

geological sense, is comparatively short, but which, measured by years, must be of long duration, each river-basin has been an isolated area, with its own peculiarities of rock-structure, slope, vegetation, character of water, food, and other conditions of environment that tell so powerfully on the evolution of organic types. A beginning has been made in working out the natural history of these basins; but much patient labour will be needed before the story can be adequately told. There are probably few areas in the world which offer to the student of evolution so promising a field of research.

In the course of my brief sojourn in the region, I was able to make an observation of some interest in regard to the history of the former wide enlargement of the Great Salt Lake. The Wahsatch Mountains, which rise so picturesquely above the narrow belt of Mormon cultivation between their base and the edge of the water, have their higher parts more or less covered, or at least streaked, with snow even in midsummer, though at the time of my visit, by reason of the great heat, and I suppose in part also of a diminished snowfall, the snow had almost entirely disappeared. But any cause which could lower the mean summer temperature a few degrees would keep a permanent snow-cap on the summits, and a little further decrease would send glaciers down the valleys. That glaciers formerly did descend from the central masses of the Wahsatch range is put beyond question by the scored and polished rocks, and the huge piles of moraine detritus which they have left behind them. These phenomena have been described by the geologists of the Fortieth Parallel Survey, and I could fully confirm their observations. But I further noticed at the Little Cottonwood Cañon that the moraines descend to the edge of the highest terrace, and that the