

strewn thereon. Vegetation wholly fails, save here and there a bunch of salt-weed or a bush of the ubiquitous sage-brush, the parched livid green of which serves only to increase the desolation of the desert.

How, then, has this strange type of landscape been produced? The rainfall is exceedingly small, though from time to time come heavy showers that no doubt do much to furrow the crumbling sides of the cliffs and "buttes," and sweep down the detritus to lower ground. The main instrument of destruction, however, is not rain. In the clear dry air of these western regions the daily range of temperature is astonishingly great. In my own experience the thermometer rose sometimes to 90° in the shade, and fell at night to 19° Fahr. But this daily range of 71° is much exceeded. Exposed during the day to the expansion caused by such heat, and during the night to contraction from such rapid chilling, the surface of the friable strata is in a constant state of strain, under which it exfoliates and crumbles into sand. The sultry air during the earlier part of the day remains motionless. Again and again we saw mirage across the plains. The isolated buttes and projecting cliffs were broken up into clumps like trees, beneath which lay what seemed the sheen of a placid lake, though really a parched sage-brush plain, or a burning expanse of sand and alkali soil. But in the afternoon a wind always rose and swept across the country, though fortunately, during our exploration, never getting beyond a breeze. But it was not difficult to realise what these blasts must be in the full blaze of summer, when the hot air, like the breath of a simoom, rushes along the desert, lifting up clouds of sand and of the fine white efflorescent dust. The powdery surface of the crumbling rocks is blown away. Wastes of loose sand, here piled into shifting dunes, there dispersed