

level and smooth, it is seen to be covered with large pieces of lava, rising in places into cones thirty or forty feet high, which are apparently bound down by huge tortuous masses, which surround them like cables. In other places these are stretched lengthwise on the level ledge, and look like hideous fiery serpents with black vitreous scales, that occasionally give out smoke, and in some cases fire.

The immense space which I have described the crater as covering, is gradually filled with the fluid mass of lava to a certain point, above which the walls, or the surrounding soil, are no longer able to bear the pressure, it then finds vent by an eruption, previous to which, however, a large part that is next to the walls of the crater has in a measure become cooled, and remains fixed at the level it had attained. After the eruption, the central mass therefore alone subsides three or four hundred feet, and leaves the portion that has become solid, forming a kind of terrace or shelf: this is what constitutes the "black ledge," and is one of the most striking features of the crater. Its surface is comparatively level, though somewhat uneven, and is generally coated with a vitreous and in some places a scoriaceous lava, from half an inch to an inch thick, very iridescent and brittle. In walking over this crust, it crumbles and cracks under the feet; it seems to be easily decomposed, and in some places had lost its lustre, having acquired a grayish colour and become friable. There was another variety of the vitreous lava, which was smooth and brittle: this occurred in the large hollow tunnels or trenches, the insides of which were rough, and full of sharp and vitreous points. On the turnings and windings small swellings were met, which on being broken off, had a strong resemblance to the bottom of a junk-bottle; at another place, fragments appeared to have been scattered around in a semi-fluid state, in an endless variety of shapes, and so brittle as to be preserved with difficulty. Underneath these was to be seen the real lava or basalt, as firm and solid as granite, with no appearance of cells, and extremely compact; it is seen separated into large blocks, but none that I saw were of a regular figure, though in some places it was thought by others to approach the hexagonal form.

There is a third kind of lava, fibrous in its texture, of quite recent ejection, and procured from the bottom of the crater; this had somewhat the appearance of a dark pumice, but was dense in comparison. On the black ledge the absence of all *debris* from those high perpendicular walls, cannot fail to be remarked; we endeavoured to find an explanation of this, but I was not satisfied with the only one which presented itself. This was to suppose that the fluid mass had recently risen above the ledge, altogether concealing it from view, and that it