

sudden rending of earth's crust in some huge volcanic fury; but it appears to be true that the whole region was repeatedly lifted and submerged, both under the ocean and under a fresh-water sea, and that during the period of the last upheaval the river cut its gorge. Existing as the drainage system of a vast territory, it had the right of way, and as the plateau deliberately rose before the pressure of the internal forces, slowly, as grind the mills of the gods, through a period

pendicular; one can scarce imagine that a catamount could clamber down their steep declivity. But as we venture, a well-worn trail discloses itself, following a narrow ledge on the face of the cliff and winding in endless ziz-zags to its foot. In places this trail is so precipitous that one must dismount and scramble down on hands and feet, the sure-footed mule picking its way behind. Where the trail makes a sharp bend at the point of the zig-zags, it makes one's heart come into



SHIELDS AND PICTOGRAPHS ON WALLS OF HAVASU CANYON.

to be measured by thousands of centuries, the river kept its bed worn down to the level of erosion; saved its channel free, as the saw cuts the log that is thrust against it. Tributaries, traceable now only by dry lateral gorges, and the gradual but no less effective process of weathering, did the rest.

The most striking experience of a visit to the Grand Canyon is a descent into its depths. Sure-footed horses or mules are provided, and as one approaches the rim the walls of the abyss seem almost per-

pendicular as the animal's head projects far over the cliff, and a single slip would send one down for hundreds of feet.

More awe-inspiring even than the gulf below are the stupendous cliffs that rise on either side in vast walls and bastions that climb into the very sky. Far down in the valley runs a trickling stream meandering through what seems to be a growth of low bushes, but which resolve themselves into tall willows, beneath which our horses seek shelter from the heat. After a four-mile