

soon be erected as a starter of the new city. There is a large body of excellent farming land in the immediate vicinity of the place, all of which will soon be occupied by the incoming immigrants. Considerable grain has been put in, and there are other evidences of a permanent settlement. Box Elder will be quite an important place in the very near future. About twenty miles east of Assiniboine, at the confluence of Clear creek and Milk river, there is a large settlement called Toledo, which will doubtless be the base of supplies for that region. One farmer there put in one hundred and fifty acres of grain, while many others seeded a less amount. Another promising town is Chinook, eight miles east of Toledo. This place is about a mile east of Dawes, the present station, but the station, it is understood, will soon be removed to Chinook. A free wagon bridge has been built across Milk river to open connection between Chinook and the Fort Belknap Indian agency. Major O'Hanlon, the enterprising post trader at Belknap, sowed one hundred and fifty acres, and a Mr. Burns seeded three hundred acres. The Indians around the agency also put in much grain. Over one thousand acres were planted in grain and vegetables around Chinook this spring, and not a rod of irrigation ditch will be dug on Milk river, at Box Elder, or at Benton or Great Falls, or in all the northern country this year. At Glasgow a board of trade has been organized, which is doing good work in attracting settlers. They have already a drug store, livery stable, and the usual proportion of residence and business and other signs of thrift and permanence. A year ago this country was a howling wilderness, given over to savage beasts and Indians. To-day it is the home of hundreds of industrious, energetic, enterprising men, who are forming little communities, the centers of a population which in a few years will number half the voting strength of the state of Montana.

THE SOILS OF IDAHO.—The soils of the territory might, with propriety, be classed in six divisions, as follows:

First—The high mountains, with their steep and rocky declivities. This soil, although it contains all the mineral elements necessary to support vegetable life, is deficient in vegetable matter.

Second—The high plateaus and timber belts. This soil is also a sandy loam, and contains all the elements necessary for the production of the cereals.

Third—The valley soil proper. This soil is also a sandy loam, resting for the most part upon a gravelly bed, and is only a few feet in depth. The first settlers chose this soil on account of its warm, productive nature, and on account of the facility with which it could be irrigated.

Fourth—Alkali soils. This soil occurs in small patches, low down in nearly all the valleys which border upon the larger streams. It is almost identical with the last-mentioned soil, with the exception that it contains an excess of sodium or potassium. It is easily known from the other soils by the native flora it produces, which are greasewood and saltgrass. When dry it is covered with a whitish or brownish crust, which contains muriate of sodium and potash. This soil is worthless in its natural condition for agricultural purposes, but by flooding for one or two years the salts are liquified and washed away. Then it will produce fair crops of cereals, but orchards or timber do not thrive even then.

Fifth—The sagebrush soil. This soil, although discarded by the earliest settlers, is now conceded to be equal, if not superior, to any other, and happily it is the most plentiful. Anything which grows in a temperate climate will succeed in this soil. Instances are within our knowledge where nine tons of hay to the acre have been produced in a single season. Three

crops can be harvested in a season. This soil is of a very fine texture, composed of mineral ash, silicate and vegetable mold, and is of unknown depth. In sinking an artesian well at Nampa this soil extended with but little variation for sixty feet. The great Snake river plains, containing millions of acres now lying idle awaiting the industry of man, are of this character. For the successful cultivation of agricultural products in Southern Idaho irrigation is resorted to. Instead of this being a drawback to the farmer it is really an advantage, as it increases the yield by more than one hundred per cent. per acre, while the expense is not great. A ton of hay or a bushel of wheat can be raised by means of irrigation for one-half the expense that it can in the eastern states. Canals are now being built from the Boise river, which, when completed, will supply water to irrigate about two hundred thousand acres, extending from Boise south to Snake river.

Sixth—The basaltic formation (lava beds, so called). This section has the appearance of a recent lava flow, upon which, in many places, a light soil has accumulated which produces a very nutritious grass, which springs up in the month of February, or as soon as the frost is out of the ground, and when the hot weather of summer approaches it is ripe, and remains in a dry condition. It is the same as grows on the plains, where it makes a splendid winter pasture. Stock subsists and even fattens upon it.—*Nampa Progress.*

Klickitat BOILING SPRINGS AND SUNKEN LAKE.—Thinking a description of some of the peculiar and somewhat unique and wonderful characteristics of Honey lake valley (in Klickitat county, Washington) might interest some of your readers, I will tell what I saw on a trip to the east end of the valley. Honey lake, a body of water which in the past occupied an area of several thousand acres, sank from sight in the month of June, last, and remained out of sight up to within a week or two past, notwithstanding two streams about the size of the Klickitat are constantly discharging their waters into its bed. At present it is very coyly coming into sight again. The lake took its name from the great deposits of honey dew in the early settlement of the valley. But at present I would more particularly call attention to the boiling springs, a number of which rise near the border of the lake on the northeast side. These rise out of a level plain not less than a mile from the surrounding hills, in a vast tract of alkali as white as though covered with snow. There are quite a number of these springs, and they extend for three or four miles along the border of the lake, when it is at its largest extension. Each spring has some peculiar characteristic of its own. The largest one throws out a volume of water four feet wide and four inches deep, as clear as crystal, and boils with such energy that the water comes up a foot above the still water around, and jets are constantly spurting much higher, and the roaring, hissing and sputtering was so loud that our team would not willingly go near. If this is the place discovered by the emigrant Dutchman when he so urgently requested Hans to drive on for God's sake, for his satanic majesty's dominion was not a mile away, one can hardly wonder at his fears. If some of our Klickitat bacon manufacturers could import this spring it would effect a great saving of fuel. I felt of the water of this spring six or eight rods below where it issues from the ground, and found that it was hot enough for scalding, and I was told the water where it came from the ground was hotter than water can be made artificially. Here is a nut for philosophers to crack. The other springs, a number of which rise near this large one, are of different degrees of heat, from boiling to cold. In one place a cold and a hot spring are near enough together that by