

INDEX.

- Acoustics cultivated by Pythagoras and Aristotle, page 186.
- Æpinus, his laws of equilibrium of electricity, 249.
- Aëriform fluids, liquids kept in a state of vapor, 241.
- Agricola, George, his knowledge of mineralogy and metallurgy, 85.
- Air, compressibility and elasticity of; limitation to the repulsive tendency of, 170. Weight of, unknown to the ancients, 171. First perceived by Galileo, 171. Proved by a crucial instance, 172. Equilibrium of, established, 174. Dilatation of, by heat, 239.
- Air-pump, discovery of, 173.
- Airy, his experiments in Dolcoath mine, 141.
- Alchemists, advantages derived from, 9.
- Algebra, 14.
- Ampere, his electro-dynamic theory, 152. Utility of, 152, 243.
- Analysis of force, 66. Of motion, 66. Of complex phenomena, 67.
- Anaxagoras, philosophy of, 81.
- Animal electricity, 252.
- Arago, M., his experiment with a magnetic needle and a plate of copper, 117.
- Archimedes, his practical application of science, 54. His knowledge of hydrostatics, 174.
- Arfwedson, his discovery of lithia, 118.
- Aristotle, his knowledge of natural history, 82. His works condemned, and subsequently studied with avidity, 84. His philosophy overturned by the discoveries of Copernicus, Kepler, and Galileo, 85.
- Arithmetic, 14.
- Art, empirical and scientific, differences between, 53. Remarks on the language, terms, or signs, used in treating of it, 53.
- Assurances, life, utility and abuses of, 43.
- Astronomy, cause of the slow progress of our knowledge of, 59. Theory and practical observations distinct in, 99. An extensive acquaintance with science and every branch of knowledge necessary to make a perfect observer in, 99. Five primary planets added to our system, 206. Positions, figures, and dimensions of all the planetary orbits now well known, 206.
- Atomic theory, 229. Advantage of, 230.
- Atomic weights of chemical elements, 230.