sand in quantity at least, in this part of the range is however questionable, as the talcose rocks, if not wanting are very limited in extent. To the northward they are somewhat more abundant

The range already spoken of which separates the Yakama from the Pisquouse and the Columbia on the north and east, is little if at all inferior to the average height of the Cascade Mountains, the point at which the trail crossed them being 5749 feet by barometrical measurement, an elevation much greater than either pass of the Cascade mountains. It appears to be formed entirely of basalt and volcanic conglomerate, the latter showing only on the Northern side on the Columbia. On the Southern side the basalt was but superficially covered with earth and the strata seemed to dip toward the S.E. The tops of the columns were much broken up, the fragments strewing the hills and where denuded by the winter rains, exhibiting long black streaks in the surface. On the tops of these mountains however there are quite extensive levels of prairie and open woods and the soil seems to be better than on the lower ridges. The timber, at first yellow pine, changes towards the summit to a straggling mountain species, intermixed with larch- spruce and fir. Some of the larches were here as much as three feet in diameter,

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