

are nearly completed. The channel in front of the town has a good depth, ranging from twenty feet in low water season to sixty feet in high water, thus enabling ocean vessels to approach at all times. As Port Hammond is the farthest point east where the railroad can be reached by ocean vessels, it is probable that it will become an important shipping point. As a place of residence it will be very desirable, since the climate is mild and quite uniform and the scenery most beautiful.

After mentioning sixteen bars of bullion, valued at \$44,000, the product of two weeks' run at the Drum Lumm; the shipment in April of \$125,000 worth of bullion from the Helena Mining and Reduction Works; the resumption of work on the Legal Tender and Bonanza Chief; the regular shipment of bullion from the Elkhorn mines on Crow Creek; the steady yield of dust in Confederate Gulch, and the shipment in April of \$50,000 worth of bullion from the Gloster mine, the *Independent* says: "We cannot begin to enumerate the different places in the vicinity of Helena where gold dust and bullion is being taken from. Suffice it to say that there are many and many thousands of dollars per month brought into our city, which is becoming so common an occurrence that but little attention is paid to it. However, we deem it proper and right that those living outside of our city should be posted as well as those living in it, hence the occasional publication of these facts." It predicts that Montana's output of \$9,750,000 of gold and silver in 1884 will be exceeded the current year.

Mr. D. H. McNeil, the recently appointed Government Guide for British Columbia, returned from an exploring trip to the North Comox Valley, on Vancouver Island, and also on Valdez Island. In the valley there is sufficient alder bottom and swamp land to provide about twenty-five families with locations. The Comox district roads are convenient for the land, some of which fronts on the coast and extends up the valley about seven miles. Two settlers who accompanied Mr. McNeil found good locations, and will begin at once to clear the land. The land of Valdez Island is swamp and marsh, with fine alder patches. Sufficient land is known to locate about fifteen families. There is a cranberry marsh on this island and also several places where this popular fruit can be successfully cultivated. On the island there is a stretch of prairie of about one hundred acres without a stick of timber on it, covered with a luxuriant growth of grass. There are also other patches of similar land of smaller extent. A further exploration will no doubt discover that on this island there are other extensive stretches of good agricultural land. The Comox Valley offers special inducements to settlers, as there is already a large settlement, with good roads, schools, churches, stores and weekly mail communication by steamer.—*Colonist*.

The improvement the great bands of horses, cattle and sheep which graze on the Western ranges are constantly undergoing is a matter of congratulation to our stockmen and business men generally, since it indicates increased prosperity of the stock industry and all branches of trade in the least dependent upon it. The vast herds of long horned, bony and gaunt Texas cattle that covered the ranges a few years ago are rapidly disappearing, and in their places are seen fat, beefy cattle worth twice as much per pound. This result has been produced by the importation of pure blood or grade short horn bulls. The range cattle of to-day are the mixed descendants of the long horns and short horns. A few more years will work even a greater change, as the short horn blood still more predominates over the native Texan. This all means greater value per head and less expense per dollar of value in handling stock. It also means prestige in the

market, which is an essential feature of the highest success in the stock business. The same is true of horse raising. Percheron stallions have been put on our ranges, with the result of wonderfully increasing the size and value of the scrubby horses so common in earlier years. Preserving all the toughness and endurance of the dam, the descendants also partake of the characteristics of the sire, and the indications are that in a few years the most desirable horses for general purposes will come off our Western ranges.

It is stated on good authority that the Chicago & Northwestern Company is determined to push its Nebraska line through to a junction with the Central Pacific Railroad, at some point in Utah, perhaps Corinne or Promontory. If this is so it means a union of the Northwestern and Central Pacific to parallel the Union Pacific. The locating engineers have already reached a point in Wyoming near the headwaters of the Niobrara. Thence the line will push forward to the continental divide at Coal Creek, following that stream to the North Platte and Stillwater, and so westward to a junction with the Central Pacific, as has been said. It is stated that the track will reach the Wyoming line this year. Should the Northwestern and Central Pacific form an alliance as a transcontinental competitor with the Union Pacific, it is very likely that the latter will spring away from its connection with the Central Pacific and strike out for the western ocean on its own line. [It has already done this by building the Oregon Short Line.—Ed.] Nor will the paralleling stop here. The Chicago, Milwaukee & St. Paul and the Chicago, Burlington & Quincy have occidental ambitions, and will not be content until their iron is rusted by the salt water of the Pacific Ocean. The more competitive lines across the continent the better. The time is not far distant when the lumber of the Pacific Coast will freely mingle with the two pines of the country east of the Rockies, while the fruits of the Cascade slopes and valleys will be found on the humblest tables of the East at moderate prices.—*Northwestern Lumberman*.

Artesian wells as a water supply for irrigating are coming into great favor in California. Ten years ago, when Santa Clara and Los Angeles counties contained nearly all the flowing wells in the State, there was naturally much doubt whether local experience there would avail much elsewhere, but during the last decade there has been such a multiplication of wells in widely distant regions that the presumption now is in favor of success in most places, although the depth to be penetrated and the consequent cost vary greatly. There are thirty-five flowing wells in the vicinity of Pomona, twelve of them within an area of thirty acres. They range in depth from 160 to 200 feet, and it has been demonstrated that the flow of old wells is not materially diminished by the sinking of new ones in the immediate vicinity. In Tulare County there are upwards of 150, with new ones constantly being added. They vary in depth from 325 feet to 700 feet, and cost from \$650 to \$1,200. An artesian well will irrigate from 40 to 320 acres of land, depending upon the size of the well, character of the soil and the use to which the land is put. By reason of their flowing ceaselessly day and night, they enable their owners to grow any desired kind of crop, and beautify their homes with gardens and shrubbery as much as they will. With the boring of these wells has sprung up a desire for small farms, and the district has the capability of supporting a large population where before but few could have found a livelihood. THE WEST SHORE has often urged the subject of artesian wells upon its readers. There are large tracts of land where the soil is conceded to be good, but where the natural rainfall is too light for successful cul-