

The gold strike on Cross mountain, Montana, still holds out in richness and extent. Every foot of development shows the ore body to be increasing in size and richness. The lowest assay of the ore so far is twenty-six ounces of gold and assays of from fifty to one hundred ounces of gold are common. The average value of the ore is upwards of \$1,000 per ton. The gold lode is located in an immense ledge of iron, which also carries some gold. Samples from various portions of the iron show a value of fifteen dollars per ton. The country north and south from the gold strike has all been located, and the locators are busy working their assessments so as to hold the ground. When completed many other rich strikes may be expected, as they will then have time to thoroughly "prospect" the surface. Three thousand feet south from the first strike another lode was uncovered which promises to be as large and rich as the first. It is the general opinion of old mining men that there are a series of parallel veins on Cross mountain and they are trenching through the overlying waste to reach them. All the gulches and forks leading from and around Cross mountain are rich in placer gold, and thousands of dollars worth have been worked out, although but a small portion of the territory has yet been worked. The news of the strike caused an influx of mining men from all quarters. Many failing to get locations near the strike, are turning their attention to the adjoining mountains and to the older district of Gold Hill. Gold Hill is situated in the lime belt, which is continuous from these to Aspin, Red Cliff and Leadville. The ores are of a similar character, though of a higher grade than at Leadville. There are three district "contacts" from which the ore is taken, viz: Between porphyry and blue lime, between blue lime and white lime and between white lime and quartz. A three car-load lot from the Anna mine averages \$5,000 per ton. Ore from the Gold Cup and Tin Cup mines show silver sulphide all through the mass. It is estimated that \$3,000,000 worth of ore is blocked out in the Gold Cup mine ready for stoping.—*Anaconda Standard*.

Hop culture is keeping pace with the other industries of the northwest, and promises to be a source of great wealth to Oregon and Washington. Hops were first planted in the Puyallup valley twenty-five years ago, and the experiment was a success from the start, although the first year's crop consisted of only one bale. The industry has grown in a quarter of a century from a product of one bale to a yield of 42,000 bales in Washington and Oregon in 1888; and it is stated the yield that year would have been greater but for the inability to save them with the labor then at command. The seasons during the present year have been very favorable and the crop has been estimated at 70,000 bales, Washington producing about two-thirds of that amount. The picking of this crop is estimated to cost \$750,000, that it will require 500,000 pounds of sulphur to cure it, and that 300,000 yards of cloth will be used in baling it. The quality of hops raised in Washington and Oregon is superior to that of any others produced in this country, and judging by statistics they enter into competition with the world with good prospects of success. In 1887 the United States imported 18,538,049 pounds of hops, and exported 260,721 pounds. In 1888 the imports amounted to 5,585,033 pounds, and the exports to 6,792,943 pounds. In 1889, 3,976,158 pounds were imported, and 12,589,262 pounds were exported. Thus it is demonstrated that the United States is fast gaining the ascendancy in the hop market of the world; and of the crop raised in the United States, Oregon and Washington produce almost 14,000,000 pounds annually, and receive the preference of foreign buyers. The present crop in these states, at an average

of fifteen cents per pound (and they are now worth twenty), makes a total value of \$2,100,000. Picking will begin early in September.

Some years since the largest irrigation project in the west was put on foot in Southern Idaho. The idea was to take water from the Snake river and its tributaries and distribute it as wanted on the plains of Alturas and Owyhee counties and elsewhere as the wants and necessities required. The Snake River Canal Company was organized and incorporated for the purpose of carrying on the undertaking, and has accomplished much, though there are still thousands of acres of land in that section that are comparatively valueless for the want of water. The territory lying on the north bank of Snake river in Bingham and Alturas counties, and known as Snake river desert, is a fine field for this company's operations. It possesses an area larger than one or two states of the union, and only needs irrigating to convert it into a grain field. In Owyhee county, and on the south bank of the Snake, some good work has been done by this company, and the *Silver City Avalanche* says construction work will soon be commenced on a dam across the Bruneau river near where the first dam was built. This dam will be built to stay, and with that idea in view great care will be exercised in laying the foundation. While this is being done, work will also be in progress on the canal and will not be stopped until it is completed. As has been said, this canal will cover thousands of acres of as good agricultural land as the sun shines upon, and will make homes for hundreds of industrious settlers and their families. It is safe to say that within three years all the land lying on the south bank of the Snake river reached by this canal will be settled and under cultivation. Where the sage brush now grows luxuriantly, affording shade for the jack rabbit, will be growing fine fields of grain and alfalfa.

War between the Canadian Pacific's trans-Pacific line of steamers and those of the Pacific Mail has been inaugurated, and some lively times may be expected. A few weeks ago the former, which had agreed to keep out of the San Francisco trade, placed an agent in that city and began bidding for passengers and freight in the Japan and China trade. The steamer *Abyssinia*, now on her way from Hong Kong, will first touch at Vancouver, B. C., and then proceed south to San Francisco. In opposition to this move the Pacific Mail has decided that its steamers shall sail up the coast and stop at Puget sound ports and Vancouver before finally crossing the ocean. This practically renders the voyage but little longer than formerly, since the route across the Pacific carries steamers far to the northward of the Golden Gate. What will be the outcome of this competition can not now be predicted, though it will probably lead to a permanent trans-Pacific line from Puget sound. Temporarily, at least, it will reduce rates considerably, and ought to largely increase the quantity of Oregon flour shipped to Asiatic ports, a trade that is becoming of great importance. It may also hasten the establishment of a line to Portland.

The very difficult feat of laying the new main for the waterworks across the Narrows at Vancouver, B. C., has been accomplished. The pipe was specially manufactured for this purpose by a Pittsburgh firm and was of rolled steel in lengths of twelve or fifteen feet. The part of the pipe which was submerged was put together into one long piece of 600 feet. Cables were attached to the main and stretched across the water, and by means of two pile drivers the heavy length of pipe was successfully moved into place within two hours.