lizard and crocodile tribe. Etym.,  $\pi\lambda\eta\sigma_{iov}$ , plesion, near to, and  $\sigma\alpha\nu\rho\alpha$ , saura,

PLIOCENE, OLDER and NEWER. Two divisions of the Tertiary Period which are the most modern, and of which the largest part of the fossil shells are of recent the most modern, and of which the largest part of the fossil shells are of recent

species. Etym.,  $\pi\lambda\epsilon_{i\omega\nu}$ , pleion, more, and  $\kappa_{aivos}$ , kainos, recent. PLUTONIC ACTION. The influence of volcanic heat and other subterranean causes

under pressure. PLUTONIC ROCKS. Granite, porphyry, and other igneous rocks, supposed to have consolidated from a melted state at a great depth from the surface.

- CONSOLUTERAL TION & MERCE State as a great deput deput
- **PORPHYRY.** An unstratified or igneous rock. The term is as old as the time of PIN, and was applied to a red rock with small, angular, white bodies diffused through it, which are crystallized felspar, brought from Egypt. The term is hence applied to every species of unstratified rock in which detached crystals of felspar or some other mineral are diffused through a base of other mineral composition.  $Etym., \pi op\phi vpa, porphyra, purple.$
- **PORTLAND LIMESTONE**, PORTLAND BEDS. A series of limestone strata, belonging to the upper part of the Oolite Group, found chiefly in England in the Island of Portland on the coast of Dorsetshire. used in London is from these quarries.
- POZZUOLANA. Volcanic ashes, largely used as mortar for buildings, similar in nature to what is called in this country Roman cement. It gets its name from Puzzuoli, a town in the Bay of Naples, from which it is shipped in large quantities to all parts of the Mediterranean.
- **PRECIPITATE.** Substances which, having been dissolved in a fluid, are separated from it by combining chemically and forming a solid, which falls to the bottom of the fluid. This process is the opposite to that of chemical solution.
- **PRODUCTA.** An extinct genus of fossil bivalve shells occurring only in the older secondary rocks. It is closely allied to the living genus Terebratula.
- PTERODACTYL. A flying reptile: species of this genus have been found in the Oolite and Muschelkalk. Some of the finger-joints are lengthened, so as to serve as the expansors of a membranous wing. Hence the name wing-fingered. Etym., πτερον, pteron, a wing, and δακτυλos, dactylos, a finger.
- PUBESCENCE. The soft hairy down on insects. Etym., pubesco, the first growth of the beard.

PUDDINGSTONE. See "Conglomerate."

PUMICE. A light spongy lava, chiefly felspathic, of a white colour, produced by gases or watery vapour getting access to the particular kind of glassy lava called obsidian, when in a state of fusion : it may be called the froth of melted volcanic glass. The word comes from the Latin name of the stone, *pumex*.

PURBECK LIMESTONE, PURBECK BEDS. Limestone strata, belonging to the Wealden Group, which intervenes between the Green-sand and the Oolite.

**PYRITES.** (Iron.) A compound of sulphur and iron, found usually in yellow shining crystals like brass, and in almost every rock, stratified and unstratified. The shining metallic bodies so often seen in common roofing slate are a familiar example of the mineral. The word is Greek, and comes from  $\pi v \rho$ , pyr, fire; because under particular circumstances, the stone produces spontaneous heat, and even inflammation.

PYROMETER. An instrument for measuring intense degrees of heat.

QUADRUMANA. The order of mammiferous animals to which apes belong. Etym., quadrus, a derivative of the Latin word for the number four, and manus, hand, the four feet of those animals being in some degree usable as hands.

- QUA-QUA-VERSAL DIP. The dip of beds to all points of the compass around a centre, as in the case of beds of lava round the crater of a volcano. *Etym.*, quâ-quâ versum, on every side.
- QUARTZ. A German provincial term, universally adopted in scientific language for a simple mineral composed of pure silex, or earth of flints : rock-crystal is an example.
- QUARTZITE OF QUARTZ ROCK. An aggregate of grains of quartz, sometimes passing into compact quartz.