

- Catacecaumene region volcanoes, 296  
 Catarractes affinis, 1002  
 Catchfly, 945  
 Catlinite, 468  
 Catopterus gracilis, 751\*  
 Catopygus carinatus, 866; pusillus, 854  
 Catskill beds (group), 576, 602  
 — Mts., 25, 188, 225, 357, 605, 636, 744, 745, 946  
 — shaly limestone, 559  
 Caucasus, 41, 239, 265, 857, 920  
 Canda-galli epoch, 410  
 — grit, 558, 559, 576, 579, 581, 728  
 Caulerpites, 688  
 Caulinites sparganioides, 889  
 Caulopteris, 584, 699; advena, 584; antiqua, 583\*; elliptica, 705; gigantea, 705; Lockwoodi, 611, 622; microdiscus, 705; poltgera, 705; Wortheni, 645  
 Cave animals, 927, 940  
 Cavern formations, 324  
 Caverns, 379, 399, 695, 883; making of, 116, 130\*, 324 (Hawaiian); filled with vein-material, 328, 334, 342, 343; nitrates in, 137; rivers in, 207  
 Cayambe Mt., 26  
 Cayuga Lake, 555, 559, 602, 603, 604, 605; jointed rocks, 112\*  
 Ceanothus, 921  
 Cebocharus, 926  
 Celastrinites levigatus, 889  
 Celastrus, 921  
 Celebes, 19, 40, 309  
 Celestite, 493, 540  
 Cement, 79, 80, 555  
 Cementing coal, 661  
 Cenomanian group, 815, 882, 857, 858, 859, 860, 865, 866  
 Cenozoic time, 879  
 Centipeds, 419  
 Central America, 40, 145, 296 (volcanoes), 297, 338  
 Central Continental Interior. See Interior Continental  
 Central Pacific R. R., 26  
 Centroceras, 602  
 Centronella, 579  
 Cephalaspids, 417, 625  
 Cephalaspis, 564, 566\*, 587, 625; Campbelltonensis, 588\*; Dawsoni, 588\*, 591; Lyelli, 624\*; Murchisoni, 566, 567; ornata, 567  
 Cephalization, 414, 437-439  
 Cephalophora, 424  
 Cephalopods, 59, 130, 424§, 425\*, 501, 569  
 Ceram Island, 38  
 Ceratiocarids, 550, 721; Cambrian (Upper), 488; Chemung, 604; Hamilton, 599, 600\*; Lower Silurian, 521; Niagara epoch, 549; Upper Silurian, 574  
 Ceratiocaris, 482, 521, 546, 557, 565, 567; Angellini, 519, 520\*, 549; Deweyi, 549, 550; papilio, 566\*; pusilla, 546; sinuata, 691; tenuistriata, 566\*  
 Ceratites, 757, 770, 771, 774; Malmgreni, 792; Middendorfi, 773; nodosus, 770, 771\*, 774  
 Ceratodus, 59, 176, 417, 418, 687, 725, 772, 774, 797; culmination in Triassic, 869; Capensis, 770; favosus, 687; Güntheri, 760  
 Ceratolichas, 591  
 Ceratops, 856  
 Ceratops beds, 828, 845, 847, 849  
 Ceratopsidae, 846, 848  
 Ceratopsids, 828, 847, 856, 864, 870  
 Ceratosaurus nasicornis, 765, 766\*  
 Ceraurus (Cheirurus), 422, 482, 500, 502, 508, 513, 516, 520, 521, 546, 568, 625; bimucronatus, 520, 565\*; Niagarensis, 550, 551; pleurexanthemus, 509\*, 515; Satyrus, 503; Sternbergi, 568  
 Cerithiopsis, 916  
 Cerithium, 780, 854, 922; Austri-nense, 836; Clabornense, 916; concavum, 926; cymatophorum, 927; elegans, 926; Hillsboroense, 898\*, 916; mutabile, 926; plitatum, 926; variabile, 925  
 Cernaysian group, 884, 923, 925  
 Cerussite, 335  
 Cervalces Americanus, 999\*  
 Cervus, 927; anoceros, 927; Falconeri, 927; giganteus, 999, 1005; Muscatinensis, 966; Polignacus, 927; verticornis, 927  
 Cestracion, 60, 416\*, 648; Philippi, 416\*, 797  
 Cestracionts, 416\*§, 797, 869 (four modern); Corniferous, 589; Sub-carboniferous, 644, 647; Carboniferous, 680\*; Permian, 707; Triassic, 772; Cretaceous, 812, 843\*, 863, 869  
 Cetaceans, 902, 912\*, 925  
 Cetiosaurus, 786, 790; brevis, 863; Oxoniensis, 786  
 Cetotherium, 925; cephalus, 912\*  
 Chabazite, 68  
 Chænohyus, 918  
 Chieropotamus, 924; Cuvieri, 926  
 Chætetes, 505  
 Chagos Islands, 737, 937  
 Chain coral. See Halysites  
 Chalcedony, 323, 340, 859  
 Chalcedony Park, 135  
 Chalcoelite, 335, 745  
 Chalcopyrite, 70§, 331, 334, 335, 339, 340, 538, 542  
 Chaleur Bay, 444  
 Challeotherium, 919, 925, 927  
 Chalk, 79§, 205 (absorptiveness), 817  
 — formation, 401, 407, 738  
 —, Gray, Lower, Upper, White, 858  
 — period, 738. See also Cretaceous  
 — marl, 865, 866  
 Challenger Expedition, 49, 59, 144, 230, 241, 718, 823  
 Chama, 780, 834; crassa, 917; squamosa, 926  
 Chamaerops humilis, 53  
 Chamops segnis, 849  
 Chamouni, 233, 243, 246  
 Champlain (Lake), 200, 232, 467, 532, 558, 982\*  
 Champlain period, American, 981; subsidence, 981; foreign, 995; elevation at close of, 993  
 — group of the Lower Silurian in New York, 459  
 Champsoosaurus, 902; profundus, 856; Saponensis, 902  
 Chara, 72 (ash of), 582\*, 590; foetida, 72; Stantonii, 889  
 Charcoal, 62§, 124, 662; mineral, 712  
 Charleston earthquake of 1886, 373, 374, 375  
 Chart. See Map  
 Chasmops, 521  
 Chatham Islands, 39, 154, 1019  
 Chattahoochee group, 884, 890, 891, 898\*, 916  
 — River, 890, 891  
 Chaudière River, 591  
 Chazy epoch, 493  
 Cheiracanthus, 625  
 Cheirurus. See Ceraurus  
 Chelonians, 772, 787, 836, 849, 868  
 Cheltenham beds, 775  
 Chelys Blakei, 790  
 Chemical attraction as a dynamical agency, 117  
 — changes producing heat, 258  
 — products, mechanical work of, 137, 138\*  
 — work, 118-140; solution, 118-122; oxidation and deoxidation, 122-128; hydration, carbonic acid, humus acids, 128-135; silica, 135-136; living organisms, 136-137; chemical products, 137-139; concretionary consolidation, 139-140  
 — — of metamorphism. See Metamorphism  
 Chemnitzia, 731; gloriosa, 855  
 Chemung period, 602  
 Chenopus liratus, 916  
 Cherry Ridge group, 606  
 Chert, 63§, 82§  
 Chesapeake Bay, 744, 819, 889, 891  
 — epoch, 884, 891  
 Chester group, 684, 687, 688, 639, 642, 645, 647, 709  
 Chestnut, 435, 837  
 Chætetes, 704  
 Cheyenne River, 266  
 Chlastoite, 65\*, 66§  
 Chico group (beds), 815, 818, 830, 831, 840, 889; see also Shasta-Chico series  
 Chile, 137; snow-line in, 234; volcanoes of, 296; earthquake in, 349; recent changes of level in, 349; Cretaceous in, 857, 867  
 Chillohowee sandstone, 468  
 Chillan Cordillera, 857  
 Chiloe, 23  
 Chilopoda, 419  
 Chimæra, 510  
 Chimærids, 416§, 574, 725  
 Chimæroids, Corniferous, 587, 589\*; Cretaceous, 828