

Washington West, which regions differ entirely from each other in physical characteristics and largely in productions. The West contains mountains, forests, waters and minerals, alluvial bottoms and rich, inexhaustible grazing and agricultural lands. There must be twelve or fifteen millions of acres of white, yellow and red firs, cedars, maple, alder, spruce, pine and other varieties of forest trees and much of it such timber as is not to be found elsewhere; the fir and cedars, especially, are of enormous extent and growth. The average of the full grown fir is perhaps five feet in diameter, many of them ten and twelve, and some of them are measured for fourteen feet. A friend informs us that he has cut twenty-two thousand feet of lumber from a single tree. The cedars, also, are of stupendous growth. I know of one specimen of solid wood which measures sixty-four feet, four inches in circumference. Two hundred million feet of lumber were shipped during the last year to the markets of the world. Coal deposits exist in large variety and in absolutely inexhaustible proportions; nearly, if not quite all of the Puget Sound basin being underlaid with anthracite, bituminous and coke making coal. Many of the mines border on the navigable waters, are easily worked, their productions easily transported to the markets of the Pacific, and are readily available for manufacturing purposes. These mines are already open by rail to the Sound and the Columbia, and more are soon to be developed. Iron, bog, magnetic and hematite and of the very best quality, is found in great abundance, and several foundries and other iron works are in successful operation. The iron is said to be very well adapted to the manufacture of car wheels. Gold, silver, copper, cinnabar, lead, plumbago and tin are found in many of the mountains, and there is no doubt but that the most valuable of these will, in time, be largely developed. Marble, granite, sandstone, limestone and fine clays and sands are also found all over the Sound country. The waters of the Territory make up a remarkable feature of its advantages. The ocean shore contains all the harbors and inlets of the Pacific coast of the United States southward, excepting the bay of San Francisco, sharing the Columbia with Oregon. Puget Sound covers an area of two thousand square miles, all of which is tide water; penetrates the interior two hundred miles, has two thousand miles of shore line, has bold shores, is free from rocks, shoals or bars, has a placid surface, is a hundred fathom deep in many places, is navigable at low water for any ship ping, and is studded with islands large and small, which are covered with forest trees or are of the highest agricultural fertility. No fewer than fifty rivers empty into the Sound and the

sea. The Columbia affords a thousand miles of navigable waters, and drains, with its tributaries, three hundred thousand square miles of territory. Other large and navigable rivers, hereafter to be greatly improved by removing obstructions, empty into the same great reservoirs, giving, besides navigation, an extent of water power by occasional falls of probably not less than five hundred running miles.

Gray's Harbor, an inland sea on the Pacific, into which empty the Chehalis, and other rivers, affords even a better inlet and harbor than the Columbia, and the same is true of Shoalwater Bay. Fresh water lakes abound all over the Territory, one of the largest of which is Lake Washington, near Seattle, within three miles of Puget Sound, which covers an area of 41 square miles, with almost unfathomable limpid waters. Lake Chelan, in Eastern Washington, is still larger, a weird lake in the midst of the plains, in a huge cleft of rock, which seems to have opened expressly to receive the waters. The rocky walls stand hundreds of feet high in an almost perpendicular direction; the length of the lake is 60 miles. The waters are clear, beautiful and calm, and the stillness as of the grave, is disturbed only by the birds and beasts which seek this marvelous, enchanted spot. Mineral lakes, alkaline and sulphurous, said to possess remarkable curative properties, are also found. Medical Lake, a large body, distinguished for its strong alkaline qualities, is a favorite resort, for invalids, and promises to be a great medical Mecca, to which many may come and be healed of their physical infirmities. Boiling springs, and other strange conditions exist in great numbers, which I have neither the time nor the space to describe. The Ocean, Sound, rivers and lakes are frequented by myriads of fowl in season, and also abound with great bodies of fish. Salmon—of sixteen varieties—trout, cod, halibut, flounders, sturgeon, smelt, rock cod, sardines, perch and dog-fish. From dog-fish, oil to the value of one hundred and fifty thousand dollars is produced annually. Fifteen hundred boats are engaged during the fishing season in catching salmon in the Columbia river alone, which are chiefly canned at the large and numerous establishments for that purpose on the river. They grow to a monstrous size. A paper recently referred to one salmon which weighed eighty and one-half pounds; ninety-one pounds and one ounce was the weight of the largest ever taken. Oysters, very small in size but fine in flavor, abound in the inlets. Three hundred thousand dollars worth were caught and sold during the present year. Crabs are large, and found chiefly in Gray's Harbor, in immense quantities. Of clams there are several varieties, both large and small, some weighing ten or

twelve pounds apiece. There are also other shell fish. Elk, deer, bear, grouse, pheasant, and other game can be found in all the forests and prairies.

In Western Washington there are seven to ten million acres of land which can be utilized for agricultural and grazing purposes. Alluvial bottoms along the river, prairies and timber lands, will produce timothy, orchard grass and red and white clover, and much of it raises, when properly cultivated, such crops of hay, grain, vegetables, flax and fruit as I have never before seen. There is no better county for grazing and dairy purposes. An abundance of fresh, pure water, shade and a cool summer temperature, all contribute to make this one of the most prosperous of sheep, cattle, and horse producing countries. Yet this will require great labor, for much of it is a natural wilderness. Let no man mistake me, for it will require labor, courage and intelligence to subdue natural growth and to fit the country for comfortable residences. Corn will not flourish here, the nights being too cool, and the seasons too short for ripening.

Washington East presents a condition of soil, climate and productions and advantages greatly in contrast with that which I have described. It contains about three-fifths of the Territory, being a vast prairie country, of level, undulating, hilly and mountainous surface, chiefly adapted to grazing and the growing of wheat, rye, oats, barley, hops, tobacco, flax, vegetables and fruits. Wheat is the main production, and the average yield is thirty-five or forty bushels to the acre, eighty-five being the largest of which I have any knowledge. I rode in an open carriage forty miles in a straight line northeast from Walla Walla, along side of one continuous body of beautiful verdure of wheat and grass without a break or wash or gully. Five years back all of this country was considered to be totally valueless, growing only sage brush and bunch grass. Now no field in Holmdel, Upper Freehold or Springfield can surpass them in beauty or fertility, and as the soil is deeply impregnated with alkaline substance, it is probable that wheat can be successfully grown there for fifty years to come, without artificial fertilization. This plateau of the Columbia is supplied with navigable rivers, for four or five hundred miles from the sea, and is drained by Snake, Spokane and other rivers. The season for seeding wheat extends equally well from September to May, and the harvesting period runs from July to November, that season being free from rain—the straw standing and holding the grain, which straw will not do anywhere but on the Pacific coast. The grain is hard and dry in consequence, and can be carried around the world without becoming musty, or deteriorat-

(Concluded on page 282.)