## WEST KOOTANIE.

as even the greater part of the terrace-flats is either sandy or stony. There are, however, some wooded flats with silty soil which will no doubt eventually be cleared and cultivated. There has been in the aggregate a considerable quantity of fair to good timber in this part of the valley, but the greater portion has unfortunately been destroyed by fire.

Vegetation.

For a few miles above the mouth of the river, the north-west bank is open and its vegetation is indicative of a dry climate, like that of the Lower Arrow Lake. Here Clarkia pulchella, a plant seldom elsewhere found in British Columbia, was collected. Balsamorrhya sagittata was also noted. Further up the valley the rain-fall is evidently greater. The forests consist chiefly of Douglas fir, hemlock, cedar and larch, with occasional specimens of yellow pine and other The western yew (Taxus brevifolia) was also occasionally trees. seen in damp spots, as a small tree with trunk a foot in diameter. On the river-flats and terraces in the immediate vicinity of Ward's Ferry, there occurs a greater number of species of coniferous trees than I remember to have seen together elsewhere in the Province. The list includes cedar (Thuya gigantea), yellow, black and white pine (P. ponderosa, P. Murrayana and P. monticola), larch (Larix occidentalis), Arboreal juniper (Juniperus Virginiana), Douglas fir (Pseudotsuga Douglasii), hemlock (Tsuga Mertensiana) and Engelmann's spruce (Picea Engelmanni).

The handsome malvaceous plant, Spheralcia rivularis, was noted in abundance near Ward's Ferry, though rarely seen elsewhere in British Columbia. As denoting the progress of the season it may be added that the service-berry, flowering-raspberry and large blueberry (Amalanchier alnifolia, Rubus Nutkanus and Vaccinium myrtilloides), were found with ripe fruit on June 20th.

Slocan River.

As already mentioned, the most considerable tributary received by the Kootanie, between the lake and the Columbia, is the Slocan. This stream, where crossed by the ferry near its mouth, is very rapid and strong, with a width of one hundred and eighty feet. From Mr. Archie McDonald, who had been engaged in prospecting on the Slocan, the following notes were obtained. It will be found that the distances as given by him do not correspond with those of the map, as his estimates doubtless include the various sinuosities of the route necessarily followed. An attempt has been made to indicate the portion of the river and lake on the map in relation to the other known features. The length of the river from its mouth to the lake in which it rises, Mr. McDonald estimates at forty miles. At eighteen miles up, a branch comes in from the west, by the valley of which the Indians cross over to Deer Park on Lower Arrow Lake—distance, say, twenty miles.

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