

- Bertrand, Joseph, quoted, i. 121, 134; 'Calcul des Probabilités,' 325; his 'Calcul différentiel' referred to, ii. 646.
- Berzelius, Reports, i. 42; chemistry, 44; discoveries published, 83; services to chemistry of, 188; biographical, 189; 'Jahresbericht,' 190; organic analysis, 190; 191; influence on German science, 208; mechanical view in biology, 219; 220, 238; experimentally proved Dalton's atomic theory, 245; and Faraday, 365; electrical action in chemical processes, 366; chemical combinations, 396; elaborated Dalton's theory, 399; 400; disproves Prout's hypothesis, 402; 403; electrochemical theory, 404; organic chemistry, 407; 409; "radicle" theory, 411; death of the binary theory, 412; 413, 414; atomic theory, 416, 417; 426; characteristic of hydrogen atoms, 430; theories of chemical affinity, 452; ii. 154; chemical research, 159, 403.
- Bessel, Friedr. Wilh., services to astronomy of, i. 177; correspondence with Gauss, 185, ii. 652; i. 199; measurements of, 322; taught at Königsberg, with Neumann and Richelot, ii. 54; popular work of, 149; on Gauss, 636; functions of, 696.
- Bessel-Sellmeier hypothesis, ii. 54.
- Beuth founded industrial schools in Prussia, i. 166.
- Beverwijk, i. 282.
- Bewick, wood engraver, 'British Birds,' i. 289.
- Bichat, works of, i. 83; not among the academicians, 126; biological labours of, 194, ii. 313; i. 195, 200; morphological study of natural objects, ii. 231; the science of biology, 381; "Vitalism," 383, 384; 386, 387; on life, 394; doctrine of energy, 399; 402; quoted, 406; school of "organicism," 436; vital force, 503.
- Billroth, Prof., 'Lehren und Lernen der medicinischen Wissenschaften,' i. 197; 193; influence of English science on medical studies in Germany, 208; quoted on services of Kant to German science, 219.
- Biogenesis, ii. 451.
- Biology a German science, i. 193; grew out of science and philosophy combined, 216; essential unity of sciences of, not yet recognised in Germany, 220; British contributions to, 282; ii. 208, 312; vagueness of theories of, 370; oscillation of thought, 374; 415.
- Biot, experimental physics, i. 44, 200; fall of stones at l'Aigle, 328; his discovery, 431; opposed to undulatory theory of light, ii. 16, 21; member of Commission of Paris Academy of Sciences competition, 1819, 25; "laterality," 27; influenced German thought, 101; 193, 508.
- Biran, Maine de, 'Mémoire sur l'habitude,' i. 83.
- Bischoff, Theod., embryology, ii. 227; 300; quoted, 381, 387; address on Liebig, 391.
- Bjerknes, A., on Abel, i. 184, 185, ii. 637.
- Black, Joseph, discovered carbonic acid, i. 115; on latent heat, 229, 399, ii. 102; Scottish university professor, i. 272; and Lavoisier, 386, 387; 391, 400; formulæ of, 436; biographical, ii. 102; attitude to science that of a medical man, 103.
- 'Blackwood's Edinburgh Magazine' published, i. 273.
- Blair, Hugh, i. 273.
- Bleunerhasset, Lady, on De Staël, i. 17.
- Block, statistics, ii. 557, 563; quoted, 561, 566; 'Statistique morale,' 579.
- Blomstrand, 'Die Chemie der Jetztzeit,' i. 430.
- Blumenbach of Göttingen University, i. 165, 194, ii. 247; fossil collections, 248; influences Herder, 532.
- Bockh, science for its own sake, i. 211; 212; classical learning of, 222; 'Logos epitaphios' on Wilhelm von Humboldt quoted, 263.
- Bode's law, i. 422.
- Bodenhansen, i. 104.
- Bodenstedt, 'Mirza Schaffy,' i. 213.
- Boehmer, Dr Heinrich, 'Gesch. d. Entwick. d. Naturwissenschaftlichen Weltanschauung in Deutschland,' ii. 531.
- Boerhaave, i. 144, 175; and the medical schools of Germany, 208; 268; atoms and *massulae*, 398; epigenesis, ii. 298.
- Bohmer, "libertas docendi," i. 164.
- Bohn, ii. 107.
- Bohnenberger's gyroscope instrument, ii. 61.
- Boileau referred to by Voltaire, i. 105.
- Boltzmann, Ludwig, lectures on Maxwell's theories, i. 251; quoted, ii. 90; 176, 186, 188, 595; "availability," 597.