

Index

Abiogeneză, la greci, 23, 27; Anaximene, 35; Diogene, 36; Xenofan, 36; Empedocle, 37; Democrit, 42; Aristotel, 48; Epicur, 60; Lucrețiu, 62; teoria abiogenezei, în legătură cu Creația, Augustin, 71; Maillet, 112; Oken, 126, 127; E. Darwin, 140; Lamarck, 178; Treviranus, 192; St. Vincent, 205; Chambers, 218. *Între apă și pământ*, Anaximandru, 34; Xenofan, 36. *Trecerea directă dinspre materia anorganică*, Aristotel, 48. *Marină*, Thales, 33; Anaximandru, 34; Maillet, 110. *Mil terestru*, sau cer și pământ, Anaximene, 35; Diogene, 36; Democrit, 42; Oken, 125. *Terestru*, direct din pământ, Lucrețiu, 62.

Abubacer, Povești orientale asupra „naturii omului”, 77.

Trăsături dobândite, Aristotel, 46; Sylvius, 26; deprinderea rapidă, Maillet, 110; E. Darwin, 145-148; Lamarck, 165-171; Goethe, 186; Darwin, 240.

Adaptarea, cheștiunea adaptării, la nivelul organismelor, Empedocle, 39; la nivelul structurilor singulare, Democrit, 42; în relație cu un proiect inteligent, Anaxagora, 42; cauze ale, Aristotel, 52-56; Kant, 100; E. Darwin, 150; Goethe, 186; Chambers, 218; Darwin, 234.

Analogia la nivelul structurii, Aristotel, 24.

Anatomie, greacă, 34; reînvierea anatomiei, 86; comparativă, Buffon, 132, Goethe, 184; Kant, 101; filozofică, Herder, 104; Owen, 218, Schelling, 104, St. Hilaire, 203; relația cu embriologia, Serres, 213.

Anaxagora, Adaptare și Proiect, 42; germenii vieții, 42.

Anaximandru, filozofia naturală, 33.

Anaximene, filozofia naturală, 35.

HENRY FAIRFIELD OSBORN

Aquino, prezentarea lui Augustin, 75.

Arabii, filozofia naturală, 75-77.

Archæsthetism, influența dorințelor și a nevoilor animalului *asupra structurii*, Aristotel, 49; E. Darwin, 147; Lamarck, 169; Darwin 236.

Aristotel, relația cu predecesorii, 43; lucrării, 45; principalele contribuții, 45; ereditatea, 46; erori, 47; dezvoltarea progresivă, 48; asupra 'mișcării,' 48; teleologia, 51; formă și materie, 53; asupra întâmplării, 53; asupra 'planului,' 54; despre supraviețuirea celui mai adaptat, 55; asupra germeilor primordiali, 56; succesorii săi, 58; interzis de către teologi, 78.

Augustin, despre știință și religie, 19; creația potențială, 71; abiogeneza, 72; despre evoluția cosmică, 73, 74; despre evoluția organică, 73; contrazis de către Suarez, 46.

Avempace, unitatea forțelor organice și anorganice, 77.

Avicenna, uniformitarianism în geologie, 76.

Bacon, Francis, science and religion, 20; failure to appreciate the Greeks, 90; induction, 91; mutability of species, 91; variation, 92; experimental Evolution, 93; artificial selection, 92; gradations between species, 93.

Baer, embryological evidence of the mutability of species, 212.

Biogenesis, Harvey's dictum, 28; Lamarck, 178.

Bonnet, relation to Leibnitz; 'Evolution,' 118; continuity, 119; perfecting tendency, 120; pre-existing germs, 120; scale of ascent, 121.

Branching nature of ascent, Lamarck, 172-176; St. Hilaire, 201-202.

Bruno, sources of his ideas, 78, 79; supposed

anticipations, 80; perfecting tendency, 80; interpretation of 'Genesis,' 80; Uniformitarianism, 82; origin of man, 82.

Buch, geographical distribution, 213; direct action environment, 214; segregation, 214.

Buffon, characteristics, 130-131; change of views, 132; conception of teleology, 132; mutability of species, 133; development and degeneration, 133; unity of type, 134; scale of ascent, 135; pangenesis, 135; direct influence of environment, 136; segregation, 136; struggle for existence, 136; imperfect phyletic views, 139; anticipation of Darwinism, 141.

Causation, relation of natural and supernatural, Aristotle, 50, 51; problems of, left by the Greeks, 68; natural, Augustine, 72; natural, philosophers upon, 89; Descartes, 94; Spinoza, 97; Kant, 100; E. Darwin, 148; Lamarck, 163; Owen, 219; 'finality,' Naudin, 224; Darwin, 237-238.

Chambers, 'The Vestiges,' 215; cosmic Evolution, 216; descent of man, 216; saltatory Evolution, 217; perfecting tendency, 217; abiogenesis, 218.

Continuity of Germs (hereditary), Robinet, 122.

Creation, *Potential*, Gregory, 71; Augustine, 71; Erigena, 74; Aquinas, 75; Bruno, 80; Descartes, 95. *Special*, Descartes upon, 94; Suarez, 83; Buffon, 134; Lamarck, 159; succession of creations, Cuvier, 196; Darwin, 232.

Cuvier, early and late views, 195; catastrophism, 196; special creations, 196; discussion with St. Hilaire, 202-204.

Darwin, Charles, relation to the past, 229; changes of opinion, 229; induction, 230, 234; hereditary and educational influences, 231; evolution idea, 233; development of his opinions,

HENRY FAIRFIELD OSBORN

235; natural selection, 236; perfecting principle, 237; 'Design,' 238; 'saltatory Evolution,' 238; survival of the fittest, 239; Lamarck's factor, 240; Buffon's factor, 240, 241; heredity, 242; final opinions, 243; relation to Wallace, 243.

Darwin, Erasmus, principal writings, 139; abiogenesis, 140; origin of man, 141; accidental variation, favourable, 141; struggle for existence, 142; indebtedness to the Greeks, 142; anticipation of Lamarck, 143; primordial germ, 144; evidences of Evolution, 145; transmission of acquired characters, 145; sexual characters, 147; irritability, 147, 148; evolution of man, 149; limitations of his theory, 150; relations to Lamarck, 152-155.

Degeneration, Aristotle, 25; Sylvius and Vesalius, 25; Kant, 101; Buffon, 133, 134; disuse, Owen, 219-220; caused by disuse, Darwin, 240-242.

Democritus, anticipation of materialism, 41; attitude towards adaptation, 42; the universe a mechanism, 42.

Descartes, on special creation and a natural order of development, 95.

Design, intelligent, Anaxagoras, 42; Aristotle, 49, 53, 54; misconception of, Buffon, 132; Darwin, 238.

Development, progressive, Aristotle, 26; Buffon, 133; Owen, 220.

Diderôt, relation to Empedocles, psychic attraction and repulsion, 115; survival of fittest combinations, 116; conception of Evolution, 116.

Diogenes, spontaneous origin of life, 36.

Economy of growth, law of, Aristotle, 25, 46; Goethe, 25; St. Hilaire, 25; Treviranus, 190.

Embryology, advance of, 27; evidence of Evolution and

unity of type, Meckel, 212; Baer, 212; Serres, 212; Owen, 220.

Empedocles, succession of life, 37; fortuitous origin, 38; survival of the fittest, 39; struggle for existence, 39; relation to modern Evolution, 41; criticised by Aristotle, 55; attraction and repulsion, 37.

Environment, Influences of, Maillet, 112; direct, Buffon, 136, 137; Kant, 101; indirect, E. Darwin, 147; Lamarck, 172; direct, Lamarck, 177-178; Treviranus, 191; action upon early stages of development, St. Hilaire, 199; action upon fixation of type, St. Vincent, 205; Buch, 214; Haldeman, 214; Spencer, 215; Chambers, 217; Naudin, 224; Darwin, 240.

Epicurus, lack of scientific spirit, 59; mechanical philosophy, 60.

Evolution, *Ceaseless changes* in the Universe, Heraclitus, 37; natural philosophers, 88; Leibnitz, 88, 95; Descartes, 94; Lamarck, 163; Chambers, 216; historic terms, 15; and natural causation, 21; Emboîtement, 26; in terms of *movement*, Aristotle, 50; 'Saltatory,' St. Hilaire, 200. *Still in process*, Empedocles, 38; Aristotle, 48; Diderôt, 116. *Evidences of, in transitions between species*, Bacon, 93; Leibnitz, 96; Kant, 102; E. Darwin, 145. [See also Vestigial Structures.] *Gradual development*, Empedocles, 40; Aristotle, 48; Bruno, 80; Descartes, Leibnitz, 96; Diderôt, 116; Goethe, 187. [See also Scale of Ascent.]

Evolution, Experimental, Bacon, 92, 93.

Fixation of type, St. Vincent, 206; Naudin, 224.

Form and matter, relations of, Aristotle, 49, 53; Bruno, 80; Goethe, 186; Treviranus, 194.

Fortuity vs. Design, Democritus, 42; opinions of Aristotle, 53; Diderôt, 117; Darwin, 238.

HENRY FAIRFIELD OSBORN

Fossils, as evidence of past history of the globe, Xenophanes, 36; Leibnitz, 96; Maillet, 112.

Geographical distribution, Buffon, 136; Buch, 214; Darwin, 240; Humboldt, 232; De Candolle, 235.

Germ, pre-existent, doctrine of, Anaxagoras, 42; Maillet, 112; Bonnet, 120; Diderôt, 119-120; Robinet, 122.

Germ or cells, primordial, the original simple forms of life, Aristotle, 56; Buffon, 135; Kant, 101; E. Darwin, 144; Lamarck, 178; primordial spheres, Oken, 126; primordial types, Treviranus, 194.

Goethe, mental characteristics, 181; influence of Buffon and the Greeks, 182; philosophical anatomy, 183; comparative anatomy, 184; unity of type, 184; vestiges, 185; method, 185; adaptation problem, 186; matter and form, 186; theory of transformation, 187.

Greeks, the natural philosophy of, 29; influence of their surroundings, 29; spirit of, 30; phases of their natural philosophy, 31, 32; their legacy to later thought, 64-68; influence upon the Fathers, 69-71; cosmic Evolution, 89; influence upon speculative group, 108.

Gregory of Nyssa, potential creation, 71.

Heraclitus, contribution to the Evolution idea, 37.

Herbert, production of new species by intercrossing, 213.

Herder, influence of Kant, 103; progressive development, 103; unity of type, 103.

Heredity ('pangensis,' 'perigenesis'), theories of Aristotle, 46; Maupertuis, 114; Buffon, 135; Lamarck, 171; Darwin, 242.

Homology in structure, Vicq d'Azyr, 24.

Inductive method, Aristotle, 16, 47; Bruno, 17, 79; Bacon, 17, 91; and deductive, Schelling, 105; Goethe, 185; Treviranus, 189; induction and deduction, Cuvier and St. Hilaire, 202-204; Darwin, 230-234.

Internal perfecting tendency, Aristotle, 50; Bruno, 80; Leibnitz, 20; Herder, 103; Bonnet, 120; Chambers, 217; Owen, 219; opposed by Darwin, 237.

Kant, indebtedness to Buffon, 98; teleology, 99; Evolution, 99; natural causation, 100; man, 101; survival of the fittest, 101; unity of type, 102; scale of ascent, 102.

Lamarck, relations to E. Darwin, 152-155; life and characteristics, 156-158; change of views, 159-161; conception of nature, 163; of Evolution, 163; uniformity, 165; his factors, 165-167; illustrations, 168-171; irritability, 169; heredity, 171; species, 170-172; phylogeny, 172-176; action of environment, 177, 178; abiogenesis, 178; primordial cells, 178; defects and failure of his system, 179-181.

Lange, opinions upon Democritus' and Empedocles' doctrines and Design, 40.

Leibnitz, continuity and perfectibility, 20; scale of beings, 95; mutability of species, 96; man and the primates, 96.

Lessing, law of development, 103.

Linnæus, characteristics, 128; fixity of species, 129; new hybrids, 130; comparison with Buffon, 130; his method of thought, 202.

Lucretius, relations to Empedocles and Epicurus, 60-62; survival of the fittest, 62; abiogenesis, 63.

HENRY FAIRFIELD OSBORN

Lyell, exposition of Lamarckism, 233; his views, 227.

Man, *Origin of*, Anaximander, 34; Oken, 127. *Slow development of*, Anaximander, 34; in the faculties and arts, Lucretius, 64; in mental evolution, Bruno, 80; relation to apes, Leibnitz, 96; E. Darwin, 147. *Relation to other primates*, tool-bearing hands, Bruno, 82; Leibnitz, 96; Kant, 101; unity of type, Herder, 104; Robinet, 121; Buffon, 134; Buffon and Helvetius, 140-141; tool-bearing hands, E. Darwin, 141; Chambers, 216. *Summit of Evolution*, Aristotle, 49, 51, 52; Robinet, 123; E. Darwin, 141.

Maillet, sudden transformations, 110; suddenly acquired characters, 110; uniformity, 112; marine and terrestrial forms, 112.

Matthew, principle of natural selection, 223.

Matter, see Form.

Maupertuis, psychic properties of matter, 113; heredity, 114; fortuitous variation, 115.

Meckel, embryological evidence of Evolution, 212.

Metamorphosis, *sudden transformation*, Duret, 108; Bonnami, 109; Kircher, 109; Maillet, 110.

Mutability of species, natural philosophers upon, 88; Bacon, 91; Leibnitz, 96; Buffon, 132; Lamarck, 163; St. Vincent, 205; embryological evidence, Baer, 212.

Naudin, unity of type, 223; phylogeny, 224; environment, 224; finality, 224; fixation of type, 224; artificial selection, 225.

Oken, relation to the Greeks, 124; Ur-Schleim, 125; abiogenesis, 126; cellular theory, 126; origin of man, 127.

Origin of species (see Mutability and Evolution) by intercrossing, Bruno, 84; Linnæus, 130; Herbert, 213.

Owen, archetypal idea, 218; continuous creation, 219;

degeneration, 219; evidences of Evolution, 220.

Parmenides, 36.

Pascal, influence of the Greeks, 17; upon Evolution, 97.

Pliny, natural history of, 58.

Psychic properties of matter, attraction and repulsion, Empedocles, 37; Maupertuis, 113; Diderôt, 115.

Robinet, scale, 121; man and apes, 121; uniformity, 122; pre-existent germs, 32.

Saltatory Evolution, St. Hilaire, 200-201; Chambers, 217; Darwin, 238; Huxley, 238.

Scale of Ascent, *from the polyps to man*, Aristotle, 48; Bruno, 81; continuity, Leibnitz, 96; Kant, 102; Lessing, 103; Herder, 103; continuity, Bonnet, 121; Robinet, 102; Buffon, 135; Lamarck, 172.

Schelling, deductive character of his philosophy, 105; philosophy of nature, 104; influence upon St. Hilaire, 197.

Segregation, similar in its results to artificial selection, Buffon, 136; Buch, 214; Darwin, 241.

Selection, Artificial, relation to Evolution, Bacon, 92; Buffon, 136; segregation, Buffon, 112; survival of the fittest, Wells, 222; Naudin, 225; Darwin, 235; Natural Selection, see Survival of the Fittest.

Serres, embryological evidence of Evolution, 212, 213.

Spencer, early publications, 215.

St. Vincent, life, 204; abiogenesis, 205; fixity of type, 205; hereditary stability, 206.

St. Hilaire, Geoffroy, characteristics, 197; sources of his

HENRY FAIRFIELD OSBORN

opinions and method, 197; his special theories, 198; environment, 199; anticipation of Darwinism, 199; 'saltatory Evolution,' 200; phylogeny and limited view of Evolution, 201, 202; discussion with Cuvier, 202-204; unity of type, 203.

St. Hilaire, Isidore, theory of limited variability, 207; stability of types, 207; influence of environment, 208.

Struggle for existence, Anaximander, 35; in feeding and propagation, Empedocles, 39; Buffon, 136; Malthus, 136; E. Darwin, 142; Treviranus, 191; De Candolle, W. Herbert, Lyell, 239; Darwin, 239, 244; Wallace, 244.

Suarez, special creation, 83; post-creation species, 84; opposes Augustine, 84; literalism, 85.

Survival of the Fittest, *forms or varieties of life*, Empedocles, 39; supported by Epicurus, 60; by Lucretius, 61; Hume, 97; Buffon, 136; Kant, 101; St. Hilaire, 199; Wells, 222; Matthew, 223; Naudin, 225; Darwin, 236; Wallace, 245. *Single advantageous variations and organs* stated and opposed by Aristotle, 55; Diderôt, by fortuitous combinations of particles, 116; by combinations of organs, 117; survival of opposable thumb, Buffon, 141; E. Darwin, 141; St. Hilaire, 199; Darwin, 239, 244.

Teleology of Aristotle, 51; opposed by Democritus, 42; by Epicurus, 60; by Lucretius, 61; Kant, 99; Buffon, 132; Darwin, 238.

Thales, suggestion of marine origin of life, 33.

Treviranus, his 'biology,' 188; his method, 189; compensation of growth, 190; environment, 191; struggle for existence, 191; factors of Evolution, 192; abiogenesis, 193; primordial polyps, 194; matter and form, 194-195.

Type, unity of, Aristotle, 45; Bruno, 80; Leibnitz, 96; Newton, 97; Kant, 102; Herder, 103; Buffon, 134; E. Darwin, 145;

Goethe, 184; St. Hilaire, 198, 203; Archetype, Owen, 219; Naudin, 223.

Uniformitarianism, similarity of past and present changes, Avicenna, 76; Bruno, 82; Maillet, 112; Buffon, 137; Lamarck, 165; Darwin, 232.

Variation and Evolution, Bacon, 88, 92; Leibnitz, 99; *fortuitous*, from sexual union, Maupertuis, 115; St. Hilaire, 199; Brown, 235; Darwin, 244; Wallace, 244.

Variation, fortuitous, *by fortuitous combinations*, Empedocles, 38; Diderôt, 117; St. Hilaire, 199; Wells, 222; Darwin's opinion, 237.

Variability, theory of limited, Is. St. Hilaire, 206-208.

Vestigial structures, meaning of, Aristotle, 45; Buffon, 132; Goethe, 185.

Wallace, on the evidence of Evolution, 226; statement of his theory, 244; distinction of, 245.

Wells, theory of natural selection, 222.

Xenophanes, 36.

Zeller, division of the Greek periods, 32; upon origin of idea of Design, 40, 42.