

- His study of specific heat, 242. Latent heat, 242.
- Laws, inductive, 128. General, 149. How applicable, 149. Illustrated by the planetary system, 151. Empirical laws, 133.
- Lavoisier, his improvements in chemical science, 226. Experiments on dilatation of bodies by heat, 239. His investigation on specific heat, 242.
- Light, refraction of, 22. Double refraction of, 23. Polarization of, 191.
- Light and vision, ignorance of the ancients respecting, 187.
- Lighthouse, 42.
- Lightning, how to judge philosophically of it, 90. Returning stroke of, 91.
- Liquids, cohesion, attraction and repulsion of the particles of, 170. Differ from aëriiform fluids by their cohesion, 175. The Florentine experiment on; experiments by Canton, Perkins, Oersted, and others on, 177. Obscurity of the laws of dilatation of, 240.
- Linnæus, his knowledge of crystalline substances, 180.
- Logic, 14.
- Lyell's Principles of Geology, extract from, 109.
- Magnetism may be caused by electricity, 71. Offers a "glaring instance" of polarity, 245. Experiments illustrative of, 246.
- Malus, a French officer of engineers, discovers the polarization of light, 99. 194.
- Man, regarded as a creature of instinct, 1. Of reason and speculation, 3. His will determined by causes and consequences, 5. Advantages to, from the study of science, 6. His necessity to study the laws of nature illustrated, 50. Happiness and the opposite state of man in the aggregate, 51. Advantages conferred on by the augmentation of physical resources, 51. Advantages from intellectual resources, 52.
- Mariotte, his law of equilibrium of an elastic fluid recently verified by the Royal Academy of Paris, 174. His difference between solar and other heat, 236.
- Matter, indestructibility of, Divided by grinding, 31. By fire, 31. Dilated by heat, 144. Inertia of, 167. Polarity of, one of the ultimate phenomena to which the analysis of nature leads us, 184. Inherent activity of, 222. Causes of the polarity of, 299. Imponderable forms of, 232.
- Measure, the standard, difficulty of preserving it unaltered, 96. How to be assisted in measurement, 97. Our conclusions from, should be conditional, 97.
- Menai bridge, weight and height of, 45.
- Mechanics, practical, 48.
- Mètre, the French, 95.
- Microscopes, power of, 143.
- Millstones, method of making in France, 36.
- Mind, its transition from the little to the great, and *vice versa*, illustrated, 129.
- Mineralogy unknown to the ancients, 60. Prejudiced by the rage for nomenclature, 104. Benefited by the progress of chemical analysis, 219.