NOTES ON MINERAL SPRINGS OF NORTH-WEST COAST.

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The earliest mention of these springs is in a letter from Count de Strzelecki, dated about 1840, and published among the papers of the Tasmanian Society.* Of their constituents Strzelecki says:—"They belong to the class of carbonated waters, containing carbonic acid gas, muriatic acid gas, carbonate of soda, chloride of sodium, sulphate of soda or magnesia, oxide of iron in the state of a peroxide, and a slight indication of lime. From this examination, and from experience, I am led to believe that they are aperient and tonic; they are also sufficiently disgusting to the palate to pass for highly medicinal."

Some thirty years ago I was travelling from Circular Head to Smithton, on departmental business, accompanied by an officer of the Police Department. On our return journey we turned aside to inspect some mineral springs reported to exist near Deep Creek, not far from where it falls into Duck Bay. The country is mostly level or slightly undulating, and at the time was quite open, the scrub, consisting chiefly of dwarf tea tree, having been burnt off. On getting near the creek we noticed two or three mounds rising about seven or eight feet above the ground level, and on climbing to the top of one of them we found a spring of clear water gushing freely from an opening a few inches in diameter, and spreading itself over the loosely compacted brownish rock of which the mound was composed. The whole formation was nothing more than a deposit of calcareous tufa, or travertine, formed chiefly by the precipitation of the lime contained in the water of the spring on exposure to the air, the deposit of lime carbonate being largely increased by mosses and small plants, which facilitated the decomposition of the carbonic acid in the water. In this way the whole of the little mound had been gradually built up.

*Tasmanian Journal, Vol. I., page 77

During a recent visit to the district of Circular Head I had an opportunity of again visiting Deep Creek, in company with an old resident who knew the country well, and without whose help it would have been difficult to identify the locality of the springs, the whole of the surrounding flats being thickly covered with tea tree scrub. Approaching the creek we noticed numerous small fissures, with water bubbling up to the surface of the ground. The mounds had entirely disappeared, and the only explanation that could be suggested was that the material had been carted away and burnt for lime; but against this theory was the fact that the ground was too swampy and intersected by numerous fissures to be practicable for horse traffic. From the edges of these fissures I obtained pieces of the travertine, which are now submitted for inspection, and from one of the springs a sample of the water, which Mr. Ward, the Government Analyst, has kindly analysed, with the following result:—

Water from Mineral Springs, Deep Creek.

	Grains per gallon.
Chlorine in Chlorides	10.9
Total solid matter	81.0

The solids consist chiefly of Sodium Chloride (salt) with Carbonates of Lime and Magnesia, the latter carbonate in larger proportion.

A considerable deposit of iron was present, but there was practically no iron in solution.

A somewhat similar deposit of travertine has been reported to the Society from Mowbray Swamp, and in the intervening district there are numerous other localities where the surface conditions indicate the probability of the occurrence of mineral springs.