

- Andromeda**, 837; *affinis*, 839; *Parlatorii*, 838*
Andromedites, 922
Aneimites obtusus, 609*, 611
Angau Island, 150
Angiosperms, 409, 434, 435§; *Cro-taceous*, 816, 831, 832*, 833, 837, 838*, 839, 859, 868; *Tertiary*, 895, 921
Anglesea, 309, 440
Anglesite, 335
Angoumand, 859, 866
Anguillaria Cunuminsi, 854
Anhydrite, 69§, 120, 121, 125, 128, 138
Animal kingdom, 9, 413, 414
Animals, geographical distribution, 52, 53; materials they afford to rock-making, 140-141, 144-152 — and plants, distinctive characteristics, 413-414
Animalkie group, 446, 469
Anisomyon, 855; *borealis*, 855; *Haydeni*, 855
Anjou, Faluns beds of, 926
Annabon Island, 297 (volcanoes)
Annelids, 55, 157, 423, 427, 438§, 720, 721, 723
Annularia, 519, 671, 685, 699, 704, 718; *carinata*, 704, 705*; *longifolia*, 689, 692, 704; *minuta*, 704; *radiata*, 704; *Romingeri*, 560; *sphenophylloides*, 689, 692, 704
Anodonta, 837
Anomalocaris Canadensis, 476, 477*
Anomalocerinus, 516
Anomalocystites, 562; *cornutus*, 559*
Anomaloptyryx, 1014
Anomia, 828; *argentina*, 854; *ephippoides*, 915; *miconema*, 855
Anomocare, 482
Anomodontia, 685
Anomodonts, 688, 707, 772, 773
Anomeopus scambus, 752*
Anomozamites elegans, 756*
Anona robusta, 839
Anoplia nucleata, 579
Anoplophora lettica, 774; *Münsteri*, 774
Anoplotheres, 924§
Anoplotherium, 926, 927; *commune*, 926; *secundarium*, 926
Anorthite, 64§, 65, 82, 86, 87, 88, 273, 313, 318, 319, 323, 324, 802
Anorthite rock, 87§
Anorthityte, 87§
Ant. See *Ants*
Ant-eater, 54, 925, 1002
Antarctic continent, 737, 798; in the Quaternary, 1019; see also *Gondwana Land*
— ice-barrier, 252
— islands, 17
— pole, 17
— regions, 737; glaciers, 238, 241; volcanoes, 295, 296, 297
Antedon, 429
Antelope Park, 178
Antelopes, 924, 927
Antholithes, 674; *Pitcairne*, 673*
Anthozoans, 491§
Anthracerpes typus, 691
Anthracerpeton crassosteuum, 703
Anthracite, 74, 315, 453, 648, 654, 655*, 657, 661, 695, 714, 732, 826; composition, 662, 663, 712, 713; in geodes, 493, 497; of the Calceferous, 493
—, origin of, 713-714
Anthracoblattina, 691, 701
Anthracomartus, 691, 701; *trilobitus*, 691; *Völkelianus*, 703
Anthracomya carbonaria, 690; *elongata*, 690; *levis*, 690
Anthracopalaemon gracilis, 678*, 691; *Hillanus*, 691
Anthracosaurus Russellii, 682, 703
Anthracotherium, 918, 926
Anthracothremma robusta, 691
Anthrapalaemon dubius, 703; *Grossarti*, 703; *Salteri*, 701*, 703
Anticlines, 102§*, 103*, 109*, 186*, 368*, 874*
Anticosti Island, shore-platform of, 221; Lower Silurian in, 493, 533; Upper Silurian, 493, 533, 537, 539, 541, 563, 568, 573; species common to the Clinton and Niagara, 551
Antilope, 927
Antimony, 331
Antipathes, 55
Antisana (Mt.), 26, 296
Antrim, 867, 938
Ants, 158, 419, 717, 783, 794; number of Florissant, 901
Apatemys, 918
Apaton pedestris, 704
Apatichnus bellus, 752*
Apatite, 63, 69§, 79, 86, 143, 313, 447, 450, 453, 455
Apatornis, 852
Aptosaurus laticollis, 763, 764*
Apennines, 41, 319, 775, 812, 920, 921, 927, 932
Aphanapteryx, 1019; *Bræcki*, 1019; *Hawkinsii*, 1019
Aphanitic texture, 76§
Aphelops, 911, 919
Aphis, *Aphides*, 419, 525, 901
Aphrodina Tippiana, 854
Apla Island, 145*
Aploerinus, 778; *Meriani*, 791; *Roissyanus*, 778*, 779
Aplocystites Canadensis, 550; *elegans*, 550; *Gebhardi*, 559*; *Huronensis*, 550
Aporoxylon, 627
Aporrhais occidentalis, 984; *Sowerbyi*, 925
Appalachian Chain, 24, 389, 559, 734, 743, 793, 799
— coal-field, 648
— flexures, 102*, 353, 354, 355*, 356*
— geosyncline, 357, 537, 570, 605, 629, 715
— Mountain Range, 389; characteristics of, 353-357
— Mountain System, 389, 732, 863
— Mountains, making of, 357, 387, 691, 728, 729, 736
Appalachian protaxis, 24, 443*, 444, 450, 461, 464, 466, 467, 483, 490, 524, 740
— revolution, 728, 735, 877
Appomattox formation, 965
— group, 892
Apteryx, 54, 1014
Aptian group, 859, 865
Aptychus beds, 791
Apuan Alps, fossils of, 310
Apus, 486
Aquamarine, 67§
Aquitania group, 884, 926
Arachnids, 418, 419, 420§, 721, 722; derivation, 722-723; relations in body segments and limbs to Crustaceans, Limuloids, and Insects, 724
—, Upper Silurian, 557, 574, 721; Carboniferous, 677, 678*, 691, 703; Paleozoic, 721; Tertiary, 901, 922
Arachnophyllum, 552
Aragonite, 69§, 129, 130, 314, 317
Aral Sea, 22, 33
Aralia, 831, 837
Aralo-Caspian depression, 22, 23
Arapahoe beds, 827
Ararat (Mt.), 296 (height)
Araucarites, 750, 777
Arbor vitae, 435
Arca, 855, 916; *crassicosta*, 900*, 917; *idonea*, 917; *incilis*, 917; *inornata*, 916; *Mississippiensis*, 898*, 916; *scalarina*, 917; *subrostrata*, 917
Arcestes, 756, 757; *cirratus*, 757; *Gabbi*, 757, 758; *giganto-galeatus*, 774; *Nevadensis*, 757; *ruber*, 774
Archean, 440; iron ores in, 376, 440
— Eozoon, 319
— map of N. America, 442, 443*
— origin of later rocks, 458
— protaxes of N. America, 359, 393, 457, 531, 744, 746, 812, 826, 875
— ranges of the Atlantic border, 461
— system of mountains in eastern N. America, 389
— of the Rocky Mountain Chain, and of the Front Range of Colorado, 389
Archean time, 204, 311, 326, 368, 380, 384, 387, 389, 393, 404, 407, 409*, 410, 440-459; N. America, 442; foreign, 456; observations, 457; age of, in eastern America, 466
Archelurus, 918
Archaeocalamites radiatus, 596*
Archaeocladaris, 641, 674, 707; *Norwoodi*, 640*, 646; *Shumardana*, 626; *Wortheni*, 640*, 646
Archaeocyathus profundus, 470*
Archaeoniscus Brodiei, 733*
Archaeophyton Newberrianum, 454
Archaeoplax signifera, 917
Archaeopteris, 596, 639, 699; *Bockschiana*, 645; *Browni*, 622; *Gasplensis*, 611; *Halliana*, 609*, 622; *Hibernica*, 626; *Jacksoni*, 595*,