

this most excellent science being no less than the wide and almost boundless field of sensible nature, the science itself must needs be exceeding great and important, of which I shall proceed to give a short but comprehensive sketch.

Natural philosophy may be properly divided into four parts. (1.) Somatology, which studies the nature of matter in general, and its properties, accidents and various modifications in all natural bodies. (2.) Uranology, which treateth on the constitution of the heavens, sun, moon, planets, &c. (3.) Aerology, which treats of the nature of the atmosphere, and the various meteors thereof. (4.) Geology, a knowledge of the earth and sea, with all their various productions.

SOMATOLOGY is the doctrine of natural bodies, and considers the original and essential properties of matter of which they are variously composed. Matter is that which we generally call the substance of things, or that of which all things do consist, under different forms and modes. The properties of matter or body are two-fold.—(1.) Essential and commonly to all bodies. (2.) Specific and accidental, which happen to bodies, not necessarily from the nature of matter, but casually and comparatively only. The essential properties of all bodies or matter are these: (1.) extension, for all matter is extended; (2.) solidity, for every particle of matter is impenetrable; (3.) divisibility, for all matter may be divided into still lesser parts; (4.) mobility, for all bodies are capable of motion; (5.) figurability, all bodies having some form or figure; (6.) gravity, for all bodies have some weight; (7.) mensurability, for all bodies have some dimensions; (8.) inactivity, for no matter can act or move of itself; (9.) ubiquity, for all bodies occupy some place; (10.) durability, for no part of matter can be annihilated.

Extension is the quantity of bulk or size into which the particles of matter are disposed or extended, for there is no body which has not length, breadth and thickness, which make what we call the extension of bodies.

Solidity is that property of body whereby it excludes all others out of the place which it possesseth, for no two bodies can possibly be in one and the same place at the same time. Hence the matter of the softest bodies is equally solid with that of the hardest; thus, a cubic inch of water will no more than a cubic