



Bulletin

Carnegie Mellon
University,
Pittsburgh,
Pennsylvania

Vol. 29, No. 2
Fall 2017

of the Hunt Institute for Botanical Documentation



Inside

-  Charles Dorat watercolors
-  Worlds Within on display
-  2018 Associates program
-  Archives reaches digitizing milestone

No. 11, Rhubarb, Ruibarbo blanco, Cedros [*Jatropha podagrica* Hooker, Euphorbiaceae], watercolor on paper by Charles Dorat (?1806–ca.1870), 30×23.5 cm, HI Art accession no. 5683.11.

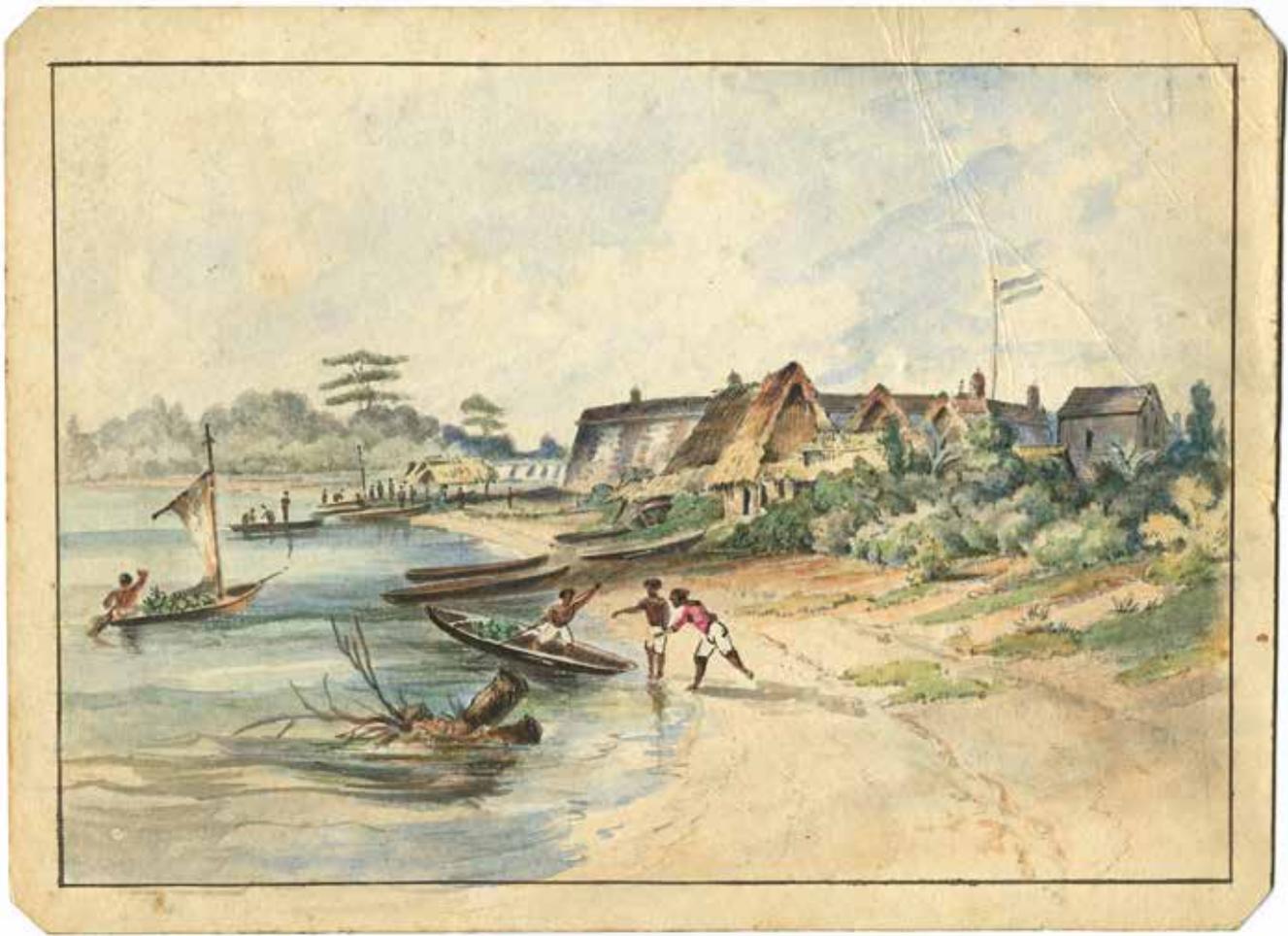
Dr. Charles Dorat and his unrealized Central American medicinal flora

Piecing together strands of information from disparate sources to create a biographical sketch for a little-known artist whose work is represented in the Hunt Institute collection is always an exhilarating challenge. Searching online has opened up the range of materials, including archival finding aids and obscure publications that were unavailable at the time of acquisition, in this case 1973. That year the Institute received a donation of 36 watercolors by the physician and naturalist Charles Dorat (also Doratt; ?1806–ca.1870) of plants used for medicinal purposes that were found in the vicinity of the municipality of Cedros (in the department of Francisco Morazán, Honduras), which at the time were misidentified as South American plants. In 1986 a family member of the original donor gave the Institute six additional Dorat watercolors that depict village scenes of Omoa, Honduras. In 2014 Helen and William Bynum were visiting institutions in Europe and the United States to see original botanical sketches by a variety of artists for a book project. This visit led to mutual research about several little-known artists in the Institute's collection. The tantalizing tidbits of information discovered about Dorat turned into a journey to unearth additional clues about this artist who was interested in nature and the medicinal uses of plants.

Charles Dorat was born to Sir John Dorat (1779–1863) and Maria Theresa Louisa Zoffany (1777–?). John Dorat was a general surgeon, practicing medicine in Brussels, Paris and London, and was embassy physician to John George Lambton (1792–1840), the first Earl of Durham, while he was in Russia (1835–1837) and in Canada (1838). In Quebec that same year John Dorat was knighted and made Inspector-General of Hospitals, and Charitable and Literary Institutions. After his return to England he was one of the Physicians in Ordinary for the household of Prince Augustus Frederick (1773–1843), the Duke of Sussex, until the latter's death. Charles married Clementine Frances Maria Horne (1808–?), and his sister married a Mr. Farrar and lived in Brussels. Charles Dorat did live in London, but we have yet to discover the location of his birth or his marriage, his length of residence or if he accompanied his father on his various commissions. He did follow in his father's footsteps to become a physician and an elected member of the Society of Literature. More is known of his time in Central America, and according to extant correspondence, Charles Dorat lived in El Salvador and traveled in Honduras between 1850 and around 1870 — states that had gained independence in 1838 but continued to experience revolution. During Dorat's stay, El Salvador had 15 changes in the presidency while Honduras had 12. In El Salvador wealthy landowners controlled the viable properties for growing indigo, and later coffee, for export, leaving the least desirable land for the indigenous people and subsistence farmers. The region was a source of raw materials for Europe and the United States. We have yet to ascertain with certainty the reason Charles Dorat moved to Central America in 1850 or the specific position he held while in

residence. Dorat's situation and interests have been partially fleshed out through publications and correspondence to and from naturalists, botanists and pharmacologists in England and the United States. He spoke several languages and was acquainted with Central American medical professionals, government officials and clergy and with European and American individuals and companies interested in materia medica and shipping raw materials and consumer goods from the region. From correspondence we can determine that Dorat resided in Sonsonate (1857, 1861–1863, 1866–1870), La Union (1858–1860) and possibly Santa Ana (?1864, 1865), El Salvador. The war with Guatemala began in 1863, and the president of El Salvador, General Gerardo Barrios (1813–1865), was deposed that same year and executed in 1865. At some point during the occupation and the presidency of Francisco Dueñas (1810–1884), Dorat lost his property and left for either La Union or Santa Ana. Letters were occasionally sent to him in care of the heads of firms that sold goods on commission and employed shipping agents to buy raw materials on other companies' behalf, such as Mr. Kerferd, Sonsonate (1867), and Hardiman & Keogh, San Salvador (1870). Since Dorat was quite knowledgeable about mining operations and economic plants, these companies likely employed him. As was common in the 19th century, Dorat found time to pursue his other passions as a naturalist and an artist. Through his travels in these two states he became interested and knowledgeable about the culture of the indigenous people, the flora and its medicinal uses and the fauna, geography and history of the region. He also avidly photographed natural occurrences, such as volcanic eruptions, and urban and rural architecture. By 1860 Dorat had created 150 botanical watercolors of useful plants, and it was his desire to eventually publish in a series a flora of all of the states of Central America. Some comments in his correspondence show that while still retaining a European bias to the cultural differences and frustrated by the initial mistrust between himself and the indigenous people, over time Dorat made inroads with those who could provide information about the native names and the local medicinal and economic uses of plants. A medicinal flora was never realized, and to date any traces of his being alive after 1870 have not surfaced.

The process of discovery has involved reading Dorat's letters to the American shipping agent, steamer captain and naturalist John Melmoth Dow (1827–1892) in the archive of the Cornell University Library, Ithaca, New York; copies of the English pharmacologist Daniel Hanbury's (1825–1875) letters to Dorat in the Wellcome Library, London, England; Dorat's letter to the American professor of materia medica Dr. Joseph Carson (1808–1876) published in the *American Journal of Pharmacy* (1869); the Smithsonian Institution's list of meteorological stations and observers (Dorat, La Union, San Salvador, 1858); and a published meteorological record that in 1868 Dorat was part of a government commission, with



[Boats and figures at shore of village, Omoa, Honduras], watercolor on paper board by Charles Dorat (?1806–ca.1870), 25 × 34 cm, HI Art accession no. 6743.4.

doctors Rafael Zaldívar (1834–1903), who became president of El Salvador from 1876 to 1885 and took possession of indigenous-held lands to sell to the coffee growers, and Carlos Bonilla, to study and create a report about the cause of the eruption of the Izalco volcano in El Salvador, which had occurred every year since 1856. Eleven years earlier Dorat had climbed this volcano as much as was feasible to look for interesting material. A number of additional published sources also pointed to people he knew and places he traveled.

John Melmoth Dow

Although primarily a shipmaster for Panama Railroad Company beginning in 1851 and shipping agent for the Pacific Mail Steamship Company, Dow, a native of New York City, also was interested in collecting the flora and fauna of Central and South America. Dorat's correspondence to Captain Dow included a requested, detailed account of the principal mining operations in El Salvador; discussed the lowering of the price of indigo and the effect of foreign imports on business; and included plant specimens and corrections of nomenclature. He noted that making *Pan y queso* (bread and cheese, similar to the American idiom bread and butter) made it difficult to pursue collecting as much as he would like. Dorat also asked for a recommendation for employment as purser and surgeon on another ship but

discovered through Dow's reply that the position had already been filled. Dow was also a friend of Joseph Carson (see below) and was likely a catalyst for Dorat's correspondence with Carson and for receiving a copy of Carson's *Illustrations of Medical Botany*... (Philadelphia, 1847).

Joseph Carson

On 10 March 1860 Joseph Carson, an American physician and professor of materia medica at the University of Pennsylvania, received a letter from Dorat from La Union, El Salvador, about his observations of the indigenous people's process for extracting resin from the balsam of Peru (*Myroxylon balsamum* var. *pereirae* (Royle) Harms, Fabaceae alt. Leguminosae), a misnomer since Spanish rule as it was shipped from, but not grown in, Peru. At the time there was much interest in the pharmacological uses for this plant, and this letter was published in the 1869 edition of *American Journal of Pharmacy*. The indigenous people used the balsam resin to treat wounds, soaked the bark and leaves in water to create a drinkable stimulant after fevers, and steeped the flowers to create an infusion to flavor liquor. They had a natural mistrust of strangers and needed to protect the resources on their land, despite being allotted the least desirable plots. Dorat admitted that it had taken some time for him to develop enough

(continued on page 4)

Dr. Charles Dorat and his unrealized Central American medicinal flora

(continued from page 3)

familiarity to be allowed to document the process, which involved beating sections of the bark with a blunt instrument until it separated from the wood but did not break; cutting notches and burning these openings so that the balsam tree would exude resin; collecting the resin on rags and boiling them in water; and skimming the resin from the surface and storing it in containers. After two weeks this process would be repeated until the rainy season. Dorat wrote about the environmental difficulties in properly preparing specimens and keeping them from being damaged by insects. This led to his decision to instead draw the plants, which allowed for the retention of color information. Since he had few contacts in the United States, he also wrote to Carson that he was interested in creating a medicinal flora of Central America.

Daniel Hanbury

This English botanist and pharmacologist traveled in Europe and the Middle East and corresponded with plant specialists and collectors around the world interested in the medicinal uses of plants, including Joseph Carson. From 1861 to 1871 Hanbury corresponded with Dorat, who sent specimens in various stages of flowering and fruiting, information relating to materia medica, as well as sketches and photographs. Hanbury meticulously copied all of his letters to Dorat (so only one side of the correspondence has been to date referenced), which thankfully alludes to information in Dorat's letters. Hanbury often requested specimens, detailing the correct process for drying them so that they would survive the passage to England, and sent supplies, including photographic paper, to Dorat. The plant specimens Dorat sent Hanbury are documented in the *Catalogue of the Hanbury Herbarium in the Museum of the Pharmaceutical Society of Great Britain* (1892) and are part of the Economic Botany Collection at the Royal Botanic Gardens, Kew. Hanbury also was keen to know more about the historic, medicinal uses of balsam of Peru. In 1863 Dorat sent Hanbury additional information, resin specimens and drawings about the processing and storage of the balsam of Peru. The information and sketches were later included in Hanbury's 1864 article on its manufacture for the *American Journal of Pharmacy*. Dorat also noted that during Spanish rule the balsam trees had been cut down instead of the practice he witnessed of cutting only a portion of the bark and conserving the rest for the following year. Treated this way, the trees could produce resin for over 30 years and, if allowed to rest afterwards for about six years, would produce again.

Three of the Hunt Institute's Dorat watercolors are a match to the plants mentioned as being collected and sent by him for Hanbury's herbarium. Sometimes the plants' medicinal uses were noted on the watercolors or in the Hanbury herbarium record. Dorat's rhubarb, HI accession no. 5683.11, is a match to Hanbury's specimen 481, *Jatropha podagrica* Hooker (Guatemalan rhubarb), sent in 1860 with the note that the base of the stem is dried, ground and used as a purgative.

True rhubarb (*Rheum* Linnaeus) has been used for centuries as a mild laxative for constipation. Dorat's sarsaparilla, HI accession no. 5683.16, is a match to Hanbury's specimen 376, *Solanum torvum* Swartz, sent in 1860 and used as a sarsaparilla. Sarsaparilla root (*Smilax* Linnaeus) has been used to treat everything from gout to gonorrhea to indigestion. Dorat's blistering leaf, HI accession no. 5683.22, is a match to Hanbury's specimen 6, *Clematis caripensis* Kunth, sent in 1863 and used as a blistering agent. Medicinal blistering, also known as vesiculation, was commonly used in the 19th century by physicians to produce blisters that were then lanced to release the liquid. This was thought to cure gout, indigestion and even insanity. Ten additional specimens sent by Dorat from 1861 to 1863 are recorded in the Hanbury herbarium.

Amy R. Edwards and Amory Edwards

The Dorat watercolors were given in memory of Amy R. Edwards and her parents Amory (1814–1881) Edwards and Sophia Jones Edwards (dates unknown). Included in this donation were 17 less skillful watercolors with the initials *A.E.*, which were likely painted by the daughter Amy Edwards. On the verso of these watercolors are the locations Tegucigalpa, Comayagua and Rio Segovia in Honduras, León in Nicaragua and the Gulf of Fonseca, bordering El Salvador, Honduras and Nicaragua. These locations are corroborated by the fact that Amory Edwards was an official of the New York City railroad, U.S. Consul-General to Nicaragua and president of the unrealized Honduras Inter-oceanic Railway (HIOR). This scheme was initiated and managed by Ephraim George Squier (1821–1888), an American archeologist and journalist. Squier was U.S. Chargé d'Affaires to Central America in 1849, wrote extensively about the region and with his influence persuaded eight American businessmen to financially back the HIOR venture that would ultimately benefit the shareholders. An exploring expedition was formed to determine the feasible railroad route across Honduras from the Puerto Caballos on the Atlantic to the Bay of Fonseca on the Pacific. Assigned to this party was a group of engineers and a draftsman who traveled from the United States in 1853. Also mentioned was a physician doubling as a mineralogist. *Perhaps* the physician was Charles Dorat, who was certainly knowledgeable about the flora, fauna and natural resources of the region, which might explain his presence in Omoa, Honduras, a railroad terminus later rejected due to its size, or perhaps he only offered ancillary assistance. This project would illuminate the connection with Amory Edwards and his descendant's subsequent possession of the Dorat watercolors, including those of Omoan village scenes, and the watercolors signed by *A.E.*

While not pure scientific illustrations, the watercolors by Charles Dorat were assured and informative and often included details of flowers, seeds and roots and handwritten notes on their medicinal uses and their local names. There



No. 22, La Crespia, Blistering leaf, Cedros [*Clematis caripensis* Kunth, Ranunculaceae], watercolor on paper by Charles Dorat (?1806–ca.1870), 30×23.5 cm, HI Art accession no. 5683.22.

(continued on page 8)

News from the Art Department

Worlds Within opens

In an exciting collaboration between the Hunt Institute and Carnegie Mellon University's Miller Gallery, *Worlds Within* opened on 22 September and runs through 15 December at the Institute and 12 November at the Miller. The two venues are exhibiting botanical micrographs by British artist Rob Kessler (1951–) alongside botanical wall charts from Carl Ignaz Leopold Kny's (1841–1916) series *Botanische Wandtafeln* (Berlin, Paul Parey, 1874–1911). A selection of models of marine organisms made of glass by Leopold Blaschka (1822–1895) and Rudolf Blaschka (1857–1939) and made of glacite by Edwin H. Reiber (1881–1967) are on loan from the Carnegie Museum of Natural History. *Worlds Within* explores the generally unseen world of plants and their internal architecture, textures, patterns and functions. It also bridges the human and plant worlds as Kessler draws the connection between plants using color to attract pollinators and his own use of color to attract viewers. Indeed audiences during the opening receptions at both the Hunt Institute and the Miller Gallery were drawn in by his vibrant colors and compelled to look for connections between the structures in his micrographs and similar shapes, textures and patterns in the wall charts and models adjacent. We encourage you to visit both venues as they each offer a different experience of the stunning artworks, the Hunt Institute providing a

more comprehensive comparison between the contemporary micrographs and the historical charts and models while the Miller Gallery features a fuller range of Kessler's recent work.

We were thrilled that Rob Kessler and his partner Agalis Manessi were able to come to Pittsburgh for this exhibition and associated events. Graciously hosted by Professor of Art John Carson and the College of Fine Arts at Carnegie Mellon, Kessler guest lectured and demonstrated his working methods in several classes on campus, including one hosted at the Institute. Professor Imin Yeh's Advanced Print class visited the exhibition on 28 September for a discussion on the varieties of printing methods used throughout history. Kessler showed examples of his working process and of the specimens he has collected and how he has dissected, photographed and colorized them. He also discussed the historical and contemporary artworks and publications that have inspired him and his process, many of which we were able to display from our Art and Library collections.

A panel discussion, "The artist in the lab, the scientist in the studio," also was held on 28 September at the Frank-Ratchye STUDIO for Creative Inquiry at Carnegie Mellon





Above, Artist Rob Kessler and Curator of Art Lugene B. Bruno discuss printing methods in a workshop for Carnegie Mellon University Professor Imin Yeh's Advanced Print class, Hunt Institute gallery, reading room and Strandell room, 28 September 2017, photographs by Frank A. Reynolds, reproduced by permission of the photographer.

Page 6, clockwise from above left: from left, Assistant Curator of Art Carrie Roy, artist Rob Kessler, Agalis Manessi, Curator of Art Lugene B. Bruno and Carnegie Mellon University Professor of Art John Carson; from left, Assistant Curator of Art Carrie Roy, artist Rob Kessler and Curator of Art Lugene B. Bruno; from left, Director T. D. Jacobsen, artist Rob Kessler and Curator of Art Lugene B. Bruno; and visitors examining models, wall charts and micrographs at the opening reception for *Worlds Within*, Hunt Institute gallery, 22 September 2017, photographs by Frank A. Reynolds, reproduced by permission of the photographer.

University. This discussion between Rob Kessler and Steve Tonsor, Director of Science and Research, Carnegie Museum of Natural History, was moderated by Edith Doron, Mellon/ACLS Public Fellow, Senior Manager of Carnegie Nexus, Carnegie Museums of Pittsburgh. Kessler, Tonsor and Doron focused on the evolution of relationships between artists and scientists into research partnerships and discussed the potential avenues for the intersections of these two disciplines in the future.

—Carrie Roy, Assistant Curator of Art

News from the Archives

The finding aid for our Popenoe family papers, HI Archives collection no. 204, has been added to the Web site. Featured in our article in the spring 2017 issue of the *Bulletin*, much of this collection has been digitized. The finding aid contains links to over 25,000 PDF pages now available to download.

Our digitization initiative moves forward. The Archives now has over 116,000 pages of digitized items being processed to go online. This includes images from our extensive portrait holdings as well as many individual collections. Despite the large number, this represents only a small portion of our current holdings.

We have also received another new collection of slides and papers, this time from a popular author of gardening books. Jack Kramer (1927–2013) specialized in horticultural writing. However, he never limited himself, writing everything from young adult novels to collector's guides. By his own accounting, he published over 160 books on various topics. Mr. Kramer's style was accessible and user-friendly. His books, written for the average reader, made plant care easy to understand. Orchids were Jack's first love. His focus on them helped to popularize these beautiful flowers for the home. He also covered all other types of houseplants in his books, and he wrote architectural construction guides for greenhouses and indoor plant spaces. Jack Kramer was popular on the daytime talk-show circuit in the early 1970s. In his way he brought everyday botany to households throughout the United States.

—Nancy Janda, Archives Associate



Jack Kramer (1927–2013), pen-and-ink on paper by Nancy L. Janda, 2017, HI Archives portrait no. 1, reproduced by permission of the artist.

Dr. Charles Dorat and his unrealized Central American medicinal flora

(continued from page 5)

are a few that illustrate insects and venomous spiders and snakes. Thumbnails of all of these images may be seen in the online Catalogue of the Botanical Art Collection at the Hunt Institute database, and our spring 2018 exhibition, *Dr. Charles Dorat and His Unrealized Central American Medicinal Flora*, will feature these 42 watercolors along with Institute archival materials relating to other parties in his circle. We would appreciate receiving any additional information about Dr. Charles Dorat.

Special thanks to Helen Bynum for her assistance in tracking down the Hanbury letters in the Archives and Manuscripts, Wellcome Library, London, England, and other leads she shared during her research for *Botanical Sketchbooks* (New York, Princeton Architectural Press, in association with the Royal Botanical Gardens, Kew, 2017). Additional collections that have been referenced include the Berendt-Brinton Linguistic Collection, Rare Book & Manuscript Library, University of Pennsylvania; Division of Rare and Manuscript

Collections, Cornell University Library, Ithaca, New York; and the Manuscripts and Archives Department, Hagley Museum and Library, Wilmington, Delaware.

Bibliography

- Anonymous. [1839 or 1840.] The Royal Kalendar: and Court and City Register, for England, Scotland, Ireland and the Colonies for the Year 1840. London: Sittaby & Co. Vol. 2. P. 131.
- Anonymous. 1852. Extra evening meeting, Wednesday, July 20th. Proceedings of the Royal Society of Literature 1(23): 369.
- Anonymous. 1869. Appendix: Patron, honorary members, and corresponding members. Transactions of the Literary and Historical Society of Quebec, n.s. 6: 71.
- Anonymous. 1869. Meteorological stations and observers. Rep. (Annual) Board Regents Smithsonian Inst. 83: 73.
- Anonymous. 1869. Telegrams. New York Times Sunday, 11 July.
- Anonymous. 1903. Miscelanea Meteorologica. Boletín Mensual del Observatorio Meteorológico Magnético Central de Mexico, Mes de Diciembre 1902 15: 391.
- Arthur, G. 1839. Appendix to Journal of the House of Assembly of Upper Canada. Toronto. P. 43.
- Cañas-Dinarte, C. 2001. El Incendio del Palacio Nacional. <http://archivo.elsalvador.com/noticias/EDICIONESANTERIORES/noviembre19/NACIONAL/nacio19.html>.

2018 Associates program

We hope that our Regular, Patron, Sustaining and Benefactor Associates enjoyed their memberships in the Associates program during 2017 and took full advantage of their benefits. As you consider renewing for 2018 or joining for the first time, we would like to preview our plans for the upcoming year.

Our spring exhibition, *Dr. Charles Dorat and His Unrealized Central American Medicinal Flora*, will feature his watercolors and related items from our Archives. The fall exhibition, *Alphabetus Botanicus*, will open in September and feature the illuminated letters of Kandis Vermeer Phillips alongside artwork of plants from A to Z. Since we will not be publishing an exhibition catalogue in 2018, Associates at all member levels will receive the 16(2) *Huntia*, which will provide those who normally receive a catalogue with an opportunity to become acquainted with our journal of botanical history and to see a different aspect of our research program. For those renewing or joining at the Patron, Sustaining or Benefactor Associate levels, portions of your contributions are tax deductible in the following amounts, \$40 for Patron, \$440 for Sustaining and \$940 for Benefactor.

As always, all members receive an email announcement when our *Bulletin* PDF is available on our Web site, announcements about upcoming exhibitions, behind-the-scenes tours by appointment and a 25% discount on our publications, stationery items and PDFs for research purposes. We will also acknowledge all members with a listing in the fall issue of the *Bulletin*. Please complete the Acknowledgment section

of the form to let me know if and how you would like your name to appear.

For anyone considering a first-time membership, this is the perfect time to join us. We also offer gift memberships in the Associates program. We can send an announcement card to you or directly to the recipient of the membership. A 2018 Associate membership is a great holiday gift for the botanist, historian or botanical art lover on your list.

Those 2017 Regular, Patron, Sustaining and Benefactor Associates wishing to renew their own or gift memberships for 2018 should complete and return the renewal form sent with the *Bulletin* email announcement. Those planning to join or give a gift membership for the first time should contact us or download and complete the Associate form available on our Web site. We hope that you will join us for another exciting year. We appreciate your support of the Institute's mission and programs. If you would like to support us in more specific ways, then please consider our Sponsorship program. Monetary gifts can be directed to our endowment or to other established funds, such as the Anne Ophelia Todd Dowden Art Acquisition Fund, or the Ronald L. Stuckey Endowment for the Preservation of Botanical History. For material or memorial gifts, please consult with our curators. For more information about the Sponsorship program, contact the Institute.

—Scarlett T. Townsend, Publication
and Marketing Manager

-
- Dod, R. 1860. The Peerage, Baronetage, and Knightage, of Great Britain and Ireland for 1860. London: Whittaker and Co. Vol. 20. P. 221.
- Dorat, C. 1869. Observations of the production of balsam of Peru in a letter to Dr. Carson (La Union, March 10th, 1860). *Amer. J. Pharm.* 32: 302–305.
- Flückiger, F. and D. Hanbury. 1879. *Pharmacographia: A History of the Principal Drugs of Vegetable Origin Met with in Great Britain and British India*. London: Macmillan and Co.
- González, D. 1896. *Geografía de la América-Central*. Oakland, Ca.: Pacific Press Publishing Company.
- Hanbury, D. 1864. On the manufacture of Balsam of Peru. *Amer. J. Pharm.* 36: 145–151.
- Hasse, A. R. 1921. *Index to United States Documents Relating to Foreign Affairs, 1828–1861*. Washington: Carnegie Institution of Washington.
- Head, F. B. 1939. *A Narrative*. London: John Murray. Pp. 478–479.
- Holmes, E. M., comp. 1892. *Catalogue of the Hanbury Herbarium in the Museum of the Pharmaceutical Society of Great Britain*. London: The Pharmaceutical Society of Great Britain.
- Ince, J., ed. 1876. *Science Papers and Pharmacological and Botanical by Daniel Hanbury*. London: Macmillan and Co. Pp. 296–309.
- Manners, V. and G. G. Williamson. 1920. *John Zoffany, R.A.: His Life and Works, 1735–1810*. London: John Lane, the Bodley Head; New York, John Lane Company.
- My Heritage. 2017. Charles Doratt. https://www.myheritage.com/names/charles_doratt.
- Royal College of Surgeons of England. 2013. Plarr's Lives of the Fellows Online: Doratt, Sir John. <http://livesonline.rcseng.ac.uk/biogs/E001440b.htm>.
- [Smith, H. B.] [2007.] Genealogy Report: Descendants of John Horne. <http://www.genealogy.com/ftm/s/m/i/Heather-Smith-Manawatu/GENE4-0006.html>.
- Squier, E. G. 1854. *Honduras Inter-oceanic Railway Preliminary Report*. New York: Honduras Inter-oceanic Railway.
- Squier, E. G. 1856. *Apuntamientos sobre Centro-América*. Paris: G. Gratiot. P. 165.
- Stansifer, C.L. 1966. E. George Squier and the Honduras Inter-oceanic Railroad Project. *The Hispanic American Historical Review* 46(1): 1–27.
- Strom, S. H. 2016. *Fortune, Fame and Desire: Promoting the Self in the Long Nineteenth Century*. Lanham, Maryland: Rowman & Littlefield.

—Lugene B. Bruno, Curator of Art

2017 Hunt Institute Associates

2017 Benefactor Associates

Richard M. Hunt
Anonymous

2017 Sustaining Associate

Donna M. Edmonds

2017 Patron Associates

Francesca Anderson
Loretta Barone
Marge Berer
Luc Berger & Teresa Honert
Robert & Kathleen Boykin
Esther Carpi
Anonymous
Anonymous
Rita S. Edmunds
Jean Emmons
Maura C. Flannery
Ayse Cetin Gilbert
Anonymous
Linda Hackett
Christian C. Heuer
Martha G. Kemp
Molly Koleber
Jerry Kurtzweg
Susan Frei Nathan
Anonymous
Emma L. Peters
Margaret Pope
Jeanne Poremski
John & Angella Raczkiewicz
Dr. Wilfred T. &
Mrs. Ruth O. Rouleau

Donald Slaugh
Terrace Horticultural Books

2017 Regular Associates

Jean Adams
Sharon Arffa
ArtPlantae
Marian Atkins
Elaine M. Bergstrom
Elizabeth Lea Black
G. Lee Boerger
Elizabeth W. Carroll
Beverly Clarke
Judith Dumke
Beverly K. Duncan
Carol Elsesser
Akiko Enokido
Anonymous
Donna Fleury
Javier Francisco-Ortega
P. Brenden Gebben
Trudy Gerlach
Karen Greb
Elisabeth Griggs
José & Nancy Heraud
Charles A. Honigsberg
Anonymous
Anonymous
Yuko Inujima
Dale E. Johnson & Marie E. Johnson
Nancy Keegan
Anonymous
Carol A. Maddison
Jan-Paul Malocsay

Ohio State University
Chadwick Arboretum
Pamela Mason
Victoria Matthews
Marguerite D. Matz
M. E. Mitchell
Anonymous
Arillyn Moran-Lawrence
Anonymous
Dr. E. Charles Nelson
Dr. Theodore W. Palmer
Richard Palmer
Annette Paluh
Diane Piemonte
Karen Rafalko
Dayna Ramlan
Paula Rebert
Anonymous
Debora Resa
Joseph Salkowitz, D.M.D.
Anonymous
Susana Steppan
Jessica Tcherepnine
Anonymous
Barbara Vanyo
Barbara Ward
William N. Weld
Brenda Anne White
Anonymous
Patricia Wullemmin
Susan A. Wyble
Kay Yatskievych
Michael Zawoyski

*We would like to thank
our 2017 Associates for
their generous support
of the Institute's
mission and programs!*

Bulletin

of the Hunt Institute for Botanical Documentation

Carnegie Mellon University
5th Floor, Hunt Library
4909 Frew Street
Pittsburgh, PA 15213-3890
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org
Facebook: <http://facebook.com/HuntBotanical/>

Editor and layout: Scarlett T. Townsend
Photographer: Frank A. Reynolds

Published biannually online by the Institute. Hunt Institute Associates receive the *Bulletin* as a membership benefit.

© 2017 by the Hunt Institute for Botanical Documentation
All rights reserved. ISSN 0192-3641