

claims of permanent settlers. The level open land was nearly all occupied thirty years since, and the settlements extended to the edges of the great forests which clothe the flanks of the enclosing ranges. The later increase in population has been coincident with the division of the original donation claims, and, to a less extent, the settlement of vacant spaces or partially wooded tracts.

Outside of the level prairies there is a belt of rolling land, verging into hills and mountains in the higher portions, which extends almost entirely around the valley, and constitutes a very valuable part of the country. The soil is mainly basaltic and sandstone, and of great general fertility. Its products are more diversified than those of the lower lands and frequently exceed them in quality. These rolling or hill lands are usually covered with brush and require to be cleared before cultivation is possible. The principal advantages of these brushy tracts are good soil, natural drainage, good water, a climate beyond the reach of malaria, an ample and general supply of wood for fuel and building purposes, and comparative freedom from early frosts.

The tract now being described does not by any means embrace all the so-called brush lands of the valley, but includes the greater portion. There are comparatively small tracts of bushes and young trees scattered through the valley, but they are isolated by stretches of prairie. The foothill lands, as they are generally termed, lie at an elevation of from 500 to 2,000 feet, and vary greatly in width between those boundaries. In their present state it is only to stock growers that these lands present encouragement. To them the excellent water, green grass and freedom from burrs that injure wool are superior inducements. When cleared the brush lands will be as productive as any that exist. Such special occupations as bee keeping, the raising of sheep and hogs, the fattening of cattle for market, and the raising of most varieties of fruit and vegetables, will doubtless find a better location there than elsewhere.

Large quantities of these desirable lands, mostly wooded, lie about the upper courses of nearly every one of the tributaries of the Willamette, and only await the hand of the energetic settler to produce abundantly. Such lands have the advantage of drying earlier in the year than valley lands, whereby it becomes possible to cultivate the soil to better advantage. A greater variety of farm products can be raised in the hills, and their quality is choicer.

Much good agricultural land lies as high as 2,500 feet, being in small, isolated valleys and difficult of access. The quality of soil is good. They are particularly adapted to stock raising, and are partially occupied for that purpose. Still there are many thousands of acres yet subject to settlement.

As for the mode of clearing brush lands, it is recommended to slash down the bushes in June; by September they will be dry and may be burned. The larger poles are used oftentimes for fencing or for fuel. The growth usually consists of oak grubs, young fir, maple, hazel, etc. None of these trees reach much size except in age, and

hence may be easily handled and removed from the soil. The fern is a far more troublesome growth, requiring much labor, time and patience for its extirpation. It grows in many fields, both in the prairies and in the hills, and gives a vast deal of trouble by its presence. It lives at almost any altitude, and is found growing high up on the Cascades. The Chinese are frequently employed for clearing brush land, for which their charges are about \$10 per acre for felling and burning the growth, and eighty-five cents per cord for chopping the sticks into cordwood. The lands uncleared are considered to be worth at present about \$5 per acre. A great many rails are made from the fir saplings which grow in such profusion, and the newly-cleared fields are usually fenced with them. There are, approximately, 2,000,000 acres of brush lands lying unclaimed, a large portion of it in the central portion of the valley, the remainder verging into the great timber belts. Frequently the farmers slash and burn the brush at the proper season, and then sow wheat, which they brush into the ashes by dragging a clump of bushes over it, no plowing or harrowing being done. The result usually is a crop of wheat of twenty or more bushels per acre, which frequently pays all the expenses of bringing the soil into cultivation. The stumps of fir and hardwood trees rot quickly and disappear from the husbandman's track, and more enduring sorts are usually left alone until time compasses their destruction.

The vacant lands of the Willamette Valley, or those open to settlement, are of four kinds—United States Government, State, railroad and wagon road grants, and school and university lands. As elsewhere, the Government lands are held at the price of \$1.25 per acre, or in case of lands within the limits of railroad grants, at double this rate. The railroad lands are subject to a price which varies according to location, being from \$1.25 to \$7 per acre. They are, moreover, to be had on favorable terms as to time and modes of payment. Generally speaking, ten years' credit is given, or less, according to the requirements of the purchaser. The Oregon & California Railway has yet a large portion of its grant in its possession, and the character of the land is the same, of course, as that of the adjoining Government or private holdings. It is chiefly hill land, covered more or less thickly with brush, often bearing an immense amount of the finest timber, but sometimes is open prairie, suitable for cultivation and grazing. In respect to the cost of clearing, it is the same as the adjacent tracts. It is well for intending purchasers to bear in mind that the lands spoken of as vacant are so because they require to be cleared before they will be of any use. As for their productiveness, they are not generally a whit behind the best valley lands, and they have, as before pointed out, some advantages over any valley land. As to the total quantity of unoccupied or untilled lands suitable for settlement along the edges of the valley, there cannot be much less than 2,000,000 acres, making proper deductions for tracts which are worthless because too rocky or too steep. This amount would be, in the present condition of affairs in Oregon, capable of supporting from