

- Waltershausen, Von, earth's interior, 88, 207; crystalline admixtures, 294, 296, 304.
 Wappinger Valley, N. Y., geology of, 642.
 Warwick, Penn., iron-ores of, 551.
 Wasatch Mountains, Cambrian of, 623.
 Washington Co., N. Y., section of First Graywacke in, 592.
 Water in silicates, 201, 298, 306; in igneous rocks (*see* Hydroplutonic agency).
 Waters, their part in crenitic action, 218 (*see* Crenitic process); mineral, alkaline, 218; fossil sea-waters, 253.
 Water-glass, Frémy on, 119; Ordway on, 149 *et seq.*; its solvent action on metallic oxyds, 160, 181, 240.
 Water-lime group, 527.
 Way, C. J., artificial formation of silicates, 155, 158.
 Webster, J. W., rock-decay, 248.
 Weisbach, mineral system of, 381 *et seq.*, note.
 Werner, his classification of rocks, 69 *et seq.*; great divisions of, 113, 100; origin of crystalline rocks, 69, 71, 76, 105; mineral veins, 71; granites, 72 *et seq.*; volcanoes, 71; eruptive rocks, 217; sources of information regarding, 71, note; his classification in mineralogy, 279, 280.
 Westanite, 365.
 Westchester Co., N. Y., its geology, 656; J. D. Dana on, 663, 665 *et seq.*; Laurentian of, 666; Montalban of, 667.
 West Indian Islands, geology of, 681 *et seq.*, 683.
 Wheatland, Penn., iron-ores of, 550.
 White, C. A., rock-decay, 270.
 White Mountains, rocks of, 406, 463, 480, 621, 657 *et seq.*, 664.
 Whitney, J. D., orthoclase with zeolites, 120; rock-decay, 249; Azoic rocks, 405; serpentines, 420; geology of Lake Superior, 613.
 Wicklow Hills, Ireland, 423.
 Williams, C. Greville, fusion of minerals, 299 *et seq.*, note.
 Williams, W. Mattieu, solar heat, 42, 64; interstellar space, *ibid.*
 Winchell, N. H., rock-decay, 270; Ani-mikie series, 578; geology of Minnesota, 579.
 Windsor basin, Quebec, 571.
 Wisconsin, kaolin of, 127, 254; petrosilex of, 546; Hall's Geology of, cited, 601.
 Woodstock, N. B., fossiliferous limestone of, 193.
 Worcester, Mass., veins near, 123; gneisses of, 274, note.
 Wrekin, Shropshire, rocks of, 421.
 Wurtz, Ad., polysilicates, 298.
 Wurtz, Henry, varying density of solids, 396 *et seq.*, his Geometrical Chemistry, 396; geology of North Carolina, 569.
XANTHORTHITE, a zeolitoid, 336.
YOUNG, C. A., interstellar space, 49.
 Younger gneisses. *See* Gneisses, younger.
ZEOLITES, name of, 331; conditions of formation of, 120; as secretions from basic rocks, 134 *et seq.*, 138, 307; bases of, 144; formed in deep-sea ooze, 154; contemporaneous formation of, 150 *et seq.*, 153, 185; artificial formation of, 155 *et seq.*, 158; paragenesis of, 143; Cross and Hildebrand on, 135; Emerson on, 138, 139; table of, with related species, 141; order of, 281, 313.
 Zeolitoids, tribe of, 316, 334; table of, 335.
 Zinc-ores, in Laurentian, 231; Taconian, 536, 538.
 Zirconio oxyd in silicates, 305, 335, 344, 355, 366, 367.
 Zircons, Linnemann on, 214; varying density of, 366.
 Zirkel, lherzolite, 508.
 Zoisite, its relations to melonite and jadeite, 299, 301, 348.
 Zöllner, comets, 64; interstellar space, 65.
 Zoölogy, its objects, 25, 28.