

Magnetic iron ores occur in large bodies in several places on the Alberni Canal and Barkley Sound, and will be a potent factor in the development of the district, especially when electrical smelting becomes commercially practicable.

Some excellent smelter sites are obtainable, with abundant water power, unlimited quantities of limestone for fluxing purposes, and a coke supply within easy reach. Gold ores have been discovered in the mountains, and free gold has been taken from some of the creek beds. Owing to the difficult character of the country the district has never been thoroughly prospected, and new and valuable discoveries of ore may be expected at any time as the country is opened up.

#### NON-METALLIC MINERALS.

The presence of beds of coal under the valley, while not actually demonstrated, is exceedingly probable, as the coal formation, similar to that on the East Coast of the Island, is seen at different points. Good coal from small stringers outcropping at the head of the Alberni Canal has been used for blacksmith's work.

Beds of clay, fit for both common and vitrified brick and tile, exist in different parts of the valley and on the canal. Fire-clay is also found on the east shore of the canal, close to the town. Government tests of these clays are very satisfactory.

Sandstone and good limestone, fit for building purposes, occur in various parts of the district, and on the shores of Sproat Lake black marble of good quality is found.

#### WATER-POWERS.

The chief water powers near Alberni are the Ash, Stamp, Sproat and Somass Rivers, all within 18 miles of the town. The Ash River, a tributary of the Stamp, has a mean flow of 30,000 cubic feet per minute, and has a grade of 40 feet to the mile in its course of twelve miles; 20,000 h.p. could be developed from this stream. The Stamp River, flowing out of Great Central Lake, drops 230 feet in ten miles, and has a mean flow of 80,000 cubic feet per minute, affording a possible development of 40,000 h.p. The power of the Sproat River is estimated at 40,000 h.p. This river unites with the Stamp to form the Somass, from which considerable power could also be generated, though the head is low. Over 65,000 h.p. could be developed from these four streams alone, without counting the smaller rivers, such as Roger and China Creeks, or the various water-powers further afield. There is, therefore, ample water-power for the electrical needs of a large city, and the transmission lines would be short, making electric power proportionately cheaper. Stamp and Sproat Falls, in particular, ten and seven miles respectively from the town, are promising sites for power development schemes.

#### CLIMATE.

The climate of Alberni and district will appeal strongly to those familiar with the rigorous winters and extremely hot summers of the interior of the continent. The average Alberni winter is wet rather than cold, with the maximum rainfall in November and December. January and February are the coldest months, and some snow falls, though there are rarely more than a few degrees of frost. March is milder and wetter, and then spring begins early, and a magnificent, sunny summer follows, though the mercury seldom rises above 90 degrees at mid-day. Occasional showers during the summer prevent the