

INDEX.

- Abutilon**, polymorphic flowers of, pp. 320, 323.
Acanthia lectularia, length of life of, 42.
Acineta, 151.
Acquired characters, meaning of, 169; on supposed botanical proofs of transmission of, 390, 397.
Acridium migratorium, length of life of, 40.
Actinia mesembryanthemum, length of life of, 54.
Actinosphaerium, 117, 118.
Activity and length of life, 7, 8.
Adansonia, length of life of, 6.
Adler, on the formation of galls, 302.
After-effects, 403.
Aglaia tau, deposition of eggs, 18; length of life of, 18, 59.
Algae, immortality of unicellular, 25.
Amoeba, length of time of fission of, 8; immortality of, 25; fission of, 25, 64.
Amphibia, polar bodies of, 340, 352.
Amphileptus meleagris, fission of, 148.
Amphorina coerulea, polar bodies of, 189.
Anabiosis, 25, 38.
Ancyclus, length of life of, 56.
Andricus, length of life of summer generation, 50.
Anisotropism, 400.
Anlagen, 192.
Anodonta, length of life of, 56, 57.
Ants, duration of life of male and female, 18, 48, 50, 51, 52, 59, 156.
Aphilotrix, length of life of imago of, 50.
Aphis, length of life of, 41; parthenogenesis of, 228, 289; polar bodies of, 349.
Apis, see Bees.
Apus, 152, 324.
Ascaris, 133, 144; fertilization of, 177; nuclear division in ovum of, 188, 232, 360; spermatogonia of, 220; spermatogenesis of, 375.
Ascidians, length of life of, 57.
Atavism, 179.
Atrophy, of organs, 85, 86.
Auerbach, on fertilization, 355.
Bacteria, in dead Cockchafer, 46.
Baer, von, 194; on the influence of maternal impressions on the offspring, 445.
Balanus, polar bodies of, 218.
Balbiani, on nuclear division, 187; on pole-cells, 197; on origin of ova, 222.
Balfour, on impregnation, 175; on polar bodies, 214, 225, 339, 345, 353.
Bear, length of life of, 13.
Bees, length of larval life of, 15; length of life of queen of, 18, 52, 156; of drones, 18, 53; of workers, 52, 59, 156; activity of, 48; oviposition of, 52, 54; death of male, 63, 120, 132; loss of limbs in development of larva, 89; nuptial flight of, 93; development of eggs of, 226, 234, 285, 351.
Begonia, propagation of, 211.
Beneden, van, on fertilization in *Ascaris*, 177, 188, 355, 360; on polar bodies, 214, 340, 345, 353; on Polkörperchen, 216; on spermatogonia in *Ascaris*, 220, 375; on nuclear division, 231; on sexual reproduction, 282.
Berthold, on male parthenogenesis, 247.
Bessels, on importance of fertilization, 235.
Beyerinck, on the formation of galls, 302.
Biorhiza, length of life of imago of, 50.
Birds, length of life of, 11, 36; factors in duration of life of, 12.
Blackbird, length of life of, 6, 11, 36.
Blaps, length of life of imago of, 47, 48.
Blastogenic characters, 412.
Blochmann, on polar bodies, 349.
Blow-flies, length of larval life of, 15.
Boar, length of life of, 14.
Bombinator igneus, nature of ovum of, 125.
Bombus, 53.
Bombyces, flight of females impeded by eggs, 17; habits of, 44.
Bonellia viridis, unequal length of life of male and female, 59.
Bonnet, on rudimentary tails in dogs, 428.
Born, on position of nucleus in ova, 177; on double impregnation, 382.

- Bosmina*, parthogenesis of, 325.
 Brooks, on heredity, 166, 326.
 Brown-Séguard, experiments on guinea-pigs, 81, 310, 313.
Bulimus, length of life of, 55.
Buprestis splendens, length of life of, 47.
 Burdach, on the influence of maternal impressions on the offspring, 444.
 Bütschli, on polar bodies, 188, 214, 224, 340; on sexual reproduction, 282; on processes of fertilization, 355.
 Butterflies, climatic varieties of, 99; death of, 120.
Bythotrophes, spermatozoa of, 176; summer eggs of, 239; winter eggs of, 348.
Calberla, on impregnation in *Petromyzon*, 175.
 Canary birds, length of life of, 36; plumage of, 321.
Carabus auratus, length of life of imago of, 47.
 Carnoy, on karyokinesis in ovum of *Ascaris*, 360, 368; on spermatogenesis, 375.
 Carp, length of life of, 6.
 Cat, length of life of, 6.
Catallacta, 123.
 Caterpillars, length of life of phytophagous, 15.
 Cells, renewal of, 21; nourishment of, 29; death of, 59.
 Cephalopods, length of life of, 56.
Cerambyx heros, length of life of imago of, 47.
Cetochilus, polar bodies of, 218.
Chermes, parthogenesis of, 294; galls of, 401.
 Cherry-tree, in Ceylon, 406.
Chrysomela varians, ovoviviparous development of, 48, 49.
Chydorus, parthogenesis of, 325.
 Cicada, length of life of, 41, 42.
 Cienkowski, on conjugation, 286.
Cionea intestinalis, length of life of, 57.
 Circumcision, 434.
Cirrhipedes, complementary males of, 58.
Clausilia, length of life of, 55.
 Cockchafer, length of larval life of, 16; length of imaginal life of, 46.
 Coleoptera, length of life of, 46.
Colpoda cucullus, fission of, 148.
 Conjugation, 282, 286.
 Continuity of germ-plasm, 104.
 Copepods, unequal length of life in the two sexes of parasitic, 58.
 Coryne, origin of sexual bud, 205.
Cossus ligniperda, length of larval life of, 15.
Crayfish, length of life of, 6.
 Cuckoo, length of life of, 11, 36.
Cyclas, length of life of, 56.
 Cynipidae, length of life of, 49; number of eggs of agamic, 50; deposition of eggs of, 93; number of males of, 293.
 Cynips, amount of nuclear matter in egg of, 229; parthenogenesis of, 274, 290, 293.
 Cypris, 294.
 Cyto-idioplasm, 181, 184.
 Cytoplasm, 184.
 Daphnidae, segmentation of the egg of, 73, 199; loss of jaws in development of, 89; winter eggs of, 121; sperm cells of, 175, 176; parthenogenesis of, 228, 325; summer eggs of, 236, 239, 240; polar bodies in parthenogenetic eggs of, 249, 345, 350.
 Darwin, on constancy of number of individuals in successive generations, 12; on Pangenesis, 77, 370; on atrophy of organs, 85, 90; on cross fertilization, 309; on effect of external influences, 391, 423.
Daucus, structure of root altered by cultivation, 414.
 Death, origin of, 20, 21, 143; relation to reproduction, 21, 120, 132, 154; necessity of, 23, 24, 134, 159; utility of, 24, 112, 135, 153; an adaptation produced by natural selection, 24, 28, 60; not universal, 25, 27, III, 119; by sudden shock, 63; meaning of, 113; definition of, 114; of the soma, 154.
 Degeneration of organs, *see* Atrophy.
 Detmer, on transmission of acquired characters in plants, 390.
 Development amongst Protozoa, 149.
 Diatomaceae, fission of, 65.
 Dicyemids, 131, 141.
 Diptera, length of life of, 42; pole cells of, 197, 206, 210, 216; as fertilizers of flowers, 309.
 Döderlein, on tailless cats, 390, 428, 430.
 Dragon-flies, length of larval life of, 15; length of life of imago, 17, 40.
 Dryophanta, length of life of summer generation of, 49; of winter generation, 50.
 du Bois Reymond, on the transmission of acquired characters, 82, 390, 422.
 Duration of life governed by needs of species, 9.
 Düsing, on origin of sex, 239, 241.
 Eagles, length of life of, 11, 37; weight of, 14.
 Echinodermata, origin of germ-cells, 202.
 Echinus, polar bodies of, 351.

- Ectocarpus**, male parthenogenesis in, 247.
- Eggs**, number laid by various birds, 12, 37; of insects, 17.
- Eider-ducks**, length of life of, 11.
- Eimer**, on the inheritance of mutilations, 426.
- Eleodes grandis**, and dentiper, length of life of imago of, 47.
- Elephants**, length of life of, 6; gestation of, 7.
- Encystment**, relation to death of, 112, 115, 116, 120, 158; protective, 117, 121; of Rhizopoda, 121.
- Entoniscidae**, unequal length of life in male and female, 58.
- Ephemeraeidae**, length of life of imago of, 40, 156.
- Epigenesis**, theory of, 316.
- Eristalis tenax**, length of life of, 43.
- Estheridae**, 228.
- Euglypha**, identity of products of fission of, 26, 64, 65.
- Eupithecia**, length of life of, 45.
- Falcons**, length of life of, 11, 37.
- Fiedler**, on polar bodies in sponges, 217.
- Flemming**, on nuclear division, 187, 231, 359, 361.
- Flourens**, on length of life, 7.
- Fol**, on fusion of nuclei, 174, 189; on origin of ova, 222; on multiple impregnation, 236, 238, 382; on polar bodies, 340, 351; on process of fertilization, 355.
- Formica sanguinea** and **fusca**, length of life of, 51.
- Fox**, length of life of, 14.
- Galls**, 302, 401.
- Galton**, on transfusion in Rabbits, 166; on heredity, 172; on twins, 380.
- Gannets**, numbers collected each year, 37.
- Geotropism**, 398.
- Germ**, meaning of, 148.
- Germ-cells**, 73; predisposition of the, 84, 102; fluctuations in, 102; not continuous, 173.
- Germ-plasm**, 80, 191, 266, 341, 357, 371, 403; continuity of, 104, 168, 173, 184; definition of, 174.
- Goliathus cacicus**, length of life of imago of, 47.
- Goose**, length of life of the wild, 37.
- Götte**, on necessity of death, 112; on rejuvenescence, 115, 124; on death of Metazoa, 125.
- Gregarines**, 148, 149, 202.
- Grobben**, on polar bodies of *Cetochilus*, 218.
- Gruber**, on regeneration amongst Infusoria, 185.
- Gryllotalpa**, duration of life of, 39.
- Gryllus campestris**, duration of life of, 39.
- Häckel**, on reproduction, 72; on Perigenesis of the Plastidule, 165; on amphigonic reproduction, 272.
- Hare**, length of life of, 14.
- Hartlaub**, on origin of germ-cells in *Obelia*, 208.
- Hawk-moths**, length of life of imago, 17.
- Helicidae**, length of life of, 55, 56, 57.
- Heliotropism**, 399.
- Hemiptera**, length of life of, 41.
- Hens**, length of life of, 36.
- Hensen**, on sexual reproduction, 282, 286; on difference between germ-plasm and histogenetic nucleoplasm, 343; on heredity, 369.
- Heredity**, 29, 71, 378; defined, 72; dependent on continuity of germ-plasm, 104, 168; dependent on coalescence of nuclei, 178.
- Hertwig, O.**, on fusion of nuclei, 174; on the influence of gravity in segmentation, 177, 189; on polar bodies, 340, 351; on process of fertilization, 355.
- Hesperornis**, rudimentary wing of, 88.
- Heterogeny**, 325.
- Heterogynis**, 44.
- Heteroplastides**, 130, 131, 134, 139, 146, 153, 204.
- Hildebrandt**, on duration of life in plants, 32, 65; on cross-fertilization, 309.
- His**, on heredity, 166, 390, 412; on the transmission of mutilations, 423.
- Hoek**, on polar bodies in *Balanus*, 218.
- Hoffman**, on transmission of acquired characters, 407.
- Homoplastides**, 122, 139, 146, 202.
- Horse**, length of life of, 6, 7; in the Falkland Islands, 99.
- Humboldt's Atur Parrot**, 12.
- Hunter, John**, experiments in Anabiosis, 25.
- Hyalineae**, length of life of, 56.
- Hybrids**, 330.
- Hydroids**, origin of germ-cells of, 199, 206, 207, 211.
- Hyla**, 301, 394.
- Hymenoptera**, length of life of, 49.
- Hypermetropia**, 89.
- Ichneumons**, length of larval life of, 15; length of life of imago of, 49.
- Ichthyophthirius multifiliis**, fission of, 148, 149.
- Idioplasm**, 174, 184, 192, 341; not identical with nucleoplasm, 180; rela-

- tion to chromatin, 217; two kinds of, 245; various combinations of, 276.
- Imago**, length of life of, 16.
- Immortality**, injurious to species, 24; of unicellular organisms, 25, 27, 33.
- Infusoria**, immortality of, 25, 72; regeneration of lost parts in, 27, 185; fission of, 64; encystment of, 117.
- Insects**, duration of life amongst, 15; duration of larval life of, 15; normal death of, 22; duration of imaginal life of, 38; segmentation of egg of, 73; deposition of eggs, 93; origin of germ-cells of, 202; polar bodies of, 218.
- Instinct**, 83; origin of, 91, 389; used but once in a lifetime, 93.
- Isotropism**, of the ovum, 176.
- Ivy**, climbing shoots of, 393, 399.
- Jäger**, on heredity, 172, 206.
- Jordan**, on varieties, 269.
- Julin**, on spermatogenesis in *Ascaris*, 375.
- Kallima**, mimicry of, 280, 306.
- Kant**, on the transmission of mutilations, 423.
- Karyokinesis**, 359, 375.
- Keim**, see Germ.
- Kirchner**, on development of *Volvox*, 204.
- Kölliker**, on nature of spermatozoa, 175; on embryonic cells, 196.
- Lagynus**, fission of, 148.
- Lamarck**, on use and disuse, 83, 84, 303, 387, 391, 421.
- Lamellibranchiata**, length of life of, 55.
- Larvae**, length of life of, 15.
- Lasius flavus**, length of life of, 50; *L. niger*, 51.
- Lepidoptera**, length of life of imagoes of, 43, 156; parthenogenesis among, 226, 352; spermatogenesis in, 375.
- Lepisma saccharina**, length of life of, 40.
- Leuckart**, on relation of absorbing surface to size of animal, 7; on development of Bees, 235; on the influence of maternal impressions on the offspring, 445.
- Limnadia Hermannii**, 152.
- Linnaeus**, length of life of, 56.
- Lion**, length of life of, 13.
- Lister**, on chromatophores of blind Frogs, 301.
- Locusta**, length of life of imago of, 39.
- Lotze**, on activity in connection with longevity, 7.
- Lucanus cervus**, length of life of imago of, 47.
- Lycaena violacea**, length of life of imago of, 44.
- Lynceinae**, spermatazoa of, 176.
- Macroglossa stellatarum**, length of life of female of, 45.
- Magosphaera planula**, 75, 120, 122, 126, 147, 152; figure of, 123.
- Magpies**, length of life of, 36.
- Mammals**, duration of life of, 38.
- Manx cats**, 427, 430.
- Maternal impressions**, supposed influence on offspring, 444.
- May-flies**, length of larval life of, 15; length of life of imago of, 16; habitat of larvae of, 17; shortening of life of, 19; death of, 120.
- Meldola**, 395.
- Melolontha vulgaris**, see Cockchafer.
- Mesozoa**, 128.
- Metazoa**, 27, 28, 111, 145; old age of, 157.
- Metschnikoff**, on pole-cells, 197.
- Micellae**, 190, 194.
- Mimetic forms**, 264, 280.
- Mimosa**, 'after effects' in, 404.
- Minot**, on cyclical development, 199; on polar bodies, 214, 225, 340, 345, 353.
- Moina**, winter eggs of, 118, 240; segmentation of, 199; polar bodies of, 218.
- Molluscs**, length of life of, 55; determined by markings on shell, 14; enemies of, 58.
- Monoplastides**, 115, 122, 125, 146, 159; definition of, 120; reproduction of, 149.
- Mouse**, length of life of, 6; gestation of, 7.
- Müller, F.**, on heredity of acquired characters, 320, 322.
- Müller, H.**, on colours of flowers, 259; on nectaries, 307.
- Multicellular organisms**, division of labour in, 27.
- Musca domestica**, length of life of, 43.
- Musca vomitoria**, polar bodies of, 353.
- Myopia**, 89.
- Nägeli**, 167, 171, 175; on idioplasm, 174, 182, 190, 201, 340, 414; on inherent tendency to vary, 256, 298; on Alpine plants, 269; on adaptation, 300; on medium of heredity, 318, 355.
- Najadae**, length of life of, 56.
- Natica heros**, length of life of, 56.
- Nautilus**, persistence of, 300.
- Nematodes**, polar bodies of, 188; nuclear division of ovum of, 234, 368.
- Neuroptera**, length of life of, 40.

- Neuroterus*, length of life of summer generation, 49; of winter generation, 50.
- Nigella*, production of double flowers of, 408.
- Nightingale, length of life of, 11, 36.
- Nothnagel, on the cause of epilepsy, 314.
- Nuclear plate, 187.
- Nuclei, behaviour during fission, 118, 188; connection of heredity with fusion of, 178; influence of, 184; influence in regeneration, 185; nutrition of, 187.
- Nucleoplasm, 179, 185, 191, 227; histogenetic, 213; ovogenetic, 213, 230, 243; spermogenetic, 220, 243.
- Nussbaum, on heredity, 172, 195, 206; on regeneration amongst Infusoria, 185, 200.
- Obelia*, origin of germ-cells of, 208.
- Obersteiner, on inheritance of epilepsy in guinea pigs, 311, 313.
- Ophiostomum*, karyokinesis in ovum of, 368.
- Orgyia*, 44.
- Orth, on the transmission of acquired characters, 411.
- Orthonectides, 120, 126; figure of, 127; degeneracy of, 130, 131, 141, 152.
- Orthoptera, duration of life of, 39.
- Ostracodes, parthenogenesis of, 294, 325; polar bodies of, 350.
- Otostoma Carteri*, fission of, 148.
- Palingenia*, sub-imago stage of, 19, 40.
- Paludinidae*, length of life of, 56.
- Pandorina*, 202, 248; figure of, 203.
- Pangensis, theory of, 77, 165, 166, 193, 316, 327.
- Panmixia, principle of, 90, 140, 291, 430.
- Papaver, production of double flowers of, 408.
- Paranucleus, 376; of the sperm-cell, 221.
- Parrots, length of life of, 36.
- Parthenogenesis, the origin of, 225, 290, 323, 339; not ancestral, 228; of bees, 235; partial, 238; explanation of, 243; male, 247; of *Cynips*, 273; not perpetual, 283, 285.
- Pasimachus*, length of life of, 48.
- Pemphigus terebinthi*, length of life of, 41.
- Petromyzon*, impregnation of, 175, 247; polar bodies of, 218.
- Pfeffer, on chemical attraction of oosphere, 247.
- Pfützner, on nuclear division, 187.
- Pfüger, on heredity, 70, 175, 355; on the inheritance of acquired characters, 81, 390, 422; on isotropism of the ovum, 176.
- Phanerogams, fertilization of, 178, 247; development of pollen grains of, 222.
- Pheasant, the length of life of the golden, 36.
- Philodina, polar bodies of, 350.
- Phryganea grandis*, 41.
- Phylloxera vastatrix*, length of life of, 41; unequal length of life in two sexes of, 58; parthenogenesis of, 294.
- Pieris napi*, length of life of, 44.
- Pig, length of life of, 6.
- Pigeon, length of life of, 36; cross-breeding of, 332.
- Pike, length of life of, 6.
- Pisidium*, length of life of, 56.
- Planorbis*, length of life of, 56.
- Plants, duration of life of, 32, 65.
- Polar bodies, 188, 218, 245; the significance of, 212, 225, 339; of Sponges, 217; in parthenogenetic eggs, 249, 345, 383; of Rabbit, 339; number of, 346; significance of second, 353, 362; in plants, 377.
- Pole-cells, of Diptera, 197.
- Polistes gallica*, 'workers' of, 53; length of life of males and females, 54.
- Pollen-grains, 222.
- Polyphemus*, spermatozoa of, 176; summer eggs of, 239; polar bodies of, 345.
- Polyplastides, definition of, 120, 122, 125, 159; development of, 152.
- Polyzoa, length of life of, 57.
- Poulton, on colours of caterpillars, 394; on cats with supernumerary toes, 426.
- Proteus*, 87.
- Protomyxa aurantiaca*, 149.
- Protozoa, development amongst, 150; conjugation of, 287.
- Psorosperms, 150.
- Psychidae, length of life of, 16, 44, 45, 157; deposition of eggs of, 18; death of female, 63, 132; parthenogenesis of, 293.
- Pulex irritans*, length of life of, 42.
- Pupa, length of life of, 55.
- Rabbit, polar bodies of, 339.
- Rauber, on heredity, 172.
- Ravens, length of life of, 36.
- Regeneration of lost parts, 65; in Infusoria, 185.
- Rejuvenescence, 112, 116, 124, 132, 153, 283.
- Reproduction, original form of, 122; effect of monogonic, 273, 275; amphigonic, 279, 281, 287.
- Reproductive cells, 27, 28, 111.

- Rhodites rosae**, parthenogenesis of, 325.
Richter, on inheritance of acquired characters, 438.
Robin, on pole-cells of Diptera, 197.
Rolph, on conjugation, 286.
Romanes, on correlation, 389.
Roth, on heredity, 166, 169.
Rotifera, unequal length of life in two sexes of, 58; polar bodies of, 350.
Roule, on origin of ova, 222.
Roux, on the struggle of the parts in the organism, 87, 100; on development in altered conditions, 177; on forces controlling nuclear division, 231, 361; on karyokinesis, 359.
Rudimentary organs, 88; disappearance of, 291; not found in parthenogenetic forms, 293.
Rumia Crataegata, 394.
- Sachs**, on reproduction in Mosses, 212; on venation, 260, 310; on shoots of climbing Ivy, 393, 399.
Sagitta, segmentation of egg of, 74, 199.
Saperda carcharias, length of life of imago of, 47.
Sarcophaga carnaria, length of life of, 42.
Saturnia pyri, length of life of, 45; *S. carpini*, cocoon of, 94.
Saturnidae, habits of, 44.
Saw-flies, ancestors of bees and wasps, 19; length of life of imago of, 49, 59.
Schmidt, on malformations of the ear, 440.
Schneider, on instincts of perception, 92, 94.
Schultze, on polar bodies of Amphibia, 340, 352.
Scytosiphon, male parthenogenesis in, 247.
Sea-gulls' eggs, 38.
Senility, 20, 21, 32, 157.
Sexes, unequal length of life in the two, 58.
Sheep, length of life of, 14.
Sida, spermatozoa of, 176; absorption of ova in, 239.
Siebold, von, on development of Bees, 235.
Siphonophora, origin of germ-cells of, 202.
Sirenina, 261.
Sirex, length of larval life of, 15.
Smerinthus tiliae, length of life of imago of, 45; *ocellatus*, 395.
Solenobia triquetrella, length of life of female of, 45; death of parthenogenetic forms of, 64, 293.
Solidago, time of flowering changed, 415.
Soma, 122, 125, 130, 140, 144, 154, 155.
- Somatic cells**, 27, 28, 75, 111, 145, 158.
Somatogenic characters, 412.
Somatoplasm, 104, 180.
Spathogaster, 49.
Spencer, Herbert, on relation of absorbing surface to size of animal, 7; on influence of diminished nutrition, 241; on correlation, 389.
Spirogyra, on cell-division in, 216.
Sponges, polar bodies of, 217.
Spontaneous generation, 34.
Sprenkel, on colours in flowers, 308.
Squirrel, length of life of, 14.
Stahl, on protective structures in plants, 260.
Strasburger, on fertilization of Phanerogams, 178, 340, 355; on cyto-idioplasm, 181; on influence of nuclei, 184; on identity of daughter nuclei, 187; on nuclei of sexual-cells, 200, 215, 246; on transmission of germ-plasm, 209; on cell-division in *Spirogyra*, 216; on development of pollen-grains, 222; on parthenogenesis, 237; on direction of growth of pollen-tube, 247; on heredity, 354, 369, 369; on polar bodies in plants, 377.
Strepsiptera, length of life of, 41; unequal length of life in two sexes, 58, 59.
Succineae, length of life of, 55.
Swans, length of life of, 37.
- Tagetes**, production of double flowers of, 408.
Talents, transmission of, 95; nature of, 96.
Tape-worms, 133, 155.
Termites, duration of life of, 18, 40.
Terns' eggs, 38.
Thuja, dorso-ventral structure of shoots of, 391, 396.
Tillina magna, 118, 148.
Toad, length of life of, 6.
Transmission of acquired characters, 73, 80, 169, 267, 407, 411; want of evidence of the, 81; unnecessary for the theory of evolution, 83; unproved, 105, 142; amongst Protozoa, 278; supposed botanical proofs of, 387.
Trematodes, parasitic in Mollusca, 57, 131, 133.
Trichodinidae, conjugation of, 287.
Trichoplax adhaerens, 141.
Tridaena gigas, length of life of, 56.
Trinchese, on polar bodies, 189, 224.
Tropaeolum, two kinds of leaves of, 396.
Turkey, the length of life of, 36.
Twins, 380.
- Unicellular organisms**, immortality of, 25, 27.
Unio, length of life of, 56, 57.

- Valaoritis**, on origin of germ-cells, 195; on physiological value of, 246.
Vanessa cardui, length of life of, 43; *V. prorsa*, 44; *V. urticae*, 44; *V. levana*, deposition of eggs of, 94.
Variations, always present, 101.
Ventral canal cell, 223.
Vertebrata, late origin of reproductive cells in, 74.
Vespa, 53.
Viola calcarata, fertilization of, 310; tricolor, 414.
Vitrinae, length of life of, 55.
Volvocineae, 202, 248.
Volvox, 204, 248.
Vorticellidae, conjugation of buds of, 287.
Vultures, length of life of, 11, 37.
- Wallace**, on constancy of number of individuals in successive generations, 12; on production of death by natural selection, 23.
Wasps, duration of life of male and female, 18, 53; loss of embryonic limbs in development of larva of, 89.
Westphal, on epilepsy in guinea-pigs, 314.
Whales, length of life of, 6; adaptation in, 261.
White mice, experiments in the transmission of mutilations on, 431.
Will, on origin of ova, 222.
Wolff, on theory of epigenesis, 316.
Zacharias, on the inheritance of mutilations, 426.

THE END.