

OF THE EARTH.

HAVING taken a cursory view of the heavenly bodies, we proceed to give a more particular account of the planet which we inhabit.

The Earth, though called a globe, is not perfectly round, but is widened at the equator, and flattened at the poles; so that its diameter from east to west, is about thirty miles longer than from north to south. Its figure is an oblate spheroid. It moves round the sun once in a year. This is called the earth's ANNUAL motion, to which we are indebted for the difference in the length of the days and nights, and for the variety in the seasons. The diameter of the earth's orbit, is 190,346,000 miles. And since the circumference of a circle, is to its diameter, as 355 is to 113, the circumference of the earth's orbit is 597,987,646 miles. And as the earth describes this orbit in 365 days and 6 hours; (or in 8766 hours,) it is plain that it travels at the rate of 68,217 miles every hour; so that its velocity in its orbit is at least 142 times as great as the velocity of a cannon-ball,

supposing the ball to move through eight miles in a minute, which it is found to do nearly. At this rate it would take 22 years and 228 days for a cannon-ball to go from this earth to the sun.

The Earth is 25,038 miles in circumference; and by turning on its axis once in twenty-four hours from west to east, causes a continual succession of day and night, according as either side is turned to or from the sun; and occasions an apparent motion of the sun and heavenly bodies from east to west. This is called the earth's DIURNAL, or daily motion, by which the inhabitants of the equator are carried 1040 miles every hour.

That the earth is round like a globe is evident: **FIRST**; From its having been circumnavigated, or sailed round by Magellan, Sir Francis Drake, Lord Anson, Captain Cook and others. **SECONDLY**, From its shadow in eclipses of the moon, which shadow is bounded by a circular line.

As the earth is round and habitable on all sides it will doubtless appear strange, that persons can stand directly opposite to us on the other side. But this will easily be conceived, when it is considered