

“ 4. It seldom happens that large masses, even of the same kind of rock, are uniform throughout any considerable space; so that the general character is ascertained by geologists who examine rocks in their native places, from the average of an extensive surface. A collection ought therefore to embrace specimens of the most characteristic varieties; and *the most splendid examples are, in general, not the most instructive.* Where several specimens are taken from the same place, a series of numbers should be added to the note of their locality.

“ 5. One of the most advantageous situations for obtaining specimens, and examining the relations of rocks, is in the sections afforded by cliffs on the sea-shore; especially after recent falls of large masses. It commonly happens that the beds thus exposed are more or less inclined; and in this case, if any of them be inaccessible at a particular point, the decline of the strata will frequently enable the collector to supply himself with the required specimens, within a short distance.

“ 6. To examine the *interior* of an unknown country, more skill and practice are required: the rocks being generally concealed by the soil, accumulations of sand, gravel, &c., and by the vegetation of the surface. But the strata are commonly disclosed in the sides of ravines,—in the beds of rivers and mountain-streams; and these, especially where they cross the direction of the strata, may be found, by careful examination, to afford instructive sections.”

The mud and gravel in the beds of rivers, and deltas, often contain grains of *gold, platina*, and other native metals, rubies, sapphires, and other precious stones; and a general knowledge of the rocks of an unexplored country often may be gained from the detritus at the embouchure of a river.

“ 7. Among the contents of the strata, the remains of organized bodies,—shells, corals, and other zoophytes,—the bones and teeth of animals,—wood, and the impressions of vegetable stems, roots, or leaves, &c. are of the greatest