

the scene of astronomical or barometrical observations, furnish the materials out of which this map has been constructed. Nothing supposititious has been admitted upon it; so that, connecting with Captain Wilkes's survey of the mouth of the Columbia, and with the authentic surveys of the State of Missouri, it fills up the vast geographical chasm between these two remote points, and presents a connected and accurate view of our continent from the Mississippi river to the Pacific ocean.

To this geographical map, delineating the face of the country over which we travelled, there is added another in profile, showing the elevations, or the rise and fall of the country from the Mississippi to the Pacific. East of the Rocky mountains, two of these profile views are given—one from St. Louis to the South Pass, the other from the mouth of the Great Platte to the same point. The latter is the shortest; and following, as it does, the regular descent of the river, and being seven hundred miles west of the Mississippi, it may be that the eastern *terminus* of this line may furnish the point at which the steamboat and the steam car may hereafter meet and exchange cargoes in their magic flight across this continent. These profile views, following the travelling routes, of course follow the lowest and levellest lines, and pass the mountain at the point of its great-depression; but to complete the view, and to show the highest points as well as the lowest levels, many lofty peaks are sketched at their proper elevations, towering many thousands of feet above the travelling line. It may here be excusable to suggest that these profile maps here exhibited are, perhaps, the most extended work of the kind ever constructed, being from St. Louis (according to the route we travelled) near sixteen hundred miles to the South Pass; from the mouth of the Great Platte to the same Pass, about one thousand more; and then another sixteen hundred from that Pass to the tide water of the Oregon; in all, about four thousand miles of profile mapping, founded upon nearly four hundred barometrical positions, with views sketched and facts noted in the field as we went.

In the departments of geological and botanical science, I have not ventured to advance any opinions on my own imperfect knowledge of those branches, but have submitted all my specimens to the enlightened judgment of Dr. Torrey, of New Jersey, and Dr. Hall, of New York, who have kindly classified and arranged all that I was able to submit to them. The botanical observations of Dr. Torrey will be furnished in full hereafter, there not being time to complete them now. The remarks of Dr. Hall, on the geological specimens furnished to him, will be found in an appendix to the report; and to his palæontological skill I am indebted for the discovery of an oolitic formation in the region west of the Rocky