to the fact that the land is not so elevated as much that surrounds it and its proximity to the Pacific coast, the excess of moisture being precipitated on the west side of the mountains. But whether the extension of the irrigation system throughout the country will produce a marked change in the climate is an unsolved problem which time alone can determine.

We saw a number of persons who had sought this climate for lung complaints and whose health had been built up in consequence. I think it was not with them a case of last resort for such cases are past redemption.

And now in taking leave of my readers in this way I wish to say that if they have derived one-half as much pleasure and interest in the reading of these notes as I have in writing them I shall feel fully repaid for the effort.

GEO. S. TRUMAN.

MICROBES.

AN ENGLISH VIEW WHICH SUGGESTS THE EXTERMINATION OF SWINE FEVER GERMS.

"Chudleigh," of the Agricultural Gazette, London, expresses his views in substance, as follows: "Having seen no comments on the extermination of swine fever germs, I will make a few remarks upon them and microbes generally. The precedent of eradicating wolves is encouraging; but we have not yet killed all the fleas, or the rats, or the mice. As a general rule, it seems that the smaller the foe, the more difficult he is to deal with. A person naively suggested that it might be a good plan to catch all the mice, but I will parody his words by asking, would it not be a good plan to catch all the evil microbes, although, of some varieties, it would require thousands to fill a hollow mustard seed? Some of them, at any rate, might certainly be exterminated. The poison of typhus, for example, cannot survive a journey through six feet of air, and is, therefore, extinguishable. Extinguishable, also, though far less easily, would I account the poison of swine fever. Its germs can fly miles through the air unharmed, and their tenacity of life is above the average; nevertheless, they can probably be destroyed, or at least be banished from the pig sty, by due attention to diet, cleanliness and general health, so that pigs are not allowed to furnish conditions favorable to the growth of the microbe. As an example of germs that can never be exterminated, I will cite bacterium terms the microbe of bad meat, and the chief agent of animal putrefaction. It is practically omnipresent, though it cannot grow in extreme cold, or without moisture, and there is a crypt under one of the Dublin churches into which animal decay finds no entrance. Some kinds of germs defy time. Bacillus authracis and the microbe of diphtheria are fair examples. The latter has been turned up with clay wherein it must have lain unimpaired for centuries. The Englishman was told by an old Carthusian of a mound in the Charterhouse which tradition said was the grave of men who died in the great plague of 1665, and that some workmen who cut into it, found piles of human bones, and were in some cases inoculated with the disease, but in an attenuated form. It is not easy to imagine the minuteness of some of the schizomycetes which comprise the microbes. Happily for us, some of the microbes are particular as to their environment, and are somewhat circumscribed in their conditions of life. Many varieties die if their supply of filth is cut off It is a characteristic of evil microbes that they like filth and flourish upon it, while the beneficent, useful microbes flourish only in environments characterized by cleanliness. In fact, though Moses nowhere says it, at least in these words, the microscope certainly reveals that cleanliness is next to Godliness. Safety of human beings and the lower order of animals lies only in habitual cleanliness of the food they eat and the water they drink