

## MATERIALS AND GROWTHS ON THE EARTH

with the texture of flesh; and the *diaphys* greatly prevail, 293; it passes into phosphatic, *calcareous*, *siliceous*, and *argillaceous* forms. New Zealand, 120; *silica* means *siliceous*; *siliceous*, a form, and *silicated* by certain *silicifying* animal and vegetable, but unaccompanied by *silicate*. The light of the glow-worm exemplifies the *silicate* nature of the town, which is derived from the Greek *phos*, light; and *phos*, I burn, in reference to *silicate*.

**Phosphorus**, one of the chemical elements, 299.

**Photogenesis**, a general term for the mode of "drawing by means of light," whereupon a surface rendered *photogenic* receives by certain properties, the rays of light impress perfect images of external objects. See *Daguerreotype*, *Caleotype*, *Talbototype*.

**Photography** (Gr. *phos*, light, and *graphein*, I write), 294.

**Photometer** (Gr. *phos*, light, and *metron*, I measure), an instrument for measuring the intensity or degree of light, 294. In *mining*, also *intensity*.

**Physical Chemistry**, 49-64; *not* to be called *material*.

**Physiology**, *Neurophysiology*, 65-80; *Animal*, 110-119.

**Physiology**, a term confined as that branch of physics which treats of the functions and properties of living bodies, animal and vegetable, 110-119.

**Physics** (Gr. *phusei*, to breathe), a science of very extent, which explains the doctrine of natural bodies, and all the phenomena exhibited with them, 119-120; *material*.

**Physotite** (Gr. *phyton*, a plant, and *stota*, a stone), a variety of fossilized plant, 120.

**Physiology** (Gr. *phusion*, a plant, and *logos*, discourse), the department of science which treats of the natural habits and qualities of plants. This term is often used instead of botany, as being of much more philosophical and comprehensive. Hence also physiologist instead of botanist.

**Physiognomy** (Gr. *phusikos*, to see); and

**Physiophagy** (Lat. *cere*, I devour), feeding on plants. *Piscibulus*, the inner tunica which dips into and lines all the folds of the brain, 117.

**Plains**, an Italian name for a portion or covered walk. The word literally signifies a broad open place or square whence it came to be applied to the walks or parks surrounding them.

**Plas and tact**, in Cookery, 750.

**Plaster**, in Zoology, 149; how to keep, 637.

**Pigments** (Lat. *pigmentum*), or paints, 316.

**Pigs**, in Zoology, 140; domesticated, 625; various breeds of, 626; choice of, 626; management of, 626;

diseases of, 626; words of, 626; *butchering*.

**Pile**, in Zoology, 158; in Angling, 682.

**Pilasters**, square or flat columns, in Architecture, 184.

**Pilchard-fishing**, description of, 701.

**Pile**, in architecture, 181; pile fabric, in weaving, 836.

**Pills**, preparation of, in Medicine, 755.

**Phosphate**, *Metallophosphate*, an alloy containing three parts of zinc and four of copper.

**Pines**, varieties, growth and culture of, 582.

**Pipoculite**, a white argillaceous earth, 359.

**Pipoca**, propagation by, in Horticulture, 582.

**Piquet**, a floricultural term for carnations, whose petals have a white ground, spotted with purple or some other colour, and are serrated on the edges.

See *Flower Garden*, p. 534.

**Pistil**, the female organ of flowers, 74.

**Placoids**, *Placoidians* (Gr. *plio*, a broad plate), one of the four great orders into which Professor Agassiz divides the class *Fishes*. The placoids have their skin covered irregularly with plates of enamel, often of considerable dimensions, but sometimes reduced to small points, like the thorns on the skin of the shark, and the prickly tubercles of the ray. It comprehends all the cartilaginous fishes (sharks and rays), with the exception of the sturgeon, *Acipenser*.

**Plains and valleys**, in Physical Geography, 38.

**Plane**, the inclined, in Mechanics, 215; *wooden* essential.

**Planctozoa** or *zooplankton*, 270; *not* to be confused with

**Planets**, primary and secondary, defined, 116; *sunlike*.

**Planisphere**, a sphere laid down on a plane surface, 48

on the cover of maps of the world and the heavens.

**Planchette**, an ornamental, 482; *not* to be confused with

**Plastigrade**, a geological term for those animals which

walk on the entire foot, 194; *not* to be confused with

**Planting** and *transplanting* of trees, 282, 279; *method*.

**Plate**; natural and physiological function of, 65; *igneous*

and *prokaryotic* constitution of, 65, 105; geographical distribution of, 65; structure of, simple and compound organs, 65; irritability and spontaneous movements, 65; colour and colouring matter, 65, 77; fragrance of, 65; taste and *olfaction*, 65; taste of, classified, 65; fluid cells, or *cytocytes*.

**Plashing**, in forestry, bending the boughs of hedges by partial cutting and then interweaving them so as to thicken the fence, 191; *not* to be confused with

**Plaster** for external application, in Medicine, 755.

**Plastic**, a word applied to substances such as clay, capable of being moulded into any desired shape, as well as to the art of so moulding them.

**Plateaux** or table-lands, in Physical Geography, 57.

**Platinum**, in Chemistry, 362; in Metallurgy, 363.

**Plectognathi**, one of Cuvier's orders of fishes, 159.

**Plodger**, in Surgery, a small flat tent of lint laid over a wound to imbibe the matter discharged and keep the wound clean.

**Plesiosaurus** (Gr. *plesio*, near to, and *sauria*, a lizard), a remarkable fossil reptile of the secondary period, 27. See *Saurian Animals*.

**Plethora**, plethoric, a condition of the body, in which the vessels are surcharged with blood.

**Pleurisy**, inflammation of the pleura or membranous covering of the lungs.

**Plough** and *ploughing*, 465.

**Plover tribe**, wading ord., in Zoology, 161.

**Plums**, character and cultivation of, 554.

**Pluviometer**, another term for a rain-gauge, which see.

**Plutonian** (Pluto, the god of the lower regions), a term applied in geology to rocks of aqueous origin, also to the theory which ascribes the formation of the earth's crust chiefly to igneous or volcanic agency.

**Pneumatic trough**, in Applied Chemistry, 306.

**Pneumatites**, 284-290.

**Pneumonia**, inflammation of the lungs.

**Pointer-dog**, varieties of, 662.

**Poison**, antidotes for, in Surgery, 765.

**Polarity**, the property of pointing to the poles; a word used in reference to mineral bodies when they attract one pole of the magnet and repel another.

**Polarisation of Light**, a changed state of light, in which it exhibits the property of polarity, when *acted upon* by certain mediums.

**Pole**, in Astronomy, 8; in Geography, 52; in Magnetism, 269.

**Polygastric** (Gr. *poly*, many, *gaster*, a stomach), 185.

**Polypes**, *Polyzoa*, in Zoology, 185.

**Polytechnic**, a word applied to institutions where many sciences are taught; or to scientific exhibitions of a varied description.

**Pony**, a horse under thirteen hands in height, 301.

**Poppies** (*papaver*), see *Papaveraceae*, in Botany, 92.

**Porcelain** or *china*, manufacture of, 524.

**Porcupine** (*Hystrix*), order Rodentia, 188.

**Pork** in dietetics, 729; in Cookery, 740.

**Porosity**, an accidental property of water, 188.

**Porphyry** (Gr. *porphyros*), purple. This term was originally applied to a reddish unstratified rock found in Egypt, and used by the ancients for statuary purposes.

It is now employed by geologists to denote a reddish igneous rock containing imbedded crystals of felspar,

and all rocks (whatever their colour) which contain imbedded crystals distinct from their mass, are said to be porphyritic. We have thus felspar porphyry,

porphyritic granite, and porphyritic gneiss.

**Powder**, a variety of malt liquor made from highly-dried or scorched malt, and characterised by its dark brown colour. Its peculiar aromatic flavour, and its tonic and stimulating qualities, 736.

**Potassium**, the metallic base of potash, 255; in growth.

**Potash**, field, 485; garden, 520; in Dietetics, 726.

**Potstone**, the lepi-olards of the dolomites, 302.