

of which had perished in the lapse of that interval. The Chaldean astronomers at the later epoch above mentioned are reported to have arrived at an estimate not very remote from the truth. But the first estimate which has been handed down to us, accompanied with a statement of the process by which it was arrived at, is that of Eratosthenes (B.C. 250); who, measuring the shadow cast by a vertical rod on the day of the summer solstice at Alexandria, and coupling it with the fact reported to him, that at Syene in Upper Egypt on the same day, the bottom of a well received the full sunshine, concluded a difference of latitude between the two places, equal to one 50th part of the circumference of a meridian. Hence, imagining the two places to lie pretty nearly north and south of one another, he concluded the circumference of the earth to be fifty times the distance from Alexandria to Syene, which on the most probable interpretation of his estimate of that distance in the itinerary measures of the time, affords an approximation to what we now know to be the truth, by no means contemptible; falling within about a sixth part of the real circumference, and if the deviation of the mutual direction of the places from the true meridian be allowed for, within much less.

(13.) Thus we see that with very coarse and rude means of observation and measurement, it is not difficult to arrive at what may be termed a respectable estimate (as contrasted with a mere guess) of the size of our own globe; which is our first step outwards into those distant regions which will next engage our attention. We need