GRIT. A provincial name for a coarse-grained sandstone.

GYMNOSPERMOUS. Gymnosperms form one of the five divisions under which the vegetable kingdom is now classified. The name is derived from the seeds being naked, γυμνος, *gymnos*, naked, and σπερμα, *sperma*, a seed. To this group belong the natural orders Coniferæ which are exogens and Cycadaceæ which are endogens.

GYPSUM. A mineral composed of lime and sulphuric acid, hence called also *sulphate* of *lime*. Plaster and stucco are obtained by exposing gypsum to a strong heat. It is found so abundantly near Paris, that plaster of Paris is a common term in this country for the white powder of which casts are made. The term is used by Pliny for a stone used for the same purposes by the ancients. The derivation is unknown.

GYPSEOUS, of or belonging to gypsum.

GYROGONITES. Bodies found in freshwater deposits, originally supposed to be microscopic shells, but subsequently discovered to be the seed-vessels of fresh-water plants of the genus *Chara*. See above p. 742. *Etym.*, γυρος, *gyros*, curved, and γονος, *gonos*, seed, on account of their external structure.

HEMIPTERA. An order of insects, so called from a peculiarity in their wings, the superior being coriaceous at the base, and membranous at the apex, ἡμισυ, *hemisu*, half, and πτερον, *pteron*, wing.

HORNBLENDE. A simple mineral of a dark green or black colour, which enters largely into the composition of several varieties of the Trap-Rocks.

HORNSTONE. A siliceous mineral substance, sometimes approaching nearly to flint, or common quartz. It has a conchoidal fracture, and is infusible, which distinguishes it from compact felspar.

HUMERUS. The bone of the upper arm.

HYDROPHYTES. Plants which grow in water. *Etym.*, ὑδωρ, *hydor*, water, and φυτον, *phyton*, plant.

HYPOGENE ROCKS. Those rocks which are *nether-formed*, or which have not assumed their present form and structure at the surface, such as granite, gneiss, &c. This term, which includes both the plutonic and metamorphic rocks, is substituted for *primary*, because some members of both these classes, such as granite and gneiss, are posterior to many secondary or fossiliferous rocks. *Etym.*, ὑπο, *hypo*, under, and γινομαι, *ginomai*, to be formed or produced.

ICEBERG. Great masses of ice, often the size of hills, which float in the polar and adjacent seas. *Etym.*, ice, and *berg*, German for hill.

ICHTHYOSAURUS. A gigantic fossil marine reptile, allied in part of its structure to a fish. *Etym.*, ιχθυς, *ichthus*, a fish, and σαυρα, *saura*, a lizard.

IGNEOUS ROCKS. All rocks, such as lava, trap, and granite, known or supposed to have been melted by volcanic heat.

INCANDESCENT. White hot — having a more intense degree of heat than red heat.

INDUCTION. A consequence, inference, or general principle drawn from a number of particular facts or phenomena. The inductive philosophy, says Mr. Whewell, has been rightly described as a science which ascends from particular facts to general principles, and then descends again from these general principles to particular applications.

INFUSORY ANIMALCULES. Minute living creatures found in many *infusions*; and the term *infusori* has been given to all such animalcules, whether found in infusions or in stagnant water, vinegar, &c.

INSPISSATED. Thickened. *Etym.*, *spissus*, thick.

INVERTEBRATED ANIMALS. Animals which are not furnished with a back-bone. For a further explanation, see "Vertebrated Animals."

ISOTHERMAL. Such zones or divisions of the land, ocean, or atmosphere, which have an equal degree of mean annual warmth, are said to be isothermal, from ισος, *isos*, equal, and θερμη, *therme*, heat.

JOINTS. Fissures or lines of parting in rocks, often at right angles to the planes of stratification. The partings which divide columnar basalt into prisms are joints.

JURA LIMESTONE. The limestones belonging to the Oolite Group constitute the chief part of the mountains of Jura, between France and Switzerland; and hence the geologists of the Continent have given the name to the group.