

violent, a torrent. Nothing adds more to the romantic character of a mountainous district, than a torrent tumbling from declivity to declivity, with accumulating velocity and fearful noise. The union of these streams produces rivers; and they, after passing over a greater or less extent of country, generally discharge themselves into either the sea or some large inland lake. As springs are most abundant in mountains, rivers usually take their rise in elevated districts, and the largest rivers in mountain chains. Every band of high land running through a continent or a country may therefore be considered as its reservoir, for on each side it pours forth the refreshing stream which meanders through the vales, and, having performed its task, discharges its surplus water into the ocean, from which it will be again raised by the process of evaporation; and is destined, when collected round some mountain's brow, to perform a similar duty in the same or some other channel.

The beds of rivers have been sometimes formed by the action of water, and at other times by the paroxysmal revolutions to which we have referred. It is evident, however, that if there were no declivities, there could be no rivers. A body of water would not move in one direction more than another over a perfectly smooth plain, but diffuse itself over the entire space, having at each part precisely the same depth. Water, therefore, must be directed into some declivity before it can collect itself together and direct its force; but when it has once obtained a momentum, it throws itself forward, and particularly if its body be large, with tremendous force, scooping out for itself a channel. Generally speaking, the mouths of rivers are considerably lower than their sources; but this is not always the case, for the sources of many of the large rivers in European Russia are very little above the level of the Baltic. The rapidity of a river does not entirely depend upon its declivity, but on this combined with the volume of its water, and the momentum it possesses at its source. The bed of the Danube is not so inclined as that of the Rhine, yet, in consequence of the greater volume of water it contains, it is more rapid. The declivity of the Amazon is not more than one twenty-seventh of an inch to every thousand feet, and yet, its momentum is great; and the Seine, between Valvais and Serves, has a declivity of but one foot to sixty-six thousand feet of its course.