
GENERAL FEATURES.

The whole of Mission Valley and branching valleys are surrounded by extensive undulating hills, in some cases rising to a great height, and holding in their undulations considerable lakes without visible outlet. Lower down, springs appear in places, forming running streams of but small extent. This, however, points to an underground supply; and should this supply be tapped by boring, an abundance of water will be obtained.

VERNON, OKANAGAN.

On leaving Mission Valley I returned to Vernon, and made a careful examination of the country surrounding that place as far as Pleasant Valley, and the valley of the Coldstream as far as the Nelson Ranch.

Water for domestic purposes is much needed in the town of Vernon, as all the wells at present sunk are strongly impregnated with alkali, carried down with the surface water.

On the high plateau above the town to the east, occupied by the farms of Mr. Price Ellison and the B. C. Express Company, &c., water is much needed, and can, from the formation of the ground, be obtained high enough to command a large area of land where irrigation is much needed. To the south-east of the town there is, between the foot of the Long Lake and the arm of Okanagan Lake, an extensive plateau of good land, but much too high to obtain water for irrigation by boring, as the water supply lying above consists of small springs and lakelets. In boring at this height, it is extremely unlikely that the water-bearing strata would be struck, from the proximity of Long Lake.

At the foot of this ridge, near the road from Vernon to Mission Valley, there is a strong spring issuing from the ground, which might be used for the town supply, as it consists of beautiful water and continues to run the year round.

Leaving Vernon, the road skirts the shore of Swan Lake until the divide at O'Keef's is reached. The valley of Swan Lake (or, more properly, Pleasant Valley) continues to run north, divided from the Slough Lake Creek (which carries the drainage of Otter Lake into the Okanagan Lake) by an undulating timbered ridge. In this valley are numbers of fine farms, where water, both for irrigation and stock, is much needed. The valley, to the east, is backed up by an extensive water-shed, the foot-hills holding numbers of small lakes. Water could be obtained here at a reasonable depth, varying from, I should say, 150 to 300 feet.

Turning to the west, there is a fine plateau of land lying between the road to Salmon River and that to Lansdowne. This land is of little value without water (although taken up and extensively improved). On this flat water might, I think, be obtained, as in the hills to the west of it are numerous lakes and swamps without much surface outlet. The mountains to the west and north form a vast water-shed, and in the depression (through which runs the Salmon River trail) there is no stream, and only some few blind lakes. It looks as if there was some underground channel by which the water is conveyed to some lower level, which could be reached by boring.

The swampy flat which connects the Okanagan Lake and Otter Lake and receives the drainage from Millstream, or Deep Creek (the stream being called by both names), continues to run north-east until near Lansdowne, where the creek turns to the west, then again to the north, running in a deep depression and having in the elbow, which it here makes, the fine farms of Mr. Schubert, &c., and known as Round Prairie.

ROUND PRAIRIE.

Water is much needed at this point, all water having to be hauled from Deep Creek. On Mr. Schubert's ranch the divining rod was tried, and in the hands of an expert showed that water would be obtained at a depth of about fifty feet. Mr. Schubert, with a faith which deserved to be rewarded, sunk (on the spot indicated by the diviner) a beautiful shaft to the depth of 125 feet, without any water being met with. A bore was then put down at the bottom of this shaft some 40 feet further, and when abandoned the depth of soil or stratified clay had not been reached. Another well was then started, near the road from Salmon River, and a shaft 120 feet sunk. This well is in a particularly good place, but no water was struck, and the sinking was abandoned, as the ventilation of a well of this depth was a great drawback to the speed of sinking. Should a site for a bore be wanted, this well is at your disposal,