of the proposed sleepers to decay as the only basis of the calculation, a large proportion of this sum would be saved. Assuming the duration of the sleeper to be doubled, and taking into account the mechanical causes of destruction, a saving of £300,000 per annum, would be effected to the railway interest in England alone.

From these data, the value of the invention in Europe will readily be seen, and although it has been patented in France and England, and, as it would seem, to some extent, in Canada, it is believed that the use in this Province is unfettered; 1st, because by the Statutes of Canada, no foreigner can obtain a patent monopoly in this country; and, 2nd, because, being already known and used in other countries, it cannot be patented here.

## THE CHINOOK INDIANS.

BY PAUL KANE, TORONTO.

In accordance with an invitation of the Council of the Canadian Institute to communicate notices of some of the tribes of Indians amongst whom I have travelled, I selected the Chinooks, one of the tribes most remote from this part of the continent, and whose manners and customs are so much at variance with our own, as to render some notice of them, from personal observation, probably both novel and interesting. Other communications of the incidents and results of my travels among the Indians of the North West, having since appeared in the Journal, I have revised my account of the Chinooks, with a view to its appearance, along with the notices of the Walla Wallas, and others of the Aborigines of this continent in the New Series.

The Flat-Head Indians are met with along the banks of the Columbia river from its mouth eastward to the Cascades, a distance of about 130 miles; they extend up the Walamett river south about 30 or 40 miles, and through the district lying between the Walamett and Fort Astoria, now called Fort George. To the north they extend along the Cowlitz river and the tract of land lying between that and Puget's Sound. About two-thirds of Vancouver's Island is also occupied by them, and they are found along the coasts of Puget's Sound and the Straits of Juan de Fuca. The Flat-Heads are divided into numerous tribes, each having its own peculiar locality, and differing more or less from the others in language, customs, and manners.