



The return of Lieutenant Schwatka from the Yukon, Lieutenant Ray from Point Barrow, Lieutenant Stoney from his trip to reward the Tchackchee Indians for their assistance to the suffering crew of the *Rodgers* in 1881, and the Scheffelin brothers from the mines, affords us an opportunity to learn much about our Arctic possessions. Lieutenant Schwatka started with a small party to explore the Yukon river early in June. On the sixth of that month they left Chilcat, crossed inland to the Doya river, ascended that stream in canoes as far as possible and then packed their outfit thirty-five miles across the mountains to the head waters of the great Yukon. Constructing a raft 16x40 feet, the party of nine started down the stream on that rude conveyance. They passed five lakes varying from ten to thirty-five miles in length. Around two rapids, one three miles in length and the other half a mile, they were compelled to make a portage, while their craft made the dangerous passage alone. A journey of 1,300 miles brought them to a station of the Alaska Commercial Co., called New Claquiet. A large boat took them to St. Michael's, seventy-five miles from the ocean, and there they boarded the U. S. schooner *Leo* for San Francisco. This is the first party to visit the head waters of the great Yukon, though small steamers navigate the stream a distance of 1,300 miles above its mouth. They saw only three Indian villages on the upper river. No frosts were experienced till near the mouth of the stream. Moose and bears abound and the water is full of trout, grayling and large salmon. The country along the Upper Yukon is thickly covered with cottonwood and small spruce. Two large parties of miners were working on branches of the river near the ruins of old Fort Selkirk. The river discharges a greater volume of water than the Mississippi, is seven miles wide in some places, and is one of the largest streams in the world.

Lieutenant Stoney reports the discovery of an immense river even larger than the Yukon. Vague accounts of such a stream have occasionally been given by the natives, and while waiting for the *Cervain* to return, he determined to investigate the matter. Accompanied by one attendant and an interpreter, he proceeded inland from Hotham inlet in a southeasterly direction until he struck what he believed to be the mysterious river. He followed it to its mouth, a distance of about fifteen miles, where he saw such immense pieces of floating timber as to satisfy him that the stream must be of great size. He retraced his steps a distance of fifty miles, where he encountered natives, from whom he learned that to reach the head waters of the unknown stream would take several months. The Indians told him they came down it a distance of 1,500 miles to meet fur traders, and that the river went up higher than that. Having no time to go further, Stoney returned. It is his opinion that the discovery of this river accounts for the large amount of floating

timber in the Arctic, popularly supposed to come down the Yukon. The Indians stated that the river in some places is twenty miles wide. It is within the Arctic circle, but in August, when Stoney was there, he found flowers and vegetation not hitherto discovered in so high latitudes.

Lieutenant Ray gives the following details of his sojourn in the north. He left San Francisco in July, 1881, under instructions from the signal service bureau to establish a permanent signal station at Point Barrow, and to remain there till 1884, unless otherwise ordered. The order for him and the whole party to return created great surprise, as the work was being successfully carried out, having accomplished all the portion respecting international work, corresponding with that of similar stations established by Russia, Sweden, Denmark and Austria. The details of his work will be made the subject of an official report. Apart from scientific importance, the station is a necessity as a refuge for crews of whaling vessels. Every year in the Arctic are an average of forty vessels, with a cargo of four millions, and 1,600 men are engaged. Out of eighty-seven vessels fifty have been lost within one hundred miles of Point Barrow. In one year alone, 1877, twelve were lost with all on board. The crews would not abandon their vessels, knowing there was nothing on shore for them to live on. Had a station existed probably all would have been saved. Since the station was established two years ago over fifty lives have been saved. Ray says all the party lived comfortably and in good health. The climate was particularly beneficial to those suffering from malaria. Besides regular provisions they had seal, walrus and white whale. The last was the best meat, being the sweetest and most nutritious. The buildings erected were left to the Indians. He expressed regret at the recall. It is certainly hard to understand why the only practical and useful effort to aid our industries in the Arctic should be thus summarily abandoned.

The last report of interest comes from the well known mining prospectors, the Scheffelin Bros., who have returned from an extended exploration of the Alaska mines. They report that the placers and quartz ledges are very rich, but doubt if they can be worked profitably owing to the shortness of the season and expense of working. There are several mining parties which have made preparations to winter in the mines, and upon their report in the spring the reputation of Alaskan gold fields will largely depend. Other parties report diggings ranging from \$25 to \$150 per day to the man, and intend to return as early as possible in the spring.

Taking it all together it would seem as though Mr. Seward when he "bought a pig in a poke" for \$7,000,000, secured in Alaska a prize far greater than he or anyone else imagined. It is a rich field for exploration, and its resources of minerals, fish, furs and timber are valuable and almost exhaustless.

John Carson, whose saw mill has been cutting 20,000 feet of lumber per day since it began running in New Tacoma last spring, has formed a copartnership with a Mr. Johnson, of Walla Walla, for the manufacture of sash, doors, blinds, furniture, etc. Machinery for that purpose has been put into his mill building, a two-story structure, 32x135 feet, and will be run by four engines.

FISHERIES.

Hon. James G. Swan, who went to Queen Charlotte islands in the interest of the U. S. Fish Commission and the National Museum, returned yesterday by the steamer *Skidgate*. Mr. Swan's researches have been conducted with assiduity and attended with success. He returns with a valuable collection of natural curiosities, etc., and a fund of information that will be of great ultimate importance to the world at large. Among many objects of interest discovered is a large and well sheltered inlet on Graham's island, which is not laid down on any chart. It is well protected, being really a harbor within a harbor. Its shores are clothed with fine timber and it offers a harbor of refuge to vessels bound up or down the coast, or to whale, cod, dog and seal fishermen. A new food fish has also been found. Mr. Swan has named it the black cod. It is caught by Indians in very deep water in large numbers. It is fat and tender, wholesome and nutritious. Mr. Swan regards it as one of the most valuable additions to fish that are known to be edible and is of opinion that when its importance is understood it will be largely exported. Whale and seal were seen off Skaloo inlet in large numbers.—*Colonist*.

On the fifteenth of September a train of twenty-eight cars freighted with Columbia salmon canned at Astoria, and highly embellished with gaudily colored labels, started on its journey from this city to Portland, Maine, the first direct shipment overland of this peculiar product of the Columbia. Its progress eastward was reported from day to day, as was the westward movement of the train of canned corn shipped from that city to its western namesake, and its arrival was greeted enthusiastically by the people of the metropolis of the pine tree state. But there have been some subsequent developments which are thus spoken of by the *Boston Herald*:

"It is a trifling surprise to the people in Portland, Maine, who contracted for ten carloads of this canned salmon, to find it will cost them more than it would the dealers in St. John, N. B., 350 miles further east, if the same train load was sent there. This is one of the incidental beauties of the tariff. The cans are made in this country of British tin. The *Portland Advertiser* says the brokers in that city find that, if they ship a portion of their train of canned salmon to St. John, thus exporting the tin of which the cans are made, they will be entitled to a drawback on crossing the boundary at Vanceboro equal to the original duty on the tin less 10 per cent. This is practically a bounty on the exportation of the fish. While it can be wholesaled in Portland at \$1.17 per dozen cans, it can be afforded in St. John, by the same dealers, at \$1.33 per dozen. Thus the tariff helps the American consumer—or somebody else."

The prospects for the revival of the oyster business at Yaquina bay are very encouraging, where there is a plentiful supply of those luscious bivalves owing to the fact that the beds have not been drawn from for several years. Arrangements have been perfected for sending about 500 bushels per month to San Francisco, with prospect of a large increase in the amount.

Three new saw mills are being constructed on the Chehalis and Gray's harbor. That region is rapidly becoming a leader in the lumbering industry.