over again, this would be as good a unit as could be proposed.

(14.) But the true objection to the choice of the pendulum for a universal unit of measure lies, not in any metaphysical and abstract considerations of this kind : but in the uncertainty which prevails, and must necessarily always prevail as to the true length of that normal or ideal pendulum which shall stand equally related to the whole globe, and from which the mean length corresponding to any assigned latitude can be calculated: that is to say, the length of a pendulum which would swing seconds at the pole of the terrestrial spheroidan uncertainty which, as I shall proceed to show, must affect the result of every attempt to deduce it with the precision the subject requires from experiments made on the surface of our planet: however refined the methods employed and however numerous and diversified the geographical stations at which they may be instituted.

(15.) In practice, the mean length of the polar or equatorial pendulum is concluded from an assemblage of the observations of the times of oscillation of one and the same invarial le pendulum at a multitude of geographical stations in all accessible latitudes in both hemispheres: no two combinations agreeing in giving the same precise length, by reason of the local deviations of the intensity of gravity due to the nature of the soil, and the configuration of the ground immediatety beneath and around the places of observation. Now, since the pendulum cannot be observed at sea, the whole seacovered surface of the globe is of necessity excluded