

Bryozoa: Streblotrypa marmionensis Eth.

Ostracoda: cf. Cavellina.
cf. Healdia.



No. 621. From glacial series at base of Mount Millard, Pool Range.
Buff coloured, calcareous siltstone. No organisms.

No. 624. From Glacial Series in gorge ½ mile north of Mount Smith, Poole Range.
Calcareous sandstone. No organisms.

No. 626. 3 miles north-west of Mount Millard, Poole Range.
Limonitic sandstone, containing plant remains, chiefly indeterminate.

cf. Glossopteris.
cf. Gangamopteris.

## NOTES ON THE SAMPLES.

No. 615 comes from an unknown depth in Dusty Bore near Christmas Creek Station, which is about 90 miles south-east of Nerrima Homestead. The sample contains an assemblage of Permian microfossils similar to that found in the Nerrima Bore, between the depths of 39 feet and 825 feet and in similar dark grey to black shales and sandstones. The foraminifera are similar to those found in the Nerrima Bore from 39 feet down to 424 feet with the exception of Calcitornella which/is absent in the Dusty Bore sample. The Nerrima Bore foraminifera are correlated with the Nura Nura limestone (see Crespin, Foraminifera in the Permian Rocks of Australia, 1947), which is the equivalent of the Callytharra limestone of the Wooramel Area.

In my report on the samples from the Nerrima Bore made on February 29th, 1940, the correlation of the fossiliferous beds was made with the Nooncanbah Series but further work on the rocks of the area proved that the correlation should have been with the Nura Nura limestone which contains the restricted foraminiferals genus Calcitornella.

The bryozoan Streblotrypa marmionensis is widely distributed in the Permian rocks of Western Australia and is found in rocks referred to the Nooncanbah Series and the Callytharra limestone.

Nos. 621 and 624 contain no fossil evidence to indicate age. The glacial beds from which these pebbles came are probably referable to the Grant Range Series of Wade.

No. 626 contains poorly preserved plant remains in limonitic sandstone. Two specimens are referred respectively to cf.

Glossopteris and cf. Gangamopteris. Specimens were forwarded to Dr. Walkom, Australian Museum, Sydney, for determination and a copy of his reply is attached. The plants are Permian in age and most probably belong to the Lower Ferruginous Series of Wade.

I. Crespin

I. Crespin.
Commonwealth Palaeontologist.

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