

VAL

- Vale of Clwyd and boulder-clay, 470, 526
 — Eden, 324, 520-522
 — — Permian strata of, 142, 307
 — — structure of country east of, 332-335
 — Tisbury, Portland Limestone of, 191
 Valleys, Forth and Clyde, 527, 528
 — how formed, 327-330
 — Loch Ness, 527
 — of denudation, 32-33
 — of Yorkshire, their origin, 334-335
 — river excavation of, 534-537
 — Tyne and Solway, 527
 Victoria cave, 464-467
 Vitrified forts, 613
 Vivian, Mr. E., and Kent's Hole, 477
 — Mr. H. on South Wales coal-field, 597
 Volcanic ashes, how distinguished, 22
 — dust of Cumbria, 81
 — rocks of Old Red Sandstone, 111
 — rocks, Lower Silurian, 71, 75-77
 — — Breidden Hills, 77
 — — Builth, 72, 77
 — — near Saint David's, 77
 — — near Stiper Stones, 77
 — — North Wales, 75
 Volcano Graham Island, 79
 Volcanos, Lower Silurian, 81, 82
 — near the sea, 80
 — roots of, 75-77

- W**ALES, &c., Old Red Sandstone, 103, 104
 — age of mountains of, 405
 — and West of England, denudation of palæozoic strata, 321
 — churches and Gaelic Saints, 584
 — partial Cretaceous submergence of, 506
 — Rivers of, 553
 — valleys of, 522-529

WIL

- Ward, J. C., on volcanic dust of Cumbria, 81
 — — — rock-bound lakes, 446
 Warwickshire coal-field, 124
 — Permian strata and fossils, 142
 Wash, rivers and plain of, 333, 517
 — alluvia of, 542
 Waste of sea-cliffs, 8
 — — strata by denudation, amounts of, 34
 Waveney, river gravels, flint weapons, &c., 539
 Weald of Kent and Surrey, 202-208
 — clay, thickness of, 207
 — denudation of, and time, 344-346
 — — marine bands in, 208
 — not an old bay, 338-340
 — rivers of, 341-344
 Wealden epoch, physical geography of, 202, 206, 208-211
 — anticlinal, 237
 — boulder-clay, absent in, 53
 — denudation of, 336-346
 — epoch, vegetation and animals of, 210
 — fossils, 207
 — grey wethers, 349, 350
 — — land of, 209-211
 — Upper Greensand of, 223, 224
 Wear, 520, 530
 Weaver, 522
 Welland, 517
 Wenlock, Upper Silurian rocks of, 93
 — alluvia of, 542
 Werner, 279
 West coast-cliffs, denudation of, 488
 Westminster Abbey and Bath Stone, 611
 Wharfe, 519
 Whitaker, Mr., and flint implements, 541
 White Lias, Lyme Regis, 159
 — — fauna, analogous to Caspian fauna, 160, 161
 Willett, Mr., and Wookey Hole, 474