sents a great contrast to the South Pole, entirely covered with mountains. Here lofty peaks shine during whole lunations in *eternal light*, in the strictest sense of the word ; they are true *light islands*, which become perceptible, even with feeble magnifying powers.*

As exceptions to this type of circular and annular configurations, so universally predominant upon the Moon, are the actual mountain-chains which occur almost in the middle of the northern half of the Moon (*Apennines*, *Caucasus*, and *Alps*). They extend from south to north in a slight curve toward the west, through nearly 32° of latitude. Innumerable mountain crests and extraordinary sharp peaks are here thronged together. Few annular mountains, or crater-like depressions, are intermingled (*Conon*, *Hadley*, *Calippus*), and the whole resembles more the configuration of our mountain-chains upon the Earth. The *lunar Alps*, which are inferior in height to the *lunar Caucasus and Apennines*, present a remarkable *broad transverse valley*, which intersects the chain from southeast to northwest. It is surrounded by mountain peaks which exceed in height that of Teneriffe.

The relative height of the elevations in proportion to the diameters of the Moon and the Earth, gives the remarkable result, that since in the four times smaller satellite the highest peaks are only 3836 feet lower than those of the Earth, the lunar mountains amount to $\frac{1}{454}$, the mountains on the Earth to $\frac{1}{1481}$ of the planetary diameters.† Among the 1095 points of elevation already measured upon the Moon, I find 39 are higher than Mont Blanc (16,944 feet), and six higher than 19,000 feet. The measurements were effected either by light tangents (by determining the distance of the illuminated mountain peak on the right side of the Moon from the boundary of the light) or by the length of the shadows. The former method was already made use of by Galileo, as is seen from his letter to the Father Grienberger upon the *Montuosità della Luna*.

According to Mädler's careful measurements by means of the length of the shadows, the culminating points of the

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* Mädler, *Astron.*, p. 166.

† The highest peak of the Himalayas, and (up to the present time !) of the whole Earth, *Kinchin-junga*, is, according to Waugh's recent measurement, 4406 toises, or 28,178 English feet ; the highest peak among the Moon's mountains is, according to Mädler, 3800 toises (exactly four geographical miles). The diameter of the Moon is 1816, that of the Earth 6872 geographical miles ; whence it follows for the Moon $\frac{1}{454}$, for the Earth $\frac{1}{1481}$.