

dred acres here, and it evidently intends to carry on extensive operations. The largest stationary engine on the Pacific coast has just been put in, the cost of which, in San Francisco, was \$54,000.00. Two hundred and fifty men are employed.

The Renton and Talbot mines, at Renton, have not been worked since 1885. The coal is lignite, the veins faulty and mining unprofitable. During the years 1875 to 1885, inclusive, these mines were made to yield one hundred and ninety-five thousand three hundred and sixty-nine tons. Recapitulating, it is found that the coal mines of King county have yielded, in all, up to January 1, 1888, as follows:

Newcastle	1,740,000 tons
Cedar Mountain	89,221 "
Black Diamond	213,087 "
Franklin	119,257 "
Renton	195,369 "
Total	2,356,934 tons

The combined output of all other mines in the territory to the same date was one million two hundred thousand tons. There have, of late, been great inducements to increase the traffic to the utmost. Prices of coal are high all over the coast, the demand is extraordinary, and the business very profitable. One new mine is opening in King county at present, and two more will be as soon as reached by rail, probably before the end of the year. Adding the anticipated product of the mine now opening to the probable products of the mines already opened, the King county coal yield of 1888 will approximate five hundred and fifty thousand tons, eighty per cent. of which will find markets abroad.

The mine now opening is at Gilman, forty-three miles from Seattle, on the line of the Seattle, Lake Shore & Eastern railway, and is the property of the Seattle Coal & Iron Company. Men have been engaged for a long time opening up gangways, building bunkers, and otherwise preparing for the coming of the cars. The road has just reached the mine, and small lots of coal have already been carried away. There are one thousand four hundred and ninety-seven acres included in the property, and the coal is a superior lignite. The five veins range from six to fourteen feet in thickness, and aggregate forty feet. A mile and a half farther along on the line, are two veins, each five feet thick, the quality of which closely resembles cannel. These are now being opened. Twelve miles from Gilman are the Raging river mines, of the same company, bituminous and anthracite coals, the veins being from three to ten feet in thickness. The bituminous coal cokes finely. Farther on, in the Snoqualmie country, are five veins of rich bituminous coal, from three to ten feet thick. The Gilman bunkers hold two thousand tons. This compa-

ny promises to contest with the Oregon Improvement Company and Dunsmuir (of Vancouver island) for the leading place among the great coal dealers of the Pacific coast. Its capital is \$5,000,000.00, and its properties equal to the best. It will ship from Seattle, where it is now building a wharf. It will load by a new process, by which, instead of dropping the coal into bunkers, and again dropping it into the holds of ships, it will, by steam engine, lift the loaded car from the track and lower it to the ship's hatchway, then back to the track after emptying. In this way, breakage of the coal will be saved. D. H. Gilman is president of this company, Henry Crawford vice president, W. J. Jennings secretary, J. A. Jameson treasurer, and F. H. Whitworth manager.

Peter Kirk is the owner of nine hundred and sixty acres of first class coal land in township twenty-two north, range seven east, four miles beyond the road of the Columbia & Puget Sound Company. The eight veins range from four to ten feet in thickness, and the coal cokes finely. He is opening up a little, but will not do much until the railroad reaches him. Mr. Kirk is an English iron worker, and has long been connected with the Moss Bay Hematite Iron and Steel Works, of Maryport, which have sent sixty thousand tons of steel rails to the Pacific coast during the past twelve months. He is interested in the Snoqualmie and Cle-Elum iron deposits, and expresses his intention of establishing immense iron works at some point. Whether that point will be Snoqualmie or Cle-Elum, or whether he will bring his iron ore to his coal mine, can not yet be stated.

This favored region is almost as rich in iron as in coal. It is more remote from tide water, has never been reached by rail, and hence has remained, to this day, undeveloped. The railroads, however, are pushing into the iron country, and the excuse of inaccessibility will not avail six months longer. Bog ore is found in many places. Brown hematite has been discovered near Snoqualmie pass, on the direct line of the Seattle, Lake Shore & Eastern railway. In a report to the governor on this discovery, Charles K. Jenner briefly describes it as follows:

The claims included in what are known as the "Denny iron mines" are nine in number, located upon four separate veins, or lodes. These lodes are situated in King county, about three miles northwesterly from Snoqualmie pass, in what is known as Iron mountain. They extend nearly due north and south, and are nearly vertical. The veins range in thickness from six to one hundred and fifty feet. The thickest vein, the "Cliff," is magnetic iron ore, the richness of which in metallic iron and almost absolute freedom from all deleterious substances, render it extremely valuable, especially for the manufacture of Bessemer steel. Following is the result of an analysis of six specimens of this ore, made by one of the leading assayers of Philadelphia: