PALÆONTOLOGIA NOVÆ CAMBRIÆ MERIDIONALIS—OCCASIONAL DESCRIPTIONS OF

NEW SOUTH WALES FOSSILS-No. 6.1

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(Plates xl.-xli.)

I .- MOUNT WILSON WELL "MUSSELBAND."

(Plate xli., figs. 1-3).

At Mount Wilson, on Dunlop Holding, about thirty miles north-west of Dunlop Homestead, Darling River, a well was sunk previous to 1881, to a depth of about five hundred feet, as a means of water supply. In 1903 I visited the locality and found the surrounding spoil heaps in a great measure composed of a blue calcareous mudstone. This matrix is crammed with broken valves and shell fragments of a small bivalve, so plentiful as to almost form a "musselband," and certainly a good "horizon-indicator" in this portion of our Lower Cretaceous.

When first sunk, water was struck at four hundred and eighty-eight feet in this well in greensand and conglomerate beds.² The strata assigned to the Cretaceous were first met with at a depth of one hundred feet from the surface, consisting of a hard blue clay with shells, pebbles and petrified wood.³ This deposit is no doubt the same as met with in Kapiti Well, No. 2, on Dunlop Holding, about twenty miles west of Mount Wilson, where the "hard blue clay" extended downwards to the three hundred foot level with one slight interruption.⁴

 $^{^{1}\ \}mathrm{For}\ \mathrm{Nos.}\ 1\text{-}5$ see Records of the Geological Survey of New South Wales.

² Wilkinson—Ann. R. Dept. Mines N.S. Wales for 1881 (1882), p. 133.

³ Brown—Albert Gold Field—Artesian Water (Report, etc.), Votes and Proceedings N.S. Wales, 1881, iii., No. 427-A, p, 725.

⁴ Wilson—Albert Gold Field—Artesian Water (Further Papers) Votes and Proceedings N.S. Wales, 1881, No. 448.