

seldom be more than forty acres capable of being watered in one direction, and it rather plate into tens and twenties. The soil is deeper here and better than in the upper section. It is a sort of half clay, half sand, and produces very large sagebrush. Lava protrudes occasionally.

The lower section is as pretty a slope as the eye could wish to behold. Water would follow a single furrow for miles. The best soil is here. I should think it ten feet deep almost anywhere. It is a dark loam with a sandy grit. It seems as if the stone and heavy drift had settled above and only the silt had reached this point.

Just below the bluff is a widening of the river bottom and here rise a remarkable series of springs supposed to be the waters of Lost river which sink into the lava forty miles to the north. These springs, combining, form Boon creek, a stream as large as Provo river, which never freezes over. Quite a number of ranches are located in this bottom, and use part of the stream for irrigating purposes. In places these springs come to the surface on the benches and around such points salt grass flourishes. Whether these farms will be troubled with alkali remains to be seen, but every indication is that there need be no fear. The sage brush on this flat is in many places as tall as a horse and rider. This seems incredible, no doubt, but it can be verified by any one that desires to make the test. As might be inferred, most of the tilings are made in this lower section. The town of Grover is laid out and quite a number of settlers are here. This is the strongest promise that the canal will be completed. There is still plenty of good land in this section.

Seven miles south of this splendid slope, but across the river, runs the Oregon Short Line; while seventeen miles southeast is Pocatello, the most prominent city in southern Idaho. The most direct route from Pocatello to vast and important mining districts in the center of the horseshoe curve of Snake river is through this very section of country; which fact together with the consideration that this section will soon be thickly settled, gives early promise of a bridge over Snake river at this point. Pocatello has subscribed large sums already to the project. A bridge secured, the lower twelve miles section covered by the People's canal will go with a boom. At present the nearest station is Blackfoot twenty-five miles above, or American Falls twenty-five miles below.

"But what about the climate?" asks the man ready to "spread out," isn't it rather cold there for the comfort of vegetables?"

In the first place the altitude is lower than that of Salt Lake City. On the other hand it is two hundred miles north of the city. But to show that it is altitude rather than latitude that immediately determines climate, I need only refer to the country about Panquitch, which, though it is as far south as Blackfoot is north, is yet so cold that the crops have been killed two or three years in succession.

The climate is hardly as mild as that of Salt Lake valley, but milder, or at least earlier, than that of Sanpete or Cache valley. It was the tenth of March that Professor Brinphall and I visited the valley, and yet many of the

farmers had begun their spring plowing. Snow fell last winter at varying depths of from ten to fourteen inches. Sixty days is the time usually calculated upon for feeding range stock and many seasons they do not feed at all. Horses winter out without difficulty.

The winters are too severe for sheep, and this on the whole must be counted a good thing as it leaves the splendid summer range unharmed for cattle. Seventy-five per cent of the land enclosed within the horse shoe bend of the river comprises this same range and will never be useful for anything else. There is perhaps a thousand square miles of it composed of lava shelves here and there with patches of soil between, the whole covered by a forest of cedar, with a sage and bunch grass undergrowth.

This vast lava area lying north of the farming district exercises a very important influence in moderating the climate of the valley. Such a surface can absorb, or render latent, very little of the sun's heat, but throws it back into the atmosphere. During seasons when the ground is bare, this circumstance gives rise to a constant breeze from the south. As this disturbance is local due to the rising of the heated column of air, it seldom becomes too violent to interfere with work on a farm. A rancher whom we asked concerning this much-talked-of wind, said that there were only three days last season when he could not load lucern hay. Frosts do not interfere with the maturity of corn or potatoes, so we may reasonably hope to raise all kinds of fruit including peaches.

A cord and a half of dry cedar wood can be gotten in a day. A load of cedar posts requires two days. There are no mountains, but let no one get the impression that good wagons are not needed. I suppose a man familiar with the difficulties of canyon work can become accustomed to the contortions of a lava flow. But it is quite safe to say that bicycle riding will never be possible among them.

Lumber can be purchased at Blackfoot at prices ranging a little lower than at Salt Lake City, and consequently houses of this kind are the most common at railroad towns. But the building material which will be most used, when the time for substantial improvement shall be found, is, in my opinion, lava stone. It occurs in loose flag croppings on nearly every section or quarter section, so that it may be said to be on hand ready for the mason. It cleaves easily, and presents, when properly pointed with lime mortar, a very handsome appearance. The fact that it is porous prevents the ill effects of sweating so common to stone houses.

As in most new countries, game is plentiful. Deer, rabbits and sage hens hold undisputed sway over the wide domain of cedar and sage-brush. Salmon, trout and other fish abound in the rivers and streams and furnish good sport at any time of the year. Boon creek and the remarkable series of large springs which feed it, are open water during the hardest winter, so the regions thereabout are alive with the cackle of geese and ducks. Just now it is a paradise for the hunter.

Such are some of the advantages which crude nature presents. What are the advantages or disadvantages,

from the side of society? First the market for farm products is very low. Wheat sold at 55 cents per hundred last fall, and hay fell to \$3 per ton. Potatoes commanded a good figure. These low figures are decidedly advantageous to the settler just now while he is compelled to buy, but what will they be when he comes to sell? I can only say that he has the same facility for reaching the eastern market that the Utah farmer has, and his local market will be good in a few years. At present the only sensible thing to do is to change his products into beef and pork, and this some of the settlers are now doing—at enormous profits. For cattle have a free range for nine months in the year, and can be fattened for market during the remaining three.

The rate of taxation is high, but the valuation is low, so that on the whole the burden is about the same as in Utah. It must, however, be kept in mind that bridges, school houses, etc., remain to be built in many sections, so that whoever settles there must expect this expense in the near future. But the present desert entry law, giving the farmer five years to make final proof, puts off the day of taxation on real estate till he can get on his feet and begin to realize something from his investment.

I was about to dash off a paragraph on the realism of pioneer life, but feel convinced that this aspect of the question will impress itself upon the settlers quickly enough to make their heads dizzy. Let all those young people, who are ambitious to experience—albeit mildly—what their fathers and mothers have passed through—come forward in prairie schooners, and tent it and grub it awhile in primitive fashion. They will become wiser, more robust, and quite picturesque, if less handsome by the experiment. It is a thorough cure for artificiality. It does not cost so much to live on the frontier as in the city. One's wants are fewer, and generations of old clothes can be aired to striking advantage. To the squirrels and chipmunks any cut or color is in fashion.

My purpose in writing this letter is, I think, a laudable one. I desire to reach the hundreds of young men and women in our Territory who are just now hanging on the ragged edge of employment—young people who will never have careers of which their posterity will be proud, unless they strike out for themselves; who, though they have eyes are still blind to the opportunities around them; who, in many cases, are as listless and careless as they are blind. I desire to turn them in the direction of this splendid opening and say: "Go, spread out where you can breathe, and help build up the waste places of Zion."

On the other hand I am not a little concerned that a progressive class of people shall settle here, and not the ordinary riff-raff of society which the tides of civilization wash to the front. I am quit willing to throw in my lot with Utah boys and girls whom I know to be made of the stuff that weans and grows stronger and better by time and hardship—the stuff that makes happy homes, choice social circles, progressive communities, patriotic citizens, and God-fearing men and women.

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