

a distance of  $4\frac{1}{2}$  geographical miles, in which space the water of the torrent falls about 1500 feet.

Fig. 644.



View of the Isle of Palma, and of the entrance into the central cavity or Caldera. From Von Buch's "Canary Islands."

This sketch was taken by Von Buch from a point at sea not visited by us, but we saw enough to convince us that several lateral cones ought to have been introduced on the great slope to the left, besides numerous deep furrows radiating from near the summit to the sea (see the map, fig. 643). The sea does not enter the great Barranco, as might be inferred from this sketch.

The annexed section (fig. 645) passes through the island from Santa Cruz de Palma to Briera Point, or from southeast to northwest (see map, p. 494). It has been drawn up on a true scale of heights and horizontal distances from the observations of Mr. Hartung and my own.

Fig. 645.



Section of the Island of Palma, from Point Briera, on the northwest, to Santa Cruz de Palma, on the southeast. See map, fig. 642, p. 494.

- a, b.* The Caldera (height of *a*, 6000 feet).      *c.* Commencement of steeper dip.  
*d.* Santa Cruz de Palma or Tedote.  
*e.* Lateral cone, 3940 feet above the sea (Vidal's Map).  
*f.* Briera Point.  
*g.* One of several outliers of the upper formation in centro of Caldera.  
*S. P.* Half-buried cono and crater of San Pedro.

The lavas are seen to be slightly inclined near the sea at Santa Cruz, where we observed them flowing round the cone of San Pedro, which they have more than half buried without entering the crater. On starting from the same part of the sea-coast, and ascending the deep Barranco de la Madera, we saw just below *c* the basaltic lavas dipping at an angle of 5 degrees, there being no dikes in that region. Farther up, where the dikes were still scarce, the dip of the beds increases to 10 and 15 degrees, and they become still steeper as they approach the Caldera at *b*, where dikes abound.