## GENERAL REPORT

OF THE

SURVEY of the Districts SHAWNIGAN, COWICHAN, COMIAKEN, QUAMICHAM, and SOMENOS.

To Joseph D. Pemberton, Esq., Colonial Surveyor, &c.

Cowichan surveys.

Sir,—In closing my returns of surveys in the Cowichan Valley, I would respectfully submit the following summary of the capabilities of the country laid out.

The character of each district has already been reported

to you upon the completion of each survey.

Valley. Extent.

The valley may be fairly considered as about 15 miles wide upon the sca coast, but narrows rapidly as we ascend the river, insomuch that upon the westerly limit of the survey (11 miles from the coast) it has only a width of about six miles. It is well watered by the Cowichan River and its numerous tributaries.

Well watered.

Mountains. High ranges of mountains, believed to be of secondary Formation, formation, with calcareous freestone or carbonate of lime, form almost impassible barriers towards the north and south, and the whole subsidence of land between these mountains is evidently a deposit borne down by the waters.

Depression. Free from

The surface throughout is either uniformly level or in gentle swells, and until the mountain sides are attained scarcely any rocks or boulders are to be found.

rocks.

Soils.

The distinctive nature of the soils throughout the Cowichan Valley is calcareous, seemingly formed by the composition of limestone rock, for while the other principles occur in different degrees, the properties of the carbonate of lime almost invariably predominate. There is usually a good depth of 2 or 3 feet resting upon a sufficiently retentive

Their nature. Calcareous. Deep soils. Subsoil.

subsoil of blue clay or gravel.

Earths. Composition of earths. Absorb and retain moisture. Colour. retain heat.

The earths, chiefly light, very porous, and composed of due proportions of clay, sand, carbonate of lime, and vegetable remains, are well constituted for absorbing and retaining moisture; and the general colour, from brown to black, with the entire absence of chalky or white earths, would likewise indicate a favourable soil for receiving and retaining heat. Absorband Samples taken from the "Somenos rains" were found by