not, therefore, dwell on a multitude of intermediate attempts between that epoch and the year 1669, when Picard, under the auspices of the then newly constituted French Academy of Sciences, took up the subject in a truly scientific manner, and with means and appliances of a higher order. They all turned, of course, as every such estimate must do, on the more or less precise measurement of the *length of a degree or a certain number of degrees of latitude* on the earth's surface. But the step which this measure of Picard inaugurated, is distinguished by the abandonment of the old methods of ascertaining such length (viz. by simply measuring it *as an itinerary distance* by rods, or measuring chains, or by rolling wheels self-registering their own revolutions); and substituting for it the infinitely more precise one, which consists in the very careful measurement of a *base line;* the extension from it, northward and southward, of a series of triangles, as above described; the ascertaining, by accurate astronomical observations, the latitudes of the extreme points; and the taking account of the deviation from the true meridian of their mutual direction, by a systematic process of calculation, grounded also on the astronomical determination of their bearings. From that to the present time, this process (in which consists "*geodesy*" as distinct from mere mensuration and surveying) has been generally adopted; with continual improvement of the instruments used; increasing accuracy in all the requisite astronomical observations; and the adoption of a more and more perfect and refined system of computation for the "reduction" of the observations and