for the missionary field, though other scholars who do not wish to enter upon missionary labors are sometimes admitted.

From Quincy I went to St. Louis for the purpose of obtaining a boat to go to St. Josephs on the Missouri river, where most of the emigrants meet before leaving the United States for Oregon. On ascending the Missouri river from its confluence with the Mississippi to Weston, a town twenty-five miles by land below St. Josephs, no pleasant villages are seen except Jefferson City, the capital of the State of Missouri. This town shows something of the beauties of art, with a good levee for the lading and unlading of goods. The state house is worthy of the most notice of the traveler. It is large and elegant, and made of hewn stone.

To the geolgist the Missouri river presents a scene of speculation. Its waters are always muddy, and still more so at high stages of the river. To the indifferent observer it may appear that the raw edges of its banks, by their crumbling off at times of high water, furnish material for its turbid appearance at all times. It is true that in times of high water its muddy look is greatly increased, but this is not all that it to be considered. The river has but small depth of water most of the time, and this passes over an argilaceous bottom, with sufficient force to keep it constantly agitated. There is also a mixture of exceedingly fine sand spread over its bottom, and the whole together is constantly agitated by the motion of its waters. The bed of the stream from its union with the Mississippi to St. Josephs, is at least one hundred feet below the high prairie of the country around it. The question naturally arises as to the length of time required to excavate such a channel through a country so vast in extent as the Missouri traverses with all its tributaries, considering the amount of alluvium carried outward into the ocean from age to age, whilst the bed of the river is supplied in part from the high countries of its tributaries, and thus rendering the work of degradation exceedingly slow. Yet notwithstanding the amount of soil received from year to year from above, that river carries outward into the ocean more than it receives, and thereby causes a lowering of its bed, though not visible for ages, yet gradually and slowly has it worn away the earth to its present condition. The geologist has no certain means of ascertaining with certainty the amount of degradation from year to year,

and must leave the subject, sublime as it is, to the wild fancies of imagination.

## CHAPTER II

St. Josephs—The Indian country lying west of the River—Formation of the Prairie—Scouring material of the Soil—Its general appearance as far west as the South Pass, or dividing ridge.

St. Josephs is a new town on the Missouri river, in latitude of about 34 deg. 45 min. north, with about 1800 inhabitants, which five years ago was a field of hemp. The town has 18 stores, 3 drug stores, 9 groceries, 6 tailor shops, 8 blacksmith shops, 2 tin shops, 3 taverns, 3 boarding houses, 1 steam and 1 water flouring mill, and 2 steam saw mills. Among its inhabitants are 15 lawyers, 11 doctors, 2 silversmiths and 2 gunsmiths.

The town is mostly located on a plat of ground with sufficient descent for drainage, contiguous to the bluffs on the north, on which it is partly built. On this bluff stands the court house of Buchanan county, where the spectator can overlook the town.

The river from this point is seen but a short distance, either up or down, in consequence of its meandering course, so that it is soon lost sight of behind the bluffs.

I left St. Josephs for the Indian country lying west of the Missouri river, through which I was to pass on my way to Oregon, with a train of emigrants for that place, on the 25th of April, 1848, with a view of reaching Oregon before the inclemencies of winter should overtake me, under as favorable auspices as the nature of the case would allow.

The Indian country is a wild, uncultivated tract, and almost destitute of inhabitants. It has, however, a few scattering tribes of Indians, though few indeed and far between. This country is what is calld a prairie country or natural meadow, with very little timber except along the water-courses. It is a continuation of the great valley of the Mississippi westward along the tributaries to the Rocky mountains, where the waters of the continent divide and run westward into the Pacific ocean.

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