Attention has been repeatedly, and with justice, directed to the fact, that in the absence of water upon the Moon (even the *rills*, very narrow, mostly rectilinear hollows,* are not rivers), we must represent to ourselves the surface of the Moon as being somewhat similarly constituted as was the Earth in its primitive and most ancient condition, while yet uncovered flötz strata, by *bowlders* and *detritus*, which were spread out by the transporting force of the ebb and flood or *currents*. Sun and Earth floods are naturally wanting; where the liquid element is absent, slight coverings of decomposed conglomerates are scarcely conceivable. In our mountain-chains, upheaved upon fissures, partial groups of elevations are beginning gradually to be discovered here and there, forming, as it were, egg-shaped basins. How entirely different the Earth's surface would have appeared to us if it were divested of the flötz and tertiary formations!

The Moon, by the variety of its phases, and the more rapid change of its relative position in the sky, animates and beautifies the aspect of the firmament under every zone more than all the other planets. She sheds her agreeable light upon men, more especially in the primitive forests of the tropical world, and the beasts of the forests.† The Moon, in virtue

Cheops, according to the known dimensions of this monument (superficial extent), would be, even at the point of commencement, scarcely one ninth of a second broad, and consequently invisible. (Mädler, in Schumacher's *Jahrbuch* for 1841, p. 264.) Arago calls to mind that, with a 6000-fold magnifying power, which, nevertheless, could not be applied to the Moon with proportionate results, the mountains upon the Moon would appear to us just as Mont Blanc does to the naked eye when seen from the Lake of Geneva.

* The rills do not occur frequently; are, at the utmost, thirty miles long; sometimes forked (Gassendi); seldom resembling mineral veins (Triesnecker); always luminous; do not cross mountains transversely; are peculiar to the level landscapes; are not characterized by any peculiarities at the terminal points, without becoming broader or narrower. (Beer and Mädler, p. 131, 225, and 249.)

† See my Essay upon the *Nocturnal Life of Animals in the Primæval Forest*, in the *Views of Nature*, Bohn's ed., p. 198. Laplace's reflections upon a perpetual moonlight (*Exposition du Système du Monde*, 1824, p. 232) have met with a disproval in the *Mém. of Liouville sur un cas particulier du problem des Trois Corps*. Laplace says, "Quelques partisans des causes finales ont imaginé que la Lune a été donnée à la Terre pour l'éclairer pendant les nuits; dans ce cas, la nature n'aurait point atteint le but qu'elle se serait proposé, puisque nous sommes souvent privés à la fois de la lumière du Soleil et de celle de la Lune. Pour y parvenir, il eût suffi de mettre à l'origine la Lune en opposition avec le Soleil dans le plan même de l'écliptique, à une distance égale à la centième partie de la distance de la Terre au Soleil, et de donner à la Lune et à la Terre des vitesses parallèles et proportionnelles à leurs distances à