BOOK II.

ON THE FORM AND DIMENSIONS OF THE TERRESTRIAL GLOBE.

CHAPTER I.

FORM OF THE EARTH—HOW ITS ROTUNDITY IS PROVED—VARIOUS ILLUSTRATIONS ADDUCED— MAGNITUDE OF THE EARTH—ATTEMPTS MADE TO MEASURE IT—BY ARISTOTLE—BY POSI-DONIUS—BY ERATOSTHENES—BY THE CALIPH AL-MAMOUN—BY FERNEL, A FRENCH PHYSICIAN —BY SNELLIUS—DIGRESSION IN EXPLANATION OF THE TERMS LATITUDE AND LONGITUDE— THE METHOD OF TRIANGULATION—THE MERIDIAN MEASURED BY RICHARD NORWOOD—BY PICARD—NEWTON ON THE PENDULUM—HIS CONCLUSIONS AND THEIR OPPONENTS—MEASURE-MENTS MADE BY LA CONDAMINE AND BOUGUER—SCIENTIFIC EXPEDITION TO THE NORTH POLE CELEBRATED BY VOLTAIRE—LATER MEASUREMENTS—INCREASING LENGTH OF DEGREES OF LATI-TUDE—A TABULAR VIEW—MEASUPEMENT OF THE MERIDIAN OF PARIS BY DELAMBRE AND MECHAIN—TRIGONOMETRICAL LABOURS OF BIOT AND ARAGO—OF CASSINI DE THURY AND COLONEL HENRY—RESULT OF THEIR LABOURS—HOW LONGITUDE IS EXPRESSED BY TIME—ON THE CONSTRUCTION OF ARTIFICIAL GLOBES AND MAPS,

CHAPTER II.

THE THREE FORMS OF MATTER—STUDY OF THE PHENOMENA OF THE FORM CALLED AIR—GEOGRA-PHICAL DISTINCTIONS ENTIRELY ARBITRARY—HEIGHT OF THE ATMOSPHERE—SUPERFICES OF THE EARTH — DISTRIBUTION OF LAND AND WATER — THE AQUEOUS AND THE TERRESTRIAL HEMISPHERES—PYRAMIDAL FORM OF THE GREAT CONTINENTS—ISLANDS AND PENINSULAS— THE COAST LINE: ITS RELATION TO CIVILIZATION—COAST LINE OF THE GREAT CONTINENTS— DIRECTION OF THE LAND IN THE EASTERN AND WESTERN HEMISPHERES—THE FIVE GREAT OCEANS,

> BOOK III. SURFACE OF THE GLOBE.

CHAPTER I.

THE MOUNTAINS: HOW THEY WERE FORMED—GENERAL SURVEY OF THE WORLD'S MOUNTAIN-SYSTEMS —SOUTH AFRICA—THE GREAT ASIATIC RANGE—FROM ASIA TO AMERICA—THE CORDILLERAS OF NORTH AND SOUTH AMERICA—MOUNTAIN-CHAINS IN EUROPE—MOUNTAIN BASINS—LOFTINENS OF THE TERBESTRIAL SUMMITS—NOMENCLATURE OF DIFFERENT PARTS OF A MOUNTAIN—COM-PARATIVE HEIGHT OF MOUNTAINS AND PASSES—CONFIGURATION OF MOUNTAINS DEPENDENT UPON THEIR FORMATION—THE ALPINE NEEDLE PEAKS—ASCENT OF THE MATTERHORN—MR. WHYMPER'S NARRATIVE—A TERRIBLE CATASTROPHE—TABLE MOUNTAIN—PETER BOTTE'S PEAK —BASALTIC MOUNTAINS—THE GIANT'S CAUSEWAY—BASALTIC MASS IN THE ISLAND OF THE CYCLOPS—PERFORATED OR ARCHED MOUNTAIN—PAUSILIPPO—MONTE TAFONATO, IN CORSICA —THE TORGHAT IN NORWAY—THE ALATOU MOUNTAINS—ARCHED ROCKS,

80

55

77

CHAPTER II.

MOUNTAINS OF EUROPE—DIVIDED INTO SIX GROUPS—THE BRITANNIC—THE SCANDINAVIAN—THE IBERIAN—THE ALPINE—TABULAR VIEW OF EUROPEAN SUMMITS—MONT BLANG—NARRATIVE OF THE VARIOUS ASCENTS OF MONT BLANG—DE SAUSSURE—JACQUES BALMAT—DE SAUSSURE'S SECOND ATTEMPT—HIS SCIENTIFIC OBSERVATIONS—ATMOSPHERIC PHENOMENA—CANON BOUR-RIT—WOODLEY AND CAMPER—COLONEL BEAUJOY—DOORTHESEN AND FORNERET—RODAZ— COUNT MATEZECEI—VAN REUSSELAER—AND HOWARD—DR. HAMEL'S EXPEDITION—THREE GUIDES LOST—ARAGO ON MOUNTAIN-CLIMBING—SCIENTIFIC EXPEDITION OF MARTINS AND BRAVAIS—DR. PITSCHNER—MONT PERDU—RAMOND'S ASCENT OF IT—MEAN RLEVATION OF THE COUNTÍNENTS—ELEVATION OF SOME INHABITED PLACES AND REMARKABLE BUILDINGS,

110