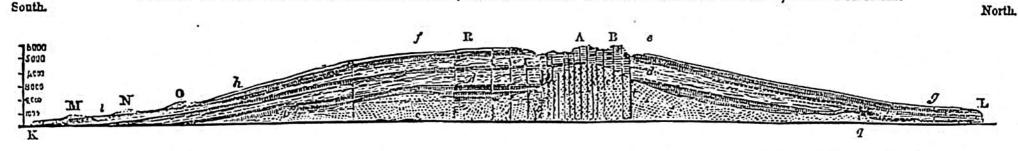
Fig. 653.

## SECTION OF MADEIRA FROM NORTH TO SOUTH, OR FROM POINT S. JORGE TO POINT DA CRUZ, NEAR FUNCHAL.



Length of section twelve miles. Drawn on a true scale of heights and horizontal distances from the observations of C. Lyell and G. Hartung, 1853-4.

33

- A. Pico Torres (or Pico do Gatto), about 6050 feet high.
- B. Pico Ruivo; the highest mountain in Madeira; about 6060 feet high.
- c. Scorize, agglomerate, lapilli, tuff, and ejectamenta, with some highly scoriaccous lava.
- d. Alternations of lava with tuff and lapilli, or with parting layers of red clay (laterite).
- Under this same head of "alternations" must be included all the beds between It and e.
- e. Commencement of more highly inclined lavas on north side of Madeira; slope usually 10 degrees.
- f. Commencement of more highly inclined lavas on southern slope, usually at an anglo of 15 degrees.

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- g. Dike of Jogo da Bola, in Ribeiro S. Jorgo.
- A Slope of beds 15 degrees, occasionally but rarely 20 degrees.

- i. Slope or dip of lavas 5 degrees.
- K. Point da Cruz, near Funchal.
- L. Point S. Jorge, on north const. M. Pico da Cruz, \$43 feet high : modern cone.
- N. Pico S. Martinho, 1100 feet high.
- O. Pico S. Antonio, 1440 feet.
- p. Buried cone in Ribeiro do Torreão.
- q. Lignite and leaf-bed.
- R. Pico S. Antonio, 5706 feet high.
- p, s, t. Line below which the rocks are not exposed to view. All below this line is given conjecturally.

The beds indicated by the sign No. 1 consist of lavas more or less stony, under which occur red clays or laterites, probably ancient solls (see p. 471), represented by the interrupted lines, No. 2. These red bands, as well as the lavas, No. 1, are very numerous in nature, and for want of space a few only are introduced into the diagram.