ARCHITECTURAL EFFECTS OF THIS CAÑON. 339

adhesive, that e-fourth of the bits in the cold yards over the from the hills. heavy cances, the patience and periogues, the t, and the perit, which almost

lack rock rising he cliffs of the mile, and was niles further a e side. Three : 200 feet high th.

extraordinary at places nearly of between 200 e sandstone, so f water, in the hree thin horito the rain ; on adually ascendn extent, when about 300 feet

the Summary Statene Walls. I cannot o, where it is brought at Slaughter river of tter is the Big Horn on have received late Rock. Clark's map ween Slaughter and ream. See last and

more. In trickling down the cliffs, the water has worn the soft sandstone into a thousand grotesque figures, among which, with a little fancy, may be discerned elegant ranges of freestone buildings, with columns variously sculptured, and supporting long and elegant galleries, while the parapets are adorned with statuary. On a nearer approach they represent every form of elegant ruins-columns, some with pedestals and capitals entire, others mutilated and prostrate, and some rising pyramidally over each (p. 239) other till they terminate in a sharp point. These are varied by niches, alcoves, and the customary appearances of desolated magnificence. The illusion is increased by the number of martins [Petrochelidon lunifrons, the cliff-swallow], which have built their globular nests in the niches, and hover over these columns, as in our country they are accustomed to frequent large stone structures. As we advance there seems no end to the visionary enchantment which surrounds us.

In the midst of this fantastic scenery are vast ranges of walls, which seem the productions of art, so regular is the workmanship. They rise perpendicularly from the river, sometimes to the height of 100 feet, varying in thickness from one to twelve feet, being as broad at the top as below. The stones of which they are formed are black, thick, durable, and composed of a large portion of earth, intermixed and cemented with a small quantity of sand, and a considerable proportion of talk [talc] or quartz. These stones are almost invariably regular parallelepipeds of unequal sizes in the wall, but equally deep and laid regularly in ranges over each other like bricks, each breaking and covering the interstice of the two on which it rests; but though the perpendicular interstice be destroyed, the horizontal one extends entirely through the whole work. The stones are proportioned to the thickness of the wall in which they are employed, being largest in the thickest walls. The thinner walls are composed of a single depth of the parallelepiped, while the thicker ones consist of two or more depths. These walls pass the river at several places,