occur here, the few deciduous trees of the country being such as grow only upon the water courses. As a consequence the fire almost invariably spring up again when burnt off. The undebrush, consisting of hazel spiraea &c., is usually dense. In some isolated tracts the primitive forest remains, and the body of timber is strong, though much less so than upon the Cascade south of the Columbia.

The first rock in place encountered after leaving Vancouver was near the Oakotte fork of the Cathlapootle river, and was a dark hard and dark green hornblende, without noticeable strike or inclination of the beds. This rock forms the cañon of the stream, and prevails to the Cathlapootle itself. Boulders of trachyte accompanied the sand and gravel in the Oakotte, but not in such quantity or variety as in the main fork, which heads in Mt. St. Helens. The divide between the latter and the Columbia is about 1800 feet in height, presenting a steep and almost precipitous face to the north. The hornblende rock is said to extend down the Cathlapootle to within a few miles of its mouth. Sandstone of volcanic origin appeared in large masses on the borders of the river, and probably occurs in place at no great distance.

The boulders in its bed are chiefly trachyte, of different shades, and basalt; varying from iconaceous

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