

covery of black spots on its surface, which, when watched from day to day, were found to change their situation on its disc, in a certain regular manner; coming in, or making their first appearance on the eastern edge or border of the disc: *i.e.*, on the left-hand side of the sun when seen at noonday; and going off, or disappearing at the west, or on the right-hand side. It very soon became evident that, whatever these spots might be, they adhered to the body of the sun, and that their apparent motions could only be accounted for by a real motion of rotation of the sun on an axis nearly, but not quite, perpendicular to the ecliptic. By following out this indication by careful observation and calculation, it has become known that the sun does so rotate; that the time occupied in a single rotation is very nearly 25 days 7 hours 48 minutes; that the axis of rotation is about 7° inclined to a line perpendicular to the ecliptic, its direction in space being that of a line pointing nearly to the star τ (tau), in the constellation of the Dragon; in consequence of which on and about the 11th of June, the spots appear to pass across the sun in straight lines, from the apparent northern to the apparent southern hemisphere of the sun, and the reverse on and about the 12th of December, while at intervening times, their course across the sun is a flattened elliptical or oval curve; a necessary consequence of their real motion being in a circle much inclined to the line of sight. Their ellipses are most open on the 11th of March, and the 13th of September; on the former of which days we get the best view of the south pole of the sun, and on the latter of the north.