

the equator, and flattened it at the poles, and made it altogether the oblate spheroid which all experience demonstrates it to be. It may be urged, however, that this form of our planet, which seems to speak so unequivocally of law, may, after all, be but accident. If so, it must be singular. What say the other planets? Of these, the form of three may be at least approximately, and that of one exactly, ascertained. Venus, Mars, Saturn, are all, like our earth, oblate spheroids, flattened at their poles, and elongated at their equators. Their substance must have been spun out by their rotatory motion in exactly the line in which, as in the earth, that motion is greatest. But while we can only approximately determine the values of the equatorial and polar diameters of these three planets, in one great planet, Jupiter, we can ascertain them scarce less exactly than in our own earth; we can gauge, and measure, and fix the proportions which *his* equatorial ring bears to his general mass. With a diameter about eleven times larger than that of our planet, and rotating on his axis in less than *half* the time, the motion of the surface at his equator must be more than twenty times greater than that of the earth's equatorial surface, and his equatorial ring ought, even in proportion to his huge bulk, to be more than twenty times as massive. And what is the fact? While the thickness of the equatorial ring of the earth is only equal to about one three-hundredth part of the earth's diameter, the equatorial ring of Jupiter is equal to about the one fourteenth or fifteenth part of *his* diameter. It is, as the integrity of the law demands, more than twenty times greater in proportion to his mass than the earth's equatorial ring, and absolutely more than two thousand times greater. Here, then, is demonstration that the oblate sphericity of the earth is a consequence of the earth's diurnal motion on its axis; nor is it possible that it could have received this form when in a solid state. A glass ball made to revolve on a spindle when in