

expected that it will soon be traversed by a county road, which will aid materially the rapid settlement of the valley. An effort is being made to secure a mail route from Ontario, through this region to Harney Valley, in Grant County, a distance of 110 miles. Many settlers on Bully Creek, and North and Middle Forks of the Malheur, who are now from thirty to seventy-five miles from a post office, would be much benefited by such a route. Above the canyon the valley land along the Malheur varies in width from absolutely none whatever to a strip six miles across. Wherever it thus opens out into valleys, facilities exist for irrigating, the construction of ditches being all that is required. The soil is fertile, and enterprise will soon render it a very productive region. The river dwindles into three forks—"North," "Middle" and "South." The first two head in the Blue Mountains, and flow southeasterly till they unite with the South Fork coming from the southwest. Along these three branches there is much excellent land, similar in many respects to that lower down the main stream. It is only of late years that the value of this region has been recognized and its agricultural possibilities known. Settlements which have been made all attest its qualifications for farming purposes. The chief industry at present is stock raising, but this will gradually be superseded by agriculture. Stock raising in connection with farming will always be a profitable industry, as there are thousands of acres lying contiguous to the valleys which will never be valuable for any purpose but grazing. Every farmer will have a free range for a limited number of cattle. A few years will see a vast improvement in the Malheur country.

The Snake River Valley, between the Owyhee and Malheur, consists of the river bottom and the bench, or plateau, elevated above the river from twenty to forty feet, and three to six miles wide, is composed of what is called sage brush land, and is very fertile when irrigated, water for which can be brought from the Owyhee, and when done will bring into cultivation about 40,000 acres of good land. The bottom and low bench land below the mouth of the Malheur can be irrigated by a ditch from that river, taken out below the butte, and another nice location be made subject to the plow.

The southern end of the county, fully one-third of the entire area, is drained by the Owyhee River and its forks and tributaries—Rattlesnake, Jordan, Soldier and other creeks. This is a region of short mountain ranges, plateaus and vast plains, some of them covered with the choicest bunch grass, and others having no vegetation save the ubiquitous sage brush. Along the streams are numerous fertile valleys, which form the headquarters of stockmen, who own the bands of cattle grazing on the limitless ranges. Much of this region is worthless for any purpose whatever, other portions of it make excellent cattle ranges, while there is not a little which is adapted to the pursuit of agriculture. The great drawback, in an agricultural sense, is its remoteness from railroads, though in that respect it is one hundred per cent. better than a year ago, since the Oregon Short Line passes the mouth of the Owyhee. Formerly the most accessible railroad

was the Central Pacific, far to the southward in Nevada. Remoteness from railroads, however, will not of itself deter settlers from seeking homes in the Owyhee country, and in a few years, when the choicer portions of the county further north have been taken, settlers will invade this region and locate farms in wherever a sufficient body of arable land may be found. When this is done it will be discovered that the quantity of arable land is greatly in excess of what it is now believed to be. Public opinion has been formed from the repeated assertions of the cattle men that this whole region is worthless for agriculture. Just how much salt must be taken with this statement the enterprising homestead prospector will ascertain when he turns his attention in this direction. It is natural that stockmen should endeavor to discourage settlement, in order to retain free and undisturbed use of the ranges as long as possible. Jordan Valley has quite a settlement, and the land there is surveyed, as is, also, that along Rattlesnake and Crooked creeks and tributary streams.

The stock ranges of the Malheur and Owyhee are among the best in the West. The climate is in every way suited for that industry. But little rain falls in summer and not much snow in winter. Cattle have grazed here for fifteen years without other food than that obtained by them on the ranges, and have never suffered serious loss. Generally they are fat and in good condition in the spring; but occasionally, as during the present winter, they suffer some deterioration. As on all ranges, a small percentage die every winter from various causes. Running water is abundant in the streams, fed constantly by the living springs and melting snow of the mountains, and stock do not suffer for lack of water in the driest season. It is estimated that 80,000 cattle are grazed in the county, valued at \$2,000,000, though the Assessor's returns fall far short of these figures both in number and value per head. Formerly a long drive was necessary to get cattle to a railroad for shipment, but now an overland road is within comparatively easy reach. The stock industry dominates a large portion of the county, and however extensive the farming settlements may become in that region, this pursuit will always be an important and profitable one. The wool interests are also quite considerable, and large bands of sheep graze on the hills and in the little mountain valleys. The railroad now offers facilities for the shipment of wool not previously enjoyed, and this industry must necessarily show a marked increase during the next few years.

The first great industry of this region was mining, and the county was first settled by a mining population. Gold and silver quartz ledges and gold placers have annually yielded large returns. Copper ore has been found in good working quantities, but no ledge of that metal has been developed by working. The great drawback has been a lack of capital by those to whom the ledges belong and the inability to induce outside capital to take hold of mines so remote from any line of transportation, in view of the enormous expense of transporting machinery for the reduction of ore. Now, happily,