

which no waters flow. That Alpine district extends along the western side of the American continent, covering sixteen degrees of longitude in the Utah latitudes, and is a succession of nearly parallel mountain ranges, having a north and south direction. Between these ridges are the valleys, whose average width may be twenty miles. In some places, the ranges are abruptly terminated for a space, leaving a gap, termed a *kanyon*, or pass, according to the width of the break in the mountain. These are names given by the trappers, who were the pioneer white men into these solitudes.

The absence of one or more short ranges, opposite each other, will occasionally unite several valleys into one. It is through the *kanyons* or narrow gorges, with perpendicular sides of rock, and the still wider passes into the plains between, that remarkably level routes for travel are found across the continent. The "South Pass" in the great eastern chain, is more than a hundred miles long, or wide, as it is usual to designate it, and then going west, you enter the great coal basin through which Green river flows. A narrower pass is near Bear river, and crossing over a gentle swell, one enters the Weber river *kanyon*, and emerging upon the beautiful Kanab prairie, that extends to the Timpanogas, the road lies down its bank into Utah valley. Here the choice of northern or southern routes is offered. The one by the Mary's river is most followed in summer; but a high pass on the Sierra Nevada has to be surmounted. The other is south-westerly in direction, across the Great Basin, and double the mountain in the head of the Tulare valleys, whence the way to San Francisco, or some Pacific port, is to be selected on feasible and fertile ground.

The great Basin is that high level, over four thousand feet above the ocean, between the Nevada and Wahsatch ranges. It is a desert in character, with some fertile strips flanking the bases of the highest ridges. This vast region is mountainous; the ranges generally from two to three thousand feet high, and parallel with the main ones on the sides, with some partial cross ridges that form minor basins. In the interior, therefore, fresh water becomes scarce, for these hills do not collect sufficient snow in winter, the only wet season, to furnish irrigating streams, and fertilize the trench of alluvion at their base, or water the plains between; and the consequence follows that these tracts are parched and arid, and frequently so impregnated with alkali as to make them unfit for vegetable life. *Artemisia* and *Salicornias* contend for a miserable existence on portions of the plains; and bunch grass furnishes grazing on the hill-sides for antelope and deer. There is not properly a "rim," or continuous mountain, particularly on the north; but a "divide" between the parallel ranges, which is sometimes a swamp, out of which the waters flow in contrary directions; and the position of this feature may be observed, on the map of the Great Valley, to the west of Bear river. This interior basin is about five hundred miles in diameter either way, and in the eastern part have the Mormons settled.

Along the western foot of the Wahsatch range, for three hundred miles, is a strip of alluvion, from one to two miles in width,—and, in the valley of the Jordan, this is widened by what can be reclaimed by irrigating from its waters; and the spots similarly situated, in other valleys, furnish the only land suited to cultivation in the Utah Territory. This arises from the want of rain during the growing season; and water for the crops is only to be procured from the numerous streams that flow