

## INDEX.

- ◆
- |   |   |
|---|---|
| <p><i>Acanthaceæ</i> in the Prodrumus, 22.<br/>         African, South, Plants, Harvey's, 36.<br/>         Agassiz's Zoölogical Nomenclator, 41.<br/> <i>Aldrovanda vesiculosa</i>, insectivorous habits of, 208.<br/> <i>Algae</i>, fecundation of, 91.<br/>         Alligator Pear, history of the, 342.<br/> <i>Allium</i>, North American, 281.<br/> <i>Allium stellatum</i>, 281.<br/> <i>Allium vineale</i>, 281.<br/> <i>Amarantaceæ</i> in the Prodrumus, 27.<br/> <i>Amelanchier</i>, 195.<br/>         Amole, 198.<br/> <i>Ampelidææ</i>, Planchon's Monograph of, 250.<br/> <i>Ampelopsis</i>, characters of, discussed, 251.<br/>         Ancestry of plants, 269.<br/>         Andes, Peruvian, Ball's Flora of, 384.<br/>         Anemophilous plants, 234.<br/> <i>Antheophora axilliflora</i>, 113.<br/>         Apple, effect of foreign pollen on an, described (note), 189.<br/> <i>Aquilegia flavescens</i>, 185.<br/>         Archæology, plant, 269.<br/>         Arctic Plants, distribution of, 122.<br/> <i>Asclepiadææ</i> in the Prodrumus, 19.<br/>         Aspirate, use of, in forming botanical names, 262.<br/>         Australia, Bentham's Flora of, 246.<br/>         Authors' names, citation of, discussed, 370.</p> <p><i>Balanophoreæ</i>, structure and affinities of, 94.<br/>         Ball, John, and J. D. Hooker, Tour in Marocco, 255.<br/>         Ball's Flora of the Peruvian Andes, 384.</p> | <p>Banana, history of the cultivation of the, 344.<br/>         Basin, the Great, character of, described, 181.<br/>         Basin, the Great, statistics of the vegetation of, 182.<br/> <i>Batatas vulgaris</i>, origin of, discussed, 317.<br/>         Beans cultivated by North American Indians, 348.<br/>         Bentham on <i>Euphorbiaceæ</i>, 259.<br/>         Bentham's Flora of Australia, 246.<br/>         Bentham's Flora of Hongkong, 117.<br/>         Bentham's Hand-Book of the British Flora, 104.<br/>         Bentham and Hooker's <i>Genera Plantarum</i>, 355.<br/> <i>Bignonia capreolata</i>, mode of growth of, 177.<br/> <i>Bolandra</i>, 282.<br/> <i>Borrea ciliaris</i>, black dots on (note), 58.<br/>         Botanical descriptions in various languages contrasted, 302.<br/>         Botanical riddles, 291.<br/>         Botanical works, methods of publication of, discussed, 285.<br/>         Botanists, characteristics of, 284.<br/>         Botany, fossil, discussion of, 269.<br/>         Botany, Henfrey's, 72.<br/>         Botany, Natural System of, 1.<br/>         Botany, Watson's, of the 40th Parallel, 180.<br/>         Bottle-gourd, history of the, 330.<br/>         Boussingault on Influence of Nitrates, 100.<br/>         Brazil, antiquity of the flora of, discussed, 387.</p> |
|---|---|

- British Flora, Bentham's Hand-Book of, 104.  
 British flora, statistics of, 105.  
*Büchloë dactyloides*, 113.  
 Buffalo-grass, 112.  
*Bulbochaete*, nature of, 92.
- Calanthera dactyloides*, 113.  
 Cassava-plant, origin of, discussed, 320.  
 Cell-formation, 54.  
 Cell-markings, 53.  
 Cell, physiological condition of, 55.  
 Cell, the vegetable, Von Mohl's, 51.  
*Ceropegia*, revolution of growing stem of, 162, 167.  
*Chamælorium Carolinianum*, 281.  
 Champlain, Les Voyages du Sieur de, 84, 316 (note), 347.  
 Circumnutation defined, 304.  
 Circumnutatory movements in plants explained, 306.  
 Citation of authors' names discussed, 49, 370.  
*Clematis*, mode of growth of stems of, 168.  
 Climates described, 272.  
 Climbing, advantage of, in plants described, 178.  
 Climbing Plants, Darwin's Movements and Habits of, 158.  
 Climbing plants, irritability of growing stems of, 164.  
 Close-breeding, results of, 266.  
 Close-fertilization, advantages of, discussed, 229.  
*Cobæa scandens*, mode of growth of, 177.  
 Color in flowers, purpose of, described, 227.  
*Comandra*, 29.  
*Compositæ* in the Prodromus, 16.  
*Compositæ* of the Peruvian Andes, 384.  
 Connubial relations of plants, 241.  
*Crescentia Cujete*, note on derivation of the name of, 330.  
 Cross-fertilization in the vegetable kingdom, 217.  
 Cross-fertilization, benefits of, 245.  
 Cross-fertilization, methods of securing, described, 230.  
 Cross-fertilization, remarks on, 225.  
*Cucurbita*, Naudin on the genus, 83.  
*Cucurbita maxima*, 83, 332.  
*Cucurbita moschata*, 83, 332.  
*Cucurbita Pepo*, 83, 332.  
*Cucurbita verrucosa*, 85.  
*Cucurbitaceæ*, cross-breeding of, 86.  
*Cucurbitaceæ*, origin of cultivated species of, 329.  
*Cucurbitaceæ*, tendrils of, 174.  
 Cultivated Plants, De Candolle's Origin of, 311.  
 Cultivated plants, improvement of, 109.  
 Cultivated plants, origin of, 69.  
*Cupulifera*, present condition of, in Europe, 137.  
 Curtis' Trees of North Carolina, 115.
- Darwin's Cross and Self-Fertilization in the Vegetable Kingdom, 217.  
 Darwin's Different Forms of Flowers on Plants of the Same Species, 241.  
 Darwin's Insectivorous Plants, 206.  
 Darwin, Movements and Habits of Climbing Plants, 158.  
 Darwin's Power of Movement in Plants, 304.  
 Decaisne's Monograph of the Genus *Pyrus*, 186.  
 De Candolle's Prodromus, 15.  
 De Candolle's (A.) Géographie Botanique, 67.  
 De Candolle's (A.) Monograph of *Smilacæ*, 249.  
 De Candolle's (A.) New Monographs, 248.  
 De Candolle's (A.) Nomenclature, 358.  
 De Candolle's (A.) Origin of Cultivated Plants, 311.  
 De Candolle's (A.) Phytography, 282.  
 De Candolle (A.) on Species, 130.  
 Descriptions, abridged, 290.  
 Descriptions, developed, 290.  
 Descriptions of plants, discussed, 290.  
 Dextrorse and sinistrorse, 297.  
 Diagnosis of plants discussed, 290.  
*Dianthera*, 22.

- Dicentra*, origin of name discussed, 378.  
*Diclytra*, origin of name discussed, 378.  
*Dielytra*, origin of name discussed, 378.  
*Dionæa*, insectivorous habits of, 207.  
*Dioscorea sativa*, origin of, discussed, 322.  
*Douglasia*, 128.  
*Drosera rotundifolia*, insectivorous habits of, 207.  
*Drosophyllum*, insectivorous habits of, 208.
- Echinocystis lobata*, movements of, 174.  
 Embryo, direction of, explained, 13.  
 Emerson's Trees and Shrubs of Massachusetts, 204.  
 Endlicher's Genera Plantarum, 33.  
 Engelmann's Notes on the Genus *Yucca*, 196.  
 Engelmann on the Buffalo-grass, 112.  
 Epiontology defined, 131.  
 Epping Forest, 253.  
*Erodium cicutarium*, distribution of, 389.  
*Euphorbiaceæ*, Bentham on, 259.
- Fecundation, Process of, in the Vegetable Kingdom by Radlkofer, 91.  
 Fertility, degrees of, in crossed seedlings of *Ipomœa purpurea*, 221.  
 Fertilization, self-, Henslow on, 263.  
 Fertilization of flowers, relation of insects to, 235.  
 Fertilization of Red Clover, 226.  
 Flora of Australia, Bentham's, 246.  
 Flora, British, Bentham's Hand-Book of, 104.  
 Flora of Hongkong, Bentham's, 117.  
 Flora, Indian, Hooker and Thomson's, 62.  
 Flora of the Peruvian Andes, Ball's, 384.  
 Flora, Tertiary, vegetation of, in south-east France, 145.  
 Floras discussed, 292.  
 Flowering and Flowerless Plants, 5.  
 Flowerless and Flowering Plants, 5.
- Forms of flowers different on plants of the same species, 242.  
 Fossil botany, discussion on, 269.  
 Fossil plants, nomenclature of, 380.  
 Fruit, ripening of, 78.  
 Fruits, nomenclature of, 78.  
*Fucaceæ*, fecundation of, 93.  
*Fucus*, note on Decaisne and Thuret's Memoir of, 59.  
*Fungi*, note on Léveillé's paper on, 59.
- Gaura parviflora*, 267.  
 Genera, number known at different epochs, 357.  
 Genera Plantarum, compared, 34.  
 Genera Plantarum, Bentham and Hooker's, 355.  
 Genera Plantarum, description of the different, 292.  
 Genera Plantarum, Endlicher's, 33.  
 Genera Plantarum, history of the different, 355.  
 Generic names, priority of, discussed, 363; duplicate use of, 45.  
*Gentiana Andrewsii*, fertilization of, 267.  
 Géographie Botanique, A. De Candolle's, 67.  
 Glaucus defined, 297.  
 Granadillas, history of the cultivation of, 342.  
 Gravity as a factor in plant-growth discussed, 309.  
 Greenland, origin of the flora of, 123.  
 Groups, methods of arranging, 289.  
 Groups, natural arrangement of, 294.  
 Gynæcium, use of the term discussed, 297.
- Hamamelis Virginica*, properties of, 79.  
 Harvey's South African Plants, 36.  
*Hastingsia*, 281.  
 Heer, appreciation of, 270.  
*Helianthus argophyllus*, experiments on growth of, 101.  
*Helianthus giganteus*, origin of Jerusalem Artichoke discussed, 315.  
*Helianthus tuberosus*, origin of, discussed, 314.

- Henfrey's Botany, 72.  
 Henslow, George, Self-Fertilization of Plants, 263.  
 Herbaria, their history, 304.  
 Heredity and variability in plants, nature of, 212.  
*Hesperoenide tenella*, 90.  
*Heteromeles*, 195.  
*Heterosmilax*, 249.  
 History of herbaria, 304.  
*Hollisteria*, 282.  
 Hongkong, Bentham's Flora of, 117.  
 Hook-climbers, mode of growth of, 171.  
 Hooker on *Balanophoreæ*, 94.  
 Hooker on distribution of Arctic plants, 122.  
 Hooker on *Welwitschia*, 151.  
 Hooker and Ball's Tour in Marocco, 255.  
 Hooker and Thomson's Indian Flora, 62.  
 Hop, revolutions of growing stem of, 160.  
 Hops, native in North America, 328.  
*Humulus Lupulus*, native in North America, 328.  
 Hybrids, characters of, 212.  
 Hybridization of Lilies, 238.  
 Hybridization, views upon, in Flora of India, 63.  
*Hydrophyllaceæ* in the Prodrum, 20.  
 Imbrication, quincuncial, 120.  
 Improvement of cultivated plants, 109.  
 Indian Flora, Hooker and Thomson's, 62.  
 Initials, capital, use of, discussed, 48, 381.  
 Insectivorous Plants, Darwin's, 206.  
 Insects in relation to the fertilization of flowers, 235.  
*Ipomœa purpurata*, Darwin's experiments in fertilizing, 218.  
 Japan, Siebold's Flora of, 37.  
 Japanese flora contrasted with North American, 38.  
 Jerusalem Artichoke, origin of, discussed, 314  
 Kidney Bean, history of the, 344.  
*Labiatae* in the Prodrum, 23.  
*Lagenaria*, history of, 330.  
 Lanceolate, defined, 297.  
 Language for botanical works discussed, 286.  
*Lasiostega humilis*, 114.  
 Latin, botanical, discussed, 286, 361.  
 Leaf-climbers, mode of growth of, 168.  
 Leaf, definition of the, 295.  
 Lesquereux, appreciation of, 270.  
*Lichens*, Antheridia of (note), 58.  
*Lichens*, note on Tulasne's Memoir of, 58.  
 Lilac, terminal bud of, 75.  
*Liliaceæ*, North American, 278.  
*Liliaceæ*, Watson's arrangement of, 278.  
 Lilies, hybridization of, 238.  
*Lillium Grayi*, 281.  
*Lillium Parkmanni*, 238.  
 Lima Bean, origin of, 351.  
 Lindley's Natural System of Botany, 1.  
 Literary material, methods of collecting, discussed, 287.  
 Longevity of trees, 82.  
*Lophospermum scandens*, mode of climbing, 170.  
*Lycopersicum esculentum*, history of the cultivation of, 341.  
*Lygodium scandens*, revolution of growing stems of, 163.  
*Maianthemum bifolium*, 281.  
 Mammoth, discussion on the origin of the, 142.  
*Manihot utilisima*, origin of, discussed, 320.  
 Manioc, origin of, discussed, 320.  
 Marocco, Hooker and Ball's Tour in, 255; early travels in, 255.  
 Massachusetts, trees and shrubs of, 204.  
*Maurandia semperflorens*, mode of growth of, 171.  
*Meliaceæ*, monograph of, 249.  
 Mohl's Vegetable Cell, 51.  
*Monanthochloë*, 114.  
 Monographs of plants discussed, 290.

- Monstrosities, vegetable, 40.  
 Moquin-Tandon's Vegetable Monstrosities, 40.  
*Musa*, history of the cultivation of, 344.
- Names for garden-plants discussed, 369.  
 Names, formation of personal, for plants discussed, 368.  
 Names, methods of abbreviation discussed, 376.  
 Names of natural orders, 11, 365.  
 Names of organs, rules for choosing, 296.  
 Names of species in combined genera discussed, 49, 382.  
 Names, permissible changes in, 377.  
 Names, popular, of British plants discussed, 106.  
 Names, substantive specific, for plants discussed, 48, 368.  
 Names, use of unpublished, 373.  
 Natural orders, analogies of, 80.  
 Natural orders, names of, 11.  
 Natural System of Botany, 1.  
 Naudin's Nature of Heredity and Variability in Plants, 212.  
 Naudin on the genus *Cucurbita*, 83.  
 Nitrates, influence of, in production of vegetable matter, 100.  
 Nitrates, sources of, in soil, 103.  
*Nolinea*, 280.  
 Nomenclator, Agassiz's Zoölogical, 41.  
 Nomenclature, A. De Candolle's, 358.  
 Nomenclature, Bentham's views on, 206.  
 Nomenclature of fossil plants, 380.  
 Nomenclature of organs, 294.  
 North Carolina, trees of, 115.  
*Nyctaginaceæ* in the Prodromus, 28.  
 Nyctotropism explained, 307.
- Oakesia sessilifolia*, 280.  
 Oaks, A. De Candolle on distribution of the, 130.  
 Oaks, history and origin traced, 136.  
 Oaks, variations in, 132.  
*Oca*, history of cultivation of, 328.  
 Odor in flowers, purpose of, described, 227.
- Edogonium*, nature of, 91.  
 Ordinal names, proper terminations of, discussed, 11, 365.  
 Organography discussed, 293.  
 Organs, nomenclature of, discussed, 294.  
 Organs of plants, nomenclature of, discussed, 379.  
 Organs, rules for choosing names of, 296.  
*Origanum vulgare*, Darwin's experiments in crossing, 223.  
*Orobanche*, 21.  
*Oxalis crenata*, history of cultivation of, 328.  
*Oxalis tuberosa*, history of cultivation of, 328.
- Papilionaceous plants, fertilization of, 267.  
 Parkman, F., on the Hybridization of Lilies, 238.  
*Parrya macrocarpa*, 185.  
*Parthenocissus*, 252.  
*Passiflora gracilis*, movements of, 173.  
*Passiflora*, history of cultivation of, 342.  
*Passiflora incarnata*, 343.  
 Peach, origin of the, 329.  
 Pears, history of the cultivation of, 193.  
 Pears, method of producing large, described, 191.  
 Pears, number of cultivated species of, 188.  
 Pears, races of, 192.  
 Pears, stock for, 191.  
*Peraphyllum*, 195.  
*Persea gratissima*, history of, 342.  
*Phacelia circinata*, 389.  
*Phaseolus lunatus*, origin of, 351.  
*Phaseolus vulgaris*, history of, 344.  
*Photinia*, 195.  
 Phyllotaxy, 76.  
 Physiology of plants, 81.  
 Phytogamy, 241.  
 Phytography, A. De Candolle's, 282.  
*Pickeringia*, 15.  
*Pilea pumila*, 90.  
*Pinguicula*, glandular hairs of, 209.  
*Pirus*, 89, 329.

- Pistillum*, use of the term discussed, 297.  
 Planchon's Monograph of *Ampelidæ*, 250.  
 Plant Archæology, 269.  
 Plants, ancestry of, 269.  
 Plants, anemophilous, 234.  
 Plants, Climbing, Darwin's Movements and Habits of, 158.  
 Plants, Cultivated, A. De Candolle's Origin of, 311; improvement of, 109.  
 Plants, connubial relations of, 241.  
 Plants, Darwin's Power of Movement in, 304.  
 Plants in Glazed Cases, Ward's Growth of, 59.  
 Plants, history of their distribution, 70.  
 Plants, Naudin on the Nature of Heredity and Variability in, 212.  
 Plants, physiology of, 81.  
 Plants, relation of, to surrounding conditions, 68.  
 Plants, Self-fertilization of, by George Henslow, 263.  
 Plants, self-sterile, 224.  
*Poinsettia*, adaptation to insect-fertilization, 234.  
 Pollen, direct action of, on ovary and ovules, 87; value of, discussed by Darwin, 228.  
 Popular names of British plants discussed, 106.  
*Portulaca oleracea*, introduction into North America, 326.  
 Potato, origin of, discussed, 69 note, 317.  
*Primula Sinensis*, glandular hairs of the leaves of, 209.  
*Primulaceæ* in the Prodromus, 18.  
 Prodromus, De Candolle's, 15.  
 Froserpina, Ruskin's, 199.  
 Pruinous defined, 297.  
 Publication of botanical works discussed, 285.  
 Publicity of publication discussed, 369.  
 Purslain, introduction into North America, 326.  
*Pyralia*, 28.  
*Pyrus*, characters of, 193.  
*Pyrus*, Decaisne's monograph of the genus, 186.  
*Pyrus*, division of the genus, 194.  
*Pyrus*, limitation of the genus, 189.  
*Pyrus*, morphology of the gynæcium of, 190.  
*Pyrus*, orthography of, 329.  
 Quaternary climate described, 275.  
*Quercus Ilex*, 139.  
*Quercus Robur*, 138, 139.  
 Quincuncial imbrication, 120.  
 Races, fixity of new, in cultivation, 110.  
 Radicle, character of the, 121.  
 Radicle of the embryo, true character of, 74.  
 Radlkofer's Process of Fecundation in the Vegetable Kingdom, 91.  
*Ranunculus alismæfolius*, 184.  
*Ranunculus fascicularis*, 184.  
*Ranunculus orthorhynchus*, 184.  
 Red Clover, fertilization of, 226.  
*Restiaceæ*, monograph of, 248.  
*Rhamnaceæ*, stamens of, 76.  
*Rhipogonum*, 249.  
 Riddles, botanical, 291.  
 Root, mode of penetration into the soil, 306.  
 Root-hairs, 75.  
 Root-tip, functions of, discussed, 307.  
*Rosa setigera*, mode of growth of, 171.  
 Ruskin's Proserpina, 199.  
*Salsolaceæ* in the Prodromus, 26.  
*Santalaceæ* in the Prodromus, 28.  
 Saporta's Monde des Plantes avant l'Apparition de l'Homme, 269.  
*Sarracenia*, history of discoveries relating to, 210.  
 Saxifrages, glandular hairs of the leaves of, 209.  
*Schæmolirion album*, 280.  
 Seeds, reproduction by, 58.  
 Self-fecundation discussed, 267.  
 Self-fertilization in the vegetable kingdom, 217, 263.  
 Self-sterile plants, 224.  
*Sequoia*, history of, 277.

- Shortia glaucifolia*, 16.  
 Siebold's Flora of Japan, 37.  
 Sinistrorse and dextrorse, 297.  
*Sisymbium*, 186.  
*Smilacæ*, A. De Candolle's Monograph of, 249.  
*Smilacæ*, distribution of, 250.  
*Smilacina*, nomenclature of, 261.  
*Smilax*, 249.  
 Soil, soluble matters in, 103.  
*Solanum tuberosum*, origin of, discussed, 317.  
 Species, A. De Candolle's definition of, 149; Linnæus' definition of, 148.  
 Species, origin of, Naudin's views on, 216.  
 Species, variation and distribution of, 130.  
 Species, various views on the, 147.  
 Species, views on the derivation of, 140.  
 Specimens, incomplete, difficulties of describing, 292.  
*Sphaeroplea*, nature of, 92.  
 Statistics of the British flora, 105.  
 Stem, the initial, defined, 310.  
 Stems of climbing plants, revolutions of, 159.  
*Streptanthus*, 185.  
 Style in botanical writing discussed, 302.  
*Sullivantia Ohioensis*, 282.  
 Sweet Potato, origin of, discussed, 317.
- Tendril-bearing plants, origin of, 159.  
 Tendril-climbers, mode of growth of, 172.  
 Tendrils, movements of, described, 172.  
 Tendrils of *Cucurbitacæ*, 175.  
 Terms, contradictory use of, 296.  
 Terms, multiplication of, discussed, 296.  
*Thalictrum Fendleri*, 184.  
 Thomson and Hooker's Indian Flora, 62.  
 Tomato, history of the cultivation of the, 341.  
 Tree-culture, possibilities of, in England, 254.  
 Trees, longevity of, 82.
- Trees of North Carolina, 115.  
 Trees and Shrubs of Massachusetts, Emerson's, 204.
- Urticacæ*, geographical distribution of, 89; relationships of, 88.  
*Urticacæ*, Weddell's Monograph of, 87.  
*Utriculariæ*, North American in the Prodrumus, 18.  
*Utrularia*, 281.
- Variability and heredity in plants, nature of, 212.  
 Variation of species discussed, 214.  
 Varieties, importance of describing, 293.  
 Varieties, method of treating, 288.  
 Varieties, their relations to species, 287.  
 Vegetable kingdom, cross and self-fertilization in, 217.  
 Vegetable kingdom, Radlkofer's process of fecundation in, 91.  
 Vegetable monstrosities, 40.  
 Vegetable world, history of, 274.  
 Vilmorin on the improvement of cultivated plants, 109.  
 Virginia Creeper, tendrils of, 176.  
*Vitis*, characters of, discussed, 251.
- Wallace, A. R., on Epping Forest, 253.  
 Ward's Growth of Plants in Glazed Cases, 59.  
 Wardian cases, growth of plants in, 59.  
 Watson's Botany of the 40th Parallel, 180.  
 Watson on North American *Liliacæ*, 278.  
 Weddell's Monograph of *Urticacæ*, 87.  
 Weed, Henslow's definition of, 268.  
 Weeds, fertilization of, 268.  
*Weldenia*, 281.  
*Welwitschia*, J. D. Hooker on, 151.
- Yam, origin of the, discussed, 322.  
*Yucca*, Engelmann's notes on, 196.  
*Yucca*, anthesis of, 197.  
*Yucca*, nature of the fruit of, 198.