

and Mercury the mountains appear to be enormous ; while in Jupiter and Saturn there are but slight traces of any considerable elevations.

20. NEBULAR THEORY OF THE UNIVERSE.—Astronomy instructs us that in the original condition of the solar system the sun was the nucleus of a nebosity, or luminous mass, which revolved on its axis, and extended far beyond the orbits of all the planets ; the planets as yet having no existence. Its temperature gradually diminished, and becoming contracted by cooling, the rotation increased in rapidity, and zones of nebosity were successively thrown off, in consequence of the centrifugal force overpowering the central attraction : the condensation of these separated masses constituted the planets and satellites. But this view of the conversion of gaseous matter into planetary bodies is not limited to our own system ; it extends to the formation of the innumerable suns and worlds which are distributed throughout the universe. The sublime discoveries of modern astronomers have shown that every part of the realms of space abounds in large expansions of attenuated matter, termed *nebulae*, which are irregularly reflective of light, of various figures, and in different states of condensation, from that of a diffused luminous mass, to suns and planets like our own. It must be admitted that this assertion appears astounding,—and that it may fairly be asked if man, the ephemeron of the material world, can measure the vast epochs which