

bucket. His rule was to feed the soil and feed every animal to full measure of appetite.

INCOME FROM HIS ONE ACRE.

The milk product from each cow per year delivered to families was \$100, viz.: two cows one year; \$200, one cow six months; \$50; one cow sold for \$50; eggs sold, about \$35.00; pork salted for family use, five hundred and fifty pounds at eight dollars per cwt., \$44.00. Vegetables and milk for family use, per year, estimated at \$50.00.

Whole amount of income from one acre of land thus well tilled and fertilized, \$429. Outgo in cash, \$105; net gain in cash and food, \$324. The expense in labor is not estimated, but is offset by board, by growth of young stock and increased value of land.

THIS EXPERIMENT IS NOT EXCEPTIONAL.

That acre is no better than thousands of acres in sight. Its income is no greater than any neighbor can make from his land. Multiply the net income by ten acres and we have \$3,240. Count \$1,000 for labor of one man and one or two children on ten acres, and he will have \$2,240 net for his year's work on his land.

Results of this kind can be gained on hundreds of ten-acre farms in Western Oregon and Western Washington. When men scratch over one or two hundred acres of these best lands to raise fifteen to thirty bushels of wheat per acre, and exhaust the soil but never enrich it, they are not model farmers. When they aim to keep stock, herds or flocks, but fail to raise a food supply, trusting to native grasses, they are not model farmers. When they allow cattle, horses and sheep to live out in winter's chilly storms and icy rains without shelter or sufficient food, they must expect poor animals. They forget that food is both the material of growth and of heat also, and that exposure to chilly storms subtracts heat and wastes both food and fat, while warm shelter saves food and increases fat. In a word, good farming demands good sheds and barns filled with hay and grain, and cellars filled with root crops. Good lands must also be fed with the fertilizers which have been withdrawn from them. Lands are like well-filled purses. Deposits can be drawn out by crops of all kind, but they must be returned in kind. As well spend your money and think you

have it, as to spend your rich soils and think you have them.

DEPLETION.

The mineral ingredients of red clover hay amount to 108.22 pounds in every thousand pounds taken from the land. If these are not returned in the manures the land will speedily be exhausted.

The mineral elements of wheat berry amount to 103.47 in one thousand pounds. The mineral elements in wheat straw amount to 104.36 pounds. The amount taken from the soil by berry and straw is 207.83 pounds in a thousand.

TESTED SOILS.

Farmers in Western Oregon and Washington have taken off ten to twenty crops of wheat and straw from their farms, sold the wheat and burnt the straw heaps, and returned nothing to replenish the soil. It is not strange that the harvests have become less and less per acre, and more liable to rust, which is due to a lack of the mineral element in the soil. This long succession of crops proves how rich in all the mineral elements these basalts are. It proves also the value of rotating crops. It gives the reason why clover pastures ploughed in every three years are naturally fertilized thereby. The waste lands of Virginia were restored by clover, pastured and ploughed in. This case shows that dairy farming is a necessity for the land, as much as for the owner's profit. The manures of the yards are annually returned. It shows also that all kinds of ashes mixed with manures, should be returned to the lands and to the fields. Root crops should follow the cereals. A variety of food and a greater abundance will be raised and will support larger flocks and herds, and give them more than double value. Ten acres well tilled and fertilized do the work of fifty acres as now cultivated.

CHANCE FOR NEW COMERS.

The intelligent emigrant is invited to buy these worn out farms, and by good sense and industry make model paying farms of them. Four or five good farms can be carved out of every section, and each one will net a larger income than the whole section now pays.

A TRIP UP WHITE RIVER.

White river can be truthfully named the garden valley of Washington Territory, not alone for its salubrious climate but for its high state of cultivation. It has had the advantage of early settlement by energetic, practical farmers,

and shows the result, in most cases, of careful and intelligent husbanding. "In most cases," we say, for there are to be found among all classes of society and callings drones and slovens.

White River Valley commences at the mouth of the Duwamish river and extends for a distance of twenty-five miles up White river, which is tributary to the Duwamish at the junction of Black river; White and Black rivers forming the Duwamish. The average width of the valley is about five miles, most of which is fine bottom land, susceptible to the highest degree of cultivation. There are few, if any, large bodies of land owned by one person, like in California. The expression of "Land-graber," so common in the Sacramento, San Joaquin and Santa Clara valleys of California, are not applicable to the farmers of White river, although there is one who owns as much as eleven hundred acres, but we believe that is the largest farm on the river. It is the property of Mr. Alvord, who, we are informed, cultivates a large portion of it, and is a practical farmer, doing all in his power to, not only use his own land, but by example encourages others to do likewise. The increase of acreage in hops for the last two years will average about 25 per cent., and the total will reach about 200 acres, with an average yield of two and a half tons per acre, and should the prices for the coming year be good the farmers will reap a rich harvest.

The cheese factory at Langston's commenced active operations on the 1st of May. When the factory was started, which will be three years ago next November, the farmers bound themselves to furnish the milk of a certain number of cows for the full period of three years at 85 cents per hundred pounds, and some will not be sorry when the first day of next November arrives, as they think they can do better. A proposition has been made to the farmers to organize a joint stock company, and purchase the factory and run it themselves. Whether they will do this or not, has not yet been decided on. It is said by many in the valley that the factory has paid net, since its commencement, six thousand dollars per year.

One of the greatest necessities at the present time is a railroad. The uncertainty and slowness of steamer travel is sorely felt, and all agree that if a railroad was built, as designed by Mr. Villard at present, from Lakeview to Seattle, it would enable them to supply the city with many articles of produce that are now allowed to go to waste for the want of proper facilities to move; and they think if the road was built that picnic and hunting parties would find their way up the river, but as travel is now it would consume too much time. The prospects of every part of the valley are good, and its industrious citizens are, as a rule, well satisfied.