

it enters the head of the upper lake, does not even then exhibit the blue transparent lucidity of the Kootanie.*

Below Sproat's Landing the river was not examined by me, but according to Mr. Bowman's traverse (which is employed for this portion of the map and has been previously referred to), after making one large and wide bend to the westward, it returns in an easterly direction and crosses the forty-ninth parallel into Washington, nearly due south of the Landing. The distance by river from Sproat's Landing to the international boundary is about thirty miles. Thence to the Little Dalles is a further distance of about fifteen miles, and the river is continuously navigable by steamers of good power to this point.

General Remarks.

Length of water
route.

In reviewing what has been said of the Columbia River and Arrow Lakes in the preceding pages, it will be found that the total distance by water from Revelstoke to Sproat's Landing, is one hundred and forty-five miles and a half, of which eighty-seven miles and a half is lake and the remaining fifty-eight miles river. Respecting the character of this water-way as a means of communication, I may state that it is likely to prove of much greater importance and utility than I had supposed before examining it. A steamer was put upon it and was used by miners at the time of the Big Bend excitement as long ago as 1866, and again, during the construction of the Canadian Pacific Railway, a second steamer was built, by which men and supplies were taken north. During the past summer it was continuously navigated by two small steamers, running between Revelstoke and Sproat's Landing, named the 'Dispatch' and 'Marion' respectively. Neither of these possess more than very moderate engine power, yet little difficulty has been experienced in ascending any part of the river. These steamers, together with those before alluded to, are stern-wheel boats, which are better suited than any others for the navigation of rivers like that part of the Columbia between Revelstoke and the upper lake.

Steamers.

* It has not been considered necessary to include mention of the various astronomical determinations of position made during this reconnaissance, which have been employed in the construction of the map. Sproat's Landing has been employed as a principal point. My observation spot here was situated a mile above the 'town,' and about 300 yards above Mr. Sproat's house, on the bank of the river. The position depends on the following observations:—

By meridian altitude of sun, Lat. = $49^{\circ} 19' 46''$
By observations on Polaris, " = $49^{\circ} 19' 54''$

Mean Lat. adopted..... $49^{\circ} 19' 50''$

By chronometer and observations June 9th and July 8th, 1898—Long. $33^{\circ} 52' 5''$ east of observation point at Revelstoke, on bank of river in garden of Government building.