power of vivifying them, nor even that of supporting life and vegetation.

Mercury, which is the nearest to the sun, nevertheless receives only a heat 400 times stronger than that of the earth, and this heat, so far from being burning, as it has always been supposed, would not be strong enough of itself to support animated nature, for the actual heat of the sun on the earth being only  $\frac{1}{50}$  part of the heat of the terrestrial globe, that of the sun on Mercury consequently is only # part of the actual heat of the earth. Now if  $\frac{7}{8}$  parts were subtracted from the heat which is at presennt the temperature of the earth, it is certain animated nature would be checked, if not entirely extinguished. Since the sun alone cannot maintain organised nature in the nearest planet, how much more aid must it require to animate those at a greater distance? To Venus it only sends a heat  $\frac{2}{50}$  times stronger than that it sends to the earth, which instead of being strong enough to support animated nature, would not certainly suffice to maintain the liquidity of water, nor perhaps even the fluidity of air, since our actual temperature would be refrigerated to  $\frac{2}{49}$ , which is very near the term  $\frac{1}{25}$  we have given as the external limit of the slightest-

290