INTRODUCTION.

denoted means

the sun its orbit. th, each centre,

surface, hem the

f its ciris called into the

is called

urface, is degrees, *north* and ce in re-

stance in lian, and ude is of

minutes, and mference they ill evidently be ile. The avemiles and one

anti-meridian.

is the heat of he place above . The tempefrozen regions, re, than places is considerably latitudes in the ch less than is

of inclination to is measured two kinds, east and west, according to the situation of the place in respect to the first meridian.

11. The meridian assumed as the *first meridian*, is usually that of some noted place. That which is now employed by British geographers, is the meridian of the Royal Observatory of Greenwich, near London.

12. Small circles, whose circumferences are every where equally distant from the equator, are called *parallels of latitude*.

13. The tropics are parallels of latitude, each 23° 29' distant from the equator. The one which is north of the equator, is called the tropic of Cancer; the other, the tropic of Capricorn.

14. The *polar circles* are parallels of latitude, each distant 23° 28' from one of the poles. That which is next the north pole, is called the *arctic circle*; the other, the *antarctic circle*.

15. The spaces between the polar circles and the poles, are called the *frigid zones*; the space between the tropics, the *torrid zone*; and the two remaining portions of the surface, the *temperate zones*.*

either by the part of the equator, or of a parallel of latitude, intercepted between those meridians. Latitude and longitude serve to determine the positions of places.

places. * 8. If the surface of the earth be divided into 100 equal parts, the torrid zone will contain about 40 of these parts, each of the temperate about 26, and each of the frigid about 4. In places of the ordinary level, the heat in the torrid zone, and the cold in the frigid, are in general great; while, in the temperate zone, both are commonly moderate: and hence the origin of their names. The zones are also distinguiphed for the different appearances exhibited by the spin In his apparent daily motion. Thus, in every part of the torrid zone, he appears part of the year northand part south of the zenith at noon; and is consequently vertical, or exactly overhead, at any particular place, twice a year, once in passing northward, and again in passing southward: while, to the inhabitants of the northern temperate and the northern trigid zones, he appears always south of the zenith at noon; and to those of the other two zones, always north of it. In each of the frigid zones also, he continues moving round above the horison from day to day during part of the year, without ever descending so low as to set; and, at the opposite season, he is for a like period invisible, never ascending so high as to rise. Hence, the inhabitants of these of the toirrid, samplesit; —the first, because, during the period of continual sunshine, their shadows move round them; the second, because their shadows at noon fall always in the same direction; and the third, because, at noon, heir shatows fall sometimes northward, and some times southward. These last have also been called asch, when the sun is vertical; as at that time a perpendicular line has ro shadow. All these terms are compounded of the Greek word for a shadow, with other words prefixed; but they are now rarely employed. ak