original, he would have made his fascination irresistible. As it is, Thoreau holds a unique place. He was a naturalist, but absolutely devoid of the pedantry of science ; a keen observer, but no retailer of disjointed facts. He thus holds sway over two domains : he has the adherence of the lovers of fact and of the children of fancy. He must always be read, whether lovingly or interestedly, for he has all the variable charm, the strange saturninity, the contradic­tions, austerities, and delightful surprises, of Nature herself.

See W. E. Channing, *Thoreau the Poet Naturalist,* Boston, 1873; F. B. San­born, *Biography of Thoreau* (American Men of Letters Series) ; H. A. Page, *Bio­graphy of Thoreau* ; Emerson, Introduction to *Excursions* ; J. Russell Lowell, *My Study Windows* ; Will. H. Dircks, Introduction to *Walden ;* Professor Nichol, *American Literature,* pp. 312 *sq.* ; Mr Burroughs ; Mr Henry James, &c. After Thoreau’s death were published (besides the *Excursions,* 1863) *The Maine Woods* (1864); *Cape Cod* (1865); *Letters and Poems* (1865) ; *A Yankee in Canada* (1866). In the *Atlantic Monthly,* in 1862, appeared “ Walking,” “ Autumn Tints,” and “ wild Apples”; in 1863 “Night and Moonlight.” His best known work, *Walden,* constitutes the second volume of the series called *The Camelot Classics ;* otherwise Thoreau’s productions are not widely known in Britain.

THORIUM, in chemistry, is the name of the as yet unisolated radical of *thoria,* one of the now numerous “ rare earths.” Thoria was discovered by Berzelius in 1828 in the mineral now called thorite. It is present also in pyrochlor, monazite, orangite, and euxenite. Being similar to the oxides TiO2 and ZrO2 of titanium and zirconium, thoria is assumed to be a binoxide ThO2. The atomic weight, according to Cleve, is Th = 233, 0 being 16.

THORN (Polish *Torún),* an interesting old town in the province of West Prussia, is situated on the right bank of the Vistula, near the point where the river enters Prussian territory, 26 miles south-east of Bromberg and 92 miles south of Dantzic. Its position near the frontier of Russian Poland makes it a strategic point of importance ; and, strongly fortified since 1818, in 1878 it was converted into a fortress of the first class. The “ old town,” founded in 1231, and the “ new town,” founded thirty-three years later, were united in 1454, and both retain a number of quaint buildings dating from the 15th and 16th centuries, when Thorn was a flourishing member of the Hanseatic League. The town-house, of the 14th and 16th centuries, the churches of St John and the Virgin, with aisles as lofty as the nave, the ruined castle of the Teutonic order, and the gates, leaning tower, and fragments of the walls, all of the 13th century, are among the most interesting edifices. The ancient wooden bridge, now burned down, at one time the only permanent bridge across the lower Vistula, has been succeeded by a massive iron railway viaduct, half a mile long. Thorn carries on an active trade in grain, timber, wine, colonial wares, and iron, and has manufactures of leather, hats, starch, candles, and numerous other articles. It is famous for its “ Pfeffer­kuchen,” a kind of gingerbread. Part of the trade is carried on by vessels on the Vistula. In 1885 the popu­lation was 23,914 (in 1816 7909), about three-fifths being Protestants and two-fifths (chiefly Poles) Roman Catholics.

Thorn, founded in 1231 by the Teutonic order as an outpost against the Poles, was colonized mainly from Westphalia. The first peace of Thorn, between the order and the Poles, was con­cluded in 1411. In 1454 the townspeople revolted from the knights of the order, destroyed their castle, and attached them­selves to the king of Poland. This resulted in a war, which was terminated in 1466 by the second peace of Thorn. In the 15th and 16th centuries Thorn was a Hanse town of importance, and received the titles of “queen of the Vistula” aud “the beautiful.” It embraced the Reformation in 1557, and in 1645 it was the scene of a “ colloquium charitativum,” or discussion betwixt the doctors of the rival creeds, which, however, resulted in no agreement. In 1724 a riot between the Protestant and Roman Catholic inhabitants was seized upon by the Polish king as a pretext for beheading the burgomaster and nine other leading Protestant citizens, an act of oppression which is known as the “bloodbath of Thorn.” The second partition of Poland conferred Thorn upon Prussia; by the treaty of Tilsit it was assigned to the duchy of Warsaw ; but since the congress of Vienna it has again been Prussian. Copernicus was bom at Thom in 1473.

THORNBACK is the name given to a species of ray *(Raja clavata)* which is found all round the coasts of Europe, and locally abundant : it derives its name from the peculiar armature of the skin of its body, the upper and lower surfaces of the body of the female being armed with scattered, more or less numerous, large round osseous bucklers, each with a spine in the centre ; the tail also is armed with rows of similar bucklers. In the male fish these bucklers are absent, or nearly so. The thornback does not grow to the same large size as the skates, a specimen three feet across being considered large. It is more valued as food than the other rays, and consumed in large quantities, fresh as well as salted.

THORNHILL, Sir James (1676-1734), historical painter, was born at Melcombe Regis, Dorset, in 1676, coming of an ancient but impoverished county family. His father died while he was young, but he was befriended by his maternal uncle, the celebrated Dr Sydenham, and apprenticed to Thomas Highmore, sergeant-painter to King William III., a connexion of the Thornhill family. Little is known regarding his early career. About 1715 he visited Holland, Flanders, and France; and, having obtained the patronage of Queen Anne, he was in 1719-20 appointed her serjeant-painter in succession to Highmore, and was ordered to decorate the interior of the dome of St Paul’s with a series of eight designs, in chiaroscuro heightened with gold, illustrative of the life of that apostle,—a commission for which Louis Laguerre had previously been selected by the commissioners for the repair of the cathedral. He also designed and decorated the saloon and hall of Moor Park, Herts, and painted the great hall at Blenheim, the princesses' apartments at Hampton Court, the hall and staircase of the Southsea Company, the chapel at Wimpole, the staircase at Easton-Neston, Northamptonshire, and the hall at Green­wich Hospital, usually considered his most important and successful work, upon which he was engaged from 1708 to 1727. Among his easel pictures are the altar-pieces of All Souls and Queen’s College chapels, Oxford, and that in Melcombe Regis church ; and he executed such portrait subjects as that of Sir Isaac Newton, in Trinity College, Cambridge, and the picture of the House of Commons in 1730, now in the possession of the earl of Hardwicke, in which he was assisted by Hogarth, who married Jane, his only daughter. He also produced a few etchings in a slight and sketchy but effective manner, and executed careful full-size copies of Raphael’s cartoons, which now belong to the Royal Academy. About 1724 he drew up a proposal for the establishment of a royal academy of the arts, and his scheme had the support of the lord treasurer Halifax, but Government declined to furnish the needful funds. Thornhill then opened a drawing­school in his own house in James Street, Covent Garden, where instruction continued to be given till the time of his death. He acquired a considerable fortune by his art, and was enabled to repurchase his family estate of Thorn­hill, Dorsetshire. In 1715 he was knighted by George L, and in 1719 he represented Melcombe Regis in parlia­ment, a borough for which Sir Christopher Wren had previously been member. Having been removed from his office by some court intrigue, and suffering from broken health and repeated attacks of gout, he retired to his country seat, where he died on the 4th of May 1734. His son James was also an artist. He succeeded his father as serjeant-painter to George II., and was appointed “ painter to the navy.”

The high contemporary estimate of Sir James Thornhill’s works has not since been confirmed; in spite of Dr Young, “late times” do not

“ Understand How Raphael’s pencil lives in Thornhill's hands.”

He is weak in drawing,—indeed, when dealing with complicated figures he was assisted by Thomas Gibson ; and, ignorant of the great monumental art of Italy, he formed himself upon the lower