

GLOSSARY.

G, *Greek derivatives.*

L, *Latin derivatives.*

- ACCRETION. (L. *ad*, to ; *cresco*, I grow.) The process of growth in inorganic bodies, by which new particles of matter are placed on top of those already formed.
- ACTINIA. (G. *aktis*, a ray.) A genus of Cœlenterata, represented by the Sea-anemone.
- ACTINOZOA. (G. *aktis* ; and *zoön*, an animal.) The higher of the two Cœlenterate classes, of which the Sea-anemone may be taken as the type.
- AGAMIC. (G. *a*, without ; *gamos*, marriage.) Applied to "asexual" forms of the reproductive process ; so called because the sexes do not participate in the process. Used synonymously with the term "*Asexual*."
- ALGÆ. (L. *alga*, a seaweed.) The group of lower plants popularly known as and including the "Seaweeds."
- ALLANTOIS. (G. *allas*, a sausage.) One of the three foetal or embryonic sacs of the higher *Vertebrata*. The allantois principally subserves the respiratory function of the embryo.
- AMNION. (G. *amnos*, a lamb.) The embryonic sac developed from the "serous" layer of the germ, within which the embryo is more immediately contained.
- AMŒBA. (G. *amoibe*, a change.) A genus of *Protozoa*, characterised by the power of changing the form and shape of the body. Formerly known as the "*Proteus animalcule*."
- AMPHIBIA. (G. *amphi*, both ; *bios*, life.) A class of *Vertebrata* exemplified by the Frogs and Newts, which possess respiratory organs (gills and lungs), suiting them for life either on land or in water.
- ANARTHROPODA. (G. *a*, without ; *arthron*, a joint ; *pous*, a foot.) A subdivision of *Annulosa*, represented by Worms, etc., in which no jointed limbs exist.
- ANDROGYNOUS. G. *aner*, a man ; *gune*, a woman.) Applied to organisms in which the two sexes are united in one individual. Used synonymously with *Hermaphrodite*.
- ANNELIDA. (L. *annulus*, a ring.) A class of *Annulosa* represented by the Worms.

- ANNULOIDA.** (L. *annulus*; and *eidos*, form or resemblance.) A term applied to the sub-kingdom *Echinozoa*, from supposed affinities with the *Annulosa*.
- ANNULOSA.** (L. *annulus*.) A sub-kingdom of animals, characterised by the jointed or "ringed" nature of their bodies, and represented by Worms, Insects, Spiders, and Crustaceans.
- ANTENNÆ.** (L. *antenna*, the yard of a ship.) The "head" or "cephalic" appendages of many *Invertebrata*. Popularly denominated "feelers," from their being supposed to subserve the sense of touch.
- ANUS.** (L. *anus*, the vent.) The vent, or inferior termination of the alimentary tract.
- ARACHNIDA.** (G. *arachne*, a spider.) A class of *Annulosa*, represented by the Spiders, Mites, and Scorpions.
- ARTHROPODA.** (G. *arthron*, a joint; *poda*, feet.) The higher subdivision of the *Annulosa*, in which jointed limbs are present.
- ARTICULATA.** (L. *articulus*, a little joint.) A term used synonymously with *Annulosa*.
- ASCIDIA.** (G. *askos*, a bag or bottle.) The scientific name of the "Sea Squirts," so called from their resemblance to a bottle or jar.
- ASEXUAL.** (L. *a*, without; *sexus*, sex.) See AGAMIC.
- ASSIMILATION.** (L. *ad*, to; *similis*, like.) The process by means of which living beings convert matter or food derived from the outer world into the substances of which their tissues and organs are composed. Assimilation in this way is a wider term for the process of "nutrition."
- AVES.** (L. *avis*, a bird.) A class of *Vertebrata*, including the Birds.
- BACTERIUM.** (Plural, *Bacteria*.) (G. *bakterion*, a staff or rod.) Applied to minute rod-like organisms, of vegetable nature, which occur in infusions.
- BALANUS.** (G. *balanos*, an acorn.) The scientific name of the "Sea-acorns"—a group of the *Crustacea*.
- BILATERAL.** (L. *bis*, two; *latus*, a side.) Possessing two equal or symmetrical sides.
- BIOLOGY.** (G. *bios*, life; *logos*, a discourse.) The science of life or of living beings. Now applied to include the two sciences of zoology and botany; or used as a subdivision of the wider science of "Natural History."
- BIOPLASM.** (G. *bios*; *plasso*, I form or mould.) Dr. Beale's term for "sarcode," "protoplasm," or the primordial matter, of which the bodies of living beings are composed.
- BLASTODERM.** (G. *blastos*, a sprout; *derma*, skin.) The "germinal membrane" of fecundated animal ova or eggs, from the ulterior development of which the embryonic form is eventually produced.

- BOTANY.** (G. *botane*, a plant.) The division of Biological or Natural History Science which investigates the structure and functions of plants.
- BRANCHIA.** (G. *bragchia*, gills.) A "gill" or breathing organ, fitted for breathing the air contained in water. The respiratory organ of aquatic forms.
- BRYOZOA.** See POLYZOA.
- CALCAREOUS.** (L. *calx*, lime.) Composed of lime.
- CEPHALIC.** (G. *kephale*, the head.) Belonging or appertaining to the head.
- CHELÆ.** (G. *chele*, a claw.) Invertebrate limbs provided with pincer-like appendages. The "nipping-claws" seen in lobsters, crabs, scorpions, etc.
- CHITINOUS.** (G. *chiton*, a tunic.) Of horny texture. Applied to those structures in which "chitine," a substance allied to "horn," is found.
- CHLOROPHYLL.** (G. *chloros*, green; *phullon*, a leaf.) The green colouring material found typically in plants, but also in many animal forms.
- CHORDA DORSALIS.** See NOTOCHORD.
- CHORION.** (G. *chorion*, a skin.) The outer coverings of the vertebrate ovum and embryo.
- CHRYsalis.** (G. *chrusos*, gold.) The "pupa" or second stage of the metamorphosis in insects, such as butterflies and moths. So named from the occasional golden lustre or appearance.
- CHYLE.** (G. *chulos*, juice.) The nutrient fluid prepared by the digestion of food. The preparatory or primary form of the "blood."
- CILIA.** (L. *cilium*, an eyelash.) Minute filaments which line the membranes of animals and plants, and which, generally, subserve a circulatory function by their vibratile movements.
- CIRRIPIEDIA.** (L. *cirrus*, a curl; *pes*, foot.) An order of *Crustacea*, in which the feet exist as filamentous organs. Exemplified by the "sea-acorns" and "barnacles."
- CNIDÆ.** (G. *knide*, a nettle.) The urticating, stinging, or "thread" cells found in most *Cœlenterata*.
- CœLENTERATA.** (G. *koiolos*, hollow; *entera*, viscera.) A subkingdom of animals, possessing a digestive cavity in free communication with the cavity of the body.
- CœNOSARC.** (G. *koinos*, common; *sarx*, flesh.) The connecting substance which binds together the zooids of a *Hydrozoön*.
- CONDYLE.** (G. *kondulos*, a knuckle.) Applied to the surface or process of a bone which articulates with another bone.
- CORPUSCLE.** (L. *corpusculum*, a particle.) Applied to the solid particles found in blood, lymph, chyle, and other organic fluids.
- CORRELATION, FUNCTION OF.** (L. *con*, together; *relatum*, carried back.) The function by means of which animals are brought

into relation with the outside world through their nervous system. Used synonymously with *Innervation* and *Irritability*.

CRUSTACEA. (L. *crusta*, a crust or shell.) The highest class of the *Annulosa*, including the Crabs, Lobsters, etc.

CYCLOSIS. (G. *kuklos*, a circle.) Applied to the circulatory movements seen in cells and in lower organisms. In some cases this circulation is caused by ciliary action; but in other cases its cause is undetermined.

CYST. (G. *kustis*, a bladder.) A sac or vesicle generally containing fluid.

DIATOMACEÆ. (G. *diatemno*, to cut through.) The siliceous or flinty coverings of a large group of microscopic organisms of a low vegetable nature.

DINOSAURIA. (G. *deinos*, terrible; *saura*, lizard.) An extinct order of reptiles, represented by the *Iguanodon*, etc., and which are supposed to present features of relationship with birds.

DIOECIOUS. (G. *dis*, two; *oikos*, a house.) Applied to organisms in which the sexes are situated in different individuals.

DISTAL. Applied to the free or unattached extremity of any structure or organism.

ECDYSIS. (G. *ekdusis*, a stripping off.) The process of "moulting," or of changing the skin. Seen typically in the process of metamorphosis.

ECHINODERMATA. (G. *echinos*, a hedgehog; *derma*, skin.) A class of the *Echinozoa* or *Annuloida*, including the sea-urchins and star-fishes. So named from the spiny or hard nature of the integument.

ECTODERM. (G. *ektos*, outside; *derma*, skin.) The outer skin or external body layer of *Cœlenterata*.

EMBRYO. (G. *en*, in; *bruo*, I swell.) The earliest appearance of the future being in an impregnated animal ovum.

ENDODERM. (G. *endon*, within; and *derma*.) The inner skin or internal body layer of *Cœlenterata*.

EPIDERMIS. (G. *epi*, upon; and *derma*.) The outer layer of the skin in the higher animals, and the outer tissue of the leaves of plants.

EPIZOA. (G. *epi*; *zoön*, animal.) Applied to certain lower *Crustaceans*, which exist as parasites on fishes, etc.

FAUNA. (L. *Fauni*, the rural deities of the Romans.) Applied collectively to the entire animal life of a country or zone.

FISSIPAROUS. (L. *findo*, I cleave; *pario*, I produce.) Applied to that asexual form of reproduction, in which new individuals are produced by simple fission, division, or cleavage of the parent body.

- FLORA. (L. *Flora*, the goddess of flowers.) Applied collectively to the plant life of a district or country.
- FORAMINIFERA. (L. *foramen*, a hole ; *fero*, I carry.) An order of *Protozoa*, distinguished by the presence of a limy shell through holes or "foramina," in which, the protoplasm of the body can be protruded.
- FUSIFORM. (L. *fuscus*, a spindle ; *forma*, shape.) Pointed at both ends ; spindle-like.
- GANGLION. (G. *gagglion*, a swelling.) A mass of nervous matter, constituting a nerve centre, formed of nerve cells, and receiving and emitting impressions.
- GASTRIC. (G. *gaster*, the belly.) Relating to the stomach ; or (in the lower animals) to the digestive system generally.
- GEMMIPAROUS. (L. *gemma*, a bud ; *pario*, I produce.) A form of asexual reproduction, in which new individuals are produced as "gemmae" or "buds" from the parent body.
- GEOLOGY. (G. *ge*, the earth ; *logos*, discourse.) The science which deals with the form, structure, past history, and present relations of our earth, and of the materials which compose it. *Palæontology* (q. v.) is accounted a subdivision of this wider science.
- GERMINAL VESICLE AND GERMINAL SPOT. The nucleated cell and nucleolar particle seen in the unimpregnated ovum, and which lie embedded amid the "vitellus" or "yolk."
- GERM CELL. The first cell which appears in the impregnated ovum as the result of successful impregnation.
- GLAND. (L. *glans*, an acorn.) An organ secreting from the blood certain products which are elaborated by the gland structures, and excreted from the gland generally by a distinct channel or duct.
- GONOPHORE. (G. *gonos*, seed ; *phero*, I carry.) Applied to the reproductive processes or generative zooids of *Hydrozoa*.
- GONOSOME. (G. *gonos* ; and *soma*, body.) Applied collectively to the reproductive zooids of an *Hydrozoön*.
- GONZOÖID. (G. *gonos* ; *zoön*, animal ; *eidos*, form.) Generally applied to denote the reproductive zooid of *Hydrozoa*, when it becomes detached from the parent organism, and exists as a free and independent form. (See MEDUSA.)
- GREGARINA. (L. *grex*, a flock ; hence *gregarius*.) A genus of parasitic *Protozoa*, represented by the *Gregarina*.
- HÆMAL. (G. *haima*, blood.) Relating to the blood-vascular or circulatory system.
- HERMAPHRODITE. (G. *Hermes*, Mercury ; *Aphrodite*, Venus.) Applied to organisms the sexes of which are contained in one and the same individual.
- HETEROGANGLIATA. (G. *heteros*, diverse ; *gagglion*, a swelling.)

- Owen's name for the *Mollusca*. Applied in allusion to the irregular condition of their nervous system.
- HOMOGANGLIATA. (G. *homos*, similar; and *gaglion*.) Owen's name for the *Annulosa*. Applied in reference to the regular or symmetrical disposition of their nervous axis.
- HUMERUS. The single bone composing the "brachium" or "upper arm" of Vertebrata.
- HYDRA. (G. *hudra*, a watersnake.) The common "fresh-water polype." The type of the *Cœlenterate* class *Hydrozoa*.
- HYDROSOMA. (G. *hudra*; *soma*, body.) Applied to the entire organism, simple or compound, of a *Hydrozoön*.
- HYDROZOA. (G. *hudra*; *zoön*, animal.) The lower class of *Cœlenterata*, of which the *Hydra* is the type.
- IMAGO. (L. *imago*, an image.) Applied by Linnæus to the perfect, winged, and sexual insect.
- INCISOR. (L. *incido*, I cut.) The front or "cutting teeth" of *Mammalia*, which are fixed in the "præmaxilla," or front portion of the jaw.
- INFUSORIA. (L. *infusum*, an infusion.) The highest class of *Protozoa*, so named from their general occurrence in infusions of organic matter.
- INNERVATION. See CORRELATION.
- INTUSSUSCEPTION. (L. *intus*, within; *suscipio*, I receive.) The process by which living beings receive matter or food *within* their bodies from the external world. Opposed to the term *Accretion* (q. v.)
- INVERTEBRATA. (L. *in*, without; *vertebra*, a joint of the backbone.) Applied collectively by Lamarck to those groups or sub-kingdoms of the animal series (excepting *Vertebrata*) which are destitute of a backbone or vertebral column.
- IRRITABILITY. See CORRELATION.
- KAINOZOIC. (G. *kainos*, recent; *zoe*, life.) The most recent of the great life-periods into which the palæontologist, from a consideration of the contained fossils, divides the rock-formations of the globe. The Kainozoic fossils, accordingly, approach more nearly than those of all the other periods to existing forms of life.
- LARVA. (L. *larva*, a mask.) Linnæus' term for the first or caterpillar stage of insect-life.
- MAMMALIA. (L. *mamma*, the breast.) The highest class of *Vertebrata*, distinguished in chief by the possession of mammary or milk glands, by means of which they suckle their young.
- MARSUPIALIA. (L. *marsupium*, a pouch.) An order of *Mammalia*, represented by Kangaroos, etc., which possess a "pouch" for the protection of the immature young.

- MEDUSÆ.** (L. *Medusa*, a Gorgon.) Applied to a group of *Hydrozoa*, represented by the "Jelly-fishes" or "Sea-blubbers;" but the term is sometimes used to indicate the free gonozooids of many *Hydrozoa*, which closely resemble *Medusæ* in form and habits.
- MESOZOIC.** (G. *mesos*, middle; *zoe*, life.) The middle or Secondary life-period of palæontologists.
- MOLAR.** (L. *mola*, a mill.) The teeth in *Mammalia*, which are not preceded by a "milk" or temporary set. The "grinding" teeth.
- MOLLUSCA.** (L. *mollis*, soft.) Cuvier's name for a sub-kingdom of animals, represented by shell-fish, cuttle-fishes, and other forms.
- MOLLUSCOIDA.** (L. *mollusca*; G. *eidos*, like.) The lower group of the sub-kingdom *Mollusca*.
- MONÆCIOUS.** (G. *monos*, single; *oikos*, house.) Applied to organisms in which the sexes are united in one individual. Synonymous with *Hermaphrodite*.
- MONOTHALAMOUS.** (G. *monos*; *thalamos*, a chamber.) Consisting of a single chamber. Generally applied to shells.
- MORPHOLOGY.** (G. *morphe*, form; *logos*, a discourse.) The division of biological science which deals with the structure and details of *form* of living organisms. It includes the subdivisions anatomy, development, taxonomy or classification, and histology.
- MULTILOCULAR.** (L. *multus*, many; *loculus*, a little purse.) Consisting of many chambers or divisions.
- NERVE.** (L. *nervus*, a sinew.) Applied to the branching filaments of the neural or nervous system.
- NEURAL.** (G. *neuron*, a cord or "nerve.") Belonging to the nervous system.
- NEUTER.** (L. *neuter*, neither.) Applied to forms (and especially to insects) in which the sex is indistinct or undeveloped.
- NORMAL.** (L. *norma*, a rule.) Agreeing with an ordinary type of structure, or with a usual and perfect function.
- NOTOCHORD.** (G. *notos*, back; *chorde*, a string.) The "chorda dorsalis" or "notochord" is a structure found in the early or embryonic life of all *Vertebrata*. It is formed in the floor of the "primitive groove" of the embryo, and is generally replaced in the adult, by the vertebral column or spine; although, in some cases, the "notochord" persists, as such, throughout life.
- NUCLEATED,** possessing a "nucleus" (q. v.)
- NUCLEUS.** (L. *nucleus*, a kernel.) The solid particle of germinal matter found in the interior of most cells. The "nucleolus" is the smaller particle, occasionally found within the "nucleus."

- OCCIPITAL.** Belonging to the "occipital" bone, or posterior bone of the vertebrate skull.
- ŒSOPHAGUS.** (G. *oisos*, a reed; *phagein*, to eat.) The "gullet" or tube leading from the mouth to the stomach.
- OVARY or OVARUM.** (L. *ovum*, an egg.) The essential reproductive organ of the female, in which the "ova" or "eggs" are formed.
- OVIPAROUS.** (L. *ovum*; *pario*, I produce.) Applied to animals which bring forth eggs from which the young are afterwards hatched.
- OVUM.** The essential product of the female generative system, generally consisting of an outer membrane, the "vitellary membrane;" a "yolk" or "vitellus;" and a contained vesicle and its particle,—the germinal vesicle and "germinal spot." After impregnation by contact with the male element, the ovum is capable of being developed into a new being.
- PALÆONTOLOGY.** (G. *palaïos*, ancient; *logos*, a discourse.) The department of science (usually forming a subdivision of Geology) which investigates the relations of life in the past, and thus deals with "fossil organisms."
- PALÆOZOIC.** (G. *palaïos*; *zoe*, life.) The most ancient or Primary life-period, into which the palæontologist divides the series of rock-formations.
- PARIETO-SPLANCHNIC.** (L. *paries*, a wall; G. *splanchna*, viscera.) Applied to the nervous ganglion in the higher *Mollusca*, which supplies the walls of the body, the heart, gills, and other viscera, with nervous filaments.
- PARTHENOGENESIS.** (G. *parthenos*, a virgin; *genesis*, generation.) Owen's general term for forms of asexual reproduction (gemination and fission). But more particularly used to denote cases in which new individuals are produced by females from ova without impregnation by a male.
- PEDAL.** (L. *pes*, the foot.) Applied to the "foot" nervous ganglion of *Mollusca*. Connected with the foot.
- PERIGASTRIC.** (G. *peri*, around; *gaster*, the stomach.) Applied to spaces in the body-cavity in *Invertebrata* which surround the stomach and viscera generally. A circulation of fluid is not unfrequently observed to take place through these spaces.
- PERIPHERY.** (G. *periphereia*, a circumference.) The outer edge or circumference of an organ or structure.
- PHALANGES.** (G. *phalagx*, a row.) The small bones of the fingers or toes (digits) of *Vertebrata*.
- PHYSIOLOGY.** (G. *physis*, nature; *logos*, a discourse.) The division of Biology which investigates the *functions* and mode of life of living beings.
- PISCES.** (L. *piscis*, a fish.) The lowest class of the *Vertebrata*—the Fishes.

- PLACENTA.** (L. *placenta*, a cake.) The "after-birth" of *Mammalia*, constituted in chief by the greatly-developed "chorion," and outer membranes of the impregnated ovum. The "placenta" forms the medium of communication between the circulation of the mother and that of the embryo or foetus.
- PLATYRHINA.** (G. *platus*, broad; *rhines*, nostril.) Applied to a group of *Quadrumana* or Monkeys, distinguished by having the nostrils broad, and placed far apart. Ex.—Spider-Monkey.
- PLUTEUS.** (L. *pluteus*, a shed.) Applied to the "larval" form of some *Echinodermata*. The "painter's easel," larva of the *Echinus* or "Sea-urchin."
- POLYPE.** (G. *polus*, many; *pous*, foot.) Now applied to the "individuals" of single *Actinozoa*, or to the "zoöids" of a compound *Actinozoön*. Formerly, and still popularly used to signify any of the plant-like *Cœlenterata* and other forms.
- POLYPIDE.** A term now used to designate the "zoöids" of a *Polyzoön* (such as the separate organisms of which a "Seanet" is composed). Employed distinctively from "polype" and "polypite."
- POLYPIDOM.** The entire or common integument or outer skin of a *Hydrozoön* or *Polyzoön*.
- POLYPITE.** A term applied to designate the nutritive zoöids of any *Hydrozoön*.
- POLYTHALAMOUS.** (G. *polus*, many; *thalamos*, a chamber.) Many-chambered. Applied principally to the shells of *Foraminifera*.
- POLYZOA.** (G. *polus*; *zoön*, animal.) The technical name of the *Molluscan* class, which includes the "Sea-mats" and their allies. Synonymously used with the older name of "*Bryozoa*," this latter term meaning "moss-like" animals.
- PROTISTA.** Hæckel's term for the series of lower organisms, the distinct animal or plant nature of which has not been ascertained. Used synonymously with the term "*Regnum Protisticum*."
- PROTOPHYTA.** (G. *protos*, first; *phuton*, plant.) A collective term used to designate the lowest plants; *Algæ* or Sea-weeds, etc. etc.
- PROTOPLASM.** See **BIOPLASM**.
- PROTOZOA.** (G. *protos*; *zoön*, animal.) The lowest sub-kingdom or type of animal-structure.
- PROXIMAL.** (L. *proximus*, next.) The fixed or attached extremity of a limb or organism.
- PSEUDOPODIA.** (G. *pseudos*, false; *poda*, feet.) The prolongations or processes into which certain *Protozoa* (*RHIZOPODA*, q. v.) can push out the substance of their protoplasmic bodies.
- PSEUDONAVICELLÆ.** (G. *pseudos*; L. *navicula*, a little boat.) Applied to the spindle-shaped bodies seen in the reproductive development of *Protozoa*, and which form the embryos or young animals. Ex. *Gregarina*.

- PTERODACTYL.** (G. *pteron*, wing; *daktulos*, finger.) A genus of extinct *Reptiles* distinguished by the great elongation of the fifth finger to form a support for a "patagium" or "wing-membrane."
- PTEROPODA.** (G. *pteron*; *pous*, foot.) A class of *Mollusca* represented by minute oceanic organisms, which possess two "wing-like" feet or fins attached to the head.
- PUPA.** (L. *pupa*, a doll.) The second stage of insect-metamorphosis. Synonymous with "nymph" and "chrysalis."
- QUADRUMANA.** (L. *quatuor*, four; *manus*, hand.) An order of *Mammalia* represented by the monkeys, apes, lemurs, etc.
- RADIATA.** (L. *radius*, the spoke of a wheel.) Cuvier's sub-kingdom of animals, now divided into the *Protozoa*, *Cœlenterata*, and *Echinozoa*.
- RADIOLARIA.** (L. *radius*.) An order of *Protozoa* allied to the *Foraminifera* (q. v.), and distinguished by the possession of a flinty or siliceous shell.
- REGNUM PROTISTICUM** of Hæckel. (See **PROTISTA**.)
- REPTILIA** (L. *repto*, I crawl.) A class of *Vertebrata* represented by tortoises, snakes, lizards, and crocodiles.
- RHIZOPODA.** (G. *rhiza*, root; *pous*, foot.) A class of *Protozoa* distinguished by the power of pushing out the body into root-like processes or "pseudopodia" (q. v.) Ex.—*Amœba*, etc.
- RODENTIA.** (L. *rodere*, to gnaw.) An order of *Mammalia* represented by the rats, etc. etc., distinguished by the possession of a peculiar dental arrangement suited for gnawing.
- ROTIFERA.** (L. *rota*, a wheel; *fero*, I bear.) A group of animalcules now included in the *Echinozoal* sub-kingdom, and which possess ciliated discs. When in motion these discs resemble rotating wheels, and hence the name.
- SARCODE.** See **BIOPLASM**.
- SESSILE.** (L. *sedo*, I sit.) Applied to any body, structure, or organism destitute of a stalk or pedicle, and which is attached directly to any surface.
- SILICEOUS.** (L. *silex*, flint.) Composed of silica or flint.
- SOMATIC.** (G. *soma*, body.) Belonging to the body.
- SOMITE.** (G. *soma*.) A segment or zone of the body in *Annulosa*. Applied also to any one part of a similar series.
- SPERMARIUM.** (G. *sperma*, seed.) The essential organ or structure of the "male" reproductive system in which the seminal fluid and spermatozooids are elaborated. The organ corresponding to the female "ovarium."
- SPERMATOGEOA** (or *Spermatozooids*). (G. *sperma*; *zoön*, animal.) The minute living organisms or "animalcules" found in the semi-

nal or spermatic fluid, and in which the fertilising power of male animals is supposed to reside.

SPORES. (G. *spora*, seed.) The usually minute germs or seeds of *Protozoa* and many plants.

STATOBLASTS. (G. *statos*, fixed; *blastos*, a bud.) The "winter-ova" or internal buds of *Polyzoa*, which give origin to new individuals on being set free from the parent-organism.

TÆNIA. (G. *tainia*, a ribbon.) A genus of parasitic worms represented by the "Tape-worm." Type of the family *Tæniada*.

THREAD-CELLS. See CNIDÆ.

TROPHOSOME. (G. *trepho*, I nourish; *soma*, body.) The collective term for the series of "nutritive" zooids of any *Hydrozoön*. Used distinctively to "gonosome" (q. v.)

TUNICATA. (L. *tunica*, a garment.) The class of Lower *Mollusca*, represented by the "Sea-squirts" or *Ascidians*.

UMBILICAL SAC or VESICLE. (L. *umbilicus*, the navel.) The embryonic sac of *Vertebrata*, developed from the "mucous" layer of the germ, and which is devoted chiefly to the nutrition of the young form.

UMBRELLA. The round contractile disc or "bell" of many *Hydrozoa*; characteristically seen in *Medusæ* (q. v.)

UNILOCULAR. (L. *unus*, single; *loculus*, a little purse.) Consisting of one chamber.

VACUOLES. (L. *vacuus*, empty.) The minute clear spaces seen in the sarcode bodies of many *Protozoa*, and caused by the digestion of food.

VASCULAR. (L. *vas*, a vessel.) Relating to the hæmal or circulatory system. A "vascular" structure is one plentifully provided with bloodvessels.

VENTRAL. (L. *venter*, the belly.) Applied to the lower or inferior surface of any body or organism.

VERTEBRA. (L. *vertebra*, from *vertere*, to turn.) One of the joints or separate bones of the spine or backbone of *Vertebrata*.

VERTEBRATA. (L. *vertere*.) The highest sub-kingdom of animals, distinguished in chief by the possession of a spine or backbone. Used distinctively to *Invertebrata* (q. v.)

VESICLE. (L. *vesica*, a bladder.) A sac or cyst generally containing fluid, but occasionally applied to denote certain glandular structures.

VIBRIO. (L. *vibro*, I quiver.) Applied to minute organisms of vegetable nature found in infusions of organic matter.

VILLUS. (L. *villus*, a tuft of hair.) Applied to minute processes of membranes throughout the animal economy. And specially to the vascular processes developed upon the "chorion" (q. v.)

of *Vertebrata*, which subsequently developes in the higher forms into the "placenta."

VITELLUS. (L. *vitellus*, the yolk of an egg.) The "yolk" or "yelk" of all ova. Surrounded by the "vitellary membrane" or "yolk-sac."

VIVIPAROUS. (L. *vivus*, alive; *pario*, I produce.) Applied to those animals (*e.g.* *Mammalia*), which bring forth their young alive.

ZOÖID. (G. *zoön*, animal; *eidos*, resemblance.) A term now applied to designate the separate beings of compound organisms (*e.g.* *Sea-mat*), which are produced by budding, or by fission from a parent form. The zoöids may either be connected with, or entirely detached from the parent.

ZOOPHYTE. (G. *zoön*; *phuton*, plant.) A popular term for plant-like animals, such as the *Hydrozoa*, *Sea-mats*, *Corals*, etc.