

Still, some of the sediment floats on beyond the bar. There is a current in the Gulf which sets eastward along the northern border, and bears Mississippi sediment as far as the straits of Florida. The fine impalpable dust finally comes to rest on the bottom of the Gulf.

A thousand rivers thus are bringing their contributions to the sea. Around ten thousand miles of coast, the sea itself is battering down the land. The coarser fragments are left along the beach. The enfeebled action of the retreating surf bears some distance seaward the smaller fragments and the pebbles—rolled and rounded on the beach. The finest sediments have no opportunity to subside till floated far from shore. Thus the same assortment is exerted which we saw effected by the torrent of the Aar. The ocean's bottom lies covered to a vast extent with sheets of sedimentary materials which, near the shore, are coarse, and remoter from shore are progressively finer, as far as the finest sediments are floated. This process goes forward before our eyes; it has been continued during all the thousands of ages past, since the ocean first came into existence. How many layers must there be? How many feet of sediments have been piled up? What conditions have they assumed while the geologic æons have rolled by?

IX. THE RIVER GORGE.

EROSION.

WHENCE come the sediments which muddy the rivers and fill the lakelets, and make even the oceans shallower? The query must have occurred to you as we talked about the abundance of sediments; yet, simple as it is, comparatively few people have considered it. These sediments must all come from some source where they existed as solid, massive constituents of our planet. They are portions of the planet transported from one position to another. Their transportation changes the figure of the planet. Every film of sediment proclaims that the fashion of the planet has been worked over to