10-19-1889

Report of the Governor of Washington Territory, 1889

REPORT

OF

THE GOVERNOR OF WASHINGTON TERRITORY.

OLYMPIA, *October* 19, 1889.

SIR: In compliance with your request for a report of the affairs and of the progress and development of the Territory for the year ending June 30, 1889, I have the honor to submit the following:

The closing year of Washington's Territorial existence has been one of unexampled prosperity. Population has increased more rapidly than in any former year. Property valuations have grown proportionally, showing a gain of nearly 50 per cent. Railroad construction has been very active. Business houses, banking institutions, manufacturing establishments have been multiplied throughout the Territory. Sales of land by the Northern Pacific Railroad Company and entries at the various United States land offices have been unprecedentedly large.

Of the great disasters for which this year will be a marked one in history, Washington has had an undue share. The business portions of four cities, Seattle, Vancouver, Ellensburgh, and Spokane Falls, were destroyed by fire, involving a loss of not less than $16,000,000.

These calamities, seriously felt as they are, in no degree threaten the prosperity of the new State. Credit remains unimpaired, abundant capital at easy rates of interest having been offered from the East for rebuilding. Not a word of discouragement is heard, but everywhere there is evidence of renewed energy and ambition.

Under the provisions of an act of Congress, approved February 22, 1889, members of a constitutional convention, chosen by the people, met at Olympia on the 4th day of July and framed a constitution, which was subsequently submitted to and ratified by the people in a general election held October 1, 1889. A proclamation of the President, which will probably be issued early in November, is all that remains to render statehood an accomplished fact. A safe and stable government is assured. Our citizens hail this deliverance from the condition of Territorial vassalage with general rejoicing.

Very respectfully,

MILES C. MOORE,
Governor.

The SECRETARY OF THE INTERIOR,
Washington, D. C.

BOUNDARIES.

Washington Territory was created by an act of Congress, March 2, 1853. It has an approximate area of 66,880 square miles of land surface. The constitution of the State of Washington, article 24, section 1, defines its boundaries as follows:

Beginning at a point in the Pacific Ocean one marine league due west of and opposite the middle of the mouth of the north ship channel of the Columbia River, thence running easterly to and up the middle channel of said river, and where it is divided by islands up the middle of the widest channel thereof to where the forty-sixth parallel of north latitude crosses said river, near the mouth of the Walla Walla River; thence east on said forty-sixth parallel of latitude to the middle of the main channel of the Shoshone or Snake River, thence follow down the middle of the main channel of Snake River to a point opposite the mouth of the Kooskooskia or Clear Water River, thence due north to the forty-ninth parallel of north latitude, thence west along said forty-ninth parallel of north latitude to the middle of the channel which separates Vancouver's Island from the continent, that is to say, to a point in longitude 123 degrees, 19 minutes, and 15 seconds west, thence following the boundary line between the United States and British possessions through the channel which separates Vancouver's Island from the continent to the termination of the boundary line between the United States and British possessions at a point in the Pacific Ocean equidistant between Bonnilla Point on Vancouver's Island and Tatoosh Island light house, thence running in a southerly course and parallel with the coast line, keeping one marine league off shore to place of beginning.

GENERAL DESCRIPTION.

Washington is situated in the extreme northwestern portion of the United States. Its form is that of a parallelogram, 245 miles from north to south and 360 miles from east to west. This parallelogram is bisected by the Cascades, a lofty range of mountains separating it into two distinct climatic divisions, differing widely in topographical features, in vegetation, and in soil. The climate of both is equable, that of the western portion being moist and warm, somewhat resembling that of the south of England, while on the east it is not unlike that of Virginia, the mean temperature at Walla Walla being the same as that of Norfolk. That portion of the Territory lying west of this range is known as western Washington, and embraces about one-third of the total area. Its principal natural divisions are the Puget Sound basin, the Chehalis basin, and the valley of the Lower Columbia and its tributary streams. Between the Pacific Ocean and Puget Sound is the coast range of mountains. Between the coast range and the Cascades lies that wonderful inland sea known as Puget Sound, extending south from the Straits of Fuca 120 miles and having an area of 2,000 square miles. The Columbia River flows along the southern border of the Territory for 250 miles.

Lumber and coal are the principal products of the Puget Sound basin, but it contains numerous rich agricultural valleys, notably the Puyallup, the Stuck, White River, Skagit, Snohomish, Snoqualmie, Duwamish, Stillaguamish and Cedar River.

Eastern Washington is an elevated plateau or rolling prairie region, walled in by mountain spurs and ranges. Numerous valleys with great agricultural capabilities are interspersed. They derive their names from the streams upon which they are situated. Principal among these are the Yakima, the Walla Walla, the Palouse, and the Spokane.

ALTITUDES IN WASHINGTON TERRITORY.

[From a report on Washington Territory, by W. H. Ruffner, L.L. D.]

	Feet.
Mount Ranier (Tacoma)	14,444
Mount Baker	10,827
Mount Adams	9,570
Mount St. Helens	9,750
Natchess Pass	4,900
Stampede Pass, summit	3,980
Tunnel, Stampede Pass	2,885
Snoqualmie Pass	3,110
Kechelus Lake	2,388
Kachess Lake	2,158
Ellensburgh	1,518
Yakima City	990
Ainsworth	351
Palouse Junction	858
Sprague	1,200
Spokane Falls	1,910
Colville	1,917
Fort Spokane	1,300
Okinagane Lake	1,163
Great Plain of Columbia River....1,000 to	3,000
Snake River, Northern Pacific Railroad...	358
Colfax	1,941
Dayton	1,360
Walla Walla	1,000
Wallula Junction	326

POPULATION.

There is appended hereto a statement showing the growth in population of the Territory from 1853, the year of its organization to the present time. The study of this table is instructive, as affording an illustration of the slow growth in population prior to the completion of transcontinental railway lines, and the rapid increase thereafter.

In the two years immediately following the completion of the Northern Pacific Railroad to Puget Sound the population of the Territory has been increased by nearly 100,000, or more than was added during the entire fourteen years preceding. The census returns compiled from the reports of the various county assessors show a population in April of the present year of 239,544. This method of enumeration is not satisfactory and is not regarded as accurate or complete. There is little doubt the present actual population is fully 275,000. The vote at the election for State officers, held October 1, corroborates this estimate.

Immigration continues to pour in at a rapid rate. The growth of some of our towns, notably Spokane Falls, Tacoma, and Seattle, is simply phenomenal, the population of each having apparently doubled in a single year. The most remarkable increase is in the county of King, which in 1887 had a population of 15,972, and in 1889, 40,788, an increase in two years of 24,816. During the same period Pierce County shows an increase of 15,611, having now a total of 27,795; while Spokane shows an increase of 13,885, having now a total of 25,200.

Washington is still sparsely populated. Containing an area of 69,994 square miles, it has a total population of only 239,544, or an average of 3.42 inhabitants to each square mile of territory.

Statement showing abstract of census returns of each county for the year 1889, *with total population.*

Counties.	Males over twenty-one years.	Females over twenty-one years.	Whites.	Blacks.	Mulattoes.	Kanakas.	Chinese.	Indian half-breeds.	Married.
Adams	583	271	1,842	.....	....	....	.....	.....	721
Asotin	429	315	1,449	.....	....	....	8	20	557
Chehalis	2,122	2,362	5,619	1	....	....	38	.....	2,174
Clallam	610	284	1,526	.....	....	....	15	123	626
Clarke	2,396	1,888	8,957	1	....	....	26	26	2,926
Columbia	.....	.....	.....	.....	....	....	.....	.....	.....
Cowlitz	1,108	653	3,974	.....	....	....	.....	.....	1,546
Douglas	994	459	2,633	.....	....	....	13	6	531
Franklin	161	76	413	.....	....	....	22	.....	132
Garfield	1,116	754	3,771	.....	....	....	10	11	1,307
Island	427	208	1,263	.....	....	....	.....	85	345
Jefferson	2,043	556	5,226	2	....	....	331	181	1,783
King	13,148	6,582	39,822	33	39	....	422	405	14,574
Kitsap	1,349	502	3,514	46	1	7	74	198	1,308
Kittitass	2,532	1,023	6,953	358	18	1	11	35	2,325
Klickitat	.....	.....	.....	.....	....	....	.....	.....	.....
Lewis	.....	.....	8,048	11	19	....	2	127	2,988
Lincoln	2,166	1,394	8,048	5	6	....	33	23	2,747
Mason	450	250	1,397	.....	....	....	1	150	522
Okanogan	.....	.....	1,038	.....	....	....	.....	22	278
Pacific	957	462	2,831	2	20	....	150	21	976
Pierce	.....	.....	26,882	82	8	42	3	575	9,164
San Juan	.....	.....	1,061	.....	....	1	.....	329	422
Skagit	.....	.....	5,984	.....	....	7	38	89	1,668
Skamania	206	120	538	.....	1	16	6	49	214
Snohomish	2,178	988	5,870	8	13	....	5	188	2,295
Spokane	9,375	4,501	25,006	92	....	...	193	14	9,116
Stevens	947	428	2,417	.....	....	....	42	275	885
Thurston	2,262	.....	6,938	17	....	....	208	73	2,324
Wahkiakum	532	264	1,402	2	....	....	.....	84	564
Walla Walla	6,804	4,503	10,882	13	....	....	406	6	4,960
Whatcom	2,430	.....	6,154	4	....	....	.....	56	2,043
Whitman	5,836	3,160	15,154	24	....	....	103	.....	5,472
Yakima	1,416	725	4,290	54	....	....	.....	64	1,453

Statement showing abstract of census returns of each county, etc.—Continued.

Counties.	Single.	Can not read or write.	Can not read or write (over fifteen years).	Deaf, dumb, blind, or insane.	Adults.	Minors.	Aliens over eighteen years.		Total population.
							Males.	Females.	
Adams	1,121	.....	.....	.....	867	975	3	.....	1,842
Asotin	920	.....	.....	1	718	769	.....	10	1,477
Chehalis	4,023	.....	226	8	.....	.....	.....	146	6,238
Clallam	1,038	.....	.....	1	917	747	20	3	1,664
Clarke	6,084	.....	.....	3	4,048	4,962	.....	.....	9,010
Columbia	.....	.....	.....	.....	.....	.....	.....	.....	6,035
Cowlitz	2,434	2	1	.....	1,761	2,213	.....	.....	3,974
Douglas	341	22	.....	.....	1,453	1,199	.....	.....	2,652
Franklin	303	.....	.....	.....	267	168	.....	.....	435
Garfield	2,485	.....	.....	2	1,116	1,071	7	1	3,792
Island	499	49	51	.....	918	438	112	15	1,356
Jefferson	3,952	.....	.....	.....	3,930	1,840	1,101	200	5,740
King	10,590	83	42	9	22,673	18,115	2,298	645	40,788
Kitsap	2,630	22	22	.....	2,438	1,545	557	30	3,983
Kittitass	1,644	.....	98	3	.....	4,158	3,372	.....	7,530
Klickitat	.....	.....	.....	.....	.....	.....	.....	.....	5,390
Lewis	5,219	.....	.....	.....	.....	.....	.....	.....	8,207
Lincoln	5,368	5	5	.....	4,310	3,805	42	8	8,115
Mason	1,026	.....	.....	.....	800	748	75	25	1,548
Okanogan	782	.....	.....	.....	726	334	.....	.....	1,060
Pacific	2,048	2	2	4	.....	189	10	.....	3,024
Pierce	10,606	.....	182	.....	.....	.....	.....	.....	27,595
San Juan	238	.....	.....	.....	419	.....	218	71	1,410
Skagit	4,443	.....	.....	.....	.....	.....	.....	.....	6,111
Skamania	127	.....	.....	.....	341	269	10	2	610
Snohomish	3,789	4	4	.....	3,779	2,305	31	2	6,084
Spokane	16,093	83	.....	.....	14,636	10,564	475	287	25,200
Stevens	578	4	5	2	1,450	1,284	13	6	2,734
Thurston	1,468	2	.....	4	4,073	3,163	79	.....	7,236
Wahkiakum	924	.....	.....	.....	780	708	60	30	1,489
Walla Walla	6,347	31	.....	4	5,847	5,460	587	44	11,307
Whatcom	4,176	.....	.....	.....	.....	.....	.....	.....	6,219
Whitman	9,809	11	.....	3	9,599	5,682	449	154	15,281
Yakima	2,960	.....	.....	.....	.....	.....	85	8	4,408
Total	.....	.....	.....	.....	.....	.....	.....	.....	239,544

Comparative population of the Territory from 1853 *to* 1889.

1853	3,965	1885	129,292
1870	23,995	1887	143,669
1873	31,037	1889	239,544
1876	40,000		

The fifteen counties east of the Cascade Mountains have a population of 97,258; the nineteen western counties a population of 142,286, showing an excess in the west of 45,028.

Further evidence of the increase in number of the Territory's inhabitants is found in the vote polled in the years named as shown in the following table:

Election years.	Votes cast.	Election years.	Votes cast.
1859	2,778	1880	15,823
1869	5,373	1882	19,498
1870	6,182	1884 (with woman suffrage.)	41,842
1872	7,801	1886 (with woman suffrage.)	47,230
1874	8,594	1888	46,348
1876	9,907	1889	58,543
1878	12,647		

TAXABLE PROPERTY.

The following tables show an extraordinary increase in the amount of taxable property, rising from $61,562,739 in 1887 to $124,795,449 in 1889, a gain of more than 100 per cent. in two years. Nothing more clearly demonstrates the substantial progress made by the Territory within the past two years than these figures. The counties showing most marked increase are Spokane, Pierce, and King, in which are situated the cities of Spokane Falls, Tacoma, and Seattle. Growth in values, it will be seen, has more than kept pace with increase in population. The rate of tax levy for the present year is 2½ mills.

Table showing value of all taxable property, number of acres of land assessed, and tax levy for varions purposes in the several counties for the year 1889.

Counties.	Value of real estate assessed.	Value of improvements thereon.	Value of personal property assessed.	Value of property assessed.	Farm land unimproved.	Improved lands.	Total acreage.
					Acres.	*Acres.*	
Adams	$537,605	$51,367	$433,329	$1,022,301	.....	11,244	665,466
Asotin	261,404	75,720	272,899	610,023	66,174	20,831	87,085
Chehalis	1,600,574	203,035	499,935	2,303,544	381,041	6,252	387,293
Clallam	690,131	85,425	95,924	871,480	78,268	3,091	.....
Clarke	1,442,605	491,482	692,266	2,626,353	189,427	21,272	210,699
Columbia	1,815,880	585,970	1,296,490	3,698,350	118,394	87,781	206,175
Cowlitz	654,457	109,117	333,434	1,097,008	232,183	10,178	243,361
Douglas	301,948	21,627	837,255	1,160,830	.....	.....	.....
Franklin	191,591	13,650	435,131	640,372	.....	.....	.....
Garfield	673,035	254,493	635,367	1,562,895	105,370	79,846	185,216
Island	230,679	107,155	205,502	543,336	.....	6,345	105,021
Jefferson	1,578,831	432,976	453,084	1,031,915	.....	1,530	87,073
King	17,588,475	2,344,655	3,800,365	23,504,290	.....	10,861	297,428
Kitsap	277,920	468,520	497,030	1,243,470	87,428	2,928	90,356
Kittitass	1,187,043	342,370	1,120,191	2,649,604	404,504	45,116	449,620
Klickitat	548,745	207,143	1,081,490	1,851,431	.....	8,841	459,455
Lewis	1,050,231	325,658	508,995	1,884,884	376,801	26,163	402,964
Lincoln	1,325,659	296,325	1,384,885	3,006,869	632,604	83,870	716,474
Mason	562,563	218,430	205,264	986,257	50,000	1,500	227,505
Okanogan	64,300	.....	437,798	502,098	.....	.....	.....
Pacific	374,284	122,390	394,445	891,119	122,814	718	123,532
Pierce	17,438,920	1,838,492	2,872,100	26,356,514	.....	.....	332,620
San Juan	140,293	131,353	107,444	379,090	44,308	4,012	48,320
Skagit	977,906	232,804	522,320	1,733,030	75,692	18,086	168,008
Skamania	49,757	35,275	73,023	158,055	17,633	1,072	18,705
Snohomish	1,110,140	213,109	287,673	1,610,922	220,197	12,709	232,906
Spokane	10,468,256	1,671,063	2,992,609	15,131,928	645,165	85,331	730,496
Stevens	273,004	65,438	348,556	634,819	81,331	3,304	84,635
Thurston	1,459,704	455,100	722,562	2,637,366	.....	.....	.....
Wahkiakum	205,075	120,070	224,008	516,572	71,399	3,267	74,666
Walla Walla	1,355,720	2,053,680	2,482,835	7,892,235	211,971	185,275	564,275
Whatcom	3,034,420	85,035	180,545	3,300,000	127,113	5,843	144,881
Whitman	4,177,308	828,179	2,864,741	7,870,228	556,755	209,716	766,471
Yakima	1,626,528	373,696	820,040	2,826,261	.....	.....	.....
Total	67,274,991	14,860,812	30,129,535	124,795,449	.....	.....	.....

Table showing value of all taxable property, etc.—Continued.

Counties.	Tax levy for Territorial purposes.	Tax levy for military purposes.	Tax levy for county purposes.	Tax levy for school purposes.	Tax levy for roads and bridges.	Tax levy for special purposes.	Tax levy for poll and road poll.	Total tax levy.
Adams	$2,555.75	$204.64	$8,462.79	$4,089.20	.....	.....	.....	$15,312.38
Asotin	1,516.06	121.28	4,865.78	3,649.34	$608.22	.....	.....	11,828.68
Chehalis	5,758.86	460.71	18,428.35	13,821.26	4,607.09	.....	$4,722.00	52,405.36
Clallam	2,178.20	174.30	6,971.84	3,485.92	2,014.44	$87.15	1,634.00	17,146.35
Clarke	6,565.88	525.27	13,131.76	15,759.11	5,252.70	2,626.35	7,740.00	51,601.07
Columbia	9,245.85	739.67	14,793.36	14,793.36	3,698.34	3,968.34	1,700.00	48,668.92
Cowlitz	2,742.52	219.40	8,876.06	5,485.04	2,194.02	.....	.....	21,611.06
Douglas	2,902.07	232.17	9,286.64	4,643.32	1,160.83	.....	5,964.00	18,225.03
Franklin	1,600.93	128.07	5,122.97	1,921.12	.....	1,921.12	.....	10,694.21
Garfield	3,907.24	312.58	12,503.16	7,814.47	.....	.....	3,125.79	27,653.23
Island	1,358.33	108.66	4,346.69	2,717.67	543.33	162.77	632.00	11,227.00
Jefferson	5,079.78	406.38	16,255.32	8,127.66	4,000.00	2,000.00	4,800.00	40,669.14
Kitsap	3,108.68	248.69	9,947.76	5,595.62	1,865.21	.....	380.00	21,145.96
Kittitass	6,624.01	529.92	2,196.83	13,248.02	2,649.60	2,649.60	5,229.20	52,197.18
Klickitat	4,628.58	370.29	14,811.48	9,257.16	1,851.43	370.29	9,257.16	40,546.39
Lewis	4,712.21	376.97	13,194.19	11,309.30	11,309.30	.....	8,772.00	49,673.97
Lincoln	7,517.17	601.37	24,054.95	18,041.21	1,503.43	.....	.....	51,718.13
Mason	2,465.64	197.25	7,890.06	5,917.57	1,975.51	2,958.77	822.00	22,223.77
Pacific	22,227.79	178.22	7,128.95	3,564.47	4,010.03	.....	.....	.....
San Juan	947.72	75.80	2,274.54	2,274.54	785.18	.....	.....	6,330.78
Skagit	4,332.57	346.60	13,864.24	6,932.12	3,466.06	.....	5,199.09	34,140.68
Skamania	395.14	31.61	1,264.44	829.79	316.11	39.51	202.00	3,078.60
Snohomish	4,207.30	322.18	12,887.37	8,054.61	2,416.38	161.09	5,960.40	33,829.32
Spokane	36,460.90	2,916.87	58,337.45	43,753.08	21,876.54	3,992.00	6,652.00	173,988.84
Stevens	1,702.04	136.96	5,478.55	4,108.91	3,424.09	.....	3,852.00	18,712.55
Thurston	6,593.42	527.47	17,142.88	9,230.78	2,912.10	263.73	3,024.00	44,694.38
Wahkiakum	.....	.....	.....	.....	.....	.....	.....	11,189.14
Walla Walla	19,584.91	1,566.79	35,252.84	31,355.84	7,833.96	7,833.97	2,318.00	105,726.33
Whatcom	8,250.00	600.00	16,252.84	16,500.00	.....	.....	.....	48,850.00
Whitman	19,675.57	1,574.05	62,961.82	43,286.25	15,740.46	.....	.....	143,238.14
Yakami	7,050.65	7,050.65	21,151.95	7,050.65	2,820.26	141.00	2,820.26	41,598.77
Total	.....	.....	.....	.....	.....	.....	.....	.....

Assessed value of all property in Washington Territory, by counties, from 1887 *to* 1889.

Counties.	1889.	1888.	1887.
Adams	$1,022,301	$873,251	$337,817
Asotin	610,023	582,177	533,905
Chehalis	2,303,544	1,803,764	1,503,630
Clallam	871,480	491,352	303,480
Clarke	2,626,353	2,290,970	2,101,205
Columbia	3,698,350	2,825,100	2,487,460
Cowlitz	1,097,008	1,098,330	823,728
Douglas	1,160,830	530,239	256,056
Franklin	640,372	579,676	140,225
Garfield	1,562,895	1,669,180	1,801,922
Island	543,336	460,419	426,989
Jefferson	1,031,915	1,235,950	1,017,795
King	23,504,290	15,016,795	12,437,191
Kitsap	1,243,470	2,305,322	2,141,191
Kittitass	2,649,604	1,032,720	1,011,640
Klickitat	1,851,431	1,746,978	1,481,182
Lewis	1,884,884	1,526,244	1,168,098
Lincoln	3,006,869	2,338,043	2,069,085
Mason	986,257	715,233	553,934
Okapogan	502,098	295,762	.....
Pacific	891,119	756,315	597,105
Pierce	26,356,514	14,021,842	5,882,130
San Juan	379,090	282,293	273,209
Skagit	1,733,030	1,460,601	1,256,012
Skamania	158,055	170,078	142,085
Snohomish	1,610,922	1,299,467	1,052,322
Spokane	15,131,928	7,212,509	3,941,635
Stevens	684,819	383,770	619,141
Thurston	2,637,366	2,136,963	1,807,967
Wahkiakum	516,572	433,303	345,572
Walla Walla	7,892,235	6,754,940	5,192,175
Whatcom	3,300,000	1,134,903	760,479
Whitman	7,870,228	7,084,745	5,105,380
Yakima	2,826,261	2,071,987	1,990,994
Total	124,795,449	84,621,182	61,562,739

Comparative valuations of property for each year from 1879 *to* 1889.

Year.	Valuation.	Increase.	Decrease.
1879	$21, 021, 832		
1880	23, 708, 587	$2, 687, 355	
1881	25, 786, 415	2, 077, 828	
1882	32, 566, 807	6, 680, 392	
1883	44, 107, 567	11, 538, 760	
1884	52, 424, 992	8, 317, 425	
1885	51, 117, 636		$1, 307, 356
1886	51, 491, 159	373, 528	
1887	61, 562, 739	10, 071, 575	
1888	84, 621, 182	23, 058, 442	
1889	124, 795, 449	40, 174, 267	

SETTLEMENT OF LANDS.

The total area of Washington is 44,798,160 acres, of which 21,715,258 acres have been surveyed. Of the unsurveyed portion about 7,000,000 acres are embraced in the Coast and Cascade ranges of mountains. This portion, being rugged and broken, is for the most part unsuitable for settlement. The remaining 15,000,000 acres should be surveyed without delay.

The rapid influx of population emphasizes the necessity for immediate action. Settlement by pre-emption can be made prior to survey, but settlers are averse to this method, as it frequently leads to confusion and uncertainty regarding boundaries and delay in acquiring title. The cost of surveying in the Puget Sound region, which is everywhere heavily timbered and covered with a rank growth of underbrush, is very great. The prices heretofore allowed by the Government have been notoriously insufficient.

The area of arable land in the prairie country east of the mountains is rapidly diminishing. In fact, no considerable portion now remains available for homestead and pre-emption except that which requires irrigation. There is, consequently, an increased demand for land in the timbered region bordering Puget Sound and in the vicinity of Gray's Harbor. This is indicated by the extraordinary business of the Seattle United States land office, 826,491 acres having been entered there under the various acts during the year ended June 30, 1889. A table below shows the entries at the various land offices throughout the Territory during the year.

Land entered at the various land offices throughout the Territory for the year ending June 30, 1889.

Locality of office.	Original homestead entries.	Timber-culture entries.	Timber-land entries.	Final and cash entries.	Pre-emption filings.	Coal-land entries.	Desert-land entries.
North Yakima	54, 030. 29	43, 303. 78		44, 023. 18	106, 560. 00		2, 151. 24
Seattle	223, 131. 77		278, 240. 00	113, 894. 01	325, 120. 00		
Spokane Falls	93, 150. 63	38, 227. 66		88, 937. 89	81, 964. 82		
Vancouver	77, 798, 29	1, 353. 35		109, 079. 80	74, 060. 86	12, 381. 22	
Walla Walla	39, 290. 00	35, 095. 00		51, 267. 00	39, 800. 00		
Total	487, 409. 98	117, 979. 79	278, 240. 00	407, 201. 88	527, 505. 68	12, 381. 22	2, 151. 24
Total for 1888	312, 740. 38	89, 264. 71	85, 600. 00		359, 643. 88	18, 720. 00	24, 000. 00
Increase in one year	174, 669. 60	28, 715. 08	192, 640. 00		267, 861. 80		
Decrease in one year						6, 338. 78	21, 848. 76

The following figures from the report of the United States land office at Seattle for the months of July and August, 1889, are appended as showing the extraordinary increase in the number of entries at that office since the close of the fiscal year:

	No.	Area.
		Acres.
Pre-emption filings	*444	71,040.00
Timber lands filings	*100	16,000.00
Homestead entries	349	45,693.07
Cash entries	544	76,568.20
Final certificates	350	55,406.26

*Estimated at 160 acres each.

The Northern Pacific Railroad Company report having sold during the year 416,321 acres at an average price of $3.68 per acre. These sales were made to 2,279 purchasers.

Land disposed of during the year ended June 30, 1889.

Original homestead entries	487,409.98
Timber-culture entries	117,979.79
Timber-land entries	278,240.00
Pre-emption filings	527,505.68
Coal-land entries	12,381.22
Desert-land entries	2,151.24
Sales by Northern Pacific Railroad Company	416,321.00
Total	1,841,988,91

U. S. LAND LAWS.

Within the limits of railroad grants only the even-numbered sections are disposed of by the Government, and these are known as the *double-minimum* land, and when entered under the pre-emption law the price is $2.50 per acre.

Outside the railroad limits the land is known as *minimum* land, and is sold at $1.25 per acre.

Citizenship is required, or a declaration to become a citizen of the United States, before any public lands can be taken in this Territory.

Only one claim can be taken by the same person under each of the public land laws of the United States.

The homestead law.

Every citizen of the United States who is over twenty-one years of age, or the head of a family, can take 160 acres of the public lands (agricultural) by establishing a residence thereon and cultivating the same in good faith as a home for five years from the date of settlement; or if, after six months' residence and cultivation, such persons so desire, they may commute their homestead claim by paying the Government price therefor; or if a soldier or sailor who, having served in the Army or Navy of the United States during the recent rebellion, has been honorably discharged, the time of his service will be deducted from the five years' residence required. But in such cases a residence of one year on the land becomes necessary before patent will be issued.

The pre-emption law.

Residence, cultivation, and sufficient improvements to show the good faith of the claimant are required.

One hundred and sixty acres can be taken of agricultural land; qualification as to age and citizenship is the same as under the homestead law. The claimant must not be the owner of 320 acres of land, nor leave land of his own in this Territory (town lot excepted) in order to settle upon a pre-emption claim, nor take such claim for the purpose of speculation instead of residence and cultivation.

The good faith of every claimant must be clearly established.

He may change his pre-emption filing to a homestead by making proper application to the land office. Not less than six months' residence and improvement are required by law before payment can be made.

On *offered* lands, the declaratory statement must be filed within thirty days, and the final proof made within one year from the date of settlement. On *unoffered* lands, the declaratory statement must be filed within three months, and the final proof made within thirty-three months from the date of settlement.

The price for minimum land is $1.25 and for double minimum land $2.50 per acre.

Timber-culture law.

Qualifications of claimant the same as to age, citizenship, and good faith.

Amount of land 160 acres. Land must be devoid of timber. During the first year at least five acres must be plowed. The second year said five acres must be actually cultivated to crop and a second five acres plowed. The third year the first five acres must be planted in timber, seeds, or cuttings, and the second five acres actually cultivated to crop. The fourth year the second five acres must be planted in timber, seeds, or cuttings, making at the end of the fourth year ten acres thus planted.

If the claim is less than 160 acres, the area plowed and planted will be in the same proportion as for 160 acres; that is, one-sixteenth of the claim. Not less than 2,700 trees must be planted on each acre, and there must be at least 675 living trees on each acre to entitle the claimant to patent at the expiration of eight years from date of entry.

Residence in the Territory is not required for timber culture.

Coal-land law.

Same qualifications as to age and citizenship.

One person can purchase 160 acres of coal land. If within 15 miles of a completed railroad, the price is $20 per acre; if outside that distance, $10. An association of persons may purchase 320 acres, or an association of not less than four persons, who make an expenditure of $5,000 upon their claim, may purchase 640 acres, including their improvements.

Coal-land declaratory statements must be filed within sixty days, and proof and payment made within one year from date of possession.

Timber and stone land laws.

Land chiefly valuable for timber and stone, by the act of June 3, 1878, can be purchased in the Territory for $2.50 per acre. Area, 160 acres. No residence required.

COMMERCE.

No accurate statement of the commerce of the Territory can be rendered, owing to the fact that a large proportion of the grain product of the southeastern section, the salmon pack, and lumber of the Columbia River find their way to market by way of Portland and Astoria, Oregon. Vessels carrying these products clear from the Astoria custom-house. There is no means of determining with any degree of exactness what proportion of this tonnage originates in Washington. Considerable shipments of wheat, barley, and flaxseed, wool, and hides, are made from the Walla Walla and Palouse regions direct to St. Paul, Milwaukee, Chicago, and the Eastern cities. Flouring-mills at Spokane Falls grind large quantities of wheat, the product of which is sold in the mining regions of north Idaho and Montana. I have been unable to obtain any accurate information regarding the amount of these sales.

Trade throughout the Territory for the past year has been remarkably active. The influx of population, generally of thrifty citizens of the Eastern and Northwestern States, has given new impulse in every avenue of trade. The expansion of commerce has kept pace with increase in population, and it is safe to say the volume of business has doubled within two years. New railroads are being projected and constructed in many sections of the Territory, banks are multiplying, and

great manufacturing and mercantile establishments are constantly springing up in all our principal towns.

Puget Sound has an extensive foreign commerce. Wheat is shipped to Europe, lumber to all parts of the Pacific. Teas are shipped direct from China and Japan. The coal consumed in San Francisco and other California cities comes chiefly from Puget Sound. Ocean steam-ships ply regularly between San Francisco, Portland, and the Sound ports. Innumerable steam-boats and other water craft are engaged in the local trade, while a line of boats runs daily between Tacoma and Seattle, Port Townsend and Victoria. Our trade relations with British Columbia and Alaska are extensive and constantly increasing.

The growth of commerce indicated is exceedingly gratifying, foreshadowing its vast extent when the State's resources are fully developed and trade relations more intimately established with the populous countries of Western Asia. The Asiatic coast imports yearly $300,000,000 of goods. The greater proportion of this trade is now controlled by England. Washington, by reason of proximity to these Asiatic countries, and other advantages, expects to ultimately secure a large percentage of this trade. It even now can distance all competition in the lumber trade and in flour, which can be more cheaply manufactured here than at any other sea-board in the world. The trade in cotton and in canned goods, in agricultural implements, in many lines of machinery, and in numberless other articles, would even now, to a considerable extent, be controlled if adequate steam-ship service was provided. Government aid should at once be extended to American steam-ship lines desiring to engage in the Asiatic trade. We are confronted here with the spectacle of a line of subsidized British steam-ships plying between Vancouver, B.C., and Hong-Kong and Yokahama, diverting business, naturally tributary to Puget Sound cities, to a subsidized line of British railway.

Through the courtesy of Hon. C. M. Bradshaw, collector of customs at Port Townsend, I am enabled to present some interesting statistics pertaining to the Puget Sound district:

Vessels entered from foreign countries during the year ending June 30, 1889.

Date.	Foreign.			American.		
	Sailing.	Steam.	Total tonnage.	Sailing.	Steam.	Total tonnage.
			Tons.			*Tons.*
July, 1888	4	.....	1,019	6	55	60,435
August, 1888	4	2	1,851	5	73	64,845
September, 1888	1	1	1,067	6	65	56,625
October, 1888	4	3	3,665	9	66	52,462
November, 1888	2	2	3,147	4	66	53,317
December, 1888	2	.....	384	1	64	53,361
January, 1889	2	2	2,899	3	58	52,836
February, 1889	.....	.....	.....	2	61	45,526
March, 1889	4	2	2,003	10	68	58,341
April, 1889	4	1	3,328	5	63	51,264
May, 1889	5	1	4,663	2	78	53,588
June, 1889	13	1	12,272	3	71	49,937
Total	45	15	36,298	56	788	652,537

Foreign vessels entered from adjoining districts during the year ending June 30, 1889.

Date.	Sailing vessels.	Total tonnage.
		Tons.
July, 1888	4	3,536
August, 1888	10	8,542
September, 1888	7	6,973
October, 1888	4	5,524
November, 1888	6	5,679
December, 1888	3	2,662
January, 1889	3	2,785
February, 1889	3	2,331
March, 1889	5	3,824
April, 1889	8	9,408
May, 1889	2	1,276
June, 1889	2	1,485
Total	57	54,025

American vessels entered from coastwise during the year ending June 30, 1889.

Date.	Sailing.	Steam.	Total tonnage.
			Tons.
July, 1888	4	10	12,699
August, 1888	18	8	28,851
September, 1888	10	8	13,456
October, 1888	13	13	25,334
November, 1888	12	13	27,920
December, 1888	5	5	11,256
January, 1889	3	7	9,434
February, 1889	1	4	5,151
March, 1889	9	5	18,767
April, 1889	13	7	21,756
May, 1889	11	10	18,169
June, 1889	9	8	9,383
Total	108	98	202,086

Vessels cleared for foreign countries during the year ending June 30, 1889.

Date.	Foreign.			American.		
	Sailing.	Steam.	Total tonnage.	Sailing.	Steam.	Total tonnage.
			Tons.			*Tons.*
July, 1888	15	1	12,228	9	60	67,708
August, 1888	8	2	8,048	16	74	78,915
September, 1888	8	2	7,206	12	72	67,034
October, 1888	9	3	9,955	14	67	63,384
November, 1888	13	2	14,949	12	66	62,938
December, 1888	9	2	9,253	20	71	76,331
January, 1889	4	2	5,092	7	64	57,903
February, 1889	5	.....	5,231	5	59	45,358
March, 1889	6	2	4,621	7	74	60,309
April, 1889	8	1	6,933	14	69	60,215
May, 1889	7	2	6,703	10	83	62,264
June, 1889	9	1	9,616	6	74	62,819
Total	101	20	99,835	132	833	765,178

American vesseles cleared for coastwise during the year ending June 30, 1889.

Date.	Sailing.	Steam.	Total. Tonnage.
			Tons.
July, 1888	6	3	9,917
August, 1888	5	5	6,263
September, 1888	3	6	8,742
October, 1888	5	6	6,775
November, 1888	2	6	6,298
December, 1888	3	3	5,486
January, 1889	4	4	8,065
February, 1889	1	4	6,332
March, 1889	1	4	4,475
April, 1889	2	5	8,412
May, 1889	5	9	14,589
June, 1889	1	9	8,384
Total	38	64	93,738

RECAPITULATION.

Months.	Entrances.						Clearances.				
	Foreign vessels from foreign countries.	Foreign vessels from adjoining districts.	American vessels from foreign countries.	American vessels from coastwise.	Total entrances.	Total tonnage.	Foreign vessels for foreign countries.	American vessels from foreign countries.	American vessels for coastwise.	Total clearances.	Total tonnage.
July	4	4	61	14	91	77,689	16	69	9	94	89,853
August	6	10	78	26	124	104,089	10	90	10	110	93,226
September	2	7	71	18	98	78,121	10	84	9	103	82,982
October	7	4	75	26	112	86,985	12	81	11	104	80,114
November	4	6	70	25	105	90,063	15	88	8	101	84,185
December	2	3	65	10	80	67,663	11	91	6	108	91,070
January	4	3	61	10	78	67,954	6	71	8	85	71,060
February		3	63	5	71	53,008	5	64	5	74	56,921
March	6	5	78	14	103	82,935	8	81	5	94	69,405
April	5	8	68	20	101	85,756	9	83	7	99	81,560
May	6	2	80	21	109	77,696	9	93	14	116	83,556
June	14	2	74	17	107	73,077	10	80	10	100	80,819
Grand totals	60	57	844	208	1,179	955,036	121	975	102	1,188	962,751

Value of exports from Puget Sound district for the year ending June 30, 1889.

Month.	Value.	Month.	Value.
July	$198,724	April	$149,863
August	217,209	May	111,926
September	281,042	June	95,968
October	470,768		
November	145,621	Total	2,937,477
December	543,723	Total for 1886–'87	1,769,209
January	204,954		
February	225,337	Increase in two years	1,168,268
March	292,342		

Comparisons for the past five years.

Year.	Clearances.	Entrances.
	Tons.	*Tons.*
1884	471,267	506,291
1885	515,032	541,025
1886	488,226	490,025
1887	617,886	657,465
1888	965,474	941,167

List of vessels belonging in the district of Puget Sound, port of Port Townsend.

Rig.	Vessel.	Net tons.	Where built.	When built.	Managing owner.	Residence.
Screw	Active	6.77	Tacoma	1884	A. Herriman	Tacoma.
Do	Albert Lea	10.38	Gig Harbor	1888	Francis Hall	Gig Harbor.
Do	Edith E	11.80	Houghton	1886	Mary Kroft	Houghton.
Do	Estella	14.84	Tacoma	1885	B. K. Hall	Tacoma.
Paddle	Gleaner	17.14	Seattle	1886	Mrs. H. D. Leader	Seattle.
Screw	Halys	12.72	Vashon	1888	R. B. Dilworth	Vashon.
Do	Iola	13.03	Big Skookum	1885	Edward Miller	Shelton.
Do	Jessie	5.97	Seattle	1881	James Avery	Olympia.
Do	North Bay	14.43	North Bay	1888	J. C. Gill	North Bay.
Do	Seaside	19.02	Portland	1885	L. F. Cook	Tacoma.
Do	Squak	18.51	Lake Washington	1884	J. C. O'Connor	Houghton.
Do	Success	6.57	Utsalady	1868	James Nugent	Port Blakely.
Do	Violet	8.56	Seattle	1887	Franklin Elliott	Seattle.
Do	Virginia	9.92	San Francisco	1875	L. B. Hastings	Port Townsend.
Paddle	Alaskan	94.51	Seattle	1886	M. Lenz	Do.
Screw	Augusta	12.70	....do	1882	William H. Hamlin	Port Madison.
Do	Arcadia	40.27	Arcadia	1889	.....	Arcadia.
Do	Blakely	98.77	Port Blakely	1872	William Renton	Port Blakely.
Do	Brick	34.55	Seattle	1883	James W. Tarte	Semiahmoo.
Paddle	City of Quincy	195.40	Portland	1878	D. B. Jackson	Utsalady.
Do	Cyrus Walker	154.25	San Francisco	1864	Puget Sound Commercial Company	Port Gamble.
Do	Daisy	97.87	Seattle	1880	D. B. Jackson	Utsalady.
Screw	Delta	26.45	Stanwood	1888	Daniel Troutman	Union City.
Paddle	E. W. Purdy	83.82	Utsalady	1888	W. K. Merwin	Seattle.
Screw	Edith	135.99	San Francisco	1882	D. B. Jackson	Utsalady.
Do	Edna	19.53	Seattle	1882	H. M. Race	Port Discovery.
Paddle	Eliza Anderson	197.49	Portland, Oregon	1859	D. B. Jackson	Utsalady.
Screw	Enterprise	14.25	Port Townsend	1884	L. B. Hastings	Port Townsend.
Do	Evangel	77.21	Seattle	1882	James Morgan	Do.
Paddle	Fairhaven	240.57	Tacoma	1889	Nelson Bennett	Tacoma.
Do	Favorite	212.08	Utsalady	1868	Puget Sound Commercial Company	Port Gamble.
Screw	Fleetwood	67.70	Portland, Oregon	1881	Z. J. Hatch	Olympia.
Paddle	Goliah	187.07	New York	1849	Puget Sound Commercial Company	Port Gamble.
Screw	Grace	27.22	Seattle	1886	Grace L. Seymore	Colby.
Do	Harry Lynn	45.51	Tacoma	1888	R. W. Maloney	Tacoma.
Do	Helen	11.09	Coupeville	1882	W. H. Ellis	Seattle.
Do	J. B. Libby	102.25	Utsalady	1863	H. F. Beecher	Port Townsend.
Do	J. E. Bowden	53.08	Seattle	1888	T. A. Jensen	Seattle.
Do	J. M. Coleman	43.17	.....do	1887	J. M. Coleman	Do.
Paddle	James McNaught	67.39	.....do	1882	Grace E. Dyer	Lynden.
Screw	Katy	27.75	San Francisco	.....	William M. Hanson	Tacoma.
Paddle	Kootenai	268.52	Little Dalles	1885	H. M. McCarthney	Spokane Falls.
Screw	L. J. Perry	39.98	Port Gamble	1875	S. Baxter	Seattle.
Do	Lief Erickson	14.07	Stanwood	1888	John H. Nibbe	Nibbeville.

Do	Lottie	30.17	Cypress Island	1882	S. Sweeney	Friday Harbor.
Do	Lura Lowe	64.58	Britisher*		R. J. Lowe	Port Townsend.
Do	Lucy Maud	36.48	Lake Washington	1887	F. A. Richardson	Kirkland.
Do	Meta	25.48	Lake Bay	1888	C. O. Lorenz	Tacoma.
Do	Michigan	21.05	Portland, Oregon	1885	James Nugent	Port Blakely.
Do	Mogul	61.60	Tacoma	1886	J. H. Stetson	Port Townsend.
Paddle	Mountaineer	52.94	Chinook	1883	W. H. Ellis	Seattle.
Do	Nellie	55.03	Seattle	1876	H. H. Mills	Snohomish.
Do	Pearl	53.91	do	1884	A. J. Edwards	Seattle.
Screw	Phantom	28.11	Port Madison	1868	Gottfried Meyer	Do.
Paddle	Politkofsky	174.89	Sitka, Alaska	1868	William Renton	Port Blakely.
Screw	Queen City	33.66	Seattle	1883	John J. Post	Seattle.
Do	Rainer	51.54	do	1887	L. V. Penny	Do.
Do	Richard Holyoke	90.94	Seabeck	1877	Rodney Kendrick	Hadlock.
Do	Rip Van Winkle	21.08	Astoria	1877	Brown's Wharf and Navigation Company	Tacoma.
Do	S. L. Mastic	106.50	Port Discovery	1869	David Gilmore	Seattle.
Do	San Juan	6.40	East Portland	1887	George E. Hall	Do.
Do	Sarah M. Renton	68.57	Port Blakely	1889	William Campbell	Port Blakely.
Do	Saranac	6.07	Whatcom	1878	J. W. Baker	Whatcom.
Do	Seattle	6.52	Seattle	1881	Puget Sound Commercial Company	Seattle.
Paddle	Shoo Fly	27.32	Coupeville	1881	H. J. Olney	Utsalady.
Do	Skagit Chief	241.17	Tacoma	1887	Pacific Navigation Company	Tacoma.
Screw	Sophia	12.61	Lake Bay	1884	C. O. Lorenz	Do.
Do	Susie	42.12	Seattle	1879	W. S. Bowln	Do.
Do	Tacoma	128.42	San Francisco	1876	William Hanson	Do.
Do	Tyee	158.17	Port Ludlow	1884	Puget Sound Commercial Company	Port Gamble.
Do	Utsalady	33.26	Utsalady	1884	John W. Collins	Laconnor.
Paddle	W. K. Merwin	166.04	Seattle	1883	D. B. Jackson	Utsalady.
Do	Washington	193.08	Vancouver	1881	do	Do.
Screw	Wildwood	26.79	Portland	1884	D. B. Hastings	Port Townsend.
Paddle	Wm. F. Monroe	99.81	Seattle	1883	C. D. Brownfield	Snohomish.
Do	Yakima	127.47	Port Gamble	1874	Puget Sound Commercial Company	Port Gamble.
Screw	Pioneer	80.48	Philadelphia, Pa	1878	Charles A. Moore	Port Discovery.
Paddle	Alida	114.46	Seattle	1870	S. B. Willey	Portland.
Screw	Alki	572.03	Bath, Me	1884	Charles Goodall	San Francisco.
Paddle	Emma Hayward	456.07	Portland, Oregon	1878	S. B. Willey	Portland.
Screw	Geo. E. Starr	336.63	Seattle	1879	do	Do.
Paddle	Hassalo	350.85	The Dalles	1880	do	Do.
Screw	Idaho	178.82	East Portland	1881	do	Do.
Do	Lone Fisherman	6.46	Seattle	1883	Francis Cutting	San Francisco.
Paddle	North Pacific	345.46	San Francisco	1871	S. B. Willey	Portland.
Do	Olympian	1,083.20	Wilmington, Del	1883	do	Do.
Do	Otter	92.88	Portland, Oregon	1874	do	Do.
Do	T. J. Potter	589.60	do	1888	do	Do.
Do	Welcome	250.99	do	1874	do	Do.
Screw	Premier	602.05	San Francisco	1887	Ernst W. Spencer	Seattle.
Do	Addie	81.02	Seattle	1874	Frank Hanford	Utsalady.
Paddle	Alki	39.81	do	1881	Pacific Broom Company	Port Angeles.
Screw	Angeles	47.01	Port Angeles	1889	August F. England	Utsalady.
Paddle	Bob Irving	125.30	Seattle	1883	H. J. Olney	

*Seized.

List of vessels belonging to the district of Puget Sound, port of Port Townsend—Continued.

Rig.	Vessel.	Net tons.	Where built.	When built.	Managing owner.	Residence.
Paddle	Cascade	64.54	Seattle	1884	G. W. Gove	Seattle.
Do	City of Seattle	186.96	Portland	1888	Thomas Ewing	Do.
Screw	Clara Brown	111.86	Tacoma	1886	Brown W. & N. Company	Tacoma.
Do	Colfax	83.30	Seabeck	1865	Marshall Bloom	Seabeck.
Do	Cornet	56.88	Seattle	1871	George A. Cushman	Seattle.
Paddle	Edith	52.18	Sehome	1884	P. B. Randolph	Do.
Do	Fanny Lake	118.81	Seattle	1875	Edwin W. Smith	Do.
Screw	Gem	87.62	do	1878	James Latham	Skokomish.
Paddle	Henry Bailey	209.59	Tacoma	1888	Pacific Navigation Company	Tacoma.
Screw	Josephine	64.53	Seattle	1884	D. K. Howard	Seabeck.
Paddle	Kirkland	117.65	Lake Washington	1888	J. M. Thompson	Seattle.
Do	Lily	86.80	Seattle	1881	S. W. Young	Mt. Vernon.
Screw	Louisa	129.77	Seabeck	1883	Rodney Kendrick	Hadlock.
Paddle	Mame	43.03	Snohomish	1887	T. H. McMillen	Snohomish.
Do	Mary F. Perle	127.58	Samish	1888	A. S. Perley	Point Williams.
Screw	May Queen	47.99	Seattle	1886	G. W Gove	Seattle.
Paddle	Messenger	97.11	Olympia	1876	Henry Winchester	Minter.
Do	Neptune	24.37	Seattle	1878	John A. Hatfield	Seattle.
Do	Nooksack	84.49	Lynden	1888	Charles H. Schoff	Lynden.
Screw	St. Patrick	21.75	Waterford	1874	D. K. Howard	Seattle.
Paddle	Willie	55.94	Seattle	1883	Samuel Willcy	Olympia.
Screw	Zephyr	109.79	do	1871	William H. Hanson	Tacoma.
Paddle	Glide	78.54	do	1883	H. Dutard	San Francisco.
Screw	Gold Dust	22.07	The Cascades	1881	F. C. Goodin	Portland.
Do	Louis Olsen	56.80	Britisher *	.....	William Olsen	Tillamook, Oregon.
Schooner	Adventurer	12.90	Seattle	1886	G. C. Reed	Seattle.
Do	Alice	13.20	do	1888	O. N. Morse	Do.
Sloop	August	10.10	Two Mile Point	1886	George H. Thomas	Clallam County.
Schooner	Clara Bell	7.01	Seattle	1889	Charles Clark	Seattle.
Do	Comet	5.28	Port Townsend	1883	G. A. Glardner	Steilacoom.
Do	Enterprise	6.11	Coupeville	1855	Thomas Cummings	Coupeville.
Do	Escort	7.89	Dewatto	1886	J. B. Rice	Dewatto.
Sloop	Hawkeye	8.29	Oreas Island	1877	W. H. Howard	Seattle.
Schooner	Industry	10.73	Seattle	1868	E. P. Newhall	East Sound.
Sloop	Margaret	8.47	Port Gamble	1887	R. C. Polhill	Port Ludlow
Do	Prospector	9.34	Cypress Island	1889	A. W. Thomas	Guemes Island.
Do	Sea Gull	15.77	Port Ludlow	1889	Jacob Johnson	Port Ludlow.
Schooner	Sea Bird	8.31	Crescent Bay	1887	G. G. Wells	Crescent Bay.
Barge	J. C. Brittian	105.34	Seattle	1885	J. C. Brittian	Seattle.
Schooner	Albatross	6.86	do	1884	W. S. Thompson	Do.
Do	Allie I. Alger	75.45	do	1886	J. C. Nixon	Do.
Barkentine	Amelia	378.07	Coos Bay, Oregon	1870	William Newhall	Do.
Schooner	American Ranger	21.66	Dewatto	1887	Karll Haller	Quilcene.
Bark	Arkwright	1,209.95	Portsmouth, N. H	1855	Cyrus Walker	Port Gamble

Bark	Buena Vista	736.55	Newburyport	1858	Puget Sound Commercial Company	Do.
Schooner	C. C. Perkins	25.38	Seattle	1874	D. A. Kabiss (Ind)	Neah Bay.
Bark	C. O. Whitmore	855.49	Bath, Me	1868	Rufus Calhoun	Port Townsend.
Schooner	Carrie Hayden	14.55	Seattle, 1875	1875	Henry A. Taylor	Do.
Bark	Ceylon	646.95	Boston, Mass	1856	Rufus Calhoun	Do.
Schooner	Challenger	27.69	Seattle	1885	C. W. Caster	Schome.
Do	Cora May	12.43	do	1888	J. B. Thurston	Seattle.
Do	Emily	19.22	Deception Pass	1884	Benjamin Une	Whidby Island.
Bark	Fresno	1,187.02	Bath, Me	1874	Cyrus Walker	Port Gamble.
Schooner	Granger	49.62	Utsalady	1882	H. J. Lipsett	Dungeness.
Do	Henrietta	39.52	Lopez Island	1886	Lucy Barlow	Lopez Island.
Do	James H. Lewis	77.52	Britisher*		J. C. Dixon	Seattle.
Do	Jennie	15.03	San Francisco	1875	John Elwood	Semishmoo.
Ship	Jermiah Thompson	1,831.25	Williamsburgh	1854	Charles A. Moore	Port Discovery.
Barkentine	Klickitat	468.59	Coos Bay, Oregon	1881	Cyrus Walker	Port Gamble.
Schooner	Maggie	30.26	Port Townsend	1878	William H. Hagadore	Fidalgo Island.
Bark	Mary Glover	700.70	Boston, Mass	1849	Charles A. Moore	Port Discovery.
Schooner	Mary Parker	85.50	Utsalady	1876	J. P. Adams	Port Townsend.
Ship	Mercury	1,098.38	New York	1851	William Renton	Port Blakely.
Schooner	Mist	17.87	Oak Point	1865	Henry Landers	Port Townsend.
Bark	Pearl	509.34	Newport	1862	Rodney Kendrick	Hadlock.
Do	Rainer	499.20	Robbinstown	1865	Puget Sound Commercial Company	Port Gamble.
Do	Richard III	554.08	Portsmouth	1859	James McIntyre	Port Townsend.
Schooner	Rustler	46.05	East Sound	1883	J. A. Fry	East Sound.
Do	Sierra	26.49	Marysville, Oregon	1854	Thomas Carlisle	Neah Bay.
Do	Teaser	33.27	Cascades	1874	S. Baxter	Seattle.
Do	Venture	23.27	Ilwaco	1886	J. S. Nixon	Do.
Ship	Belle O'Brien	1,807.77	Thomaston	1875	Edward O'Brien	Thomaston, Mass.
Do	Ericsson	1,568.07	New York	1852	Pacific Coast Steam-ship Company	San Francisco.
Schooner	Mary Ellen	77.95	San Francisco	1863	do	Do.
Bark	Mennon	806.66	Boston, Mass	1858	Leon Blum	Do.
Ship	Merom	1,158.30	Phippsburg	1870	Charles G. Minott	Phippsburg, Me.
Do	Mount Washington	1,162.13	Saco, Me	1867	Leon Blum	San Francisco.
Bark	Theobald	933.33	Richmond	1865	C. S. Holmes	Do.
Ship	Valley Forge	1,226.35	Pittston, Me	1862	George Middleton	Do.
Schooner	William F. Witzman	449.55	Fairhaven, Conn	1887	James Madison	Do.
Bark	Atlanta	824.38	Amesburg	1851	Cyrus Walker	Port Gamble.
Do	Arcturus	1,007.21	Kennebunk	1865	Rodney Hendrick	Hadlock.
Do	Bonanza	1,292.72	Bath, Me	1875	Puget Sound Commercial Company	Gamble.
Do	Canada	1,144.66	do	1859	William H. Hanson	Tacoma.
Ship	Carondelet	1,376.03	New Castle, Me	1872	Puget Sound Commercial Company	Port Gamble.
Bark	Cowlitz	740.22	Bath, Me	1881	do	Do.
Ship	Dashing Wave	1,012.14	Portsmouth	1853	William H. Hanson	Tacoma.
Brig	Deacon	402.09	Bath, Me	1863	Charles A. Moore	Port Discovery.
Schooner	Edward E. Webster	93.86	Gloucester	1875	William Hudder	Port Townsend.
Bark	General Butler	1,163,37	Bath, Me	1862	Puget Sound Commercial Company	Port Gamble.
Ship	Guardian	1,072.55	Damariscotta	1863	Rodney Hendrick	Hadlock.
Barkentine	J. M. Griffiths	574.98	Seabeck	1882	do	Do.
Bark	James Cheston	948.45	Baltimore	1855	Cyrus Walker	Port Gamble.
Schooner	James G. Swan	44.43	British*		C. Peterson	Port Townsend.

*Seized.

List of vessels belonging in the district of Puget Sound, port of Port Townsend—Continued.

Rig.	Vessel.	Net tons.	Where built.	When built.	Managing owner.	Residence.
Ship	Kate Davenport	1,193.74	Bath, Me	1866	William Renton	Port Blakely.
Schooner	Kitsap	735.84	Port Ludlow	1887	Puget Sound Commercial Company	Port Gamble.
Do	Lottie	28.69	Utsalady	1868	James Clapantroo	Neah Bay.
Do	Mollie Adams	117.26	Kennebunk	1884	William Hudder	Port Townsend.
Bark	Nellie May	664.17	New Castle, Me	1867	William P. Sayward	Port Madison.
Do	Northwest	489.52	Port Madison	1868	do	Do.
Do	Nonantum	1,099.59	Newburyport	1886	do	Do.
Do	Oakland	507.72	Bath, Me	1865	do	Do.
Ship	Palmyra	1,299.39	do	1876	Puget Sound Commercial Company	Port Gamble.
Do	Prussia	1,172.03	do	1868	William Renton	Port Blakely.
Bark	B. K. Ham	541.83	Port Blakely	1874	do	Do.
Barkentine	Retriever	520.33	Seabeck	1881	Rodney Kendrick	Hadlock.
Bark	Roswell Sprague	923.11	Bath, Me	1856	Puget Sound Commercial Company	Port Gamble.
Do	Sagamore	1,274.46	Portsmouth	1856	do	Do.
Do	Samoset	601.25	do	1847	William H. Hansen	Tacoma.
Do	Shirley	996.62	Medford, Mass	1850	do	Do.
Barkentine	Skagit	481.61	Port Ludlow	1883	Cyrus Walker	Port Gamble.
Bark	Tidal Wave	573.24	Port Madison	1869	William P. Sayward	Port Madison.
Ship	Topgallant	1,228.61	East Boston, Mass	1863	William Renton	Port Blakely.
Bark	Vidette	585.86	Bath, Me	1864	William P. Sayward	Port Madison.
Schooner	Henry Dennis	91.55	Essex, Mass	1883	Joshua Brown	Salem, Mass.
Do	Oscar and Hattie	81.28	do	1884	C. Johnson	Swampscott, Mass.
Do	Puritan	533.68	Port Madison	1888	C. A. Hooper	San Francisco.
Do	Rosie Olsen	47.40	East Portland, Oregon	1886	William Olsen	Tillamook, Oregon.
Screw	Biz	40.27	Arcadia	1881	Edward Miller	Shelton.
Do	Union	13.31	Portland, Oregon	1883	A. W. Berri	Port Townsend.

In addition to the list obtained of the custom-house, the tonnage of lumber and coal vessels which arrived and departed under license is added. The total number of vessels is 472; total tonnage, over 500,000.

The following tables, compiled by the Seattle Post-Intelligencer, contain additional information relating to the year ended December 31, 1888

The total ocean tonnage of Puget Sound for 1888 was as follows:

	Tons.
Entrances under register, 1,039 vessels	941,16[illegible]
Entrance under license, 472 vessels	509,121
Total	1,450,288
Clearances under register, 1,046 vessels	965,474
Clearances under license, 472 vessels	509,121
Total	1,474,595
Total entrances	1,450,288
Total clearances	1,474,595
Total ocean commerce	2,924,883

IMPORTS DIRECT.

During the year the direct imports to the Puget Sound district aggregated $395,631, classified as follows:

Free.	
Raw furs and skins	$165,921
Household goods and personal effects	33,353
Tea	9,602
Chinese goods	882
Horses for breeding	4,200
Axle grease	408
Ice	197
Cattle for breeding	630
Corned beef	1,417
Fruit-trees	235
Miscellaneous	2,475
Total	219,370

Dutiable.	
Liquors	7,766
Steel rails	81,125
Tea	65
Rice	10,586
Salt	3,272
Butter	2,470
Chinese goods	8,523
Opium	764
Bric-a-brac	1,702
Cattle and horses	1,932
Common brick	2,483
Fire-brick	478
Cement	2,939
Tin-plate	727
Pig-iron	5,012
Iron-ore	11,694
Coal	12,565
Wool	2,423
Dog-fish oil	3,040
Second-hand machinery	1,449
Iron castings and metal	147
Steam-launch	225
Earthen and porcelain ware	1,791
Patent medicines	145
Laces, fancy goods, toys, etc	4,632
Small stuff from panings	201
Mustard	601
Terne-plates	2,601
Yellow-metal	1,376
Coca	454
Submarine cable	450
Electric-light machinery	1,500
Miscellaneous	1,742
Total	176,261

Comparisons.

Year.	Free goods.	Dutiable.	Total duties.
1885	$566,117	$35,468	$26,191.36
1886	319,209	56,145	23,824.62
1887	168,527	150,109	103,995.83
1888	219,370	176,261	112,990.15

IMPORTS IN BOND.

During the year imports in bond to the value of $994,090 were made into the Puget Sound district. These were goods and merchandise received at Port Townsend from foreign ports destined to American ports outside of the Puget Sound district. Of the

above amount $994,090 was free and $57,213 dutiable. The estimated duty on the latter was $41,701.09. Classified, the imports in bond were:

Tea	$930,034
Chinese goods and wines	21,749
Rice	8,923
Fish-oil	1,906
Liquors	1,207
Porcelain and china ware	3,807
Silk screens	1,446
Manufactures of linen	1,321
Clothing and dry goods	690
Pelts and skins	7,265
Wool	$4,349
Salt fish	835
Curios	950
Bric-a-brac	1,31[illegible]
Straw baskets	6,714
Hats and caps	403
Flax net	1,064
Miscellaneous	212
Total	994,090

ENTRIES FOR TRANSSHIPMENT.

Entries of products from foreign countries at the Port Townsend custom-house for transshipment to foreign countries through the United States were $369,218, as follows:

From Japan	$234,247
From British Columbia	134,971

Classified, these entries were:

Pickled salmon, 1,657 barrels	$14,743
Canned salmon	74,836
Tea	230,470
Seal-skins	42,400
Manufactures of leather	228
Earthenware	1,613
Hops	3,195
Japanese ware	1,794
Boots and shoes	300
Manufactures of wool	576
Curios	200
Manufactures of silk	697
Jewelry	250
Household furniture	550
Miscellaneous	366
Total	369,218

FOREIGN EXPORTS.

The total foreign exports from the Puget Sound district during the year were $3,803,533, divided as follows:

Wheat		$1,659,825.00
Lumber—		
To Australia	$818,708.17	
To South America	196,502.29	
To Hawaii	107,931.67	
To Mexico	27,156.78	
To China	26,974.00	
To India	8,000.00	
		1,185,097.91
Other exports		958,435.09
Total		3,803,533.00

The other exports were to British Columbia, and are as follows:

Agricultural implements	$5,441
Animals:	
Cattle, 558 head	18,755
Hogs, 3,191 head	10,997
Horses and mules, 122 head	12,755
Sheep, 24,456 head	52,477
All other animals and fowls	1,328
Blocking	976
Bones, horns, etc	20
Books, maps, engravings, etc	5,360
Brass, manufactures of	376
Breadstuffs:	
Wheat	7,480
Flour, 64,271 barrels	247,867
All other breadstuffs	35,574
Bricks	24
Brooms and brushes	697
Candy	960
Carriages	5,235
Casings for sausages	143
Chemicals:	
Patent medicines	748
All other drugs	8,875
Clocks and watches	382
Coal	1,243
Coffee	709
Copper, manufactures of	$1,160
Cotton, manufactures of	9,534
Earthen and china ware	2,656
Eggs, 76,485 dozen	16,956
Fish	1,400
Oysters	662
Flax:	
Cordage and twine	1,726
All other flax manufactures	825
Fruits:	
Green apples, 4,227 barrels	8,962
Canned fruit	923
All other fruit	6,717
Nuts	386
Furs and fur skins	55,480
Glass and glassware	5,426
Glucose	48
Grease	332
Gunpowder and other explosives	210
Honey	14
Hops	21,680
Ice	10
India rubber, manufactures of:	
Boots and shoes	9,509
All other India-rubber manufactures	4,298
Ink	790

Instruments, scientific	$3,832
Iron and steel:	
Boilers	$2,212
Castings	15,518
Cutlery	347
Fire-arms	708
Locks and builders' hardware	1,899
Machinery not elsewhere specified	15,046
Saws and tools	10,111
Sewing machines	1,791
Stoves	759
All other iron and steel	11,539
Lamps	1,816
Lead	1,555
Leather:	
Boots and shoes	8,990
Other manufactures of	1,442
Lime and cement	2,179
Malt liquors	4,793
Marble and stone, manufactures of	185
Matches	3
Musical instruments:	
Pianos	5,829
Organs	2,311
Other instruments	100
Oakum	43
Oil:	
Lard oil	1,043
Fish oil	138
Illuminating oil	37,650
Lubricating oil	2,882
Paints	3,065
Paper of all kinds	7,844
Plated ware	642
Provisions:	
Canned beef	5,873
Bacon, 408,050 pounds	42,148
Hams, 206,366 pounds	23,158
Pickled pork	369
Lard, 239,226 pounds	21,495
Mutton	594
All other meats	5,339
Provisions—Continued.	
Butter	$1,281
Cheese	26
Milk	414
Roof slating	2,231
Salt	34
Seeds	3,017
Soap	69
Spices	560
Spirits:	
Bourbon whisky	1,496
All other spirits	539
Spirits turpentine	1,548
Starch	195
Stationery	2,085
Sirup	3,858
Tin, manufactures of	2,137
Tobacco, cigars, and cigarettes	10,896
Trunks	427
Varnish	221
Vegetables:	
Onions	383
Potatoes	2,066
Canned vegetables	563
All other vegetables	380
Vessels sold to foreigners:	
Sailing	800
Steam	3,600
Vinegar	70
Wood, manufactures of:	
Lumber	1,783
Moldings	1,397
Woodenware	2,843
All other manufactures of wood	3,986
Wearing apparel	5,836
Wool, manufactures of	2,233
Household furniture	20,437
All other articles, manufactured and unmanufactured	2,988
Zinc, manufactures of	127
Total	958,405

EXPORTS, HOW CARRIED.

The following table shows the nationality of vessels which carried away the exports of Puget Sound:

Month.	American steam.	American sail.	Foreign sail.	Total.
December	$68,400	$20,232	$50,793	$139,425
January	51,381	100,939	117,262	269,582
February	78,339	77,804	71,313	227,456
March	121,558	156,288	39,133	316,979
April	61,655	12,079	283,408	357,142
May	90,241	20,461	157,952	268,654
June	66,540	12,513	75,691	154,744
July	66,966	32,396	108,661	208,023
August	65,320	61,790	105,549	232,659
September	61,791	220,313	59,165	341,269
October	93,955	339,071	327,310	760,336
November	64,912	79,448	382,904	527,264
Total	891,058	1,133,334	1,779,141	3,803,533

PROGRESS OF RAILROADS.

Railroad construction has been quite active during the past year. Existing mileage is shown in the table below:

	Miles.
Northern Pacific Railroad Company:	
Main line	648.2
Roslyn branch	3.4
Spokane and Palouse	104.1
Northern Pacific and Puget Sound	7
Northern Pacific and Cascade	7.8
Spur to mines at Burnett	1.7
Central Washington, Cheney to Davenport	45
Total standard gauge	807.2
Oregon Railway and Navigation Company:	
From Oregon State line to Wallula Junction	6.2
From Walla Walla to Riparia	55.7
From Bolles Junction to Dayton	18
From Starbuck to Pomeroy	29.5
From Walla Walla to Oregon State line	5.4
From Walla Walla to Wallula	31.2
Columbia and Palouse, operated by Oregon Railway and Navigation Company	141.6
From Texas Ferry to La Crosse Junction	24.6
From Farmington to Rockford	33.8
From Winona Junction to Seltice Junction	48.1
Total standard gauge	389.1
Narrow gauge:	
Cascades Railroad, operated by Oregon Railway and Navigation Company	6
Mill Creek F. and M. Company, operated by Oregon Railway and Navigation Company	13.4
Total narrow guage	19.4
Oregon and Washington Railway Company:	
Hunt's Junction to Oregon State line	9
Hunt's Junction to Walla Walla	52
Eureka Flat branch	23
Total standard gauge	84
Seattle, Lake Shore and Eastern Railroad Company:	
Snoqualmie division	24
West coast	20
Spokane Falls to Davenport	45
Total standard gauge	89
Puget Sound and Gray's Harbor Railroad Company	13
Puget Sound and Shore Line Railroad Company	20.5
Columbia and Puget Sound Railroad Company	63
Vancouver, Klickitat and Yakima Railroad Company	10
Grand total standard gauge	1,475.8

	Miles.	
Narrow gauge:		
Olympia and Chehalis Valley	21	
Satsop Railway	16	
Ilwaco Railway and Navigation Company	16	
Cascades Railroad, operated by Oregon Railway and Navigation Company	6	
Mill Creek F. & M. Co., operated by Oregon Railway and Navigation Company	13.4	
Total narrow gauge		72.4
Total standard gauge		1,475.8
Total mileage, 1889		1,548.2
Total mileage, 1888		1,197.7
Increase in one year		350.5

Construction work is being actively pushed on the following roads, and not less than 100 miles of track have been laid since the end of the fiscal year: Puget Sound and Gray's Harbor, Seattle Northern (23 miles graded), Port Townsend Southern (1¾ miles graded), Ellensburgh and Northeastern (10 miles graded), Fairhaven Southern (27 miles under construction). On the Oregon and Washington track has been laid from Walla Walla to Waitsburgh, 20 miles. The Spokane and Northern has about 50 miles of track, and will complete the line to Colville by the end of the present month, while the Oregon Railway and Navigation Company has just completed a line from Rockford to Spokane Falls.

AGRICULTURAL DEVELOPMENT.

In 1885 the total number of acres of land assessed, as reported by Governor Squire, was 3,457,952. The number of acres assessed for 1889, as reported by the various county assessors, was 8,110,706; an increase in four years of 4,652,754. The present acreage of improved land, so far as reported, is 953,791, of which 820,795 acres lie in the counties east of the Cascade Mountains, and 132,736 in the counties on the west. The distinctively agricultural section, it will be seen from the foregoing, lies east of the mountains. A prairie country, possessed of an equable climate, a fertile soil, yielding marvelously in cereals and vegetables and in fruits, is a most attractive region to the agriculturist, especially to those emigrating from the rigorous climate of the Northern States. In the Walla Walla, Palouse, Spokane, and Big Bend regions no irrigation is required, cereals, fruits, and vegetables attaining great perfection without it. In the Walla Walla section much attention is being given to the growth of fruits and vegetables. Shipments have already attained vast proportions and are rapidly increasing. Fruits common to the temperate zone flourish in all parts of the Territory.

In Yakima and Kittitas counties considerable areas have been reclaimed by irrigation and are proving of enormous value. With water on the soils of this region all things are possible. Enormous crops of grain and vegetables are grown, while as many as five crops of alfalfa are reported as having been cut in a single year from tracts of irrigated land. Canal companies are being organized, bringing in water on an extensive scale. The plan of these companies is to lease water at a fixed price per acre irrigated, or to sell perpetual rights subject to a small annual assessment for repairs. In the central parts of the Territory, in Franklin, Adams, Douglas, and other counties, vast areas remain to be reclaimed. The introduction of water is, however, too expensive to be undertaken by individuals or private corporations. It is

hoped that within a few years the National Government will have devised and carried into effect a comprehensive system of water supply for this and other arid regions in the West, and thus solve the problem of providing homes for the homeless.

The lands which have been brought under cultivation in the Puget Sound section, while much less in extent than on the east by reason of the great cost of clearing, are exceedingly fertile. Immense crops of hay, oats, and vegetables are produced along the bottom-lands of the rivers.

GRAIN.

The great staple of eastern Washington is wheat. The volcanic soil of that region is peculiarly adapted to the growth of all cereals, the average yield being perhaps greater than that of any other grain-growing district in the United States. With proper cultivation the yield of wheat is seldom less than 25 bushels per acre, while it frequently reaches 50 and even 60 bushels. Corn is grown successfully south of Snake River, where it yields about 30 bushels per acre. Barley yields an average of 30 bushels and is of very superior quality, being preferred by Chicago and Milwaukee brewers to that of any other section.

The following table gives the average yield per acre of ten of the chief wheat-producing States:

State or Territory.	Bushels.	State or Territory.	Bushels.
California	15.8	Pennsylvania	13.4
Dakota	10.6	Virginia	8.6
Minnesota	11.3	Oregon	16.8
New York	15.7	Illinois	15.5
Ohio	18.0	Washington	23.5

This table places Washington in the front rank. A peculiarity of the soil of eastern Washington is its apparently inexhaustible fertility. Farms which have been cropped successfully for twenty years show no decrease in yield. This is said to be due to the presence of a large percentage of potash and soda in the soil. There are different grades of fertility in these soils, dependent largely upon the rain-fall. Walla Walla has 17 inches and is marvelously productive. Localities which have less than 15 inches require irrigation to insure successful farming.

In the Palouse region, north of Snake River, the rain-fall is greater than at Walla Walla, while in Yakima County it is less. The lands of Yakima yield enormously when irrigated, the value of lands which are so situated as to be susceptible of irrigation being very great.

The varieties of wheat usually grown in Washington are Little Club, Blue Stem, and Red Chaff. They are sown in either fall or spring. Freight rate from Walla Walla, the center of the wheat-producing region, to a sea-port at Portland, Oregon, or at Tacoma, is $4.70 per ton, or 13.1 cents per bushel. The methods of harvesting are the same as prevail in California. The wheat is sacked in burlap grain-bags at the thrasher. It is then piled in the open air, where it frequently remains for several weeks without shelter, until it suits the farmer's convenience to haul it to the railway station. Elevators for storing grain in bulk have recently been constructed along the lines of the Oregon Railway and Navigation Company and of the Northern Pacific, and an effort is

being made to induce the farmer to abandon the system of sacking grain in the harvest field.

No insect or other pest infests the grain of Washington. The average price for wheat in the interior is about 55 cents per bushel. The cost of growing, harvesting, sacking and delivering at the railway stations is about $9 per acre. The product per acre, 25 bushels, at 55 cents per bushel, is $13.75, or an average profit of $4.75 per acre, for careful farming on good land in an ordinary season.

Below is appended a statement of wheat and other products shipped from certain stations in Washington, on the lines of the Oregon Railway and Navigation Company to Portland, Oregon, and on the Northern Pacific to various points east and west, for the year ended June 30, 1889.

Statement of wheat, flour, barley, and wool originating and forwarded from Oregon Railway and Navigation stations in Washington Territory during the year ending June 30, 1889.

From—	Wheat.	Flour.	Barley.	Wool.	Total.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
Wallula Junction	.....	1.4	.....	49.2	50.6
Touchet	133.0	.....	.....	38.3	171.3
Walla Walla	19,174.3	2,795.4	1,597.9	37.5	23,605.1
Prescott	608.7	2,282.4	.....	4.7	2,895.8
Bolles Junction	2,002.3	.....	15.0	.....	2,017.3
Alto	2,775.4	.....	17.0	.....	2,792.4
Starbuck	2,409.8	.....	17.8	108.3	2,535.9
Riparia	1,752.7	.....	470.0	219.8	2,442.5
Snake River Landings	14,260.0	15.7	135.0	186.4	14,597.1
Winona Junction	.....	.....	.....	7.5	7.5
Endicott	4,208.0	1.0	22.5	31.1	4,262.6
Colfax	11,677.7	221.7	2,378.0	3.6	14,281.0
Garfield	1,674.6	108.9	.....	.....	1,783.5
Farmington	4,313.6	14.0	585.6	.....	4,913.2
Tekoa	50.0	.....	.....	.....	50.0
Latah	975.8	27.8	.....	.....	1,003.6
Rockford	.....	125.4	.....	.....	125.4
Heppner	10.0	1.0	.....	485.9	496.9
Waitsburgh	8,817.8	2,990.1	160.0	.....	11,967.9
Dayton	11,963.4	4,065.7	2,370.9	3.6	18,403.6
Pomeroy	12,162.3	988.4	1,664.7	50.4	14,865.8
Connell	636.3	21.7	.....	.....	658.0
Pullman	4,858.9	10.1	23.5	.....	4,892.5
Total	104,464.6	13,670.7	9,457.9	1,226.3	128,819.5

Statement of commodities forwarded from Northern Pacific stations in Washington Territory during the fiscal year ending June 30, 1889.

Commodities.	East bound.	West bound.	Total.
	Tons.	*Tons.*	*Tons.*
Wheat	34,326.3	59,892.2	94,218.5
Grain (other than wheat)	10,994.5	2,441.7	13,436.2
Flour	5,173.4	4,565.7	9,739.1
Mill products	1,762.7	1,120.0	2,882.7
Hay	6,112.8	5,502.0	11,614.8
Fruit and vegetables	3,746.9	1,105.5	4,852.4
Live stock	13,761.7	9,231.8	22,993.5
Dressed meats	310.8	77.8	388.6
Other packing-house products	198.4	88.4	286.8
Poultry, game, fish, etc	3,139.2	41.4	3,180.6
Wool	529.7	501.4	1,031.1
Hides and leather	159.4	440.1	599.5
Anthracite coal	.1	76.5	76.6
Bituminous coal	39,136.7	283,517.6	322,654.3
Coke	701.7	2,692.3	3,394.0
Ores	283.8	2.6	286.4
Stone, sand, etc	882.4	10,587.8	11,470.2
Lumber	54,472.2	22,133.1	76,605.3
Other forest products	30,489.1	34,558.9	65,048.0
Petroleum and other oils	870.9	373.9	1,244.8
Sugar	8,285.3	18.1	8,303.4
Iron (scrap)	278.8	238.6	517.4
Iron and steel rails	3,318.3	616.8	3,935.1
Other castings and machinery	1,349.4	1,014.1	2,363.5
Bar and sheet metal	1,082.3	280.7	1,363.0
Cement, brick, and lime	2,454.5	6,009.1	8,463.6
Agricultural implements	333.7	77.1	410.8
Wagons, carriages, tools, etc	522.2	339.4	861.6
Wine, beer, etc	658.1	168.4	826.5
Household goods and furniture	1,157.2	821.6	1,978.8
Merchandise	19,750.8	6,239.8	25,990.6
Miscellaneous	14,854.6	5,974.5	20,829.1
Tea	6,045.3	6.4	6,051.7
Foreign companies' equipment	508.7	7.2	515.9
Construction material	7,629.4	2,399.7	10,029.1
Total	275,281.3	463,162.2	738,443.5

Receipts of grain at Tacoma were approximately 2,000,000 bushels; at Portland, 4,000,000.

Large quantities from the Walla Walla section were shipped to Denver, Colo., during the past year for milling purposes. From the region north of Snake River, extensive shipments were made to Duluth, and considerable quantities were consumed by the flouring-mills at Spokane Falls.

The total export for the crop year ended June 30, 1889, was approximately 7,000,000 bushels. It should be remarked that the crop fell short of its usual average on account of the light rain-fall.

This industry is susceptible of indefinite expansion, only a small percentage of the lands suitable for grain-growing having yet been brought under cultivation.

HOPS.

Hops are the peculiar product of western Washington, although they are also grown successfully and yield abundantly in the Yakima and Walla Walla Valleys. The manner of their cultivation having been described in former reports, little more than statistics will be given at this time. To J. P. Stewart, esq., a pioneer hop-grower of Puyallup, I am indebted for most of the following facts.

At the time of writing, the shipment for the present year has not been ascertained. That for the year 1888 is shown in the following table:

Station.	Bales.	Weight.	Station.	Bales.	Weight.
		Pounds.			*Pounds.*
Seattle	11,352	2,220,659	Enumclaw	57	10,720
Tacoma	547	109,861	Chehalis	305	58,119
Puyallup	10,790	1,963,956	Tenino	64	12,457
Sumner	5,934	1,176,409	Kalama	63	12,669
Slaughter	3,987	792,254	Buckley	522	96,913
Orting	1,880	384,481	Media	592	112,862
Kent	4,349	859,436	North Yakima	1,640	313,250
Winlock	196	38,826			
Bucoda	142	27,635	Total	42,482	8,202,287
Lake View	62	11,781			

The average yield in Pierce and King Counties for last year was 2,000 pounds to the acre. The yield per acre will be somewhat less this year, but, owing to the increased acreage, it is estimated that the aggregate shipment will be about the same. Mr. Stewart states that he has been a hop-grower in the Puyallup Valley for eighteen years, and the average price for his hops has been 20.4 cents per pound. The highest price he has ever received was 58.5 cents in 1882; the lowest was 6 cents in 1878. As the cost of production rarely exceeds 9 cents per pound, it is seen that the crop is usually very profitable.

Further, Mr. Stewart writes:

We have feared that we would have to limit our acreage on account of scarcity of pickers, as in years past some fields have been left unpicked for lack of them, but the tide of immigration flowing in upon us during the past year has given us a superabundance of this help. Our uplands, that are not well adapted to the growth of hops, are being settled by the hardy pioneer, who will not be slow in removing the forest and the stumps, and making in their stead meadows, pastures, and orchards of prunes, plums, peaches, and apples. This upland is to the valley land in the proportion of ten to one, and is as much better adapted to the growth of the fruits named as the valley land is to the growth of hops. So, while the upland is being cleared and homes made upon it, the hop-grower will be a necessity to many of those who live there, as they in turn will be a necessity to the hop-grower. Whole families will come from the uplands, pass a month in the hop fields, and thereby earn a year's supply of sugar, flour, and other necessaries of life.

TOBACCO CULTURE IN WASHINGTON.

The following article is from the pen of Mr. William Kerr, president of the Moxee Land Company:

I was led to try the experiment of raising tobacco in Washington Territory in 1887. My friend the late Dr. Jorgensen, in company with Governor Miles C. Moore and other gentlemen, was discussing the possibility of raising a high-class tobacco in this country. He expressed himself as having no doubt that the thing could be done. From his experience in Virginia he was admirably qualified to form a correct judgment in the matter, and he fortified his opinion by reasoning so sound as to convince me that he was right. Among other things, I remember he said that he had submitted a sample of the soil to the late Professor Henry, of the Smithsonian. Professor Henry, after analysis, said that the soil was peculiarly adapted to the growth of tobacco. I tried the first year Havana, Sumatra, and Virginia seeds. The Sumatra did not do very well, while the Havana and Virginia were a distinct success.

The next season I put in Havana seed alone, mainly for the reason that this class of tobacco commands a better price, and has at present a better market than the larger and cheaper grades.

When factories for the handling of these coarser tobaccos are established in this country, however, it will pay the farmer well to grow them.

So far we have not used any fertilizer on our tobacco land. There was much to learn both in growth and curing, and the following is a brief statement of our methods and success so far:

The plants are raised in beds and transplanted.

We sow one-half ounce of seed in a bed one rod square, raising plants enough for 3 acres of ground, the plants being set about 2 feet apart.

The first hot-beds are sown during the first half of April. If more than one bed is desired they should be sown at intervals, so that the plants may not become ready to put out at the same time, and so hamper the grower.

After the middle of April, if the season is not unusually cold, open beds may be sown, and the plants will be ready for the last setting.

The tobacco field should be prepared by careful cultivation, and should be thoroughly irrigated. The plants may be put out when they are from two to three inches high.

Till the plants take root and begin to grow they should be well watered, but afterwards very little water and constant cultivation are required.

The crop matures in from sixty to eighty days.

After the plants have budded and before they blossom they are "topped," leaving not more than twelve leaves on the stalk, the "suckers" are then removed constantly until the plant is cut.

When ripe the leaf will be mottled with light spots, and will be quite brittle in the cool of the day.

It is then cut and left in the sun till it is thoroughly wilted, then strung on a lath (six to eight plants on each lath), and hung in the curing-house. The laths are placed about 4 inches apart.

Our climate in eastern Washington is so dry that artificial moisture is required in curing. This may be partially supplied by flooding the ground which forms the floor of the curing-shed, but we have found it necessary to supplement this by steam. A vat is placed outside, with a steam-pipe running into the shed. The latter is closed up and filled with steam, under the action of which the tobacco rapidly becomes soft and pliable. In damp weather, of course, this treatment is not required; but in the usual warm dry weather of eastern Washington it should be repeated at intervals of about two weeks. After the plants become moist, the house is gradually ventilated till they become dry. This is repeated till the tobacco is thoroughly cured, which should be about the first of February. It is taken down (while moist), stripped from the stalk, sorted into grades, and packed into cases containing usually about 300 pounds each, in which it goes through the sweat which prepares it for the manufacturer. Time is saved and the tobacco improved by putting it through an additional artificial sweat. For this purpose an ordinary box stove, with pipes running into a water-pan in the bottom of the sweat-box, may be used—the case being put in bodily.

In this district the growing and harvesting are much the same as in the old tobacco districts. We consider from 800 to 1,000 pounds of Havana per acre a good crop so far.

Our last crop had much more gum than either of the preceding ones. I ascribe this to increased dew, consequent on the increase of irrigation in the valley and increased knowledge in the matters of cultivation and watering. Great care should be taken not to give the plants too much water after they have fairly started to grow, as the tobacco will then cure more easily and better.

That the method of curing which I have described is successful, is proved by the quality of the cigars we manufacture. The flavor of our tobacco is said by experts to approach more nearly to that of Havana than any other tobacco grown in America, and the cigars meet with the practical approval of constant use by the most critical smokers. That tobacco culture is one of Washington's greatest resources would seem to be fairly proven.

The analysis referred to on the first page of this article is appended.

U. S. DEPARTMENT OF AGRICULTURE, DIVISION OF CHEMISTRY,
Washington, D. C., July 24, 1885.

DEAR SIR: I am much obliged for the answer in regard to the samples of soil you forwarded to this Department, and now take pleasure in sending the complete analysis of the seven air-dried soils.

Judging from what we know of soils of similar origin in Europe, where vineyards have been in cultivation for over fifty years with a large yearly yield, as in the Rhine and Mediterranean regions, soils arising from the disintegration of volcanic rocks are very fine in texture, dark in color, and of great fertility. Climate, however, would have great influence on the character of the crops raised.

From an inspection of the analysis, these soils will be found to have an abundant supply of the important soil constituents, and will prove, probably, very enduring and produce a great variety of crops. In their contents of nitrogen, with the exception of 1660 and 1661, they are, however, somewhat deficient; this would indicate that ammoniacal manures would have to be applied in the future when the soil should

become unproductive by excessive cropping. The large amount of soda, as well as of potash, is remarkable. The samples have been numbered and designated as they were marked when received.

Respectfully, yours,

EDGAR RICHARDS,
Assistant Chemist.

Hon. JOSEPH JORGENSEN,
Walla Walla, W. T.

The following tables shows the analysis of air-dried soil:

Composition.	1656. Sandy soil from 5 miles northwest of Umatilla, Wash.	1657. Surface in Grant's Ranch, Sec. 24, T. 11, R. 24	1658. Two feet square in Grant's Ranch, Sec. 24, T. 11 R. 25.	1659. T. 8, R. 26.	1660. Sec. 26, T. 7, R. 26.	1661. Middle of T 8 N., R. 27, between Yakima and Colorado River.	1662. Sec. 12, T. 8, R. 28.
Moisture	0.525	1.300	1.950	1.600	0.675	1.325	1.125
Insoluble silica	78.602	62.140	65.630	63.640	71.585	67.575	64.864
Hydrated silica	5.983	17.600	16.485	16.105	11.480	13.925	11.685
Soluble silica	.275	.260	.275	.470	.370	.575	.385
Sesquioxide of iron	3.920	4.850	5.248	5.056	4.250	4.370	4.768
Alumina	4.698	6.738	6.818	5.740	5.320	5.510	6.238
Phosphoric acid	.192	.192	.224	.224	.216	.224	.224
Lime	1.338	1.433	1.329	2.099	1.418	1.428	1.449
Magnesia	.703	.659	.465	1.411	.973	.947	.991
Potash	.440	.495	.475	.545	.535	.940	.700
Soda	1.690	1.560	1.070	.830	.945	1.255	.700
Sulphuric acid	.043	.052	.060	.060	.052	.035	.129
Chlorine	.020	.015	.020	.030	.020	.007	.014
Carbonic acid	.005	.002	.116	.110	.090	.116	.030
Volatile and organic matter	2.045	3.573	3.584	2.040	1.885	1.559	2.600
Total	100.479	100.844	100.759	99.969	99.818	100.157	100.368
Nitrogen	.044	.089	.075	.069	.140	.224	.067

STOCK-RAISING.

Stock-raising, though still a profitable industry, is relatively diminishing in importance. Large areas of what was formerly stock range have been converted into grain fields. The stock-grower with his herds is constantly being forced back for range to localities remote from railroads where farming can not yet be profitably carried on. Returns under this head made by the county assessors are very incomplete, few having made any enumeration whatever. Deliveries of wool at the various railway stations indicate the number of sheep within the Territory to be about 700,000. Of the number of cattle and horses no reliable estimate can be made. The native bunch-grass, which by the natural and long-continued dryness of the atmosphere is cured as it grows is a wonderfully nutritious grass. Horses, cattle, and sheep thrive upon it summer and winter, and with the exception of unusually severe seasons require no other food. These grasses start very early in the spring, grow rapidly and mature by the first of June. There are still considerable areas of these bunch-grass grazing lands in the eastern and northeastern parts of the Territory, where stock-growing is profitably carried on. By reason of the encroachment upon the ranges heretofore referred to, many of the stock-men are securing from the Northern Pacific Railroad Company and from the Government lands near the ranges, which they inclose for pasturage and provide feed as an insurance against severe weather. Herds are being constantly improved by importation of improved strains. Many sections of the Territory have been found to be adapted to the growth of alfalfa. This will undoubtedly be the feed of the future after the disappearance of the native grasses. The various railway lines provide excellent facilities for the shipment of live stock. Good markets for a considerable por-

tion of the cattle and sheep are found at Portland, Oregon, in the Puget Sound towns in British Columbia, and in the mines of Idaho and Montana, while occasional shipments are made as far east as Chicago.

MINING.

Coal mines.

There are at present twelve developed coal mines in Washington, upon which work is being steadily prosecuted. Eleven of these are on the western and one on the eastern slope of the Cascade range. The largest coal-field lies south of the Snoqualmie River between Puget Sound and the mountains. Along the Skagit River and west of Bellingham Bay is a smaller and yet an undeveloped field. Beds of another, presumbly of a later geologic period, are found in the coast range west of Puget Sound. In the valley of Chehalis and the Skookum Chuck about Centralia extensive deposits occur.

In the Green River and Wilkeson fields bituminous coals are found. The best grades of the Wilkeson coal is made into coke. The Newcastle coal is a high-grade lignite. Cost of mining at Newcastle averages $1.10 per ton.

The only mines at present developed in the Yakima and Wenatchie district on the eastern slope are at Roslyn. The output for 1889 was 230,000 tons. These mines belong to and are worked by the Northern Pacific Coal Company. A branch road, 4 miles in length, connects Roslyn with the Northern Pacific main line. The coal consumed throughout eastern Washington is supplied chiefly from this point. It is bituminous in character, black, firm, and free burning. It is used chiefly by the Northern Pacific Railroad Company for its locomotives.

A vein of anthracite is reported to have been recently discovered on the Wenatchie, not far from North Yakima, but no authentic information regarding it has been received.

The first coal shipped from this Territory was from the Seahome mines on Bellingham Bay. Being of an inferior grade of lignite, work was suspended when other mines of better quality were developed.

Comparative statement of coal mined in first and second districts for years ending September 30, 1888 and 1889.

Name.	1888.	1889.
First district.		
	Tons.	*Tons.*
Bucoda	49,160	26,600
South Prairie	36,149	45,107
Wilkeson	2,300	6,738
Carbon Hill	203,702	195,387
Tacoma Coal and Coke Company	14,371	8,081
Total	305,682	281,913
Second district.		
Franklin	182,921	136,844
Black Diamond	186,522	105,255
Cedar Mountain	52,813	23,120
Gilman	13,528	41,482
Roslyn	234,201	230,548
Newcastle	158,134	76,122
Durham	.....	22,319
Total	828,119	635,690
Output first district	305,682	281,913
Output second district	828,119	635,690
Total output	1,133,801	917,603

The decrease in the shipments of coal is largely due to the competition of the British Columbia mines and the decline in price in San Francisco and other markets.

In the mines comprised in district No. 1, 1,967 men were employed; in district No. 2, 578, a total of 2,545. But seven fatal accidents have occurred during the year, which, according to Inspector Sullivan, is a lower percentage in proportion to the output than is shown by the statistics of any other State or Territory. This fact indicates that there has been a disposition to respect the laws regarding ventilation and operation of mines, and that the management has been careful, intelligent, and humane.

Geological.

The following article by Prof. Thomas Condon, of the Oregon State University, will be read with interest:

The oldest geological portion of Washington Territory lies along its eastern border. Here the outlying foot-hills of the Blue Mountains, the Bitter Root and the Cœur d'Alene Mountains form an irregular belt of rocks ranging in age from the Carboniferous to the Cretaceous.

During the long time of the deposition of these older rocks of the interior, the Pacific Ocean flowed unhindered over what is now eastern Washington. The Cascade range was not yet elevated above the ocean. This period was that in which the first chapter of the geological record of Washington Territory was outlined on its rocks. It was at its close that the ocean deposited a cretaceous fossil sea-beach along the foot-hills and outlying spurs of these older lands of the interior.

During this older geological period there had been progressing an agency of change along the present line of the Cascade Mountains, then 150 miles out to sea. The future Cascade range was steadily rising from the ocean bed. Its progress had been first a shoaling of the sea-bed, then a line of islands, now an elevated belt of land high enough to effectually shut out the Pacific Ocean from the interior.

As before intimated, the last visit of the ocean to the Blue Mountains left its trace in a fine fossil sea-beach that to-day marks the farewell work of the ocean there. The elevation of this new land changed the sea-shore to the western declivity of the Cascades, and it was here along the slopes of these mountains that conditions for coal deposits were renewed. The climate was moist and every way favorable for the work, and a grand coal-field, extending from what is now the line of the Upper Cowlitz to Bellingham Bay, was the result. Later these coal-beds were sunk in level and covered by other sediments which secured their preservation a permanent coal.

While this coal-field was thus storing away its acres of fossil wealth, other changes were progressing out to sea again. As before, first a shoaling of the ocean bed began to extend, then a belt of islands, and lastly the whole became elevated into what is now known in Oregon as the coast range, extending into Washington in broken links, one of which is the Olympic range, and continuing northward through the highlands of Vancouver Island and Queen Charlotte's Islands.

There resulted from this second upfolding of sea bed into mountain mass a geological depression or trough between these ranges. This in Oregon became what we now call the Willamette Valley, and its northern extension, the Cowlitz Valley, and finds its extension into Washington Territory in the depression we call the "sound country," with continuance still farther northward. After the close of the Cretaceous period, as already stated, the ocean was excluded from eastern Washington, but had still full access to the sound region.

It followed that rock making sediment in the interior, later than Cretaceous, would be fresh water, while rock making sediments west of the Cascades would continue to be marine.

Such are the marine sediments of the valley of the Cowlitz, those of the Chehalis Valley, the older rocks of the sheltered places along the coast not covered up by eruptive rocks, and lastly those places around the sound that were covered by these Tertiary waters.

In a few localities, as along the Cowlitz and Columbia, there were coal deposits during these Tertiary times, but these are lignites, inferior in worth and extent.

At the close of the Tertiary period yet another agency of change was introduced in Washington Territory, as elsewhere, in the glacial ice. In its direction and in its force it was modified in Washington and Oregon by the mountain ranges. The ice sheets of which it was composed plowed and planed gorges in the mountains, transporting the chips of its workshops out over the space now occupied by the waters of

the sound, thus strewing fragments of granite and slate over the surrounding region. The fine masses of granite found now in the streets of Tacoma and Seattle are all from these sources.

During the period following these glacial times, the land along our northern coast sank to a lower level; in other words, the waters stood relatively higher, and these waters distributed the mud and gravel of the glaciers over the spaces thus flooded, forming many of the light colored bluffs of the sound, those of like position around Shoalwater Bay and Gray's Harbor.

These waters of the Champlain period did more. They backed up the waters of the Columbia River over the Yakima Valley and the valley of Walla Walla, covering in their sediments the fossil remains of the ox, the horse, and the elephant.

After this Champlain period the surface slowly changed into the forms and conditions in which we now find them.

The gold-bearing slates, the limestones and marbles of eastern Washington belong, then, to the older periods before the Cretaceous.

The coal-bearing belt of the western slope of the Cascades, from Tenino to Bellingham Bay, belongs to the early Cretaceous.

The sand stones, so full of marine shells of later type, so abundant in the foot-hills that border the sound, the Cowlitz and the Chehalis, as also the lignite coals of the lower Cowlitz and the Columbia, belong to the Tertiary.

The drab-colored bluffs that border the sound containing bones of the elephant, the like deposits that border Shoalwater Bay and Gray's Harbor containing recent marine shells, and also like sediments in the Yakima and Walla Walla Valleys, all these are Quarternary.

Gold and silver mining.

Gold and silver are found in paying quantities in several of the counties of the Territory, notably in Kittitass, Okanogan, Douglas, and Stevens. In Okanogan County numerous veins rich in gold and silver have been located. Owing to the lack of transportation facilities development has been slow. The following extract made by the late Professor Clayton, an eminent authority on mines, will be found of interest to mining men. It relates chiefly to the Ruby district of the Okanogan mining region:

The principal mines of the district are on the southwest side of Conconnully Creek, in the high ridge locally known as "Ruby Mountain." This ridge rises abruptly from the creek to a height of 2,500 feet. Its crest extends in a southeasterly and southerly course, forming the Conconnully and Louploup Creeks.

The country rock of Ruby district is, in most part, granite, gneiss, mica, and hornblend schists, all presenting a coarsely bedded structure, uplifted, or folded to nearly vertical positions, having a general trend from northwest to southeast, and dip northeast at angles varying from 60 degrees to nearly vertical. These bedded lines of the granite schists cut through the mountains ridge on very oblique angles—say 15 to 20 degrees—the longitudinal axis of the ridge being 15 to 20 degrees more southerly than the course of the bedding planes of the country rock.

The general aspect of the country rock is coarse feldspathic granite, with alternating bands of hornblendic, and micaceous schists of coarse granite structure. No true slates are seen in the district. The formation is evidently of primordial types, probably belonging to the Archian series.

The width of this zone of gneissoid granites and schists is at least two or three miles, flanked on the southwest side by massive granites of great extent, rising into high mountain ranges to the west.

THE MINES.

The mineral belt or zone, so far as known, in Ruby district is two or three miles wide, and is confined to the granitic bedded formations above described. By far the largest of silver-bearing lodes in the district are substantially conformable to the dip and strike of the schistose rocks, having a general course nearly SE.—NW. magnetic, and dip (NE.) varying from 50 degrees to nearly vertical positions. While the general strike and dip of the bedded structures of the country rock hold their courses as stated, the local variations are very numerous, both as to strike and dip.

There are two or three lodes in the district that have a course nearly north and south, and dip east at high angles, varying from 60 to 80 degrees below the horizontal plane. These cut through the bedded formations obliquely at angles varying from 30 to 50 degrees, thus marking them distinctively as *true fissure lodes*. The most

prominent of these N.-S. fissure lodes is the Arlington lode. (I do not mean by the above that the lodes that are conformable to the dip and strike of country rock are *not* fissure lodes also. I think all the principal lodes of the district are true fissure lodes. I arrived at this conclusion from the facts not necessary to state in this connection.)

From another authority I quote the following:

The geological formation belongs to the Archian series. The country rock consists for the most part of granite, hornblendic, gneiss, and mica schists in nearly vertical positions. Their course is from northeast to southwest, with a northeast dip, at angles varying from 60 to 90 degrees. The width of this zone of coarse granitic structure is from 2 to 3 miles. The mineral belt of the district is bound to this formation of granite. Some of the silver-bearing lodes have the same dip and strike as the country rock, while others run nearly north and south, dipping east at angles varying from 60 to 80 degrees, and cutting obliquely through the bed formations at angles from 30 to 50 degrees. They are thus evidently true fissure lodes, and of these fissure lodes the most prominent is the Arlington. The Arlington lode is composed of true gangue, which carries the silver ore in disseminate grains of black sulphurets of silver, and of a brittle sulphuret closely resembling dark antimonial ruby silver. In addition to this is found galena, copper, iron, arsenical pyrites, and zincblend in small quantities, and gold.

Discoveries made in the Fourth of July, First Thought, Ruby, and other mines throughout the Okanogan country show ore of the same character as the Arlington lode. This fact forces upon us the conclusion that when subterranean forces uplifted or folded the granitic schists, cutting through the mountain ridge, there was formed an immense quantity of silver in solution, which filled the clefts and fissures, and thus formed the true fissure lodes.

The Arlington mine is at the southern end of the Ruby Hill group of mines, on the western slope of the mountains, about 300 feet below the summit. Its discovery was similar to that of a hundred other rich locations. A prospector found upon the ground a rich piece of drift. Nothing else was in sight, but he picked and shoveled away the earth until he came upon a ledge so richly mineralized as to nearly take his breath away. He associated with himself two or three others and they began to sink an incline shaft. Two years ago the mine came into possession of the Portland company, which owns it at present. The first work done by the company was to sink the development shaft to a depth of 105 feet. Work upon the shaft was then stopped and a tunnel was run in from the west to tap the incline at a depth of 210 feet. At a distance of 418 feet the ledge was struck. From the station where the tunnel cuts the ledge a drift has been run south 210 feet, and north 335 feet. The width of the lode between the foot and hanging wall is variable, but gradually widens with the depth. At the working shaft at the surface it was 6 feet wide; 60 feet below the surface it was 8 feet, and the portion now opened by the tunnel and drift is from 20 to 35 feet.

From these facts and from the physical character of the ledge we conclude that this mine, being on a true fissue lode, of great strength and permanence, with a tenure of silver much above the average of workable silver mines, will carry good ore to a depth as great as modern appliances will enable men to work it. The block of ground now entirely explored by the shaft, surface cross-cuts, and tunnel, contains millions of ounces of precious metals.

Since this report was made reduction works have been erected at the Arlington mine, which is regarded as the strongest vein in the district. It is from 3 to 9 feet wide, and assays as high as $187 in silver to the ton.

The First Thought, the Ruby, and Fourth of July are all promising properties. Numerous other locations, which will ultimately prove valuable, have been made in the Ruby district. In the Salmon River district the Tuff Nut, the Mammoth, the Lone Star, the Home Stake, the Minnehaha, and Salmon Creek are most prominently mentioned. There are also numerous good locations in the Galena district.

The Washington Central Railway, a branch from the Northern Pacific main line, running westward from Cheney, is projected, and will soon be completed to the vicinity of these mines. Under the stimulus of cheap and sufficient transportation these mines will have rapid development, and Washington will take rank among the silver-producing States.

In Stevens County the Old Dominion is still the principal ore-producer. Numerous other properties will be opened and worked when the Spokane and Northern Railway, now under construction, shall have been completed to Colville and the Columbia River.

Iron ore.

The iron ores of Washington consist of bog ore, limonite, hematite, and magnetic ore. Bog ore is found underlying the flats bordering Puget Sound; brown ore is found on the Skagit River. The largest beds of magnetic ore are found in the Cascade Mountains, from 1,200 to 1,500 feet above the water-courses. Large deposits of ore occur on the east side of the Cascade range, near the Cle-elum River, 25 miles from the Northern Pacific Railway. The ore is magnetic and assays about 66 per cent. This mine has been purchased for the Moss Bay Company—an English corporation—by Mr. Kirke. Extensive deposits are also found on the Snoqualmie River, on the line of the Seattle, Lake Shore and Eastern Railway. The ores of this mine are said to be of superior quality, and are what are termed typical steel ores.

I quote from the Tacoma Globe an interesting article relating to the coal and other mineral deposits of eastern Washington:

A gentleman who had a fine collection of minerals on exhibition in his window at Tacoma, on being interviewed by a Globe reporter, said: These minerals, embracing coal, iron, copper, lead, silver, and gold ores, come from the country immediately surrounding or directly tributary to Ellensburgh. They are not only samples of valuable products, but they are samples from mines of established worth. Kittitas County coal is shipped into Montana, Dakota, and Minnesota to grade up the interior coals mined in those localities, while the Oregon Short Line and the Oregon Railway and Navigation companies are always ready to take any surplus the Northern Pacific may have. For steam and gas purposes this coal is first class, and for domestic uses it compares well with Ohio soft. Some 50,000 acres of coal land have been explored and a much greater area of coal bearing formation is yet to be investigated. The coal mines tributary to Ellensburgh are not mythical as, although only in the first stages of developement, the coal company's pay-roll ranges from $40,000 to $60,000 per month. The iron mines tributary to Ellensburgh are of the same tangible substantial sort. English and American capital is engaged in their exploration, contracts have been entered into with the Northern Pacific company for the construction of branch lines for the development of these iron mines, and the English syndicate has only awaited our admission to statehood before beginning construction, for working of these ores, of a great iron and steel manufacturing plant the influence of which will be felt throughout the markets of the world. Equally stable are the gold placer and gold quartz mines of Kittitas County. No wild excitement attends their development, but each year a greater amount of placer and retort gold is sold in Ellensburgh as the result of the employment of more men and better working equipment.

Aside from the coal, iron, and copper interests referred to, the most important mines represented in this collection are those of the Ruby, Conconully, Lime Belt, and Wannicut Lake mining districts of Okanogan County, the youngest and one of the richest subdivisions in undeveloped natural wealth of Washington Territory. The Okanogan mineral ranges extend from the Columbia River on the South up to and across the boundary line directly into the precious-metal producing districts of British Columbia that have so long paid rich tribute to the Crown. A massive lime belt traverses the entire region. Parallel with and on either side of the lime belt are situated the milling, smelting, and concentrating ore-producing mines. Silver ores, with more or less lead, predominate. The Okanogan mines are destined to cut a good figure in the commercial prosperity, not only of central Washington, but of the entire State. Equally distant from the progressive "rustling" cities of Spokane and Ellensburgh, the trade of the Okanogan mines is naturally attractive by way of the latter city to Puget Sound. To the credit of Spokane energy and enterprise be it said, however, that continual improvement of transportation facilities between Ellensburgh and these mines is necessary to permanently secure this trade for Puget Sound. The establishment of the Ryan smelter in this city is a great stride forward in this direction. Completion of the Ellensburgh and Northeastern Railway, now under construction, will shorten the time consumed between tide-water and the mines over one-half.

The commerce resulting from development of the great diversity of mineral wealth of central Washington will ever prove a prize well worthy the best endeavors of the great business centers, and prosperity will attend the cities most vigorously therefor. Instead of being jealous of the cities situated in the mines, Ellensburgh is interested

in promoting the prosperity of each because each additional person employed in or about the mining regions is an additional consumer of the products of her surrounding area of rich agricultural lands and is in consequence an indirect patron, at least, of her mercantile houses.

The Union Iron Works of San Francisco have smelting works at Irondale, near Port Townsend. The pig-iron smelted here has been proved equal to the best produced in the United States. The material used in the construction of the U. S. cruiser *Charleston* was smelted here.

BUILDING STONE.

Granite is found in the Cascade Mountains, in the vicinity of Spokane Falls, and along Snake River, in Garfield and Whitman Counties. The Territory has a quarry of this valuable stone on the site purchased for the Hospital for the Insane at Medical Lake, in Spokane County.

A fine, greenish-gray sandstone is furnished in large quantities by the Chuckanut quarries on Bellingham Bay.

Marble has been discovered at points near the Spokane and Northern Railway, in Stevens County, and in other localities. Also a superior article of fine clay, suitable for fire-pottery and fire-brick.

Limestone.

The principal deposits of limestone occur on the islands in the San Juan Archipelago, where there are unlimited quantities of the finest limestone, averaging over 90 per cent. pure lime. These are the only limestone quarries being worked to any considerable extent. The cities of Puget Sound, Portland, Oregon, and in fact nearly the entire Pacific Northwest are supplied from these kilns. Limestone and marble are found in conjunction with iron ore in the Cascade Mountains, and have great value, not only for flux, but also for commercial purposes.

FORESTS AND THE PRODUCTION OF LUMBER.

Lumbering was the first industry developed in Washington Territory, and is still the most important. The entire western slope of the Cascade Mountains down to the Pacific Ocean is covered with a dense growth of the finest timber. The area of this timber tract is estimated at 20,000,000 acres. The Douglas fir, known in the markets as Oregon pine, constitutes the greater part of the forests—probably one-half—and is the most valuable. Trees of this variety 200 feet in height and 10 feet in diameter are not uncommon. Last year a lumberman shipped to San Francisco a stick of this timber 24 inches thick and 154 feet long. Colonel Griggs, of the St. Paul and Tacoma Lumber Company, upon examining timber lands two years ago with a view to purchasing, found a 40-acre tract which he estimated would cut 250,000 feet to the acre, counting no tree to cut less than 5,000 feet. Mr. G. P. Rogers, in the Whatcom Reveille, says: "Our land will cut 10,000,000 feet of lumber to the quarter-section—mostly fir, with a sprinkling of cedar. One fir tree is 300 feet high and 44 feet in circumference. It is 75 feet to the first limb, and at that point it is 10 feet through." The same paper adds: "Much of the timbered lands of the county will yield 12,000,000 feet to the 160 acres, and there is, at a low estimate, an average of 1,500,000 feet of lumber to the square mile throughout the entire county."

These instances, which might be multiplied indefinitely, are men-

tioned as indicating the wonderful growth of timber in the Puget Sound region. Many saw-mills of great capacity, equipped with all modern appliances, are in operation at various points along the Sound, at Gray's Harbor, and on the Columbia River. Steam-power is the chief reliance at present, and as fuel is exceedingly cheap will no doubt continue to be the power employed.

As the shores of the bays and inlets and the tributary streams are denuded of their timber, logging railroads are constructed into the forests. A number of these are already in operation.

The annual cut, which is something enormous, is shown in the tables below. The lumber market of Puget Sound is, in the language of Mr. Cyrus Walker, a member of the Puget Mill Company, "all countries and ports on the Pacific Ocean." A partial list of these ports is given below with the view of demonstrating more clearly the extent of the market, which is open to the mill men of Washington. Actual shipments are made yearly to each of these ports: Melbourne, New Caledonia, Ensenada (Mexico), Shanghai, Valpa, Hilo, Adelaide, San Diego, Honolulu, Callao, Guaymas, Iquiqui, Autofogasta, San Francisco, Cadera, West Coast, San Pedro, Sydney, Montevideo, Sandwich Islands, Rio de Janeiro, Kohalui, Townsville, Brisbane, Hong-Kong, Mollendo, Falmouth, Taku, Suava Fuga Islands, Broken Bay, Coquimbo.

As nearly as can be ascertained, the number of saw-mills in Washington is 181; shingle-mills, 71; planing-mills, 162, and logging railroads, 22. Many of the saw-mills are of great capacity.

My predecessors have spoken of the destructive forest fires that annually sweep over the timber region. No remedy has yet been devised. It is hoped the State legislature, soon to convene, will, by the enactment of stringent laws, be able in some degree to prevent these fires.

Annual lumber cut for the year ending June 30, 1889.

	Feet.
Puget Sound Mills	540,000,000
Gray's Harbor Mills	100,000,000
Shoal Water Bay Mills	40,000,000
Columbia River Mills, Washington side	75,000,000
Total cut for export	755,000,000

There are many mills in the interior, the product of which is shipped by rail and consumed locally, from which no statistics have been received. Along the line of the Northern Pacific Railroad, between Tacoma and the Columbia River, there are sixteen mills with an aggregate daily capacity of 400,000 feet. On this line there are also twenty shingle mills with a daily capacity of 900,000. Cedar shingles in considerable quantities are shipped to the States of the Mississippi valley. These shingles are in popular demand and the volume of the business is steadily growing.

The extent of the lumber trade of the Northwest, the vast capital, the shipping, and the number of men employed in carrying it on, should secure for it the attention and fostering care of the General Government.

LABOR SUPPLY.

No statistics are obtainable bearing directly on this subject. Information derived from various sources indicates that there is throughout the Territory a demand for all kinds of labor. The prices paid are somewhat higher than those prevailing in the States east of the Rocky

Mountains. The business portions of Seattle, Ellensburgh, and Spokane Falls were destroyed by fire during the summer of the present year. The rebuilding of these cities has created an unusual demand for mechanical and other labor.

The average rate of wages paid at present is as follows:

Longshoremen	per day		$3.00
Bricklayers	do		5.00
House painters	do		2.50
Carpenters	do	$3.00 to	4.00
Machinists	do	3.00 to	4.00
Blacksmiths	do		4.00
General laborers	do		2.00
Farm laborers (board included)	do		1.25
Mill hands	per month	50.00 to	125.00

LABOR IN LUMBER CAMPS.

Foreman	per month, with board	100.00 to	150.00
Teamsters	do	100.00 to	125.00
Choppers	do	75.00 to	85.00
Skidders and swampers	do	50.00 to	65.00
Hook tender	do	65.00 to	85.00
Sawyers	do	65.00 to	90.00
Cooks	do	50.00 to	65.00

It can readily be seen by the foregoing table that the wage-worker receives fully 50 per cent. more for his labor here than he receives for the same amount of skill in the Middle States. The above schedule is, if anything, placed at a low figure.

There is still an active demand for labor required in railroad construction. A few years since the Chinese were chiefly relied upon for railroad grading. The rigid enforcement of the Chinese restriction act has diminished the supply of these laborers and in their stead Caucasians are employed. Chinese are still the main reliance for house servants, for laundries, for market gardening, and for work in the salmon canneries. Hop picking is done mainly by Indians. They congregate in great numbers about the hop fields during the picking season, coming from British Columbia and from the various reservations throughout the Territory. At the Roslyn coal mines the experiment of employing negro labor is being tried by the Northern Pacific Coal Company, so far with satisfactory results.

There is a constant demand for good house servants. Girls who are willing to engage in domestic service find ready employment at highly remunerative wages.

In the lumber camps, in the coal mines, in the fisheries of the Puget Sound region, as well as in the cities that are springing up so rapidly, and in the great grain fields of the interior, there is abundant opportunity for all who are willing to work.

MANUFACTURES.

Aside from the manufacture of lumber and flour, Washington has little as yet to boast of in the way of manufactures. No State, however, is more abundantly supplied with water power, and no other has greater resources in raw material. The remoteness of Washington from the manufacturing centers, the long and expensive haul of our raw material to distant markets and its return in manufactured form, constitute a protection that should encourage and stimulate the establishing of local manufactories of every description.

Fine water-power is available on many of the streams flowing down from the Cascade range and emptying into Puget Sound, notably on the Snoqualmie, on Green River, and on the Des Chutes. At the mouth of the latter stream, near Olympia, there is available a 6,000 horse-power. In the east the Kittitass, the Yakima, the Walla Walla, Mill Creek, the Touchet, the Palouse all have rapid fall, and afford water-power every few miles along their entire length. The falls of the Spokane engender a power available for industrial purposes estimated by competent authority at 36,000 horse.

CONDITION OF THE INDIANS.

The total Indian population of the Territory, as near as can be ascertained, is about 10,000. The majority of these Indians live on reservations and are gradually adopting the habits of the whites. The total acreage of lands reserved for the tribes within the Territory is 4,086,148, or about 400 acres per capita. The reservations usually comprise the most fertile regions in their respective localities. The Yakima Reservation contains 800,000 acres. It is believed the allotment of these lands in severalty to the Indians would result beneficially to them and remove the cause of much discontent among the whites.

I am indebted to Edwin Eells, esq., of the Puyallup Agency, for the following account of the Indians under his care:

The Indians on the Nisqually, Chehalis, Puyallup, Skokomish, and Squaxon reservations having received patents for their allotments are citizens, having been made so by the provision of the Daniels' severalty bill. They vote, pay taxes on their personal property, are self-supporting, and civilized. Their land is inalienable until this Territory becomes a State, when the legislature, with the consent of Congress, can remove the restrictions and it becomes a title in fee simple. They are generally industrious, quiet, peaceable, and law-abiding, and make but little trouble.

Although they are citizens, the Government still continues to provide an agent for them, and to exercise a certain kind of jurisdiction over them, and to assist them to some extent. Their children are still educated at the expense of the Government, which also pays the expenses of small courts, composed of their own members, to regulate their intercourse with each other.

The Indians living on the Quinaielt Reservation are not citizens, their land never having been allotted. This reservation has never been subdivided, and the expense of surveying it into allotments would be very great compared with the proportion that is available for agricultural purposes. If the land along the river bottom could be surveyed, a part of it might be occupied, but most of the uplands are nearly worthless, and the undergrowth is so thick and the land so mountainous that it would cost a great deal to survey that part of it.

Besides the Indians living on the reservation, there are nearly half as many more that are not living on any reservation, but are still connected with the agency. These are scattered among the white settlements, some of them having homesteads, some having acquired land by purchase, some living near saw-mills, where they work, and others moving about, fishing, and living from hand to mouth.

According to the present laws the agent has no means of enforcing any authority over any Indians off the reservations, and as a large proportion of those in this agency are citizens it is easily seen that the authority of the agent is quite limited.

The citizen Indians make most of their living either on their farms or in other civilized pursuits. The Quinaielt Indians get most of their living by hunting and fishing. They get their money by picking hops and fishing for the canneries, which is very profitable.

Aside from the tendency of the Indians to drink, all under my charge are generally quiet and orderly. But as a very large proportion of them are very fond of liquor, and drink whenever they have an opportunity, situated as I am, it is not possible to do much to prevent this. By the aid of the police force and the courts of Indian offenses, it is measurably restrained on the reservations, although it is doubtful to what extent our authority extends over American citizens, even if on a reservation, but it is very much kept in check there. Off the reservations, however, it is impossible to do anything effectively to check it.

The lands of the Puyallup Reservation are immensely valuable. This Territory will soon be a State. Public opinion will press through the legislature at the earliest

possible moment, a bill removing the restrictions to the sale of their lands. In my judgment a part of these lands should be sold; but I do think it very desirable that a part of the reservation containing the homes of the Indians should still be protected for a term of years. Avaricious and unprincipled men would very soon crowd them all out if they had the opportunity. I think, however, that the laws should be so changed that the Indians should be allowed to sell even what is protected to each other, as the titles by descent are not satisfactory and are getting very much mixed. I think it would be advisable, too, that they should be allowed to rent to white men a part of this land under suitable restrictions.

There is not the same necessity for the Indians on the other reservations to be allowed to sell their lands, and I should not recommend it; but I do think that even on those reservations they should be allowed to sell to each other, so as to avoid this mixture of title resulting from the descent by inheritance.

SCHOOLS.

There are five schools belonging to this agency. The largest is on the Puyallup Reservation, and averages about eighty scholars. There have been three different head teachers during the year in charge, and the efficiency of the school has suffered in consequence. There has been a large and commodious boarding-house and school-rooms combined erected at that place during the year, which is now ready for occupancy as soon as the old buildings can be moved away. This will afford accommodations for half as many more scholars, and I hope to have a good school here soon.

The Chehalis and Skokomish schools are both on the reservations of the same name and both together have nearly as many scholars as the Puyallup school has. Their success has been fair.

The Quinaielt and Jamestown schools are both together the size of one of the latter schools, so that altogether there have been about two hundred scholars in attendance. They hardly kept up to the standard of previous years, but have done good work. Two causes operate against us. First, the Indians are slowly diminishing, and, second, the authority of the agent and his power to compel the attendance of the children has been curtailed. The schools are all supported by the Government and are all industrial boarding-schools, except the Jamestown school, which, although a day school, still has rations issued to the scholars.

The usual formula followed is for the scholars to rise soon after 5, do their morning chores, and prepare for breakfast by a little after 6. The morning work is then all done up, so that they can go into school by 8 o'clock, when study hours are till 12. The afternoons are devoted to industrial pursuits, the scholars being detailed to work under the different employés, as convenience and necessity dictates. After supper there is a free and easy study hour for the children in which there are no recitations, but singing and other exercises are interspersed, as is convenient.

The most serious matter to be considered with reference to the Indians and their children is their want of health. All are more or less diseased, and their systems are so weakened that they easily succumb to the attacks of any acute diseases that happen to prevail among them.

Two missionaries have labored among them during the year with fair success.

I omitted to say that owing to the annual pilgrimage of the Indians in this country to the hop-fields in September, the annual vacation is during that month with us, instead of in July and August, as with others. Besides, the crops have to be gathered and the weeding done by the scholars, and if there were no school during those months that work would be seriously impeded. There is also a short vacation of a week or ten days at the end of each quarter.

Our Indians seem to be very much like white people. They have not the sterling qualities, however, which will keep them up, but easily slide back to their former condition. Like all lower races they like their pleasure and willingly barter substantial benefits for fleeting pleasures.

W. H. Talbott, esq., of the Tulalip Agency, reports as follows:

A complete census for the fiscal year ending June 30, 1889, shows a population of 1,233 souls, divided as follows: Tulalip Reservation, 444; Lummi Reservation, 310; Snohomish Reservation, 229; Madison Reservation, 147, and Muckleshoot Reservation, 103; total, 1,233. Statistics for the fiscal year just closed show the following crops: Oats, 29,151 bushels; wheat, 90 bushels; onions, 6,000 bushels; potatoes, 11,225 bushels; turnips, 2,175 bushels; wool, 500 pounds; hops, 3 tons; hay, 769 tons. The Indians are nearly self-supporting, and receive very little assistance from the Government. We have an excellent school, which is supported by the Government and run under contract with the Catholic Indian Bureau at Washington, and under the immediate control of the Sisters of Charity, with a Catholic priest as superintendent. This school is in a flourishing condition, and furnishes ample accommoda-

tions for at least one hundred and fifty pupils. Average attendance throughout the year about one hundred and thirty. Nearly all the Indians have received their allotments, and are very generally clearing and cultivating their severalties. A special agent will be sent by the Department in the spring to complete the work and allot land to those not already holding patents. The sanitary condition of our Indians is not encouraging; there has been a slight decrease since last year, and we see them dying off gradually. This, if nothing else, will settle the Indian question in a few years. The monthly health report during the year continued about the same, with the exception of a few weeks during the small-pox epidemic last spring.

The greatest drawback to our Indians is whisky, and they can obtain it anywhere on the Sound. It has been a great source of annoyance to me, and I am sure causes more trouble than all other nuisances combined. All things considered, our Indians are doing very well and seem happy and contented.

Hal J. Cole, esq., of the Colville Agency, writes:

The tribes under my supervision in this Territory, occupying the reservations, are the Colvilles, Upper and Lower Spokanes, Lakes, Okanogans, San Puells, Joseph's band of Nez Percés, Moses' band of Columbias and Calispels.

The Upper Spokanes, known as "Louis band," are not fond of work, but prefer loafing around the city of Spokane Falls. Something should be done with these Indians. My idea would be to have them placed on some reservation and not allow them to leave there, and by that means they might be weaned from their bad habits and try to do something which would be more creditable to them.

The Calispel Indians are gradually being crowded out of the Calispel Valley by the whites, and some action will have to be taken by the Government in the near future or they will cause trouble, as they have threatened the whites. Troops from Fort Spokane and Fort Sherman were stationed in the valley during the month of August to prevent trouble.

The Lakes, Okanogans, and Colvilles are all getting along very well farming. Some of them have large farms, principally engaged in stock raising, having large herds. The Lower Spokanes, under Chief Whestleposum (Lot), is a very progressive tribe and doing well, trying to imitate the white men in civilized pursuits.

The Okanogans, under Chief Tonasket, occupying the country between Osooyoos Lake and the Columbia River are all engaged in farming and stock-raising, for which they have unsurpassed grazing grounds.

The Columbias, under Chief Moses, and the Nez Percés, under Chief Joseph, are occupying the country together on the Nespilem River. These people are industrious and intelligent, and have large bands of horses and cattle.

The Skolaskins band, of San Puells, occupying the country around Whitestone, are under Skolaskins's leadership. They are not a very progressive people. They farm on a small scale only. With a good man at the reins of the Government they could be self-supporting. They have good farming land if properly managed.

Captain Thomas Priestley, of the Yakima Agency, reports as follows:

There are supposed to be over 3,000 Indians of the Yakima Nation who are entitled to the rights of the reserve under the treaty of June 9, 1855, but at present, and for several years past, the number residing upon and making the reservation their headquarters is only about 1,700 of all ages. The remainder, I understand, are scattered throughout the adjoining States and Territories, some of them leading vagrant lives within the confines of white settlements, but by far the greater part of them are no doubt in the wilder regions of the country, where they are subject to less restraint than if upon the reservation.

Most of those upon the reserve are self-supporting and progressive. Many have extensive ranches inclosed and raise large quantities of horses, cattle, hay, and grain, besides as fine vegetables and fruits as any in the Yakima Valley. A few old and disabled, of both sexes, need and receive aid from the Government, but the number of this class, it is hoped, will diminish as the general prosperity and intelligence grows, when the young and able-bodied will be better prepared and more disposed to care for their aged parents and relatives.

Although the Government provides, on the reservation, school accommodations with a competent corps of teachers, furnishing books, clothing, subsistence, etc., all free, it is impossible to get one-half of the children of school age (about 275) to attend the school. This is almost entirely because of the adverse influence of the parents, who can not be convinced that it is better for their children to be reared and trained in the ways of civilization than in the ignorance and barbarism of their parents. The children who attend school, as a whole, are quick to learn, manifesting a capacity equal to the average of white children.

The present season the crops on the reservation are the lightest known for many

years, owing to the meager snow and rain falls last winter and spring, and the consequent lack of natural moisture in the ground and scarcity of water in the streams from which irrigation is secured. Not to exceed one-third of the usual products are raised, and instead of having wheat, oats, hay, vegetables, and fruit to sell, many have insufficient for their own use, and to feed their stock through the winter. Pasturage was never so scarce, and inevitably hundreds of horses and cattle must die of starvation before spring, unless the coming winter is exceptionably favorable.

The settling up of lands bordering on the reservation by white people, and the increasing demand for pasturage for the multiplying herds of sheep and cattle, brings the question of boundary lines into greater prominence annually, and soon some positive steps must be taken for its definite settlement. The Indian police are instructed to keep all stock, except that of Indians, off the reservation, and in the discharge of this duty necessarily come in conflict with stock-owners and herders, and disputes as to whether stock is on the reserve or not are frequent, the usual result being that the white man's stock feeds upon the Indian's grass without proper consideration. A feeling that his rights are not respected by his white neighbor is thus strengthened in the Indian and natural antipathy is increased.

A further grievance is the disregard, or at least serious abridgment, of the fishing rights of the Indians, secured to them by their treaty. On the Columbia River they were guarantied certain fishing rights which they do not enjoy, and to secure which tedious litigation is now in progress. They understand that under the treaty they have the exclusive right to fish in the streams within and bordering upon the reservation, and believe that therein they may take fish in such manner, at such times, and by such means as best suit their purposes and convenience. Yet, by the operation of Territorial laws, they are confined to the use of traps and nets of specific dimensions, unadapted to the streams from which the fish are to be taken. In consequence they are deprived of their legitimate food supply. The regulation traps will take only the larger fish, such as are not found in the waters of the reservation, but only in the streams below where white men monopolize the business. The laws which thus operate to make the streams of the Indians mere spawning ground for the white man, they can see no justice in, and regard it as a violation of their treaty rights.

Stimulated by the Government providing a good saw-mill on the reservation and sawing without charge all logs delivered at the mill by the Indians, many of the more enterprising have fenced large tracts of land and erected houses, stables, etc., making for themselves good ranches. Several of these are extensive, embracing 1,000 to 2,000 acres. These improvements and the number of fenced tracts are increasing annually. Last year 1,500,000 feet of lumber was sawed and used in this way. There being no allotments of lands, the fencing is in extent and along lines determined by the fencer. In this way the most desirable tracts are being rapidly taken, and the range for stock of other Indians constantly decreasing in extent and value. This fact tends to a desire for allotment, and will help more than any abstract argument to bring the Indians to see the advantage of taking in severalty. Estimating the total number, men, women, and children, having rights on the reservation, and who might appear to claim under an allotment, to be 3,000, there would be 160 acres of arable land for each, and a surplus of 350,000 acres of stock range and pine lands, mostly mountain spurs.

Of the Indians at the Neah Bay Agency W. L. Powell, esq., writes:

I have under my charge two tribes of Indians, the Makahs and Quillehutes, located from Neah Bay around Cape Flattery and down the Pacific coast 35 miles to Lapurt, the point where the Quillehutes reside. The number of Makahs is 232 males and 252 females, making a total of 484. The Quillehutes number 125 males and 127 females, making a total of 252. The females predominate in each tribe. These Indians are decreasing slowly in number.

The Government has an industrial boarding-school at Neah Bay, where the children are taught the usual English branches, also blacksmithing, carpentry, and farming for the boys, while the girls are taught cooking, sewing, house-cleaning, etc. They are clothed and fed by the Government, for which I can not truly say they are thankful. The Quillehutes have a day school at Lapurt. These Indians are rapidly becoming civilized, being slowly compelled to give up their superstitious rites, etc.

These Indians, with the exception of hop-picking, make their living entirely from the water. They are expert at sealing, whaling, and all kinds of fishing. They are not an agricultural people, and I do not think they ever will become so.

EDUCATION.

The schools of Washington Territory have long been a source of pride to its citizens. Liberal provision has always been made for their support. The tax-levy for school purposes in 1889 was $329,081.39. In

some of the eastern counties during recent years school lands have been leased by the county authorities. These leases were subsequently ratified by act of Congress. Considerable revenue has been derived from this source which is not included in the above. The larger towns are supplied with commodious school buildings constructed on approved modern plans. The future of the school system is most promising. The State of Washington is assured of a magnificent school fund. By the terms of the enabling act, title to sections 16 and 36 of each township within the Territory, heretofore reserved as school lands, is confirmed to the State, with a provision that they shall not be sold at less than $10 per acre. These sections constitute one-eighteenth of the entire area of the State, or 2,488,675 acres, and deducting for Indian reservations and waste lands, there will still remain, in round numbers, 2,000,000 acres. This if sold at $10 per acre will provide a fund of $20,000,000. A large proportion of this land could not at present be sold for this figure. In many localities, however, sections can even now be sold at from $20 to $30 per acre. Spokane Falls and Tacoma has each within or adjacent to its city limits an entire section which is exceedingly valuable. In addition to the above, 5 per cent. of the proceeds of the sales of public lands lying within the State goes to the permanent school fund. For the maintenance of a scientific school there are appropriated 100,000 acres; for State, charitable, educational, penal, and reformatory institutions, 200,000 acres. The constitution recently ratified by the people protects the school fund thus provided for by declaring that the lands shall never be disposed of unless the full market value is secured therefor. The school fund is also made permanent and irreducible, and can be invested only in national, State, county, or municipal bonds.

The annexed table is condensed from the report of Hon. J. H. Morgan, superintendent of public instruction for the Territory.

Total amount raised for school purposes:	
1887	$491,480
1888	505,885
1889	892,752
Amount paid for teachers' wages:	
1887	213,633
1888	239,588
1889	314,594
Amount paid for rent and repairs, 1889	21,123
Amount paid for school furniture, 1889	27,034
Amount paid for school-house sites, 1889	12,058
Amount paid for school buildings, 1889	233,808
Total amount for all purposes	655,642
Balance on hand	$220,887
Estimated value of school-houses	$1,094,462
Number of school-houses in the Territory	1,044
Number of school districts maintaining schools	1,066
Total number of districts	1,161
Average number of months taught	4⅞
Number of graded schools in the Territory	49
Number of children enrolled:	
In 1887	32,172
In 1888	38,673
In 1889	46,751
Number of children of school age:	
In 1887	47,431
In 1888	59,833
In 1889	72,723
Number of children in private schools, 1889	2,529
Number of children under 5 years of age, 1889	26,448

Total number of children under 21 years of age.	
1887	65,557
1888	83,008
1889	97,416
Number of male teachers employed, 1889	536
Number of female teachers employed, 1889	813
Average monthly salary:	
Males, 1889	$47.66
Females, 1889	$39.67

Mr. Morgan writes:

Much progress has been made in our schools during the past year. More money has been spent in building and repairing houses, providing apparatus and furniture, and paying teachers than ever before. More institutes have been held with better attendance, more graded schools have been established, more schools have been furnished with unabridged dictionaries, and teachers have obtained higher-grade certificates. It is with much gratification that I find the evidence that justifies me in reporting notable progress.

The following is a partial list of the private schools in the Territory: Whitman College, Walla Walla; Annie Wright Seminary, Tacoma; Washington College, Tacoma; Waitsburgh Academy, Waitsburgh; Olympia Collegiate Institute, Olympia; Northwest Normal School, Lynden; Spokane Business College, Spokane Falls; Empire Business College, Walla Walla; Cheney Academy, Cheney; Puget Sound Academy, Coupeville; Benj. F. Cheney Academy, Cheney; Spokane College, Spokane Falls; Colfax College, Colfax; St. Paul's School, Walla Walla; Tacoma Business College, Tacoma; Washington Seminary, Huntsville, and the Ellensburgh Academy, Ellensburgh. The sisters have schools at Spokane Falls, Sprague, Walla Walla, North Yakima, Olympia, Tacoma, Seattle, Pomeroy, and Vancouver.

TERRITORIAL UNIVERSITY.

The University of Washington was located in the city of Seattle and opened for students in 1862. It is finely situated on a campus of 10 acres in the heart of the city. The original grant of two townships made by Congress has been disposed of so that the institution is now dependent for support upon tuition fees and appropriations by the legislature. Heretofore these have been insufficient to keep the buildings and grounds in proper order and supply the various departments with all needed apparatus. But it is hoped the next assembly will make such provision for the university that it shall maintain a high standing among the institutions for learning in the new State.

The present board of regents consists of five members, who are actively interested in their charge. The faculty deserve much credit for their good work done under many difficulties. There are four courses of study open to students—the classical, scientific, normal, and business course. During the past year 217 students were in attendance.

FISHERIES.

Salmon continues to be the staple product of the fisheries. The pack for the year 1889, valued at $1,332,500, was distributed as follows:

Canneries.	Cases.
Columbia River, Washington side	130,000
Shoalwater Bay	25,000
Gray's Harbor	30,000
Puget Sound	20,000
Total	205,000

The annual catch of this magnificent food fish appears to be diminishing in waters which have been fished for any considerable period. A hatchery has been established on the Clackamas, a branch of the Willamette, by the State of Oregon. Laws have also been enacted by that State limiting the fishing season, and otherwise protecting this industry. Corresponding laws will no doubt be passed by our State legislature, and an effort made to increase and perpetuate this large food supply of the Columbia and other Washington rivers.

HALIBUT.

Halibut in considerable quantities are taken off Cape Flattery in this Territory, and abound along the whole coast from that point to the Aleutian Islands. Several vessels are engaged in the trade. Better and cheaper transportation facilities will give to this industry indefinite expansion, there being, apparently, no limit to the number of fish that may be taken, or to the market therefor when cheap, rapid, and convenient transportation is provided. This fish is salted and dried, and shipped both in this form and fresh, packed in ice in refrigerator cars. An interesting article from the pen of Hon. James G. Swan, of Port Townsend, a well recognized authority on this subject, appears below:

The fish which constitute the most important product in a commercial point of view are the salmon, which are taken during the regular spawning seasons and are canned and also salted in barrels and smoked, and the halibut, cod, and other deep-sea fish, which are taken in limited quantities in Fuca Strait at certain seasons, and in great quantities in the waters of the Pacific Ocean and Behring Sea from Cape Flattery to the Arctic Ocean.

Inasmuch as statistics concerning the salmon pack can be obtained with accuracy from the canneries, I will confine my remarks to the salt water products of the Strait of Fuca and the North Pacific Ocean.

On the 20th of October, 1880, I submitted to Prof. Spencer F. Baird, at that time U. S. Fish Commissioner, reports of the halibut and other food fish products of Puget Sound, particularly at Cape Flattery. At that time there were no organized fisheries by white people, the principal amount of halibut being taken by the Makah Indians of Cape Flattery, whose principal village and the agency of the reservation is at Neah Bay, where I was stationed at that time as an inspector of customs. The total number of Indians does not vary much at the present time from the number then residing on the reservation, and I will quote from that report as follows:

"Of the amount of halibut taken by the Indians of Cape Flattery, I can arrive at only a very rough estimate. I tried at the commencement of the season to keep an account of each day's catch, but when the Indians removed to their summer residences it was simply impossible, without incurring an expense for transportation and time which I did not feel justified in assuming. In conversation with several of the most intelligent of the chiefs, they informed me that each family lays in from three hundred to five hundred halibut of the sizes brought from the banks. These halibut when fresh will average 35 pounds each, but when dried they lose at least 75 per cent. of their weight. There were, at that time, one hundred and fifty-four heads of families in the Makah tribe, and taking the smallest estimate of three hundred halibut of 35 pounds each to every family, is 10,300 pounds of fresh halibut, or 2,575 pounds of dry halibut, a total for the whole tribe of 1,586,200 pounds fresh halibut, or 396,555 pounds dry fish, for the annual production, the greater portion of which is used by the tribe for food, although a large amount is yearly sold or traded to other Indians."

The halibut are taken in the largest numbers on banks which lie northwest from Cape Flattery, 15 miles distant, and they are most numerous during the summer months, at which time the Indians procure and dry enough for their winter supply, although fish can be taken by them every day in the year when the weather is suitable for canoes to go out on the strait or ocean. Later in the season and during the winter months halibut are taken up the Strait of Fuca and in the channels between the islands of the San Juan Archipelago. These are of much larger size, and average from 75 to 100 pounds. The largest specimen I have seen was taken in Port Townsend Bay and weighed 250 pounds; but these very large ones are not common, nor are they as nice eating as the small sizes, which are termed by Gloucester fishermen "chicken halibut."

Several of the Gloucester fishermen have come out here to engage in developing the fisheries of the North Pacific Ocean, and find no difficulty in procuring cargoes on the banks along the Alaskan coast, but the excessive rates for transportation charged by the transcontinental railroads have prevented a rapid growth of this industry. It has been announced by the Union Pacific Railroad Company that when their arrangements are completed they intend to run refrigerator-cars direct to Port Townsend, and will take fresh fish in ice through on the long haul at such greatly reduced rates that the fishermen can get their products to eastern markets and sell them at remunerative rates. As soon as this arrangement can be effected other industries will be brought to Puget Sound, particularly the whaling business, as the oil and bone which are now all taken to San Francisco to be forwarded to eastern markets can find a rapid transit by the Union Pacific or Northern Pacific roads to New York, Boston, or London, and save 600 miles of water carriage between the Strait of Fuca and San Francisco.

The cod fishery, which is now all done by San Francisco parties, and the entire catch transported there and cured, will eventually center on Puget Sound as naturally as the cod fishery of the Atlantic centers at Gloucester. It is an admitted fact that the sooner fish can be cured after they are caught the better the product, and fish caught in northern waters should be cured in northern latitudes. The cod fish of Newfoundland and Nova Scotia, when cured at those places, are far superior to what they would be if transported in bulk to Norfolk to be cured and dried; and the cod of the Shumagin Islands could be better cured on Puget Sound than San Francisco Bay.

At the last session of the legislature of Washington Territory a bill was introduced to create a fish commission, to be composed of three commissioners, one of whom should reside in the interior and have special charge of the propagation of fish, one to reside at Astoria to look after the salmon interests of the Lower Columbia, and the third to reside on Puget Sound to look after the deep-sea fisheries. These commissioners were required to make annual statistical reports to the secretary of the Territory, who was directed to make annual reports to the governor for transmission to the legislature. The bill failed to become a law, which is to be regretted, as we now see the importance of such a commission, and particularly at the present time, when such reports would be of great value to the Eleventh Census of the United States, to be taken in 1890. It is to be hoped that the legislature of our new State will appreciate the importance of fostering and encouraging our fisheries, and by wise enactments provide for the development of this valuable industry.

Besides the halibut, cod, and salmon, there are other valuable food fishes whose excellence is beginning to be appreciated. One of these, the *Ophiodon elongatus*, or cultas cod as it is called at Cape Flattery, and in San Francisco is known as Green or Buffalo cod, resembling the true cod in its outward marking, but different in the fins and other particulars. This fish, which attains a weight of from 20 to 30 pounds, is nutritious and palatable, and is found in considerable quantities around Cape Flattery and in Fuca Strait. During the present year Capt. Charles Johnstone, of the Gloucester Fish Company, at Port Townsend, has salted and dried a lot of this fish, which sells readily and gives good satisfaction. Captain Johnstone thinks that when the excellence of this fish is better known the demand for it will steadily increase.

The best and most delicious of all the ocean fish taken in Puget Sound is the black cod, *Anaplopoma fimbria*. At present this fish is taken only in limited quantities, as it is found in very deep water. The largest are taken in 80 fathoms in Fuca Strait, but around Queen Charlotte Islands, British Columbia, where they abound, they are caught in 210 fathoms depth. The skilled fishermen from Newfoundland have no difficulty in fishing at that depth, but the fishermen of Puget Sound, who find other fish plenty at 50 fathoms and under, do not care to fish in the profound depth of 200 fathoms. Those who have tasted of this fish pronounce it superior to all others. The black cod averages 16 pounds. Some have been taken which weighed 40 pounds, but this size is not common. The outside of this fish is dark sepia brown, approaching black on the upper portion, and grayish belly. The flesh is white and very fat; not the oily fat of the mackerel, salmon, or herring, but a product like soft lard, which, when fresh, is very palatable. The fat permeates every part of the tissue, and imparts a delicious flavor to the fish which is much prized by epicures. These fish are called "skid" by the Indians of Queen Charlotte Islands, and "beshow" by the Makah Indians of Cape Flattery. Each tribe or band along the coast has a local name for these fish. They were first called black cod by the white men at Neah Bay. But this fish does not belong to the *Gadus*, or true cod family, nor is it likely any eastern fish. It somewhat resembles the pollock of Europe, and was named by Dr. Bean *Pollachius Chalcogramus*, or Alaska pollock. Professor Jordan, however, discovered that it was neither a pollock nor a true cod, and he gave it its present scientific name, *Anaplopoma fimbria*.

A fishery has been established at Queen Charlotte Islands, British Columbia, by Victoria parties, and the product of their catch finds ready sale. When we have the railroad facilities for transporting our fresh fish in refrigerator-cars direct to East-

ern markets it will not be long until our own fishermen will find some means of securing the black cod, which are found in all the deep waters of Fuca Strait, Admiralty Inlet, and Hood's Canal. Occasionally they are taken in all these places, but no regular, systematic fishery has as yet been established for the capture of this delicious fish, which, either fresh, salted, or smoked, is most palatable and nutritious food.

Besides the larger varieties which I have mentioned there are some fourteen varieties of *Sebastichthys*, which, under the various names of rock cod, red fish, grouper, bass, perch, etc., are taken in great quantities at Cape Flattery and in Fuca Strait and other portions of Puget Sound. To these may be added flounders of several varieties, kelp fish, smelt, herring, eulachon, a candle fish, and other kind, which, although excellent food fish, are not taken in sufficient quantities to be considered of much commercial value. Among these may be named the eastern shad, which was introduced into the California waters by the U. S. Fish Commission several years ago, and are now beginning to be taken in limited numbers with the spring run of salmon in the Columbia River and in the schools of herring on Puget Sound. As population increases, making a home demand for fish food, and when means of cheap and speedy transportation to distant markets is furnished, our fisheries will steadily develop, and prove eventually to be one of the most important and profitable industries of the new State of Washington.

BANKS.

There are in the Territory twenty-six national and forty-two private banks.

National Banks of the Territory.

Name.	Capital.	Name.	Capital.
First National Bank of Colfax	$100,000	Spokane National Bank of Spokane Falls	$60,000
Second National Bank of Colfax	60,000	Traders' National Bank of Spokane Falls	75,000
Columbia National Bank of Dayton	60,000	First National Bank of Sprague	50,000
Ellensburgh National Bank of Ellensburgh	50,000	Citizens' National Bank of Tacoma	100,000
First National Bank of North Yakima	65,000	Merchants' National Bank of Tacoma	100,000
Yakima National Bank of North Yakima	65,000	National Bank of Commerce of Tacoma	200,000
First National Bank of Olympia	75,000	Pacific National Bank of Tacoma	100,000
First National Bank of Pomeroy	50,000	Tacoma National Bank of Tacoma	100,000
First National Bank of Port Townsend	50,000	First National Bank of Vancouver	50,000
National Bank of Oakesdale	50,000	Baker-Boyer National Bank of Walla Walla	150,000
First National Bank of Seattle	150,000	First National Bank of Walla Walla	100,000
Merchants' National Bank of Seattle	100,000		
Puget Sound National Bank of Seattle	50,000		
First National Bank of Snohomish	40,000	Total capital	2,120,000
First National Bank of Spokane Falls	70,000		

Territorial and private banks.

Name.	Capital.	Loans.	Deposits.
Ben E. Snipes & Co., of Ellensburgh	$100,000	$202,470	$156,413
Chehalis Bank, N. B. Coffman estate	----------	90,000	100,000
Bank of Colfax	----------	100,000	80,000
Bank of Farmington	50,000	106,850	61,413
Skagit County Bank, of La Conner	50,000	----------	----------
Skagit River of Mount Vernon	25,000	18,449	----------
Harford & Sons, of Pataha City	----------	30,000	----------
Merchants' Bank, of Port Townsend	75,000	188,253	176,187
Bank of Pullman	25,000	48,947	28,725
Bank of Commerce of Seattle	100,000	----------	----------
Dexter, Horton & Co., of Seattle	200,000	1,202,100	1,987,357
Guarantee Loan and Trust Company of Seattle	50,000	128,021	112,112
Seattle Safe Deposit and Trust Company, Seattle	100,000	----------	----------
Washington Savings Bank of Seattle	50,000	65,276	37,179
Bank of Spokane Falls	75,000	----------	----------
Oakland Land, Loan, and Trust Company, Tacoma	182,200	173,849	27,271
Security Bank of Tacoma	60,000	----------	----------
Tacoma Building and Savings Association, Tacoma	75,000	54,318	10,120
Tacoma Trust and Savings Bank, Tacoma	30,000	48,868	43,630
West Coast Fire and Marine Bank, Tacoma	180,000	182,009	73,385
Traders' Bank of Tacoma	100,000	289,970	355,595
Farmers' Savings-Bank of Walla Walla	100,000	----------	----------
Walla Walla Savings-Bank Walla Walla	125,000	----------	----------
Washington Loan and Trust Company, Walla Walla	200,000	----------	----------
Commercial Bank of Vancouver	30,000	61,273	48,928

List of banking institutions of which no statistics have been obtained.

Bank of Aberdeen.
Rodman & Eshelman, of Goldendale.
C. N. Byles Company, of Montesano.
Bank of Palouse City.
Clapp & Fauerbach, of Port Townsend.
G. E. Miller & Co., of Seattle.
Spokane Loan, Trust, and Savings-Bank.
Tacoma Building and Savings Association.
Bank of Waitsburgh.
Stewart & Masterson, of Puyallup
Crandall Bros., of Pomeroy.
Stearns Syndicate Bank, of La Camas.
Bank of Centralia.
H. H. Dearborn & Co., of Seattle.
Bank of North Seattle.
Traders' Bank of Tacoma.
First Bank of Whatcom.

Meteorological data.

[Report of Edgar McGovern, signal observer for the U. S. Signal Station at Olympia.]

Year.	Mean height of barometer.	Highest barometer.	Lowest barometer.	Annual range of barometer.	Mean annual temperature.	Highest temperature.	Lowest temperature.	Annual range of temperature.	Mean temperature for spring.	Mean temperature for summer.	Mean temperature for winter.	Rain-fall and melted snow, total amount.	Rain-fall for spring.	Rain-fall for summer.	Rain-fall and melted snow for winter.
	In.	*In.*	*In.*	*In.*	°	°	°	°	°	°	°	*In.*	*In.*	*In.*	*In.*
1878	29.93	30.63	29.07	1.56	50.8	95.0	22.0	73.0	50.6	61.6	41.8	64.33	10.47	1.54	32.05
1879	29.96	30.69	29.17	1.52	49.1	88.5	8.0	80.5	48.8	60.3	38.2	73.44	21.26	5.17	32.97
1880	30.00	30.79	29.12	1.67	47.7	93.5	11.0	82.5	45.5	59.4	38.0	62.79	12.14	2.20	41.51
1881	29.98	30.59	29.15	1.44	49.4	87.0	23.0	64.0	49.7	57.6	38.7	65.50	10.50	3.62	34.04
1882	30.00	30.53	29.17	1.36	48.9	91.5	13.5	78.0	46.9	61.0	39.1	51.59	9.11	2.48	26.08
1883	30.04	30.71	29.27	1.44	49.0	90.0	8.0	82.0	48.7	60.7	36.4	41.61	16.32	0.22	14.00
1884	29.98	30.56	29.17	1.39	49.4	92.0	2.0	90.0	49.8	61.8	36.3	35.58	6.63	4.76	15.46
1885	29.98	30.54	29.06	1.48	50.8	97.0	23.0	74.0	50.5	62.3	39.3	41.95	3.43	1.89	25.37
1886	30.00	30.70	29.16	1.54	50.2	92.0	15.0	77.0	48.1	62.2	42.5	48.13	10.01	2.83	24.94
1887	30.01	30.63	29.26	1.37	49.2	93.0	2.0	91.0	49.0	60.0	38.0	61.78	20.20	1.93	29.86
1888	29.99	30.71	29.33	1.38	50.9	92.0	—2.0	94.0	50.0	61.7	41.3	45.54	7.89	6.46	10.56
1889 to Sept. 1	.....	30.54	29.22	1.32	.....	90.0	20.0	70.0	52.3	61.9	.....	17.00	8.22	3.33	.....

Year.	Wind, mean direction.	Highest hourly velocity of wind.	Total number of miles wind traveled.	Number of cloudless days.	Number of partly cloudy days.	Number of cloudy days.	Number of days on which .01 inch or more of rain or snow fell.	Number of days temperature rose above 90°.	Number of days temperature fell below 32°.	Mean relative humidity.	Remarks.
		Miles.	*Miles.*							*Per ct.*	
1878	S.	27	34,890	46	120	199	162	1	19	78	First frost Oct. 15.
1879	S.	36	40,243	60	94	211	197	0	40	80	First frost Oct. 22; last frost June 16.
1880	S.	32	39,457	54	127	185	159	1	60	80	First frost Sept. 8; last frost June 15
1881	S.	29	38,668	43	138	178	182	0	18	80	First frost Oct. 3; last frost May 22.
1882	S.	48	37,756	53	149	159	183	2	37	77	First frost Nov. 8; last frost May 20.
1883	S.	28	20,872	99	125	140	134	0	36	77	First frost Nov. 18; last frost April 24.
1884	N.	42	17,880	87	139	140	146	2	65	79	First frost ——; last frost May 28.
1885	S.	31	23,139	104	128	133	134	4	16	82	First frost Oct. 10; first snow Nov. 30.
1886	S.	23	35,458	99	128	138	166	1	46	83	First frost Sept. 27; first snow Dec. 26.
1887	S.	26	33,794	90	134	141	165	1	57	83	First frost Oct. 24; last frost May 11.
1888	S.	30	30,935	103	98	165	156	1	44	80	First frost Nov. 14; last frost May 5.
1889 to Sept. 1	S.	22	.....	100	56	79	79	0	18	.....	

Meteorological summary of Walla Walla, Wash., for the years 1886, 1887, *and* 1888.

[Latitude, 40° 2′; longitude, 118° 20′; altitude, 1,018 feet above sea level; magnetic variation, 21° east. H. S. Blandford, sergeant, Signal Corps.]

Year.	Annual mean.	Highest observed.	Date.	Lowest observed.	Date.	Absolute range.	Temperature.								
							Annual mean.	Maximum.	Date.	Minimum.	Date.	Absolute range.	Mean maximum.	Mean minimum.
							°	°		°		°	°	°
1886...	28.95	29.63	Jan. 7	28.35	Jan. 20	1.28	53	104	July 16	— 5	Jan. 20	109	65	44
1887...	28.94	29.57	Dec. 20	28.22	Jan. 20	1.35	53	99	May 30	— 3	Feb. 7	102	63	43
1888...	28.94	29.72	Jan. 14	28.44	Jan. 2	1.28	54	102	July 18 Aug. 21	—17	Jan. 16	119	64	44

Year.	Mean dew point.	Mean relative humidity.	Mean cloudiness.	Precipitation. Total amount.	Total movement of wind.	Maximum hourly velocity of wind during month.			Prevailing direction.	Number of days.								
						Miles.	Direction from—	Date.		Cloudless.	Partly cloudy.	Cloudy.	.01 inch or more precipitation fell.	Maximum temperature below 32°.	Minimum temperature below 32°.	Maximum temperature above 90°.	Thunder-storms.	Auroras.
	°	*P. c.*		*Inches.*	*Miles.*													
1886....	35	57	4.4	16.20	55,330	36	SW.	Sept. 25	SW.	142	148	75	101	16	62	39	5	4
1887....	36	59	4.9	20.44	56,701	45	SW.	Mar. 11	SW.	129	124	112	115	19	68	27	5	0
1888....	35	56	4.6	13.59	52,117	45	SW.	Apr. 4	SW.	137	115	114	86	29	67	35	3	0

Signal station at Port Angeles.

[Mean monthly and mean annual temperature. T. J. Patterson, observer, Signal Corps.]

Months.	1885–'86.	1886–'87.	1887–'88.	1888–'89.	Mean for each month.	Remarks on temperature.
July.....	58.1	56.9	54.3	55.8	56.3	Highest 1885 was 82°, July 55.
August....	55.4	55.8	55.1	57.3	55.9	Lowest 1885 was 14°, Dec. 31.
September.	52.9	52.1	51.1	55.7	52.9	Highest 1886 was 88°, July 18.
October....	47.2	45.0	46.0	49.0	46.8	Lowest 1886 was 7°, Jan. 18.
November.	42.9	39.5	41.5	40.2	40.8	Highest 1887 was 82°, Aug. 11.
December .	40.2	40.8	39.3	39.0	39.8	Lowest 1887 was 3°, Feb. 5.
January...	33.2	38.5	31.7	35.6	34.8	Highest 1888 was 79°, Aug. 3.
February..	40.3	28.9	40.5	39.6	37.3	Lowest 1888 was 6°, Jan. 14.
March.....	39.7	40.7	40.7	44.6	41.4	Highest 1889 was 83°, July 8.
April.....	44.2	43.4	46.1	47.1	45.2	Lowest 1889 was 26°, Jan. 14.
May.....	49.0	49.6	50.7	51.2	50.1	
June	53.8	52.2	55.4	53.6	53.8	
Mean..	46.4	45.3	46.0	47.4	46.3	

NOTES.—The range of temperature for five years is 85°. The greatest range in any one year is 81° in 1886. The mean daily range for five years is 15°, showing a condition of climate that for health and comfort is not surpassed. The weather is neither extremely hot nor cold. The days are extremely pleasant and enervating and the nights are cool; so cool, in fact, that flies, mosquitoes, and other troublesome insects are unknown.

Signal Station at Fort Angeles—Continued.

Month.	Average number cloudless days for each month in the year.	Average number partly cloudy days for each month in the year.	Average number cloudy days for each month in the year.	Average number days with rain-fall for each month in the year.	Prevailing wind direction for each month in the year.
July	13	12	6	5	W.
August	11	11	9	11	W.
September	8	15	7	8	W.
October	9	18	4	8	W.
November	2	14	14	17	S.
December	2	15	14	22	N.
January	5	12	14	22	S.
February	2	12	14	13	S.
March	6	11	14	15	W.
April	2	16	12	13	W.
May	12	12	7	8	W.
June	9	14	7	8	W.

NOTES.—The maximum velocity of wind at this station in five years was 35 miles per hour from the northeast on January 14, 1886. The average daily movement of wind is 113 miles and the average hourly movement is 4.5 miles. High winds do not frequently occur, and when they do Port Angeles is well sheltered from each direction. October and February are among the most pleasant months in the year here, the days being warm and balmy and the nights cool, and when cold waves come they are quickly superseded by the warm "chinook."

Table showing rain-fall for each month, the mean rain-fall for each month, and the total annual rain-fall.

Month.	1885–'86.	1886–'87.	1887–'88.	1888–'89.	Mean for each month.
July	.03	.46	.56	1.11	.54
August	00	.88	.14	0.53	.39
September	3.25	1.68	1.15	.72	1.45
October	2.44	1.88	2.89	4.31	2.88
November	3.90	1.46	4.52	3.77	3.41
December	3.07	7.71	6.07	3.44	5.07
January	5.54	6.20	5.43	2.96	5.03
February	2.98	4.68	1.58	.99	2.56
March	3.23	3.65	2.89	2.43	3.05
April	2.67	1.16	1.56	2.49	1.97
May	.77	2.11	.21	1.53	1.16
June	.70	1.12	2.62	.94	1.34
Mean	28.58	32.99	29.62	25.22	28.85

NOTES.—Snow is of rare occurrence and generally melts almost as rapidly as it falls. Thunder-storms seldom occur; occasionally one may be seen passing in the distance along the top of the Olympic Mountains, when the effect is grand beyond description. A destructive hail-storm has never been known here. The rain-fall is just sufficient to insure good crops. A failure of crops or a drought is unknown.

Meteorological data of Spokane Falls from 1882 *to* 1888, *inclusive.*

[Compiled by Charles Stewart, sergeant, Signal Corps.]

Date.	Mean height of barometer.*	Highest barometer.*	Lowest barometer.*	Range of barometer.*	Mean annual ‖temperature.	Highest temperature.†	Lowest temperature.‡	Annual range of temperature.	Rain-fall and melted snow.	Wind.		
										Prevailing direction.	Highest hourly velocity.	Total number of miles traveled.
	In.	*In.*	*In.*	*In.*	°	°	°	°	*In.*		*Miles.*	
1882	30.05	30.65	29.48	1.17	46.5	101.5	17.0	118.05	25.99	SW.	44	49.098
1883	30.08	30.81	29.46	1.35	46.8	96.7	27.7	124.4	14.37	SW.	37	37.086
1884	30.02	30.76	29.94	1.52	45.5	57.5	17.8	115.3	20.56	SW.	29	30.684
1885	30.06	30.65	29.52	1.13	50.1	99.3	14.0	113.3	19.01	SW.	33	40.064
1886	30.03	30.73	29.41	1.33	48.7	100.3	10.5	110.8	15.86	W.	42	40.553
1887	30.01	30.73	29.17	1.56	47.2	97.3	11.0	108.3	20.10	SW.	31	34.490
1888	30.02	30.96	29.46	1.50	48.7	101.8	30.5	132.3	17.69	SW.	30	37.945
Mean	30.04	.....	.....	1.36	47.6	.....	.....	117.6	19.08	SW.	.....	.....

Date.	Number of clear days.	Number of fair days.	Number of cloudy days.	Number of days .01 inch or more rain or snow fell.	Number of days temperature rose above 90 degrees.	Number of days temperature fell below 32 degrees.	Mean relative humidity.	Remarks on frost.
							Feet.	
1882	92	132	141	141	17	121	68.6	First, Sept. 30; last, May 20.
1883	181	126	58	94	14	136	67.1	First, Oct. 3; last, April 5.
1884	113	151	97	123	10	128	69.4	First, Sept. 7; last, May 13.
1885	141	137	87	116	15	84	75.5	First, Oct. 5; last, April 25.
1886	176	114	75	104	14	113	70.6	First, Sept. 28; last, April 5.
1887	105	153	107	126	15	137	73.2	First, Sept. 20; last, June 4.
1888	98	111	157	106	28	115	68.4	First, Sept. 23; last, May 21.
Mean	.....	.....	.....	115.7	16.1	119.1	70.4	

* Barometer reduced to sea-level.
† Highest temperature, 101.8 degrees, August 22, 1888.
‡ Lowest temperature, 30.5 degrees (below zero), January 16, 1888.

PUBLIC BUILDINGS.

Aside from the penitentiary at Walla Walla and the hospital for the insane at Steilacoom, Washington has no imposing public buildings. The capitol at Olympia is a plain wooden structure. The act providing for the admission of Washington as a State makes an appropriation of 32,000 acres of land for the erection of public buildings at the capital of the State. When the capital shall have been finally located it is expected that with the assistance thus afforded suitable and creditable buildings will be erected. Some of the more prosperous counties have handsome and commodious court-houses, notably those at Ellenburgh, Dayton, and Walla Walla.

HOSPITAL FOR THE INSANE AT MEDICAL LAKE.

The last legislative assembly appropriated $60,000 for the erection of a hospital for insane at Medical Lake in eastern Washington. Work is now well advanced on this building, which will probably be fully inclosed by November. The edifice is of brick, commodious and well arranged, to be similar in all but exterior decorations to the asylum at Steilacoom.

HOSPITAL FOR INSANE AT STEILACOOM.

A brief history of this institution, with account of its present condition, has been furnished by John W. Waughop, M. D., superintendent of the asylum, and is appended in full:

This hospital owns 630.86 acres, most of which was formerly used as a military garrison, but after being abandoned by the United States Government was secured by the Territory for its present use, and was established as a hospital August 19, 1871. Since that time all the insane of the Territory have been sent here. Until 1887 the old buildings of the garrison were used for the hospital, but in that year a fine brick hospital building, with all the modern improvements, was finished and occupied. Its capacity is 240; cost, $100,000. There are at present in the hospital 303 patients—225 males and 78 females; 203 are from western Washington and 100 from eastern Washington. The new building not being of sufficient capacity to hold all these patients, three of the old wooden buildings are still occupied.

The following is a list of patients admitted from different counties during the past two years:

Counties.	Male.	Female.	Total.	Counties.	Male.	Female.	Total.
Adams		1	1	Okanogan	1		1
Asotin	2		2	Pacific	1	1	2
Chehalis	2		2	Pierce	46	16	62
Clallam	3		3	Penitentiary	3		3
Clark	6	3	9	San Juan	1		
Columbia	2	2	4	Skagit	2	1	3
Cowlitz	8	3	11	Skamania	1		
Franklin	1	1	2	Snohomish	6	2	8
Garfield	5		5	Spokane	22	15	37
Island	1		1	Thurston	11	8	19
Jefferson	13	4	17	Wahkiakum	1		1
King	56	9	65	Walla Walla	19	9	28
Kitsap	5		5	Whatcom	5		5
Kittitas	15	2	17	Whitman	11	3	14
Klickitat	6	2	8	Yakima	2		2
Lewis	3	1	4				
Lincoln	2	2	4	Total	266	85	351
Mason	4		4				

The hospital was opened in 1871 with 21 patients, who were removed from Monticello, Cowlitz County, where they were for a time kept. Since the establishment of the hospital 1,100 patients have been admitted. The hospital is free to all the insane of the Territory, to rich and poor alike. The counties bear the cost of commitment and return, if indigent, when discharged, and the Territory bears the expense of taking them to the hospital and caring for them while there.

The hospital is under the general management of three trustees, who are appointed by the governor and confirmed by the legislative council. The immediate control of the hospital is under the superintendent, a physician, appointed by the trustees.

The management of this institution is enlightened and humane, and compares favorably with that of any other such establishment in the country.

TERRITORIAL PENITENTIARY.

The Territorial penitentiary, completed at Walla Walla in 1887, has been improved during the past year by the completion of a new cell wing, officers and guards' quarters, new brick barn, workshops, and the erection of buildings for the electric light and steam-heating plant. Electric lights and steam heat have been introduced, and various improvements made upon the farm and brick-yard, a new steam brick-making plant having been added to the latter.

The board of commissioners report the number of convicts at present confined in the penitentiary to be 172. Since October 1, 1888, there have been received 126; 50 have been discharged by commutation of sentence, 9 have been pardoned, 3 sent to the asylum, 2 have died, and

2 escaped. The number of prisoners reported in 1887 was 103, an increase of 69 in two years. Prisoners are employed chiefly in brick-making.

SCHOOL FOR DEFECTIVE YOUTH.

This school, situated at Vancouver, has, during the past year, been provided with a new, handsome, and commodious building, overlooking the Columbia River:

Number of pupils in attendance last term	26
Number of male pupils	15
Number of female pupils	11
Number of deaf-mutes	25
Number of blind	1
Whole number of officers	3
Amount of salary paid to officers	$2,300
Amount of expenditures last term	$5,000
Valuation of property	$35,000
Whole number of pupils at beginning of present year	36
Increase of pupils over last term	10

TERRITORIAL LIBRARY.

The library of Washington Territory, consisting of law-books, Government documents, and miscellaneous works, occupies two large, well-lighted rooms of the capitol building. There have been 529 additions during the past year, making a total of 10,313 volumes. The library is increased chiefly through a system of exchange with other States and Territories.

NATIONAL GUARD.

The following article on the national guard of Washington was prepared by Adjutant-General R. G. O'Brien:

The organized militia of this Territory, designated by law as the National Guard of Washington, is composed of two regiments of infantry of six companies each, and one troop of cavalry; in all, 845 officers and men. The general staff numbers 25; making an effective force of 870 officers and men ready for duty.

These regiments are located, one in western Washington and the other, with the troop of cavalry, in eastern Washington. They are made up of the best class of our citizens, and are active and earnest in the performance of the duties that pertain to the military branch of the Government.

The history of the past two years in this Territory has demonstrated the usefulness of this arm of the government as an extraordinary police to assist the civil authorities in maintaining the laws, protecting the lives and property of our citizens, and suppressing mob violence when the civil power has failed.

The services rendered by the National Guard of this Territory in suppressing the riots at the Newcastle mines in King County, in the preservation of life and property by maintaining order at the cities of Seattle and Spokane Falls on the occasions of the disastrous conflagrations at those places during the past summer, have proved beyond question that the small cost of maintaining a well-organized militia is as nothing compared to the great saving in property alone through its intervention.

The value of property saved and protected from destruction in Seattle alone will exceed more than a hundred-fold the entire cost of equipping and maintaining double our present force for the past two years.

The assessors' returns, made under the law to the adjutant-general, show the number of persons between the ages of eighteen and forty-five years, subject to military duty, to be about 55,000, from which a very effective force could be organized in an emergency at short notice.

The needs of the force continue to increase as it progresses toward perfection in the line of duty assigned it, and, though small in number, Washington Territory can boast of a National Guard which experience has proved to be second to none in the nation.

LEGISLATION.

The legislation of a national character that the people of Washington especially desire is:

First. Liberal appropriations for continuing actively the work on the canal at the Cascades of the Columbia River and the construction of a boat railway over the portage at The Dalles. The opening of this main artery of our internal commerce has long been needed and demanded by the people inhabiting the great Columbia Valley. The construction of this canal and boat railway, it is believed, will solve the problem of cheap transportation, rendering grain-raising a profitable industry in many localities where otherwise it can never be made so. Appropriations are also imperatively needed for the Upper Columbia and the Snake to make of them steam-boat rivers. Large areas not now habitable will, with navigation of these streams, immediately become populated. There is no more appropriate subject for legislation than the improvement of rivers where such conditions exist.

Second. The improvement of Gray's Harbor. With a moderate expenditure of money this harbor can be made accessible for vessels of the largest class. The Chehalis Basin, which is immediately tributary to Gray's Harbor and dependent upon it for an outlet, has an area of 2,400 square miles. It is for the most part densely timbered. Vast quantities of lumber are annually shipped on coasting vessels. A railroad from the Centralia coal-fields will shortly be constructed and the delivery of coal at this harbor will emphasize the need of deepening the channel.

Third. The allotment of lands in severalty to all the Indians on reservations. It is believed this will not only be conducive to the welfare of the Indians, but will subserve the public good by throwing open much valuable land to settlement.

Fourth. Another matter of great public importance, and of deep solicitude to our people, is the establishing of a naval station at some point on Puget Sound. Whether the site at Port Orchard, selected by the commissioners appointed for that purpose, is the most advantageous is still an unsettled question in the minds of many enlightened citizens. The final location of the site should be determined only after the most painstaking investigation. It is urged with some apparent force that the rendezvous for vessels intended to defend the entrance to the Straits of Fuca should be in proximity to the straits.

The expanding commerce of Washington, its coasting trade even now being second in the country, surpassed only by New York; the growth of Puget Sound cities, their proximity to the Pacific Ocean, their present absolutely defenseless condition, all distinctly indicate the importance of the immediate establishment of this station, and thoroughly emphasize the necessity for some means of defending the entrance to this inland sea.

Fifth. Only about one-half the lands of the Territory have yet been surveyed. Rates allowed for surveys by the General Government are notoriously inadequate. With the rapid influx of population we are now experiencing there is imperative demand for immediate additional surveys. Attention has been repeatedly called to the necessity for this. It is earnestly hoped the subject will soon receive the consideration its importance demands.

Sixth. The growth of several of our principal towns entitle them to Federal buildings. Better post-office facilities are imperatively required.

At Spokane Falls and Seattle there has been well-grounded complaint of inefficient service resulting from insufficient appropriations.

Seventh. The chief and most prolific sources of friction between the people and the Northern Pacific Railroad Company is the failure on the part of the National Government to make a final adjustment of the limits of the land grant to that company. The lands granted in aid of construction of the Columbia River line of their system should be immediately restored to the public domain and thrown open to settlement, the company having apparently long since abandoned any intention of constructing it. In Walla Walla County 55,000 acres of land lie in disputed limits. These lands were purchased by settlers from the railroad company, and in many instances paid for. By a subsequent ruling of the Commissioner of the General Land Office they were held to be outside the grant to that company. Eight years have elapsed since these rulings disturbed the titles to these lands, and although repeated efforts have been made by the sufferers to secure an adjustment no action has been taken. Meanwhile improvement is retarded, a feeling of insecurity prevails, and there is constant irritation and apprehension concerning their ultimate disposition. In Whitman and some other counties there is conflict between lien land settlers and the railroad company, which should also be avoided by appropriate legislation.

Eighth. Washington, like the other Pacific States, is awaiting with solicitude the completion of the Nicaragua Canal. Her sea-ports are, by the Cape Horn route, distant from Liverpool 15,000 miles. This immense distance precludes the possibility of profit in the shipment of our forest products, closing the markets of Europe as well as those of the Atlantic coast of our own country against it. Washington ships annually to the United Kingdom and to ports of Continental Europe 250,000 to 300,000 tons of wheat, or, say, 150 cargoes. If shipped via the proposed canal a saving in distance of 8,000 miles, or more than half the entire distance, would be effected. The length of time required for a voyage of a sailing vessel would be reduced from five months to eight weeks, while a moderately fast steamer will make the voyage in three weeks. The saving in cost of shipment of wheat cargoes, which by reason of the reduction in distance, in time and in insurance, would not be less than 40 per cent. An average rate for charters, for grain cargoes, from Puget Sound to Liverpool under present conditions is not less than 35 shillings per ton. A 40 per cent. reduction on this rate would add to the profits of the grain producer in Washington alone, at present rate of production, not less than $1,000,000 annually, while the stimulus afforded by better prices would immediately bring all arable land into cultivation. No further argument is required to show the advantages to result to Washington from the completion of this canal. It is a matter of such transcendent national importance that it is an appropriate subject for national legislation and assistance.

APPENDIX.

Biennial report of Territorial treasurer, from October 1, 1887, to October 1, 1889.

GENERAL SUMMARY.

General fund:		
Balance on hand October 1, 1887		$3,973.29
Received:		
From counties		284,439.48
From sale of codes and laws		1,086.90
From one-third gross earnings tax		19,410.62
From penitentiary, sale of brick		4,538.30
From 10 per cent. liquor license tax		19,870.49
From military fund on account		12,787.74
From coal-mining fund, to balance		950.30
From penitentiary fund, to balance		240.32
From post-office stamps returned by council		5.00
		347,302.44
By total amount warrants paid October 1, 1887, to September 30, 1889, principal	$347,061.85	
By total amount interest paid on same	19,024.48	
Balance on hand October 1, 1889	1,216.11	
		347,302.44
Penitentiary fund:		
To balance on hand October 1, 1887		59.17
Received from counties		781.15
		840.32
By paid warrants	600.00	
By carried to general fund to balance	240.32	
		840.32
Liquor-license fund:		
To received from towns, cities, and counties		19,870.49
By carried to general fund to balance		19,870.49
Coal-mining tax fund:		
To balance on hand October 1, 1887		303.35
To received from coal companies		696.95
		1,000.30
By total amount warrants paid inspector	150.00	
By carried to general fund to balance account	950.30	
		1,000.30

The audited indebtedness of the Territory September 30, 1889, was $154,352.42.

The official vote of the election October 1, 1889.

Counties.	Congressman.			Governor.		
	Wilson.	Griffitts.	Majority.	Ferry.	Semple.	Majority.
Adams	250	442	117	261	141	119
Asotin	172	124	48	171	125	46
Chehalis	897	612	285	897	615	232
Clallam	235	220	15	222	232	*10
Clarke	1,230	681	549	1,216	692	524
Columbia	671	648	23	666	648	18
Cowlitz	666	354	312	663	355	311
Douglas	357	262	95	353	265	88
Franklin	52	76	*24	38	89	*51
Garfield	520	415	105	517	418	99
Island	175	103	72	180	100	80
Jefferson	866	637	229	867	633	234
King	4,438	3,367	1,071	4,319	3,398	921
Kittitas	1,399	1,110	289	1,339	1,158	181
Kitsap	630	295	335	619	289	330
Klickitat	689	375	314	686	382	304
Lewis	1,225	865	360	1,219	868	351
Lincoln	1,087	881	206	1,104	863	241
Mason	319	307	12	322	304	18
Okanogan	307	226	81	4,362	211	111
Pacific	575	138	367	494	150	344
Pierce	4,442	3,592	910	4,362	3,608	754
San Juan	268	101	167	264	104	160
Skagit	955	561	394	949	566	383
Skamania	60	74	*14	62	72	*10
Snohomish	882	652	238	880	659	221
Spokane	3,208	2,294	914	3,256	2,272	984
Stevens	452	354	98	460	350	110
Thurston	1,091	697	394	1,067	725	342
Wahkiakum	306	129	165	284	149	135
Walla Walla	1,437	1,179	257	1,433	1,186	247
Whatcom	1,562	734	827	1,534	742	792
Whitman	2,099	1,869	230	2,149	1,844	305
Yakima	584	488	96	537	519	18
Total	34,039	24,492	9,547	33,711	24,732	8,979

*Democratic majorities.

THE STATE TICKET.

Totals for other State officers are as follows:

For lieutenant-governor:
- Laughton 33,998
- Platter 24,363
- Majority 9,635

Secretary of state:
- Wier 34,014
- Whittlesey 24,478
- Majority 9,536

State treasurer:
- Lindsley 34,203
- Kaufman 24,469
- Majority 9,734

State auditor:
- Reed 34,162
- Murphy 24,125
- Majority 10,037

Attorney-general:
- Jones 34,143
- Snively 24,411
- Majority 9,732

Superintendent of public instruction:
- Bryan 33,443
- Morgan 24,929
- Majority 8,514

Land commissioner:
- Forrest 34,131

Land commissioner—Continued:
- Goodell 24,344
- Majority 9,787

Supreme judges:
- Dunbar 34,042
- Stiles 32,686
- Hoyt 33,578
- Anders 34,302
- Scott 33,800
- White 24,556
- Judson 24,461
- Sharpstein 25,505
- Reavis 24,533
- Ganahl 24,029

For constitution 40,152
Against 11,879
- Majority for 28,273

For woman suffrage 16,527
Against 35,613
- Majority against 19,086

For prohibition 19,546
Against 31,487
- Majority against 11,941

For State capital:
- Olympia 25,490
- North Yakima 14,711
- Ellensburg 12,833
- Centralia 607
- Yakima 314
- Pasco 130
- Scattering 1,088

FOR SUPERIOR JUDGES.

The votes for superior judges were:

District No. 1:	
R. V. Blake	3,598
George W. Bell	2,662
Majority	936
District No. 2:	
W. N. Ruby	2,095
C. M. Kincaid	1,890
Majority	209
District No. 3:	
Wallace Mount	1,923
N. T. Coton	1,582
Majority	341
District No. 4:	
W. H. Upton	1,388
W. G. Lanford	1,330
Majority	58
District No. 5:	
R. F. Sturdevant	1,274
M. M. Godman	1,248
Majority	16
District No. 6:	
C. P. Graves	3,026
H. Dustin	1,582
Majority	1,444
District No. 7:	
N. H. Bloomfield	2,366
J. A. Munday	1,452
B. F. Dennison (Ind.)	240
Plurality	914
District No. 8:	
M. Irwin	2,531
T. N. Allen	2,437
Majority	94
District No. 9:	
J. Applegate	3,871
F. Allyn	4,084
Majority	213
District No. 10:	
J. A. Stratton	3,849
I. J. Lichtenberg	3,956
Majority	107
District No. 11:	
N. B. Sachs	1,775
H. L. Blanchard	1,670
Majority	105
District No. 12:	
J. J. Weisenberger	2,647
J. R. Winn	2,671
Majority	24

TERRITORIAL BRIEFS.

[From Secretary Owings' Statistical Report for 1888.

Area in square miles, 69,994.
Area in acres, 44,796,160.
Acres unsurveyed (about), 20,954,000.
Area of Straits of Juan de Fuca, 318 square miles.
Area of tide-water inside, 1,258 square miles.
Total tide-water in Territory, 1,576 square miles.
Shore line inside, 1,992 miles.
Channel line from Victoria to Olympia, 117 miles.
From Victoria to Cape Flattery, 72 miles.
Shore line from Cape Flattery to Columbia River, 170 miles.
Distance by sea, 156 miles.
Area of Lake Washington, fresh water, 41 square miles.

GOVERNORS OF THE TERRITORY.

[From Secretary Owings' Statistical Report.]

The Territory of Washington was set apart by the act of March 2, 1853. The following named comprise the list of governors appointed:

1. Isaac I. Stevens, from 1853 to 1857.
2. J. Patton Anderson, from 1853 to 1857.
3. Fayette McMullen, from 1857 to 1861.
4. R. D. Gholson, 1861.
5. W. H. Wallace, 1861.
6. Wm. Pickering, from 1861 to 1867.
7. Marshal F. Moore, from 1867 to 1869.
8. Geo. E. Cole, 1869.
9. Alvin Flanders, from 1869 to 1870.
10. Edward S. Salomon, from 1870 to 1872.
11. James F. Legate, 1872.
12. Elisha P. Ferry, from 1872 to 1880.
13. W. A. Newell, from 1880 to 1884.
14. Watson C. Squire, from 1884 to 1887.
15. Eugene Semple, 1887 to 1889.
16. Miles C. Moore, 1889.

Of the above, J. Patton Anderson, R. D. Gholson, J. F. Legate, and W. H. Wallace did not qualify.

CONDENSED STATISTICS.

Total population April, 1889	239,544
Population of eastern Washington	97,258
Population of western Washington	142,286
Total number of children under 21	97,416
Total number of children enrolled in public schools	46,751
Teachers employed	1,349
Number of persons subject to military duty	55,000
Number of officers and men in National Guard (2 regiments)	845
Number of convicts in Territorial penitentiary	172
Number of patients in hospital for insane, at Steilacoom	303
Number of pupils in school for defective youth	26
Number of miles of railroad within the Territory	1,548
Total value of taxable property	$124,795,449
Vote for Congressman:	
In 1888	46,353
In 1889	58,541
Majority against woman suffrage, 1889	18,086
Majority against prohibition, 1889	11,941
Majority for the constitution, 1889	28,263
Vote for permanent seat of government:	
Olympia	25,490
North Yakima	14,718
Ellensburgh	12,833
Scattering	1,088

The new map of Washington Territory, referred to on page 46 of the Annual Report of the Commissioner of the General Land Office for the year 1889, is made a part of this report.