try, including the Indian reservation and extending into British Columbia, and to the interior mining camps.

SOCIETY AND EDUCATIONAL.

Until recently, before the advent of the railroad, the morality of the country was held in the hands of the aborigines and their little more civilized descendants, but the headlight of the locomotive has flashed a new intelligence abroad in the land. Where once the menace of knife and pistol engineered by savage hands made peace a matter of policy now law and order, as promulgated by the statute books, is the recognized rule of obedience. The public school system is good and many handsome edifices of learning dot the country over. Every element of civilization has planted the seed of its kind here and nothing lacks in the nature of things to keep us in the front ranks of the progress of the great new state of Washington. JOHN B. SLATER.

WALLA WALLA COUNTRY.

A Garden of Beauty and Great Fertility.

Prolific in Luscious Fruits—Vast Yields of Grain—Finest of Horses and Cattle.

WALLA WALLA, Dec. 23, 1890.

The Walla Walla country originally embraced all of Washington east of Snake river, and that part of Oregon tributary to the Walla Walla river. Walla Walla county included all the territory now comprising Columbia, Garfield and Asotin counties, and extended from the Oregon line to the Snake river and opposite Lewiston, Idaho. In 1859 the Walla Walla country was opened to settlement by presidental proclamation, ratifying the treaty with the Indians made by Governor Stevens. In 1875 the county was divided, and Columbia county took the whole eastern part. Out of Columbia, Garfield county was carved in 1881, and Asotin has since been taken out of Garfield. Each of these subdivisions has impressed its name upon its particular country, and now the "Walla Walla country" means little more than the "Walla Walla county" of which this article treats.

GEOLOGICAL AND TOPOGRAPHICAL.

At some time in its geological history the Walla Walla country was overflowed by lava. These overflows apparently came from both the Blue mountains and the Cascades. The lava belt extends from about the Cascades in Oregon, on the Columbia river, to about Spokane Falls, and varied in thickness from 2,000 feet at its greatest thickness to only a few inches at its northern extremity. This lava, now decomposed to an unknown depth, makes the exhaustless fertile soil of the great wheat lands of Eastern Washington. Topographically the country is rolling prairie, sloping toward the Columbia and Snake rivers at an average of sixty feet to the mile. Walla Walla city has an altitude of 1,000 feet above mean tide at Astoria.

EARLY DEVELOPMENTS.

In 1859, when the Indian country was opened to settlement, Walla Walla city consisted of a few straggling houses of settlers, depending for the security of their lives and property upon the United States military post established there. In 1860 the discovery of gold in the Oro Fino district, and later the opening of mines in the Elk City, Florence, Boise Basin and Owyhee districts brought Walla Walla into prominence as a trading place and distributing center, and the town enjoyed its first and only boom. In 1860 the population of the whole undivided county was 1,318. People came rapidly after this, but were attracted by mining and speculative purposes principally, and the country settled up very slowly. The county was considered adapted only to stock-raising and, to a limited extent, to wheat-growing in the valleys of the rivers and creeks. In 1870 the population of Walla Walla county was 5,302, and the assessed valuation of all property was $3,187,000.

During all this time the country was not self-supporting. Flour, bacon and all other edibles, except beef, were shipped up the Columbia to Wallula and hauled to Walla Walla in wagons. Freight rates were fabulously high.

In 1870 an inquisitive, experimental farmer took up a homestead on the bench land, which was covered with so heavy a growth of bunch grass that two tons of wild hay were cut on it per acre, dug down seventy-two feet for drinking water, broke up forty acres of sod, sowed wheat upon it and astonished himself and the world by gathering an average of thirty-five bushels of superior wheat from each acre sown on breaking. His success proved that where bunch grass grows there wheat will grow, that the hill lands make better grain fields than the creek bottoms, and the raising of wheat rapidly became the great industry of Walla Walla valley. How to get this wheat to market was a great problem. It was hauled to Wallula, thirty miles away, by horse, mule and ox teams, and thence taken down the Columbia river in boats to The Dalles, around which it was taken on a short railroad to other boats, then to the Cascades, around which it was taken by another short railroad to other boats, which carried it to Portland. Teamsters charged as high as $13 a ton to haul wheat to Wallula, from which point the steamboat company charged $6 a ton to Portland, and the farmers made money raising wheat and paying these enormous freight charges. Seeing the possibilities of the grain transportation business of Walla Walla valley Dr. D. S. Baker, with a few associates, organized a company and began the construction of a narrow gauge railroad from Wallula to Walla Walla, using at first wooden rails, which were soon covered with strap iron that gave place to iron rails. This was the first railroad constructed in the Inland Empire. Its cars did not run into Walla Walla until the spring of 1876.

In 1880 there were exported from Walla Walla 39,200 tons of wheat. There were three little burr mills which ground wheat, supplied the local market with flour and, in 1880, exported 68,262 tons. The pioneer millmen, H. P. Isaacs, I. T. Reese and A. H. Reynolds, long since replaced their primitive mills with the finest flour-making machinery made, and the flour industry has kept even pace with the enormous growth of the wheat crop. In 1875 the county was divided, and Columbia took about two-thirds of the original county. In 1880 the population of the reduced Walla Walla county was 8,716.

RELATIVE WEALTH AND IMPORTANCE.

Walla Walla is one of the smallest counties in the state. It ranks sixth in wealth and sixth in population, being exceeded by King, Pierce, Spokane, Whitman and Whatcom. Since 1880 it has advanced steadily, without a boom or other spasmodic growth. It has a characteristic soil and climate. Walla Walla city has a mean temperature of 53 degrees—the highest average of any city in the state. The county is the "garden spot" of the state. The wheat lands, which so suddenly usurped the cattle ranges, are fast giving way to orchards and gardens, and wheat farms worth $100 per acre are worth $500 per acre in ten-acre tracts for orchards and gardens. The soil is unequaled anywhere for fertility, and the climate permits the perfect growth of anything from winter apples to cotton and peanuts. The surplus is shipped to Seattle, Tacoma, Spokane Falls, the Cœur d'Alene country, Helena, Butte City and intermediate points. The demand is many times the present growing supply and marketing facilities are good.

ORCHARD AND GARDEN.

In 1870 W. S. Gilliam had a bearing orchard of apples, peaches, plums, prunes and cherries up in his ranch on Dry creek. In the same year J. M. Gove and D. M. Jessee set out their orchards and began experimenting in fruit raising. Everything grew to perfection. There were no insect pests, the climate was just right, and the soil, with or without irrigation, of the finest on earth. Gardens were planted and yielded prodigiously. Small fruits and berries grow in wild luxuriance. Grapes are as luscious as those of California. Strawberries ripen the first week in May. On the warm gravelly bottoms, with plenty of irrigation, several crops are raised in each season, and all are marketed at a handsome profit. The industry has assumed such proportions that organization has been found necessary to handle the crops, and the Walla Walla Fruit Growers' Association has recently been formed to further this end. The fruit and garden belt of Walla Walla extends from west of the city, at about Whitman station, across the valley to the Oregon hills, taking in Milton, skirts the foothills of the Blue mountains and includes the Dry Creek valley. One of the needs of the county is practical gardeners and orchardists to develop these two great industries. The belt here described includes only that part of the county which is peculiarly adapted to raising very early crops, apparently having a climate all its own.

HORSES AND CATTLE.

Walla Walla is the natural home of the horse. Colts mature as early as in California, and have better bone and muscle than either California or Kentucky. This important fact is fast becoming known to horsemen. The Walla Walla Valley Consolidated Agricultural Society has the finest mile track in the Northwest, and at its annual fair may be seen colts representing such celebrated strains of blood as the Jay Bird, William L., Bedouin-Sultan, Meredith, Bellfounder, Nutwood, Caution-Electioneer, Wilkes and others. All that the horse requires to attain equine perfection is found in abundance here. The same is true of cattle. All the thoroughbred strains are well represented. The fine horses and cattle and beautiful homes are the pride of Walla Walla.

IN AND AROUND THE CITY.

Walla Walla city has a population of 8,000. It has a most desirable site, sloping sixty feet to the mile, gravelly soil and perfect drainage. Its healthfulness is unsurpassed, no native malaria, no marshes or stagnant water. Its clear, cold, mountain spring water is the delight of every visitor. Its altitude, 1,000 feet, is just right; its climate, healthful. It has no local diseases. Its markets are not equalled for good things to eat, nor for cheapness. It has beautiful homes, green lawns and flowers all the year round. It has churches for all the orthodox, and a prosperous liberal society. Its educational institutions are Whitman college, a High school, two commodious public school buildings, with 1,500 pupils, St. Paul's school for girls, the Sisters' school for girls, and St. Patrick's academy for boys and an excellent business college. There is also a very lively school for the heathen Chinese in successful operation. It has two building and loan societies, a local and a national, both doing good work. It is rich, moral, and happy.

Municipal improvements during 1890 were very marked. Many new streets were opened and graded. A public school building, costing $60,000, was built. Brick and pressed brick and stone business blocks, with a frontage of 1,509 feet, were built at a cost of $410,000, and 163 residences erected at a cost of $269,000. The city has but one insignificant indebtedness, and its tax rate is very low. A large and handsome industrial exposition building will shortly be completed, and will be used to advertise the productions and resources of the country.

The city is lighted by the arc electric lights, and a very complete incandescent plant is being put into the private residences and business houses, supplanting gas in many instances. The question of putting in a complete system of sewers is being agitated, with good prospects of acceptance by the people. Walla Walla presents a fine illustration of constant growth and permanent prosperity without the stimulus of adventitious causes.

GENERAL OBSERVATIONS.

Walla Walla county is one of the smallest and wealthiest counties in the state. Its population is 13,000, and its assessed wealth in 1890 was $10,045,721, an increase over the assessment of 1889 of $2,211,756.

The development of the agricultural lands of the county was very great during the past year. The Oregon & Washington Territory railroad completed its lines through Eureka Flat and opened up an immense wheat country which was formerly too far from market. The same road has also created a large business in shipments of flour, other millstuffs, feed, cattle and vegetables to the cities of Seatte, Tacoma and other Puget sound points, and the better prices obtainable at Sound points for wheat has given that road the bulk of the shipments from competitive points and created a feeling of mutual dependence and co-operation between the two great divisions of our state.

The completion of the Spokane branch of the Union Pacific railroad opened up a most desirable market in the Falls City and the Cœur d'Alene country for our fruits and vegetables, besides giving us direct communication with the great Palouse country and its prosperous cities.

Although Walla Walla is an "old county" there yet remain within her limits many thousand acres of good government lands and railroad lands awaiting the settler. The attention of immigrants desiring homes outside of city limits is called to this county and its many striking advantages as a place to build a home where all the comforts of life and many of its pleasures can be had at the least labor and the least cost. H. S. BLANDFORD.

THE YAKIMA COUNTRY.

Fertile Region in Center of the State.

The Soil Responds Prodigally to Cultivation of Fruits and Grains—Big Irrigating Schemes.

NORTH YAKIMA, Wash., Dec. 22, 1890.

The famous Yakima country, occupying an area of nearly 6,000 square miles, at the eastern base of the great Cascade range, has been transformed, within a few years, from an arid prairie to a garden of productive beauty. The development of an irrigation system, which is yet far from complete, has made this region bloom as the rose. At the recent Northwest industrial exposition at Spokane Falls, for the splendid exhibit of Yakima county there were fruit, vegetable and agricultural products of every zone, grown on the fertile irrigated lands of the county. The exhibit included the most perfect specimens of fruits, watermelons, huge root vegetables, cabbages, Indian corn, cereals of all kinds, alfalfa, tobacco, sugar cane and cotton—composing the largest variety of vegetable growth at any exhibit of the exposition. The apples, grapes, peaches, plums, prunes, etc., rivalled anything ever produced in California.

Yakima county extends eastward 125 miles from the summit of the Cascade mountains to the angle in the Columbia river, where it touches the Oregon boundary, and lies between the Wenatchee river on the north and the Klickitat range on the south. It embraces the fertile alluvial plains of the Yakima, Cowyche, Natchess, Wenas, Selah, Ahtnum and Tapiniah valleys. By the aid of irrigation pumps, millions of acres of the most productive land can yet be reclaimed. The climate of this region is about the same as that of Northern California. The temperature is modified by the southwest trade winds which sweep through the great gap in the Cascades formed by the Columbia river, and the sun shines nine-tenths of the year. The annual rainfall is about eight inches. The streams, however, flowing through the county, carry water enough from the glaciers of the Cascades to give water to all the region, and the perfection of a system of irrigation will reclaim all the arable lands of this fruitful plain. Perhaps no other region of America will produce so great a variety of natural products. The annual hay crop of the county is immense, and yields a profit to the producer of $7 per ton. Large quantities of watermelons, syrup manufactured from sorghum, and peanuts are produced for market. The watermelons of Yakima are famous for their size and lusciousness. The soil is especially adapted for fruits of all kinds, and large quantities of the choicest varieties are annually produced. The famous Moxee experimental farm is located within a few miles of the city of North Yakima. The principal owners of this farm are Gardner G. Hubbard, of Washington City, D. C., and William Ker, esq., of Moxee. This company has carried the science of irrigation to a high degree. The main ditch is eighteen feet on the bottom, and calculated to carry a depth of three feet of water. It winds around the foothills of the beautiful Moxee valley. Alfalfa, producing three crops per year, hops, tobacco grapes, apples, peaches, pears and cereals of all kinds are produced in great quantities and in rare perfection on this great farm. Large quantities of cigars are manufactured from the tobacco.

The city of North Yakima is beautifully situated in the heart of the sunny Yakima region, on the Northern Pacific railroad, at the confluence of the Natchess and Yakima rivers. All the fertile valleys of the region are immediately tributary to it. Although the city was not platted until 1885, yet it now contains a population of over 3,000, and is growing rapidly. It has made decided material advances during the past year. The development of the vast Yakima plains by irrigation, which is only a question of a short time, will make it the center of a vast area of unexcelled productiveness. Many new irrigation schemes for the reclamation of many hundred thousand acres have been projected the past year. The rapid increase of population of the Sound cities, and the expansion of the home market for food products of all kinds, will doubtless hasten the reclamation of this fruitful region, and make it a great source of supply for the heavy future population of Western Washington. E. G. E.

THE BIG OCEAN INLET.

Development and Prosperity at Gray's Harbor.

Claims as a Commercial Port—A Safe Bar—Thriving Cities and Ambitious Towns.

GRAY'S HARBOR, Dec. 25, 1890.

Gray's harbor is clearly entitled to be ranked amongst the first of the five important inlets of the Pacific. It is the most important ocean harbor north of San Francisco, except the Columbia, the value of its exports and imports being second only to those of the great river. Its lumber industry has assumed proportions that make it a respectable rival of Puget sound for its coastwise trade, and its fishing and agricultural resources are assuming more than local importance. The expansion of its interests during the year has been notable, and the growth of population has been very heavy.

As shown upon any map of Washington, Gray's harbor is heart-shaped, and extends inland from the ocean a distance of fifteen miles to the mouth of the Chehalis river, and in width is ten miles from north to south. Outside the harbor, and before its entrance, is the usual bar, about one-third of a mile across. Across the bar is a channel, having an average width of about 1,500 feet, and carrying a depth of water at low tide of nineteen feet at its shallowest point. The harbor contains 6,000 acres of anchorage area where the water is of greater depth than twenty-five feet at low tide. The outside bar permits, at high tides, which rise upon it from eight to ten feet, the passage of ocean vessels of heavy draught. The channel by which the harbor is entered runs in a northeasterly direction through the harbor with depths of water from twenty-two feet upwards, directly to the wharf of the town of Gray's Harbor. The harbor is practically land-locked, affording perfect protection in storms. The particular merit of the Gray's harbor bar is that the channel across is perfectly straight and unmistakable, having on either side a well-defined line of breakers. So clear is the channel that vessels enter during storms with ease and comparative security. In the hundreds and thousands of times the bar has been crossed by incoming and outgoing vessels since 1792, the date of its discovery, not one wreck or serious mishap has occurred—a record that is significant of the value and safety of the crossing.

The resources of Gray's harbor are varied. No part of the vast timber belt of Washington excels in value, extent, availability or importance that of Gray's harbor basin. There are tributary to Gray's harbor 1,700,000 acres of land densely covered with forests of red and white fir, spruce and cedar, estimated to contain from 20,000 to 100,000 feet per acre, making a total of about 90,000,000,000 feet of lumber. In the basin of the Chehalis river, flowing into the harbor, there are about 40,000,000,000 feet, making an extraordinary total of 130,000,000,000 feet of lumber in the tree tributary to Gray's harbor alone. The amount of standing timber in Washington is, in round figures, 400,000,000,000 feet. Twenty streams with their tributaries drain this great area, and afford ready means for driving logs to the harbor.

The agricultural resources are unexcelled in any part of Washington. The valley of the Chehalis river is very fertile in all manner of vegetable, grain and fruit products. The river bottoms of the Humptulups and Satsop, and, in less extent, of the Hoquiam and Wishkah, produce astonishing crops of hay, all manner of root vegetables and cereals. Claims of ten and twenty acres are sufficient to sustain a family in comfort. The greater part of the Olympic country, with its wealth of minerals and timber, is tributary to Gray's harbor. Many hundred settlers have taken up claims in the agricultural region between the mountains and the ocean and harbor, during the year, and begun cultivation of the soil. The bottom lands are covered with a light growth of alder and vine maple, and are easily cleared. The uplands have heavier growths of timber, but the act of clearing is generally profitable, the cut timber being marketable. These lands, when cleared, are very productive. The product of the country west and south of the Olympics will of course find a market at Gray's harbor.

The future of Gray's harbor as a leading commercial port may be regarded as a certainty. Hitherto it has had no railroad connection and has depended strictly upon local resources for its activity and prosperity. During the season two railroads—the Northern Pacific and the Hunt railroad—have been building in this direction. The Northern is now complete to Montesano, and will be finished to the harbor in the early spring, the grade being nearly complete to the town of Aberdeen. Between thirty-five and forty miles of the grade of the Hunt railroad were finished from Centralia west. The operation of these two railroads, connecting with local and transcontinental lines, means that Gray's harbor shall be a point of transshipment for the products of the state—notably coal and grain. The Lewis county coal fields, of approved value and great extent, are tributary to the harbor, and their output will be shipped here. The Hunt system of railroads is already in operation through the grain belt in Eastern Washington, and the principal object of construction to Gray's harbor is connection of the two lines and shipment of grain via Gray's harbor.

A very important advantage of Gray's harbor is the entire absence of the wharf-destroying pest, the teredo. Wharves here stand for many years; elsewhere it is necessary to renew piling once in two or three years, because of the depredations of this very mischievous pest. The teredo cannot live here on account of the fresh-water character of the harbor, caused by copious discharges from many tributary streams.

There is a number of flourishing towns on the harbor, as follows: Aberdeen, Hoquiam, Gray's Harbor, Cosmopolis, Ocosta and South Aberdeen. [The towns of Aberdeen and Hoquiam are reviewed elsewhere.]

TOWN OF GRAY'S HARBOR.

The town of Gray's Harbor is on the north side of the harbor, three and a half miles below Hoquiam. Its claims are that it is the only town on the harbor that is accessible from deep water, the channel above being shallow and preventing the passage of any but light-draught vessels. Gray's Harbor has advanced materially during the year. About $175,000 has been expended by the Gray's Harbor Company this year and a part of last in improving the townsite, opening streets and constructing a wharf across the tide flats to Gray's Harbor. Seventy-five buildings have been erected, at a cost of over $150,000. A sawmill, with a capacity of 30,000 feet per day, has been started by the Terminus Mill Company, and a large brick plant, with a capacity of 20,000 brick per day, is ready for operation. This is one of the most complete brick plants in Washington. There is a variety of retail stores, restaurants, blacksmith shop, hotel, real estate offices, cooper shops and saloons.

Plans are laid for a large future for Gray's Harbor. It is by contract the terminus of the Hunt railroad, and there is a very strong probability that the Northern Pacific will extend to this point. There is a stretch of tide flats one mile in width in front of the town, through which it is proposed to construct artificial deep-water channels from the natural channels. The townsite company has secured the right to use the Bowers dredge for this purpose. Adjacent to these channels will be built wharves for shipping. It is expected to make this an important point for the shipment of coal, grain, lumber and other products.

The population of Gray's Harbor is 523, as shown by the June census. The place has a very creditable weekly newspaper, the Gray's Harbor *Times*.

OTHER TOWNS.

Ocosta, on the south side of Gray's harbor, is to be reached by the Northern Pacific railroad, the grade being nearly completed. A number of houses have been built during the year and several industries established. A wharf to deep water has been built.

South Aberdeen is on the south side of the harbor, directly opposite Aberdeen. A number of buildings have been erected during the year.

I have attempted in the foregoing to illustrate, in a plain way, the merits of Gray's harbor as a commercial port. A complete statement of our claims and advantages, resources and expectations would take a great deal of space. E. B. P.

ON THE LOWER COLUMBIA.

Home of the Logger and Bottom Land Farmer.

The Canning Industry—20,000,000 Feet of Logs During Past Season—Prospect of Railroads.

CATHLAMET, Wash., Dec. 26, 1890.

Entering the mouth of the Columbia river and having traversed about twenty miles you reach Wahkiakum county, which borders on the Columbia for a distance of nearly forty miles. While at a sufficient distance from the Pacific to escape the wild ocean storms, still the influence of the sea breeze is felt and malaria and similar ills of inland dwellers are unknown. The county is small in population, having about 2,700 people, and it speaks well for the general healthfulness of the district when I say there is not a medical man located within its borders.

In the Elokomni, Skamokawa, Gray's river and other small valleys opening on the Columbia is some fine land which readily yields four tons of hay to the acre. The farmers are principally engaged in dairying. A few years ago the tide lands lying along the river, which are subject to overflow in extreme high water, were thought to be valueless; but now they are all occupied by settlers, and when gotten under more extensive cultivation will make Wahkiakum a rich farming county, as the land is the richest on the globe and, like the country adjacent to the Nile, is inexhaustible on account of the annual overflow. These floods are not dangerous, the Columbia being nearly three miles wide in this vicinity, and the rise is slow and moderate compared to freshets in the back country.

The country is essentially a timber one, and lumbering and salmon fishing are the chief industries of the inhabitants. Probably 20,000,000 feet of logs were manufactured the last season, most of which were consumed by Portland mills. There are large tracts of fine fir timber here, and during the last year large bodies have been acquired by Michigan lumbermen. Logs range in price from $5 to $6. Business in this line is somewhat retarded by uncertainty as to the ownership of most of the odd sections of land. For ten years the government allowed the Northern Pacific railroad to sell these lands as part of their grant, but for the last five has declared them open for settlement. Grantees from both claim lands and till a decision by the supreme court, where suits have been appealed, a great many titles are uncertain.

The seven canneries in the county put up about one-third of the salmon pack of the state, and, as the salmon caught here are the finest in the world, with proper protection by the state to prevent the extermination of the fish, this will always remain an important industry. This winter and last fishermen have been enabled to pursue their vocation after the salmon season closed by catching sturgeon, which are caught in the winter and shipped frozen to the East by New York dealers.

Cathlamet and Skamokawa are the principal places among Wahkiakum's small towns. The former is the county seat and was settled in 1845 by Mr. James Birnie, a Scotchman and ex-officer of the Hudson Bay Company. Here he raised a large family, and here gathered many of the prominent men of the Northwest of those times to enjoy his generous hospitality. The town was platted about two years ago, and is a popular place of resort for summer visitors. The next summer will probably witness a building boom, as Mr. Alexander Birnie proposes, in response to the demand, to lay off a large tract in acre lots, where Portland people can establish summer residences and still be within a night's journey of the city.

Skamokawa is the outlet for three small valleys. At this place is the location of the Columbia River Lumber and Manufacturing Company. The mill has a capacity of about 65,000 feet per day, and is at present shut down for the addition of an abandoned plant being brought out from Michigan.

Railroad surveyors are now running a line through the county, and with the ingress of capital and larger transportation facilities the next year will probably see Wahiakum's assessed valuation of $494,235 largely increased. H. M. MONTGOMERY.

THE WILD OLYMPIC RANGE.

Its Mysteries Revealed to Exploring Parties.

Abounds in Magnificent Timber and Fertile Valleys -Home of the Elk and Large Game.

GRAY'S HARBOR, Wash., Dec. 16, 1890.

The thorough exploration of the great Olympic peninsula, in the northwestern part of Washington, is amongst important achievements of the year. For many years it had been regarded as a *terra incognita*, all but inaccessible because of the fierce aspect of the Olympic mountains and the heavy growth of timber that covers it on all parts; and many tales were told of the riches, mineral and agricultural, behind the great barrier that apparently forbids all access from Puget sound. Prospectors, hunters and homeseekers had attempted to penetrate the great unknown region; and, though they met with more or less success, none returned with very lucid accounts of the character, topography or resources of the country. Enough was learned, however, to give confirmation to previous reports that here was a country of great possibilities, and, as years passed on and other parts of the state became populated more and more, the desire of learning what is the exact nature of the peninsula, and of giving a definite and authoritative account of it to the public became generally current. About 1885, the government decided to take the matter in charge, and delegated Lieutenant Frederick Schwatka, the noted Arctic explorer, to make the excursion. Other matters intervened, however, and, later, Lieutenant J. P. O'Neil was instructed to explore the mountains. Lieutenant O'Neil started in at Port Cresent, on the Straits of Fuca, but he had penetrated only a few miles when he was recalled and dispatched on other duties.

The first successful systematic attempt was made by C. A. Gilman, ex-lieutenant governor of Minnesota, and his son, S. C. Gilman. These two entered the Olympics from Gray's harbor, on the southwest, in October, 1889. They went up the coast to Quinaiult agency, thence followed the course of the stream, flowing in a southwesterly direction from the mountains. They penetrated to Mount Constance, the highest peak of the range, and then, striking another fork of the river, followed it to their starting place. Not content with one trip, they went around to the Straits of Fuca, and thence directly across the peninsula south, and west of the mountains, to Gray's harbor. It was in the midst of winter, and the two explorers suffered incredible hardships on the way. They finished January 4.

A little later a party was sent out by the Seattle *Press*. This party entered from the north, and, crossing the mountains and striking the Quinaiult, went down to the Quinaiult reservation and Gray's harbor. This party, which was also in the mountains several months in dead of winter, suffered severe hardships.

Last July, a government expedition, under charge of Lieut. J. P. O'Neil, started in from Hood's canal, and traversed thoroughly every part of the peninsula. This party had many queer and exciting adventures in the mountains, but emerged safely on Gray's harbor about October 1.

Several parties, sent out by Norman R. Kelly and others, have likewise gone into the reservations, and altogether the sum of knowledge as to their character is about complete. The effect is to divest them of that glamour of romance which has hung over them for years, and to expose them in their true light—of a country very mountainous, with streams abounding in fish, with vales of great fertility, with timber resources of immense value, and with game of the larger varieties in almost untold numbers. The mineral wealth of the country is as yet an uncertain quantity. It may and it may not be very rich in this respect. The report prepared by the Gilmans concerning the peninsula is complete and concise. It is given:

> The Olympic peninsula is fifty miles wide on the south, ninety on the north side, and about eighty miles long. It contains about 5,600 square miles, or 5,585,000 acres. The Olympic mountains, from which the peninsula takes its name, commence in the form of a long range near Cape Flattery, and extend from there southeasterly, nearly parallel, and their summits, about sixteen miles distant from the straits, and gradually increasing in height until at Mount Olympus, eighteen miles south of Port Angeles, their greatest height, 8,150 feet, is reached. From Mount Olympus the summit of the range runs a little south of east to Mount Constance, 7,770 feet high, twelve miles west of Quilcene. Then it bears south about 30 degrees, west twenty miles, to a point near Lake Cushman, then west about eighteen miles to the Quinaiult river, just above the lake. Such is the general course of the main range that forms the divide between the waters flowing into the straits and Hood canal and those flowing into Gray's harbor and the ocean. Of the 5,600 square miles in the peninsula there are about 2,950 square miles, or 1,890,000 acres of mountains, and 2,650 square miles, or 1,695,000 acres, of land suitable for settlement, distributed as follows: Four hundred and fifty square miles, or 290,000 acres, mostly surveyed, on the north and east sides along the straits and Hood's canal, 900 square miles, or 575,000 acres, mostly surveyed, on the south side of the mountains, north of the Chehalis river and Gray's harbor, and drained by the Satsop, Wynoochie, Whishkah, Hoquiam and Humptulups rivers; and 1,300 square miles, or 830,000 acres, 64,000 acres surveyed, west of the mountains and on waters flowing direct to the Pacific ocean, the principal streams of which are the Osette, the Quillayute and its four branches, the Dicky, the Solduck, the Killawah and the Bagachiel; the Hoh, Queets, Raft, Quinaiult, Moclipse and Chehalis. Three of these streams, the Solduck, Hoh and south fork of Quinaiult, each drain a part of Mount Olympus, the east fork of Quinaiult heading in Mount Constance. The Queets penetrates the interior to a considerable distance. None of them are navigable at present for steamboats, although the four largest of them could be made so for fifteen or twenty miles each at a moderate expense. They can all be navigated with small boats and driven with logs to within a few miles of their head. Along them and their branches are in the neighborhood of 350 square miles, or 224,000 acres, of rich bottom land. The soil generally between the mountains and coast is good and well adapted, when cleared, for farming, grazing and fruit-raising. Among the mountains are many small, rich valleys and much good grazing land. The peninsula as a whole is heavily timbered with fir, cedar, spruce and hemlock, the hemlock predominating on the western slope, with cedar a good second. The prairies are small and few and far between. Coal float is found on a number of the streams, but has not been much prospected for. Iron crops out in considerable quantity in several places. Gold is found in the sand in nearly all the streams, and within the last year or two a few prospectors have penetrated the mountains and have met with fair encouragement, bringing out some very promising looking gold, silver and copper quartz. Tin ore, yielding a rich assay, is found on the Skokomish. On the western slope clay is abundant, some of it, notably some white and yellow banks, looking good enough to make most anything of, and I know of two very extensive croppings of elegant sandstone.
>
> The streams teem with splendid fish, and game is abundant. On the Quillayute and its branches are between 300 and 500 settlers. Twenty-one claims have been settled on the Quillayute this spring, about thirty on the Quiniault, and the beach from the agency down to the harbor is all taken.
>
> The Quiniault Indian reservation extends from the Moclipse to the Queets along the ocean and back to Quinaiult lake, and contains about 220 square miles, or 140,000 acres. According to a census taken last fall there were then 453 Indians belonging to the reservation. That included quite a number of Indians at the Hoh and Queets and along the beach south. Most of the Indians live on the beach, a few families only living four or five miles up the streams. They seldom penetrate the interior, and then only for a few days at a time in pursuit of elk, which they kill for their hides and horns, seldom taking more than a few pounds of the meat. Quinaiult lake, eighteen miles northeast of the mouth of the river, is four and a half miles long, two miles wide, and from seventy to 220 feet deep.
>
> There is not a harbor on the coast between Neah bay and Gray's harbor.

The principal agricultural region it will be seen from the report, lies on the west and south of the range. The richness of the valley of the Quillayute has been known for many years, and was first taken advantage of twenty years ago. Reports of its fertility are almost incredible. The soil is of a rich, black sandy loam, that raises a variety of crops, and is particularly well adapted to the production of vegetables. The pasturage for sheep, hogs and cattle is excellent, and the abundant rainfall renders failure of crops an impossiblity. The winters are long and wet, but snowfalls are rare. The summers are cool and pleasant. The settlers are happy and prosperous, though sadly hampered by lack of transportation facilities. Indeed, their isolation has rendered the production of surplus crops useless, as there is no market for them. Life in the Quillayute is therefore somewhat conducive to idleness. There is a reasonable prospect that a railroad will soon be built across from Port Crescent, on the Straits of Fuca, to Gray's harbor, tapping the vales of the Quillayute, Humptulups, Queets, Hoh, Pysht and others. These places are of the same character as the Quillayute, and will, it is said, produce just as richly.

The report of Lieutenant O'Neil has not yet been made public, but he has on various occasions expressed himself as impressed with the value and importance of the great untouched resources of the Olympic country. It has an unlimited supply of timber, he says, and in many places there are bottom lands exceedingly valuable for agricultural purposes. Prominent among trees, Lieutenant O'Neil mentions the larch and Alaska cedar. Both are finishing woods of value many times exceeding that of ordinary timber. Alaska cedar is, probably, the rarest and most costly soft wood in the United States, and larch is hardly inferior in quality or price. Both these varieties are found in great abundance in the Olympics.

There are copper deposits in the Olympics claimed to be very valuable. A large belt has been found on the Humptulups and another on the Skohomish. It is quite possible that when developed they will be ascertained to be of very good quality.

Settlers in large numbers have gone into the Olympia country during the year. They have taken up claims mostly on the west side of the mountains. It cannot be doubted that when the country is opened up theirs will be found to be amongst the very valuable claims of the state. E. W. POLLOCK.

THE MOSES RESERVATION.

Forbidden to Settlement by White Men.

Eager Prospectors Long to Invade the Red Man's Reserve—Fabled Wealth and Resources.

COLVILLE, Wash., Dec. 20, 1890.

The Colville Indian reservation comprises an area of about 5,000 square miles. It is largely a mountainous country and covered with a heavy growth of timber. About one-fourth of the area, comprising 800,000 acres, is valuable agricultural land. At $5 per acre one-fourth of this land would be worth all of $4,000,000, to say nothing of the value of the other three-fourths of the territory set aside for the liberty-loving savages to lazily exist upon at government expense. Neither have we valued the timber or the mineral wealth that abounds in unknown millions in the rock-ribbed mountain fastnesses of that reservation that is as large as the state of Connecticut. This reservation is cut in twain by a range of mountains that slope westward to the Okanogan county line and eastward and south to the Columbia river that divides it from the civilization of Stevens county. These slopes are mottled with timber and prairie openings of bunch grass. The lowlands are such as lie along the valleys of streams emptying into the Columbia. Every now and then are beautiful stretches of country that would make the agriculturist and orchardist smile with envy. The Columbia river bench lands are very fine, and orchards that a few of the christianized siwashes have been induced to cultivate exhibit a wonderful capacity for the production of fruit in almost endless variety. The Kettle river valley i its general nature is somewhat like that of the Colville. The land near the stream is very productive of hay, and the uplands, that are gravelly soil, produce remarkable yields of wheat, oats, barley, potatoes and other merchantable farm produce. The mountains along the Kettle river on either side are rich in minerals. Gold exists in rich bodies of white or sulphurets of iron, also copper. Silver and lead have been found in large and very rich ledges. It is hard for the prospector's conscience to look across the Columbia river upon a portion of his own country, so rich and yet forbidden his inspection. Still, despite the efforts of the agency to keep away white people from the reservation, they do go over there, and not a few of these sturdy frontiersmen are quietly pursuing their vocation. One man has shown the writer a collection of mineral that he has gathered from the reservation, including mica in beautiful sheets a foot square; also a specimen of pure anthracite coal that he claims came from a ledge three feet thick at a depth of fourteen feet from the surface, and located on Kettle river, and innumerable specimens of mineral.

It is indeed a rich country to be inhabited by less than a thousand Indians, half of whom come from British Columbia regions or the interior towns of our own country where they inhabit the surburbs and drink fire water all summer and congregate at the agency to draw their quota of wagon supplies for winter, etc. etc., which they take away with them to be swapped off for more fire water.

Tonasket is the name of the big chief of the tribe, numbering about 500, that inhabit the Kettle river. His dem[...] always that of a gentleman, alth[...] does not dress stylishly. He has [...] fine ranch of 1,000 acres on Kettle [...] and is very friendly to all visitors [...] pass through the reserve, as they [...] do in going northward to [...] Columbia. He has over 300 horses [...] range and delights in scooping the [...] face egotist whenever occasion [...] and he seldom fails. His [...] are law. He is temperate [...] ply for example and an offe[...] "drunk and disorderly" is a very [...] crime to his code. As an exampl[e ...] winter two Indians in a scuffle [...] bottle of whisky accidently discharg[ed ...] pistol, causing the death of one of [...] dusky admirers of the sport. The [...] fortunate siwash was arrested and [...] for the offense, found guilty of crim[inal] carelessness and being drunk and [...] the timely interference of the [...] agent, would have expiated his [...] upon the gallows in ten days from [...] conviction. Tonasket's people are peace[...] and a few of his relatives like himself [...] in cabins and raise small crops of [...] and hay to meet the current demand [...] their live stock. They do not believe [...] the ghost theory at all. Owing to the [...] and inviting disposition that pervades [...] home of Tonasket and his people, many white brothers-in-law are stealing upon his dominion. It is curious [...] this should be so when other white [...] are prohibited. We presume for the [...] reason that when a buck Indian renoun[ces] his tribal relations and puts on civi[...] clothes, he is clothed likewise with [...] franchise of citizenship. A white man [...] don the blanket and work in the realms [...] savagery.

Several small fragments of tribes [...] along the Columbia river. At Nespelem where Moses and his few warriors [...] their families, in all 200 souls, hold [...] ful abode. Moses is, without excep[tion] one of the finest specimens of human [...] ture to be encountered anywhere. [...] stands full six feet in his moccasins, [...] tips the scales at 225 pounds. He [...] as highly intellectual and well [...] formed on all matters of primi[...] importance as he is perfect in his physi[...] ogical make-up. He talks good Engl[ish] but seldom engages in conversation oth[er] than in his own tongue. In the [...] neighborhood is Chief Joseph, of Nez Pe[rce] fame. He lives with about fifty of [...] tribe and knows no other people. He [...] at peace with all the world, and is inv[...] ably on hand to get his rations.

The Indian population of the reserv[ation] will number less than six or seven hu[...] dred actual residents. They are said to [...] peaceable and industrious, but they [...] not. They are lazy and shiftless beca[use] the government feeds them and the cli[...] mate is conducive to good health and [...] certain crop of farm product each [...] with the slightest care. It is a pity [...] so small a number of Indians should [...] possession of so vast, beautiful and rich [...] portion of our state, with capacity and possibilities of an empire.

JOHN B. SLATER.

Mills & Randall,
DEALERS IN
REAL ESTATE.
On our list we have
ACRE TRACTS,
HOUSES AND LOTS.
Fine Locations and Desirable. Convenient to Cable and Electric Lines.
SIXTY LOTS IN SOUTH SEATTLE
At $200 Per Lot. Good Buy.
We negotiate loans, rent houses, collect rents, place insurance and manage properties for residents and non-residents.
Office—228 Butler Blk., Cor. Second & James Sts.

ALBERT JOST. NELSON MACPHERSON, Notary Public.
NELSON MACPHERSON & CO,
Real Estate and Financial Brokers,
CORRESPONDENCE SOLICITED.
INVESTMENTS MADE FOR NON-RESIDENTS
Locating on Goverment Land a Specialty.
First-Class Surveyor-Locators Connected with the Office.
WRITE FOR CIRCULARS.
Rooms 18 and 19 Frye Block, Front and Marion Sts.
SEATTLE.
P. O. Box 833. Telephone 186.
References---Old Residents and Bankers.

LOANS NEGOTIATED. RENTAL AGENCY.
W. PARRY SMITH,
NOTARY PUBLIC,
Real Estate and Insurance Agent,
P. O. BOX 14.
Room 44 Colman Building, Front Street,
Seattle, Wash.

QUEEN CITY LOAN OFFICE.
Money advanced on Watches, Diamonds and Valuables at low rates.
G. M. GODFREY, 108 Washington St.
SEATTLE, WASH.
All Business Strictly Confidential.