Fig. 1.—<u>Fncephalartos longifolius</u>: at van Staadens, near Port Elizabeth. South Africa.

Fig. 2.—<u>Cycas revoluta</u>: unusually large specimen, about 10 meters tall, at Minè, Province of Izu, Japan.

Fig. 3 .-- Stangeria paradoxa: at East London, South Africa.

Fig. 4.—<u>7amia floridana</u>: female plant, with seedlings growing at base of leaves, at Miami, Florida.

Fig. 5.—Dioon edule: photograph of surface view of apex of stem, showing a cone dome with its bundles going to a cone and, to the left of it, a similar series of bundles going to the new apex, which is producing leaves; \*\*elow\* is a cone dome with some of the bundles cut across.—After Chamberlain.

Fig. 6.—<u>Dioon spinulosum</u>: photograph of surface view of top of a large plant cut longitudinally through the middle. The second cone dome from the top shows the peduncle of the cone, part of which can be seen in the cone dome just below it and in the lowest one; one-half natural size.—After Chamberlain.

Fig. 7.—Cycas circinalis: new crown of leaves growing up through crown of megasporophylls, in the University of Chicago greenhouse.

Fig. 8.—<u>Encephalartos friderici-guilielmi</u>: cluster of female cones at apex of stem; Queenstown, South Africa.

Fig. 9.—<u>Macrozamia moorei</u>: male cones borne in axils of leaves; Springsure, Australia.

Fig. 10.—Zamia silicea, from Isle of Pines, Cuba. Length of stem, 16.5 cm.

Fig. 11.—<u>Dicon edule</u>: portion of trunk of an old plant, showing armor of leaf bases. The trunk is smaller below than above. It shows three zones, marking prolonged dormant periods.—
From Chamberlain, <u>The Living Cycads</u> (University of Chicago Press).

- Fig. 12. Microcycas calocoma, near Consolación del Sur, Cuba.
- Fig. 13.—<u>Encephalartos friderici-guilielmi</u>, near Queenstown, South Africa.
- Fig. 14.—<u>Dicon edule</u>: female plant, at Chavarrillo, near Jalapa, Mexico. The trunk is about 1.5 meters in height and about 1,000 years old.
- Fig. 15.—Cycas media: transverse section of stem, showing growth rings. Diameter of stem, 19 cm.
- Fig. 16.—Cycas pectinata: transverse section of stem, showing growth rings. Diameter of stem, 20 cm.
- Fig. 17.—<u>Dioon spinulosum</u>: transverse section of stem, showing zone of wood the widest ever described in a cycad.

  Diameter of stem, 33 cm. The growth rings show faintly.—From Chamberlain, <u>The Living Cycads</u> (University of Chicago Press).
- Fig. 18.—<u>Dioon edule</u>: new crown of twenty leaves, the longest, 45 cm. in length.
- Fig. 19.—<u>Dioon spinulosum</u>: new crown of leaves nearly erect, the previous crown nearly horizontal.
- Fig. 20.—Vernation in <u>Macrozamia denisonii</u> (A), <u>Cycas</u> circinalis (B), <u>Tamia floridana</u> (C), and <u>Stangeria paradoxa</u> (D).
- Fig. 21.—<u>Dioon spinulosum</u>: juvenile leaves at left, adult leaves at right.
- Fig. 22.—<u>Cycas revoluta</u>, at Huntington Botanical Gardens, San Marino, California. From a photograph by A. W. Haupt.
- Fig. 23.—Cycas revoluta: male cone, 35 cm. long, at Los Angeles, California. From a photograph by A. W. Haupt.
- Fig. 24.—<u>Cycas revoluta</u>: compact crown of megasporophylls, at Los Angeles, California. From a photograph by A. W. Haupt.

Fig. 25.—Cycas revoluta: expanding crown of megasporophylls, at Garfield Park Conservatory, Chicago.

Fig. 26.—<u>Cycas revoluta</u>: megasporophylls, about one-half natural size.

Fig. 27.—Cycas pectinata: microsporophyll, twice natural size.

Fig. 28.—Cycas wadei: megasporophylls and seeds.

Fig. 29.—Cycas undulata: leaflets near apex of leaf, about one-half natural size.

Fig. 30.—<u>Cycas undulata</u>: branching plant with crown of megasporophylls near base of main stem and new crown of leaves at top; in the Phipps Conservatory, Pittsburgh, Pennsylvania.

Fig. 31.—Cycas undulata: megasporophylls, natural size.

Fig. 32.—Cycas circinalis: male plant with cone, in the greenhouse of the University of Chicago.

Fig. 33.—Cycas circinalis: male cone, in the Garfield Park Conservatory, Chicago.

Fig. 34.—<u>Cycas circinalis</u>: new crown of megasporophylls above, older sporophylls hanging down below; in the greenhouse of the University of Chicago. The new crown is about 35 cm. high.

Fig. 35.—Cycas circinalis: crown of megasporophylls.

Fig. 36.—Cycas rumphii, in the Botanic Garden, Sydney, Australia.

Fig. 37.—Microsporophylls of <u>Cycas rumphii</u> (above) and <u>C</u>. <u>circinalis</u> (below), natural size.

Fig. 38.—Cycas media: branched plant with two male cones, near Freshwater, Cucensland, Australia.

Fig. 39.—Cycas media: male cone.

Fig. 40.—Cycas media: female plant with crown of megasporophylls; at Frenchman's Creek, near Rockhampton, Australia.

Fig. 41.—<u>Cycas media</u>: cluster of megasporophylls, Frenchman's Creek, near Rockhampton, Australia.

Fig. 42.—Stangeria paradoxa, at Ngoye, Zululand, South Africa.

Fig. 45 .-- Stangeria paradoxa: leaflet with deeply incised margin.

Fig. 44.—<u>Stangeria paradoxa</u>: male plant, at Manubie, Kentani, Transkei, South Africa. From a photograph by Mrs. Sarah Van Rooyen Webster.

Fig. 45.—<u>Stangeria paradoxa</u>: female plant at Mubie, Kentani, Transkei, South Africa. From a photograph by Mrs. Sarah Van Rooyen Webster.

Fig. 46.—<u>Stangeria paradoxa</u>: male cone, about 14 cm. long, exclusive of peduncle.

Fig. 47.—Stangeria paradoxa: female cone, 21 cm. long.

Fig. 48.—Bowenia spectabilis: female cone, 14 cm. long.

Fig. 49.—<u>Bowenia serrulata</u>: fully grown plant at Byfield, near Rockhampton, Australia.

Fig. 50.—Bowenia serrulata: a stem, showing profuse branching.

Fig. 51.-Bowenia serrulata: male cone, natural size.

Fig. 52.—<u>Dicon edule</u>: two male plants, with cones shedding pollen; at Chavarrillo, near Jalapa, Mexico.

Fig. 53.—<u>Dioon edule</u>: male cone, at shedding stage; University of Chicago greenhouse.

Fig. 54.—<u>Dicon edule</u>: lateral and abaxial view of microsporophylls, slightly enlarged.—After Chamberlain.

Fig. 55.—Dioon edule: female plant, at Los Angeles, California, with an unusually large cone, which is 43 cm. long and 29 cm. in diameter. The leaves are 1.5 meters long. From a photograph by A. W. Haupt.

Fig. 56.—<u>Dioon edule</u>: female cone, at Huntington Botanical Gardens, San Marino, California. From a photograph by William Hertrich.

Fig. 57.—<u>Ficon purpusii</u>: a plant cultivated at Coronado Beach, California.

Fig. 58.—<u>Dicon pinoi</u>: leaf and seeds collected by C. A. Purpus near Monserrato, Chiapas, Mexico.

Fig. 59.—<u>Dioon madrense</u>: male cone and microsporophylls, from Los Mochis, Sinaloa, Mexico. The cone is 21 cm. and the sporophylls 3.5 cm. long.

Fig. 60.—<u>Dioon spinulosum</u>, on the Hacienda de Joliet, near Tierra Blanca, Mexico.

Fig. 61.—<u>Dioon spinulosum</u>: leaflets from plant grown near Sarasota, Florida.

Fig. 62.—<u>Dioon spinulosum</u>: male cone, at shedding stage, on plant grown in the University of Chicago greenhouse. The cone is 54 cm. long, the peduncle 6 cm. long.

Fig. 63.—<u>Macrozamia denisonii</u>, on Tambourine Mountain, near Brisbane, Australia. From a photograph by Mrs. Hilda Geissmann Curtis.

Fig. 64.—<u>Macrozamia denisonii</u>; female plant with cone;
Tambourine Mountain, near Brisbane, Australia. From a photograph
by Mrs. Hilda Geissmann Curtis.

Fig. 65.—<u>Macrozamia denisonii</u>: male cone, shedding pollen, at Huntington Botanical Gardens, San Marino, California. From a photograph by William Hertrich.

Fig. 66.—<u>Macrozamia denisonii</u>: female cone. From a photograph by Wrs. Hilda Geissmann Curtis.

Fig. 67.—Macrozamia hopei: tall plant at Bellenden Plains, about 30 kilometers from Cardwell, Queensland, Australia.

Fig. 68.—<u>Macrozamia hopei</u>: male cone, 21 cm. long; Daintree River, Queensland, Australia. From a photograph supplied by Department of Agriculture and Stock, Brisbane.

Fig. 69.—<u>Macrozamia moorei</u>: male plant. From a photograph supplied by New South Wales Government Printer.

Fig. 70.—Macrozamia moorei; female cone, 70 cm. long; Clarence River, New South Wales. From a photograph supplied by New South Wales Government Printer.

Fig. 71.—<u>Macrozamia reidlei</u>:tall type, near Gibson's Soak, Western Australia.

Fig. 72.—<u>Macrozamia reidlei</u>: plant with three male cones beginning to shed pollen; Crawley, Western Australia. From a photograph by Miss Alison Baird.

Fig. 73.—Macrozamia spiralis: female plant.

Fig. 74.—<u>Macrozamia spiralis</u>: female cone. From a photograph by B. E. Dahlgren.

Fig. 75.—<u>Macrozamia spiralis</u>: male plant. From a photograph supplied by Department of Agriculture and Stock, Brisbane, Australia.

Fig. 76.—<u>Macrozamia micuelii</u>: male plant; Frenchman's Creek, near Rockhampton, Australia.

Fig. 77.—Macrozamia miquelii: female plant.

Fig. 78.—Macrozamia miquelii: female cone.

Fig. 79.—<u>Macrozamia heteromera</u>: female cone, 16 cm. long; Botanic Garden, Sydney, Australia.

Fig. 80.—<u>Fncephalartos brachyphyllus</u>: male cone on left, 30 cm. long, without peduncle; female cone on right, 16 cm. long, without peduncle.

Fig. 81.—<u>Fncephalartos villosus</u>: male cone, 55 cm. long, exclusive of peduncle; in the University of Chicago greenhouse.

Fig. 82.—<u>Fncephalartos villosus</u>: female cone, 30 cm. long, exclusive of peduncle; at the Huntington Botanical Gardens, San Marino, California. From a photograph by A. W. Haupt.

Fig. 83.—<u>Fncephalartos villosus</u>: three views of megasporophylls, natural size.

Fig. 84.—<u>Encephalartos barteri</u>: female plant with cone; from a photograph by B. E. Dahlgren.

Fig. 85.—<u>Fncephalartos horridus</u>, near Port Elizabeth, South Africa.—From Chamberlain, <u>The Living Cycads</u> (University of Chicago Press).

Fig. 86.—<u>Fncephalartos horridus</u>: male cone; at the Huntington Botanical Gardens, San Marino, California. From a photograph by William Hertrich.

Fig. 87.—<u>Fncephalartos horridus</u>: female cone, at the New York Botanical Garden.

Fig. 88.—<u>Fncephalartos lehmannii</u>, at Junction Farm, near Cathcart, South Africa. <u>Aloe</u> in center.

Fig. 89.—<u>Fncephalartos lehmannii</u>: female plant with cone, Capetown, South Africa.

Fig. 90.—<u>Encephalartos lehmannii</u>: female cone at left, male cone at upper right, two microsporophylls at lower right.

Fig. 91.—<u>Encephalartos latifrons</u>, cultivated at Brisbane, Australia.

Fig. 92.—<u>Fncephalartos longifolius</u>: male cone and microsporo-phylls.

Fig. 93.—<u>Encephalartos altensteinii</u>: male cone; at the Huntington Botanical Gardens, San Marino, California. From a photograph by William Hertrich.

Fig. 94.—<u>Fncephalartos altensteinii</u>: plant with two female cones falling apart in liberating seeds.

Fig. 95.—Encephalartos hildebrandtii: female cone; at the Lincoln Park Conservatory, Chicago.

Fig. 96.—<u>Encephalartos friderici-guilielmi</u>: male plant with three cones; at the University of California, Los Angeles. From a photograph by A. W. Haupt.

Fig. 97.—<u>Fncephalartos friderici-guilielmi</u>: male cone, 32 cm. long, and microsporophylls.

Fig. 98.—<u>Encephalartos ghellinkii</u>, at Drakensburg, Natal, South Africa. From a photograph by W. E. Marriott.

Fig. 99.—Microcycas calocoma; plant with branched stem, near Consolación del Sur, Cuba.

Fig. 100. Microcycas calocoma: plant with male come, near Consolación del Sur, Cuba.

Fig. 101.—Microcycas calocoms: plant with female cone.—After Caldwell.

Fig. 102.—<u>Microcycas calocoma</u>: microsporophylls (above) and megasporophylls (below), adaxial and lateral views; natural size.—Megasporophylls after Caldwell.

Fig. 103.—<u>Ceratozamia mexicana</u>, near Jalapa, Mexico, across from the extinct volcano Naolinco.

Fig. 104.—Ceratozamia mexicana: male cone, 22 cm. long without the peduncle.

Fig. 105.—<u>Ceratozamia mexicana</u>: two microsporophylls, twice natural size.—After Chamberlain.

Fig. 106.—<u>Ceratozamia mexicana</u>: female cone, 25 cm. long, exclusive of peduncle.

Fig. 107.—<u>Ceratozamia purpusii</u>: plant with male cone, at Doheny Conservatory, Los Angeles, California. From a photograph by A. W. Haupt.

Fig. 108.—<u>Coratozamia purpusii</u>: male cone, 22 cm. long, exclusive of peduncle. From a photograph by A. W. Haupt.

Fig. 109.—<u>Ceratozamia purpusii</u>: plant with female cone, 39 cm. long, at Coronado Beach, California.

Fig. 110.—<u>Ceratozamia purpusii</u>: female cone, 20 cm. long, without the peduncle.

Fig. 111.—Ceratozamia miqueliana: plant with female cone, at Garfield Park Conservatory, Chicago.

Fig. 112.—Zamia floridana: plant with male cones, at Miami, Florida.

Fig. 113.—Zamia floridana: plant with female cone, at Miami, Florida.

Fig. 114.—Zamia floridana: female cone. From a photograph by W. J. G. Land.

Fig. 115.—Zamia angustifolia: male plant with two cones.—After Marie-Victorin and León.

Fig. 116.—Zamia angustifolia: female plants, at Pilon, Oriente, Cuba.

Fig. 117.--Zamia angustifolia: male cones (left) and female cone (right).--After Marie-Victorin and León.

Fig. 118.—Zamia angustissima, at Santiago de las Vegas, Cuba.

Fig. 119.—<u>7amia angustissima</u>: stems and female cones, at Pilon, Ensenada de Mora, Cuba. Cones are 6 cm. long, without the peduncle.

Fig. 120.—<u>Zamia pumila</u>: male plant with two cones, these 7.5 cm. long, exclusive of peduncle.

Fig. 121.— 78 mia pygmaea: female plant with cone 2.3 cm. long, exclusive of peduncle.

Fig. 122.—<u>Zamia kickxii</u>: male plant with cone 5.3 cm. long, exclusive of peduncle; University of Chicago greenhouse.

Fig. 123.—Zamia kickxii: female plant with cone 4.5 cm. long, exclusive of peduncle; University of Chicago greenhouse.

Fig. 124.—<u>Zamia silicea</u>: female plants, on Isle of Pines, Cuba.—After Marie-Victorin and León.

Fig. 125.—<u>Zamia ottonis</u>; female cone, 4 cm. long, at the left, the other cones male.

Fig. 126.—Zamia latifoliolata: male plants, with cones; near Vega Baga, Puerto Rico.

Fig. 127.— Zamia latifoliolata: female plant with cone; near Vega Baga, Puerto Rico.

Fig. 128.—<u>Zamia media</u>: female plant with cone 12.5 cm. long, exclusive of peduncle; University of Chicago greenhouse. Plant sent from Coamo Springs, Puerto Rico.

Fig. 129.—Zamia portoricensis: male plant with two cones, at the University of Chicago greenhouse.

Fig. 130.—Zamia portoricensis: male cones of various ages on one plant, at the University of Chicago greenhouse.

Fig. 131.—Zamia portoricensis: female plant with three cones; at Penuelas, Puerto Rico.

Fig. 132.—Zamia furfuracea: two female plants, each with a cone; Garfield Park Conservatory, Chicago.

Fig. 133.—<u>Zamia sylvatica</u>: female cones, 13 cm. long, exclusive of peduncle; at the University of Chicago greenhouse.

Fig. 134.—<u>7amia mexicana</u>: male cones; Garfield Park Conservatory, Chicago.

Fig. 135.—<u>Zamia spartea</u>: male plant with three cones, from Zacuapan, Huatusco, Mexico; at the University of Chicago greenhouse.

Fig. 136.—Zamia spartea: female cones.

Fig. 137.—Zamia gutierrezii: female cone, 7 cm. long, on a peduncle 18 cm. long; at the University of Chicago greenhouse.

Fig. 138.—Zamia monticola: plant with six male cones.

Fig. 139.—<u>Zamia skinneri</u>: mature plant, near Turrialba, Costa Rica. From a photograph by A. W. Haupt.

Fig. 140.—<u>Zamia skinneri</u>: male plant with four cones; near Turrialba, Costa Rica. From a photograph by A. W. Haupt.

Fig. 141.—Zamia skinneri: female cone, 20 cm. long, exclusive of peduncle; near Turrialba, Costa Rica. From a photograph by A. W. Haupt.

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| Fig. 5   | Use Fig. 82 from Chamberlain's GYMNOSPERMS                                   |    |  |
| Fig. 6   | п п 83 п п   | •  |  |
| Fig. 11  | Use Fig. 67 from Chamberlain's GYMNOSPERMS or Fig. 23 from THE LIVING CYCADS |    |  |
| Fig. 17  | Use Fig. 71 from Chamberlain's GYMNOSPERMS or Fig. 23 from THE LIVING CYCADS |    |  |
| Fig. 54  | Use Fig. 109 from Chamberlain's GYMNOSPERMS                                  |    |  |
| Fig. 85  | Use Fig. 19 from THE LIVING CYCADS   |    |  |
| Fig. 105 | Use Fig. 110a from Chamberlain's GYMNOSPERMS                                 | -  |  |

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