

- Ptyonodus, 687
 Pudding-granite, 97§
 Pudding-stone, 80§, 147
 Puerco Eocene lake or basin, 881*, 882, 898
 — group, 886
 Puerto Rico, 19
 Puget group, 881
 — Sound, 881
 Pugnellus densatus, 854
 Pulaski shales, 494
 Pullastra arenicola, 774
 Pulmonates, 423, 674 (first), 676*
 Pumice, 80, 84§, 136, 144, 246, 276, 892
 Punjab, 770
 Pupa, 152, 708; Blandi, 966; contracta, 966; fallax, 966; muscorum, 966; quarticaria, 966; simplex, 966; Vermilionensis, 676*, 690; vetusta, 676*, 682, 690
 Purbeck axis, 936
 — beds, Purbeckian, 411, 775, 777, 783, 789, 791
 Purity of air and waters in the Cambrian, 484, 485
 Purpura, 130; cancellata, 855
 Purús, 867
 Putnam County, N. Y., 24
 Pycnodonts, 417§, 836
 Pycnodus, 417, 772, 788
 Pycnogonids, 419
 Pygidium, 421§
 Pygocephalus Couperi, 703
 Pygopterus, 692, 705; mandibularis, 707
 Pygurus rostratus, 865
 Pyramids of Egypt, made in part of Nummulitic limestone, 920
 Pyrazisinus acutus, 916; campanulatus, 898*, 916
 Pyrenean basin, 857
 Pyrenees, 23, 239, 265, 812; Lower Silurian in, 518; Jurassic, 775; Cretaceous, 866; Tertiary, 347, 865, 919, 920; elevation of, 932, 936
 Pyrifusus granosus, 855; Newberryi, 841*, 855; subduratus, 854
 Pyrite, 70*§, 123
 Pyrites, 80
 Pyritiferous rocks, 73§, 84, 658
 Pyromeride, 84§
 Pyrophyllite, 68§, 89
 Pyrophyllite schist, 80§
 Pyroxene, 67*§, 85, 86, 288*; rocks, 88-89
 Pyroxenite, 88§, 582
 Pyrrhotite, 70§
 Pytho, 847
 Pythonomorphs, 826, 847

 Quadersandstein, Upper, 866
 Quadrumana, 54, 902, 908, 906, 907, 917; in Europe, 923, 925, 927
 Quadrupeds. See Mammals
 Quakertown coal-beds, 656
 Quartz, 15, 62, 63§; work of solutions of, 135-136
 Quartz-andesite, 86§, 273, 296; basalt, 296; diorite, 86§, 272; dolerite, 87§; felsyte, 272, 325; gabbro, 87§; porphyry, 84§, 317; syenite, 85§; trachyte, 84§, 86, 273, 314 (see also Rhyolite)
 Quartz flour from glaciers, 169
 Quartzophyric rocks, 77§, 83, 84
 Quartzose rocks, 78§
 Quartzite, 80§, 82§, 112* (jointed); septaria, 138*
 Quartzitic rocks, 83, 84
 Quaternary era, 940; general observations on, 1016
 Quebec, 466
 — group, 482, 490, 496, 497, 503, 527*
 Queen Charlotte Islands, 747, 757, 760, 809, 818, 830, 868
 Queensland, 698, 699; Devonian in, 628; Jurassic, 776; Cretaceous, 857
 Quenstedtoceras cordiforme, 758*, 760
 Quercus, 840, 921, 922; angustiloba, 839; castanopsis, 839; Ellistana, 839; Godeti, 839; myrtifolia, 895*, 896; suber, 713
 Query phosphorite beds, 926
 Quetta, earthquake in 1892, 375
 Quicklime, 78§, 79
 Quicksilver mines, 835
 Quito, plateau, 26; volcanoes of, 296

 Racket River, 946
 Racodiscula, 432*
 Radack Islands, 36, 88, 89, 145
 Radiates, 419
 Radiolarian earth, 935, 936; ooze, 144
 Radiolarians, 57, 64, 72, 121, 136, 141, 144, 433*; Archæan, 1029
 Radiolite limestone, 866
 Radiolites, 820, 861, 877; Austiniensis, 855; Bournoni, 861*; Mortoni, 861; Neocomiensis, 865; Texanus, 834, 835*, 886
 Radula acutilleneata, 854
 Rafinesquina, 503, 579; alternata, 507*, 514, 524; fasciata, 503; incrassata, 503
 Raft of Red River, 191
 Ragadina annulata, 432*
 Raibl shales, 774
 Rain, causes influencing the amount of, 50, 51
 Rain-drop, work of, 177§, 178*
 Rain-prints, 95§, 178, 223, 645, 742
 Rainfall, 51, 944, 945
 Rainier, Mt. See Tacoma
 Rainy Lake, 446
 Rájmahál group, 698, 873
 Ralick Islands, 36, 88, 89, 145
 Rancocas group, 821
 Rangifer caribou, 946, 1002; tarandus, 946
 Ranunculus, 240
 Raphistoma, 506, 520, 521; lenticulare, 507*, 514, 524, 567; multivolvatum, 501; Peppinense, 501; planistrum, 503
 Rappahannock freestones, 816
 Karitan beds (group), 815, 821
 Rat, 53, 156, 797
 Raton coal-field, 364
 Raton Mts., 828
 Rattan, 435
 Rattlesnake, 682
 Rauchwacke, 697
 Rauhalk, 697
 Rauracian group, 790
 Rays, 415§, 418
 Razor stone, 88§
 Recent period, 1012
 Receptaculites, 497*, 513, 515, 516, 560, 584, 597; elegantulus, 497*, 500; globularis, 513; infundibuliformis, 562; lowensis, 513; Neptuni, 517, 524, 569; Oweni, 513, 515
 Red Bluff group, 889
 Red Crag, 927
 Red Deer River, 847
 Red earth, 134
 Red marl, 542, 627
 Red ocher, 70§, 126, 331
 Red porphyry, 86§
 Red River, 191 (raft), 819, 885, 888, 895
 Red River of the North, 947
 Red Sea, 21, 41, 200; volcanoes of, 295, 296
 Red Wall Group, 469, 658
 Redwood, 831, 859, 939
 Regelation, 245§
 Reindeer, 946, 950, 1013
 Reindeer or Mesolithic epoch, 997, 1009
 Remopleurides, 520, 521
 Rensseleria, 562, 578, 579; ovoides, 578*, 579
 Rensselaerite, 320, 453§
 Reptiles, 54, 55, 414; reign, or era of, 737; Permian, 687, 706, 726; relation to Birds, 794, 795
 Requiaenia, 877 (end of genus); ammonia, 865; Lonsdalei, 865; oblonga, 865; patagiata, 836; Texana, 834, 835*, 836
 Resins, 74, 143, 712, 713
 Respiration, 136§
 Reteocrinus, 516
 Retepora, 427
 Retzia, 627
 Rhabdoceras Russellii, 757
 Rhabdoceras bed, 757
 Rhacophyllites, 760
 Rhacophyllum, 699; Brownii, 611; filiciforme, 689, 705; flabellatum, 645; lactuca, 689, 693, 705
 Rhadnichthys, 692
 Rhætic beds, 738, 769
 Rhamnus Goldianus, 830; rectinervis, 839; salicifolius, 839
 Rhamphorhynchus, 788, 790; phylurus, 787*, 788
 Rhea, 54
 Rhénan beds, 626, 627
 Rhine, 169, 176, 191 (denudation), 195 (less), 570
 Rhinoceros, 54, 902, 907, 909, 910, 911, 927, 928; Etruscus, 927; hemitechus, 1005, 1006; incisivus, 927; megarrhinus, 927; proterus, 1001; Schlegelmacheri, 927; tichorhinus, 1004, 1005, 1006