

evidence it presents of the most nicely adjusted symmetry. Hill and mountain, valley and glen, are so grouped that each falls into its natural, and, as it were, pre-arranged place in the topography. There is certainly no evidence that random, haphazard operations have in any way affected the delineation of the topographical features of the land. Whatever may have been the nature of the causes that were in operation, the results which they have brought about point to the paramount influence of some agent that worked with constant reference to the drainage lines. The system of these lines is one of the most remarkable characters of the terrestrial areas of our planet. From the high grounds, the gathered rains and melted snows and outflowing springs descend in thousands of water-courses, which, beginning with the tiniest runnels, and ranging through a vast gradation of rivulets and brooks and tributary streams, reach at last the broad-breasted river that bears their united burden to the sea. Each of these threads of water keeps its own channel, and the system of water-channels that has been graven into the solid land shows the most marvellous harmony in every minutest detail.

Each drainage-line follows a depression on the surface of the land. The smaller runnels have beds sometimes only just deep enough and wide enough to carry their water; but the larger rivers flow in capacious valleys. There is everywhere, indeed, a more or less close relation between the volume of the stream and the size of the hollow along which it descends. The form and dimensions of the hollow may vary indefinitely, but the general symmetry of the system is maintained. No ordinary map can adequately represent these hollows, but it aims at depicting at least the larger streams which flow in them. The map consequently gives us little information as to the