

Lloydiana



Because the Past is the Path to the Future

Bringing Science, Art, and History to Life

A Publication of the Lloyd Library and Museum &
Historical Research Center for the Natural Health Movement

From the Director

CHEMISTRY! This issue is in honor of the International Year of Chemistry 2011 (IYC 2011). It will also be a good reminder that chemistry and its history are well-represented in the Lloyd's collections. Under the unifying theme "Chemistry—our life, our future," IYC 2011 is a worldwide celebration of the achievements of chemistry and its contributions to the well-being of humankind. It is our hope that this issue of *Lloydiana* will offer a celebratory tribute to this ancient and honored science; therefore, the subsequent pages offer the following chemistry-related highlights:

- An article on our new online exhibit "The Magic and Myth of Alchemy"
- Information about the Cincinnati Chapter of the American Chemical Society collection now being processed and organized
- The recent acquisition of a historic book introducing chemistry to women (3rd edition, 1805) purchased to commemorate IYC 2011
- A select list of Lloyd's chemical resources, both new and old, in "Off the Shelf," which features a 1711 book, one of the first treatises on chemistry by a woman and written for women; and
- A book review on one of the many chemistry books held by the Lloyd—an older book (2006); however, one that is accessible to many interested readers who need be neither chemist nor historian.

Other news of interest in this issue includes information on and highlights of our Joseph Dalton Hooker exhibit, which opened on Saturday, October 8 and runs through December 31. I hope that many of you were able to attend the opening reception, which included a lecture on Hooker's relationship with Darwin by **Gene Kritsky, PhD., Professor of Biology at the College of Mount St. Joseph**. In conjunction with the Hooker book exhibit, the Lloyd Art Gallery holds an eclectic exhibit by a variety of local and regional artists on the subjects of the natural history of India, the Himalayas, and the broader Asian region. From orchids to orangutans and botanical illustration to sculptures to multi-media works, the art exhibit promises to be a unique experience. It will also run from October 8 through December 30, 2011—don't miss it!

In addition, there will be a related event on Wednesday, November 30, 2011, from 7pm to 9pm (**SAVE THE DATE!**). **Michael A. Flannery, Associate Director of Historic Collections, University of Alabama, Birmingham**, will speak on his new book *Alfred Russel Wallace: A Rediscovered Life*, followed by a dessert and coffee reception. Wallace, also a contemporary colleague of Hooker, who together with Darwin, Hooker, and Thomas Huxley, worked to make natural selection not just a theory, but a universally accepted vehicle for evolutionary change. More information inside.

Also inside (on page 23) is an update on status of grants, compact shelving project, and reading room exhibit project. Here's hoping you enjoy it all; and, that we will see you at our upcoming events.

Maggie Heran

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CINCINNATI SECTION OF THE AMERICAN CHEMICAL SOCIETY RECORDS

By
Erin Dornbusch, Asst. Archivist

The American Chemical Society, formed at New York University in 1876, is the world's largest professional scientific society, composed of more than 160,000 members across 188 local chapters. Among these local chapters is the Cincinnati Section of the American Chemical Society, which was established in 1892 by Thomas Herbert Norton. In 2005, the records of the Cincinnati Section of the ACS—notably, the third oldest ACS chapter—were donated to the Lloyd Library and Museum by the chapter. This significant collection is comprised of approximately twenty boxes of historical materials, spanning over a century—from 1890 through 2005—of organizational operations. The bulk of these records dates from the period between 1950 and 1990 and is essentially clerical or administrative in nature. Some of the collection's most considerable record types include membership rosters and directories; programming and activity reports; meeting agendas and minutes; special event materials; internal and external correspondence; and budgetary, scholarship, and financial files. In addition to the above-mentioned items, the collection also includes a significant assortment of newsletters (including CINTACS, the newsletter of the Cincinnati Section of the ACS); outreach, publicity, and informational publications; and societal handbooks and manuals. While the vast majority of the collection is comprised of papers produced solely by the Cincinnati Section of the ACS, included among these records are several noteworthy items from the national organization, from other local ACS sections, and from related groups (including the Engineering Society of Cincinnati).

The varied materials included in the donated collection of the Cincinnati Section of the ACS have the potential to offer researchers several scholarly and investigative possibilities. Indeed, first and foremost, the collection has a considerable capacity to serve as a comprehensive resource on the history, structure, function, and actions of the Cincinnati Section of the ACS from its inception to its very recent past. What is more, in documenting the history of such a long-standing and significant Cincinnati scientific society, the donated records may likewise function to partially illuminate the development of the Cincinnati professional scientific community not only as a general whole, but also in terms of such notable participants as John Uri Lloyd and George Rieveschl, Jr. (both of whom were local ACS members and whose papers also reside at the Lloyd). Above and beyond these applications, the materials could also provide, because of the items from local sections and the national organization, a broad basis for understanding the evolution—across multiple levels and over time—of the ACS as a professional organization. More specifically, the presence within the collection of materials received by, sent to, or otherwise exchanged with the national ACS in particular may conceivably function to clarify some of the intricacies of working relationships between a parent organization and its local chapters.

While these and other comparable organization-specific insights are the most obvious and easily derived from the materials, the records of the Cincinnati Section have a considerable array of less obvious research applications as well. For instance, among the subtleties of the collection is its inclusion of a wide chronological range of materials relating directly or indirectly to women in the sciences. These records, which encompass career and informational pamphlets, women-oriented event items, and female-led committee documents, could provide a foundation for an examination both of the evolution of the role of women in chemistry as well as of the evolution of the American Chemical Society's particular perspective on the role of women in chemistry. Additionally and alternatively, the variety of items within the collection connected to either publicity of the organization or outreach to various sectors of the public (including children, high school teachers, other organizations, and corporate donors) may similarly enable research on such topics as the relationship between professional organizations and the public, the presentation of the sciences to children,



Members of the Radium Chapter of Iota Sigma Pi, the women chemists' honorary society, pictured above, were prominent in planning the 1940 American Chemical Society Convention, held in Cincinnati. In addition, this convention featured Dr. Helen L. Wikoff [not pictured], Ohio State University, who delivered a luncheon lecture on health hazards for women in chemistry and chemical industries. From the records of the Cincinnati Section of the American Chemical Society, Lloyd Library and Museum.

continuing chemistry education for adults, and organizational donation strategies.

On the whole, the records of the Cincinnati Section of the American Chemical Society are an invaluable resource because of the unique view they provide into the Cincinnati Section of the American Chemical Society, the national American Chemical Society, and multiple professional, scientific, and socio-cultural themes. Indeed, like many of the archival collections housed at the Lloyd Library and Museum, the records of the Cincinnati Section of the ACS have a distinct capability to enrich and enhance for interested patrons, researchers, and scholars— both within and outside of the scientific, pharmaceutical, medical, and botanical communities—the appreciation and understanding of the complex and multidimensional role of science across society. ■

THE MAGIC AND MYTH OF ALCHEMY

By

Anna Heran, Archivist/IT Specialist



Late in the summer, I completed the last of my research and image capture for our latest online exhibit, “The Magic and Myth of Alchemy.” <http://www.lloydlibrary.org/exhibits/alchemy/index.html>. This exhibit, as they all do, afforded me the opportunity to once again be “wowed” by our fabulous collections at the Lloyd.

The impetus for doing this exhibit was the fact that 2011 is the International Year of Chemistry and the Lloyd wanted to help celebrate that achievement by sharing some of its historic volumes on the subject. Alchemy is considered by many to be the founding science behind chemistry, and certainly, this is where scientific method, laboratory procedure, and laboratory equipment all got their starts. Because so much of pharmaceutical research involves the use of chemistry, the Lloyd has a healthy collection of chemistry titles, especially relating to organic chemistry. This also includes alchemy, with titles dating back to the 1500s by some of the best known alchemists in history. The exhibit features images from and information relating to Lloyd’s alchemical texts, with information on the authors where known, identification of images and activities, and more. There is also a brief explanation of what alchemy is, its history and relevance, and a list of additional primary and secondary sources that can be found within the Lloyd collection.

I never cease to be amazed at what the Library has in its collections. While reading a text on women in chemistry, I ran across an interesting reference and said, “What are the chances that we have this book?” And, of course, the Lloyd never disappoints. In the collection is an early edition by Marie Meurdrac, one of the earliest known female chemists, as well as an alchemist, who is featured in the “Off the Shelf” section in this edition of *Lloydiana*. Aside from a woman who practiced about 1000 years before Meurdrac, there are no known chemical texts by women before her. Although the written record may not include many women, it has been established that several husband-and-wife partnerships existed throughout the history of alchemy and chemistry. Flamel’s wife, Perenelle, was involved in Flamel’s experiments, as well as their multiple interpretations on modern day alchemy. Some 300 years later, Antoine Lavoisier’s wife was integral to his chemical experiments and pursuits. [See “Off the Shelf” feature on next page for information on the Lavoisier and his wife’s contributions to his work.]

The fact that you can trace the history and developments of this esoteric field through primary sources dating from the early 16th century up to modern philosophical ponderings on alchemy as a not-so-dead art that still plays a role in modern chemistry is amazing in and of itself, not to mention that one can do this at the Lloyd. If you are intrigued by the online exhibit, we invite you to come to the library and further examine the magic that is alchemy. ■



Reproduction at right from: *Chymisches Cabinet* by Michael Maier published in Frankfurt, 1708. This plate accompanied Lesson 21 “Man and Woman make a circle”

OFF THE SHELF

An Early Treatise on Chemistry by a Woman

By

Maggie Heran, Executive Director

During the course of researching and executing our new online exhibit, “The Myth and Magic of Alchemy,” Anna Heran discovered yet another “gold” nugget in the Lloyd’s rare book collection. The 3rd edition, 1711 [at right, reproduction of frontispiece], first edition published in 1666, of *La Chymie Charitable et Facile, en Faveur des Dames* by Marie Meurdrac, considered the author of the first treatise on chemistry by a woman since the works of Maria the Jewess approximately 1600 years earlier. Meurdrac described her work as containing six parts: 1) principles and operations, including necessary equipment, as well as characteristics and weights; 2) the properties, preparation, and extraction of medicines made from plants; 3) animals; 4) metals; 5) the method of making compound medicines along with several tested remedies; and 6) “is for Ladies, in which there is a discussion of everything capable of preserving and increasing beauty.” Meurdrac concluded this enumeration of the parts of her book by writing: “I have done my best to explain myself well and to facilitate the operations: I have been very careful not to go beyond my knowledge, and I can assure that everything I teach is true, and that all my remedies have been tested...”



The book also contains a table of weights used in medicine, as well as a table of 106 alchemical symbols. In some passages of the book, Meurdrac suggests that she was not only an alchemist/chemist but also a medical doctor, i.e. “I have used it (essence of rosemary) with good results and have affected some admirable cures with it.”

Meurdrac was keenly aware that her book might not achieve success because “men always scorn and blame products of a woman’s wit” due to a traditional concept of women, which, according to her, was that they “remain silent, listen and learn, without displaying ... knowledge.” There must have been many enlightened publishers and readers in mid-17th century because her book was followed by two other French editions (1680 and 1711) and was translated into German in four editions (1673, 1676, 1689 and, 1712). It was also translated into Italian, which edition was published in 1682.

Sources Used:

1. *European Women in Chemistry* edited by Jan Apotheker and Livia Simon Sarkadi, 2011.
2. *The Biographical Dictionary of Women in Science: L-Z* by Marilyn Bailey Ogilvie, Joy Dorothy Harvey, 2000 from http://books.google.com/books?id=LTSYePZvSXyC&pg=PA889&lpg=PA889&dq=marie+meurdrac&source=bl&ots=hOI9rTY83B&sig=pqkvju2bLiVdAuAcQC61dd7QqRM&hl=en&ei=Pm9vTpyWA-XlsQLS1ry-CQ&sa=X&oi=book_result&ct=result&resnum=4&ved=0CDAQ6AEwAw#v=onepage&q=marie%20meurdrac&f=false, accessed September 13, 2011.

DISCOVERING CHEMISTRY AT THE LLOYD

By

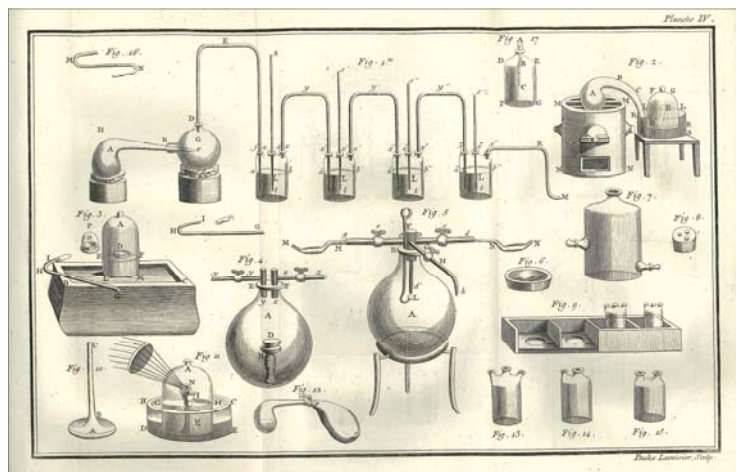
Alex Herrlein, Reference Librarian

While it is no surprise that the Lloyd holds many titles on chemistry, what may be surprising is the large number of historic books on chemistry in the library’s collection. One of the founders of the library, John Uri Lloyd, was a pharmaceutical chemist himself, and made chemistry part of the collecting scope of the library. Much like medicinal botany, chemistry is a topic that covers centuries of progress—historical resources at the Lloyd allow for research that covers, very nearly, the birth of chemistry, as well as medicinal botany, through to today. Chemistry’s earliest history dates back to at least the 8th century with **Abu Musa Jābir ibn Hayyān**, who is often considered the first practical alchemist—no doubt by virtue of his emphasis on experimentation and a belief that “he who performs not practical work nor makes experiments will never attain to the least degree of mastery.” Jābir is represented in the Lloyd by an early print publication of his,

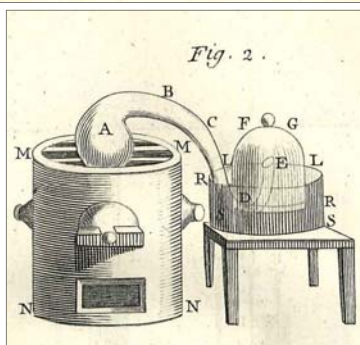
Gebri Arabis Chimia, sive, Traditio summæ perfectionis et investigatio magisterii innumeris locis emendata / à Caspare Hornio; accessit ejusdem Medulla alchimiae Gebricae Omnia edita à Georgio Hornio, 1668. Some historians mark Jābir's influence throughout the entire history of European alchemy and chemistry and claim that his importance to the history of chemistry is equal to that of Robert Boyle and Antoine Lavoisier, the two most significant figures in chemistry's history after Jābir. From Jābir through the next 10 centuries, alchemy's story and key figures are the subjects of a new online exhibit now available on the Lloyd Library's website. **The Magic and Myth of Alchemy** takes visitors on a virtual tour of this often secretive discipline, including many illustrations from rare, historical sources in our collection. [For more information on this exhibit, see page 3.] Also found at the Lloyd are holdings by some of chemistry's most prominent names throughout its long history dating back to Jābir and up through to the 15th century. The so-called "modern" age of chemistry is represented by a select few primary and secondary resources held at the library that cover the history of chemistry to the 20th century.

In the evolution of chemistry into a modern science, **Robert Boyle (1627-1691)** is widely considered to be one of its most important figures. One of the co-founders of the Royal Society, Boyle carried out experiments using what would be considered a more empirical methodology than usual for his time. His first and most influential chemical work is *The Sceptical Chymist* of 1661, which challenged the Aristotelian and Paracelsian theories of chemical composition, and proposed units of matter as a precursor to concepts like elements and atoms. Some of Boyle's most notable chemical work was in the area of acids and alkalis, including tests for metals using chemical solutions. Although the Lloyd's collection of Boyle's works is not extensive, it does hold the 1725 collection of his work **The Philosophical Works of the Honourable Robert Boyle**, a three-volume set containing his writings in a number of areas other than chemistry.

Also considered a significant to the development of modern chemistry is **Antoine-Laurent de Lavoisier (1743-1794)**, a French nobleman prominent in the histories of chemistry and biology. Lavoisier's works are better represented in the library's collection than are Boyle's—the catalog shows ten titles by Lavoisier, as well as several editions of his most important book. Overall, his contributions are considered most important in advancing chemistry to the level reached in physics and mathematics during the 18th century, some of which include; founding and naming both oxygen and hydrogen; helping to develop the metric system; creating the first extensive list of elements; and assisting in the reform of chemical nomenclature. He was also the first to establish that sulfur was an element rather than a compound; and, he discovered that, although matter may change its form or shape, its mass always remains the same. Lavoisier's **Traité élémentaire de chimie** is considered to be the first modern chemistry textbook—the Lloyd holds the first (1789) and two other editions. Lavoisier's wife, Marie Anne Paulze, took a very active role in her husband's study of chemistry. The most notable of her contributions



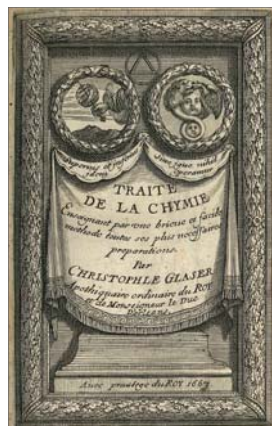
Reproduction above: From *Traité élémentaire de chimie*, vol. 3, Plate 4, executed by Mme. Lavoisier, shows various distillation equipment used by Lavoisier in his experiments. The image to the right, which has been enlarged from upper right-hand corner of image above] has been identified as "Lavoisier's famous phlogiston experiment." [See source number 4 at bottom of article, p. 7]



are the 13 engraved plates of chemical and laboratory equipment, executed by her, and printed in the third volume of *Traité élémentaire de chimie*. In addition, she was fluent in Latin and English and translated many books critical to Antoine's studies and experiments. Her translation of Richard Kirwin's "Essay on Phlogiston"—phlogiston was widely believed to be a substance present in all substances that burned and subsequently escaped during combustion—enabled Lavoisier and his colleagues to study and test the Kirwin's essay and ultimately reject the notion. Kirwin himself finally denounced his phlogiston idea; Lavoisier renamed the so-called "phlogistated air" oxygen. The images reproduced here are from the library's first edition of *Traité élémentaire de chimie*.

Continued on next page

Of course, there are many other notable chemists than the three mentioned above. Contributing to the fields of both chemistry and pharmacy, **Nicolas Lemery (1645-1715)** figured prominently in the scientific world of the time. Lemery taught courses in chemistry and published his research on a number of topics for the Academy of Sciences. His **Cours de Chymie** was a successful textbook with popular appeal, resulting in over thirty editions and translations; the Lloyd holds seven editions of this title—1677 (2nd edition), 1687, 1701, 1724, 1730, 1744, 1726. Later, Lemery published a pair of pharmacopoeial reference works, the **Pharmacopée Universelle** and **Traité Universel des Drogues Simples**, which are both in the Lloyd Library's collection in early editions, 1698 and 1699, respectively.



Christophe Glaser (1615-?), an instructor of Nicholas Lemery, has been somewhat overshadowed by his pupil. Glaser described himself as an apothecary to Louis XIV and was appointed to the position of demonstrator in chemistry for Le Jardin du Roi. He also published a lone chemical work **Traité de la Chymie** [at left: reproduction of the book's title page] in 1663; the textbook saw fourteen editions, including a 1667 second edition held in the Lloyd's collection. Glaser's legacy includes the preparation of potassium sulfate, or Glaser's salt, once used medicinally, and the naming of another sulfate glaserite in his honor. Towards the end of his life, Glaser was named as the source of poison in the 1676 murder case brought against the Marquise de Brinvilliers. Glaser was not charged with a crime, and the case resulted in a 1682 edict from Louis XIV regarding the responsible storage and sale of poisonous substances—considered a very early example of this type of regulation.

During the nineteenth century, many scientific fields saw an increased level of study and interest, chemistry included. Michael Faraday is best known for his work with electricity and magnetism, having a unit of electrical measurement known as the farad named for him, and for his research in chemistry. His chemical experiments resulted in the discovery of the solvent benzene in 1825, as well as contributions towards the production of steel alloys and optical glass. Three editions of Faraday's work **Chemical Manipulation** can be found in the Lloyd's collection, published between 1827 and 1842, including a French translation. When mentioning Faraday, **Sir Humphry Davy's** name often comes up. Davy was an accomplished chemist, who Faraday assisted in his earlier years, and is best known for his work with gases and proving chlorine and iodine to be elements. His **Elements of Agricultural Chemistry**, in editions dated 1813 to 1821, is held by the Lloyd.

As many of the better-known names in the history of chemistry are men, women chemists have often been overlooked, despite making contributions just as important as their male counterparts. Just published in 2011 and recently acquired by the Lloyd, **European Women in Chemistry** (edited by Jan Apotheker and Livia Simon Sarkadi) offers historical and scientific portraits of over 50 women with contributions to chemistry, including Flamel's wife [see page 3]; Lavoisier's wife; Marie Meurdrac [see above]; and, perhaps the most famous woman in science, Marie Skłodowska-Curie, 1867-1934, the first woman to win a Nobel Prize (in chemistry) and share a Nobel Prize in Physics with her husband. Curie's Nobel Prize awards make her the only woman to win in multiple science categories. Although the Lloyd does not hold any writings by Marie Curie, there is a 1943 translation of Curie's biography written by her youngest daughter, Eve—**Madame Curie: a Biography**. Readers of **European Women in Chemistry** will learn that the early era of alchemy and chemistry was plagued with peril for women, who risked accusations of witchcraft for their work, and often wrote under pseudonyms to hide from authorities. Even as the world of chemistry became more accepting of women, they typically faced more challenges than their male counterparts. The scope of the book begins with alchemist **Maria the Jewess** in the beginning of the last millennium and continues into the twenty-first century with polymer chemist **Katharina Landfester**, first female director at the Institute for Polymer Research in Mainz, Germany. Other entries include Anna, Princess of Denmark and Norway (1532-1585), who practiced alchemy and owned the largest chemical laboratory in sixteenth-century Germany; Julia Lermontova (1846-1919), the first woman to obtain a degree in chemistry; and Maria de Telkes (1900-1995), who invented both a solar-powered cooking stove and a method for desalinating water using solar power.

The acquisitions work begun by the Lloyd brothers and continued by library staff into the present has allowed the library to collect chemistry information in formats other than books. More recently, the Lloyd was fortunate to receive the archival and book collections of the late Dr. **George Rieveschl, Jr.**, chemist and developer of Benedryl®. Like John Uri Lloyd, Rieveschl is best known for his contributions to pharmaceutical chemistry, but he owned a number of works on various topics within chemistry that have since become part of the Lloyd Library's collection. Some of these include chemical resources dating to his earlier years at the Uni-

versity of Cincinnati, a number of titles on organic chemistry, and his own work *Introduction to Quantitative Analysis*, co-written with Saul B. Arenson and published in 1944. Another donated work, *Crucibles: the Lives and Achievements of the Great Chemists* (1934) by Bernard Jaffe, is a good source of biographical entries in chemical history. Rieveschl's books joined approximately 100± other resources from the 20th and 21st century on chemistry and its history. Rieveschl's archives collection contains his laboratory books from his earliest days at the University of Cincinnati through records on projects he led while working for Parke-Davis. For a more detailed write-up on Rieveschl's collection as a whole, please see the article "Rieveschl's Books" in the Summer 2009 issue of *Lloydiana*; and, the *George Rieveschl, Jr. Papers* finding aid available on our website.

Aside from the books on our shelves, the Lloyd has long maintained a large collection of periodicals which fill two floors of the library. In chemistry alone, there are over 60 titles, including those beginning in the late eighteenth century to current publications. A French title, *Annales de Chimie et de Physique*, is among the oldest, with the earliest volume in the Lloyd dating to 1790. A detail from the title page of a 1797 pharmaceutical and chemical journal, the *Journal de la Société des Pharmaciens de Paris*, is reproduced at right. The Lloyd's serial collections provide access to chemistry periodicals not only from Western Europe and the United States, but also from countries like Russia, Japan, India, and Mexico. As research collections increasingly transition to electronic formats, with many publications entering the born-digital phase and back issues only slowly being converted to digital format, the Lloyd is committed to maintaining as much as possible in hard-copy (with many digital delivery options) so that the collection is available to all users, no matter their institutional affiliation or position. It is one of many things that makes the library unique and accessible to all.



Sources Used:

1. *A History of Magic and Experimental Science* by Lynn Thorndike, 1941, volume 5, p.538.
2. "Jābir ibn Hayyān," http://en.wikipedia.org/wiki/J%C4%81bir_ibn_Hayy%C4%81n, accessed September 14, 2011.
3. "Robert Boyle," http://en.wikipedia.org/wiki/Robert_Boyle, accessed September 14, 2011.
4. "Antoine Lavoisier," <http://en.wikipedia.org/wiki/Lavoisier>, accessed September 14, 2011.
5. "Marie Anne Paulze Lavoisier: The Mother of Modern Chemistry," *The Chemical Educator*, vol. 3, no. 5, 1998, digital version from <http://journals.springer-ny.com/chedr>, accessed October 3, 2011. ■

FEATURED ACQUISITIONS

By

Maggie Heran, Executive Director

La Chimica per le Donne by Guiseppe Compagnoni, 3rd Edition, 1805

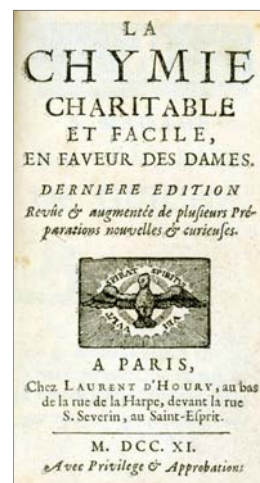
While the theme of this issue is chemistry, the articles, thus far, contain an interesting subtext—the role of women in chemistry. And, "Featured Acquisition," continues in the same vein. To add to the Lloyd's historic information on chemistry, we have purchased the third edition of Guiseppe Compagnoni's (1745-1749) *La Chimica per le Donne* [Chemistry for Ladies], 1805—an "attractive unsophisticated copy," without images. The first edition was published in 1796; and, curiously, it is less scarce than the third edition. The information available notes only one other third edition in another library—the Bibliothèque Nationale de France; and, while several copies of the first edition can be found in U.S. libraries, the Lloyd is ostensibly now the only library in this country to hold the third edition.

Compagnoni's work is a textbook for women readers and is based on the "new" chemistry of Lavoisier as articulated by Compagnoni's friend and colleague, Vincenzo Dandolo (1758-1819), in his 1795 book, *Fondamenti della Scienza Fisico-Chimica*. In this book, Dandolo championed new scientific theories and discov-

Continued on next page

eries in chemistry which were made in the last quarter of the 18th century, especially those of Lavoisier, and included translations of several of the best French works on chemistry. Compagnoni credits Dandolo and his book in the preface of *La Chimica per le Donne* on pages xiii-xiv, essentially acknowledging the debt he owed to Dandolo and his remarkable work in the creation of *La Chimica per le Donne*.

And, a creation Compagnoni's book certainly is. While it does impart information on Lavoisier's ideas and chemistry, it is written as a series of 101 letters to and from a fictional woman, Countess Marianna Rossi of Ferrara. Findlen [see source number two at end of article] writes: "His [Compagnoni] *Chemistry for Ladies* (1796) [is] explicitly modeled upon Francesco Algarotti's *Newtonianism for Ladies* (1737) rather than Marie Meurdrac's *Chemistry Made Easy for Ladies* (1666) [see page four of this issue—at right: a reproduction of Meurdrac's title page]..." which, for me, begs the question "why." After a little digging, I can only conclude that Meurdrac and Compagnoni were writing for very different audiences and purposes. Meurdrac, writing over a century earlier than Compagnoni, intended to write a useful book that contained dependable remedies for the cure of diseases and conservation of health that was accessible to the common reader—both men and women. While she did include "several rare secrets in favour of ladies," presumably secrets of perfumes and cosmetics, Meurdrac used simple language to convey information to all readers and offered to "...personally explain... [and/or] perform myself whatever one may want me to teach."



Meurdrac wrote in the period after Glaser and before Lemery [see page 6 of this issue]; and, of course, there were similarities as well as differences between her ideas of chemistry and those of her better-known male counterparts; however, Meurdrac, as she asserted, wrote for the common reader, while Glaser, Lemery, and others, wrote for their colleagues in science and the academy. One of her most cherished ideas about chemistry was that its sacred task was to bring health to the sick. Meurdrac invoked alchemist Basil Valentine [see Lloyd's online exhibit "The Magic and Myth of Alchemy" and source number five], as well as biblical authorities, to support her belief in chemistry's ultimate objective; and, therefore, purposely brought clarity to practical chemistry so that all—men and women, wealthy and poor, etc—could understand and apply it to their needs.

After Meurdrac's death in the late 17th century, chemical knowledge inevitably expanded through the works and experiments of others. Perhaps one of the most significant figures in the development of modern chemistry in the 18th century was Lavoisier [see page five of this issue]. In addition, a new literary genre proliferated during the 18th century—books written to popularize science and, thereby, circulate knowledge about its many branches to those not associated with universities and other educational institutions. There are a number of examples of these popular and simplified works, often written as letters to fictional women, whose readers could then convey what they learned in a variety of venues, as well as the fashionable salons of the 1700s. In 1737, Francesco Algarotti wrote *Newtonianism for Ladies*, for which he created a fictional woman through whom he could "translate" the natural philosophy of Newton. Since Compagnoni was familiar with Algarotti and this literary genre, as stated above, he deliberately modeled his book on Algarotti's. His intentions were vastly different than Meurdrac's. He wanted to render science less serious and thereby reach an audience not so much interested in the technical details of chemistry, but one that wished to know what new ideas contemporary natural philosophers had produced and to participate in scientific discourse; Meurdrac wanted women and the common reader to understand enough chemistry to practice its healing capabilities to bring health to all. Compagnoni was interested in disseminating a certain overall intellectual understanding of chemistry to those outside the academy; Meurdrac was interested in disseminating practical knowledge of chemistry to those who had need of it to cure their ills.

Having these two books in the library's collection will offer interesting and widely varying perspectives to historians and philosophers of science, as well as literary scholars, who study the spread of scientific discourse and knowledge across time and place, as well as the different purposes and communication styles adopted for the authors' intended audience.

SOURCES USED

1. Guisepe Compagnoni, *La Chimica per le Donne*, 3rd ed., 1805.
2. Paula Findlen, "Translating the New Science: Women and the Circulation of Knowledge in Enlightenment Italy," *Configurations*, vol. 3, no. 2, 1995, pp. 167-206.
3. Lucia Tosi, "Marie Meurdrac: Paracelsian Chemist and Feminist," *Ambix*, vol. 48, part 2, July 2001, pp.

4. http://en.wikipedia.org/wiki/Vincenzo,_Count_Dandolo, accessed October 13, 2011.

5. <http://www.sacred-texts.com/alc/arr/arr07.htm>, accessed October 14, 2011.

6. Deborah Coltham, *Rare Books Catalogue Three*, pp. 74-75.

Das Pollinische Decoct by Joseph Ferdinand Friderich, 1798

Editor's Note: All resources referenced in this article, with the exception of those listed in "Sources Used" at the end of the article, are held by the Lloyd Library and Museum

The description of this book as given by the book-seller is: "Rare treatise on the mysterious remedy 'Decoctum Pollini' and its use in venereal diseases. The author compares this extract with the healing power of the walnut, its essential oils and its shells. He describes the preparation of the oils, ointments and other remedies by walnut and their successful use in many diseases. Also, he exemplified it by important works of famous physicians." Perhaps it was the lure of a "mysterious remedy," certainly it was the healing power of the walnut that conspired to lead to the purchase of this book. Once at LLM, I began researching how this title [at right: reproduction of frontispiece and title page] fit within the context of the collection; and, while I could find no information about walnut treating venereal disease, I did learn a lot about the walnut's (*Juglans regia*) medicinal properties.



I began by investigating many of the pharmacopeias published before this work, i.e. pre-1798, to discover if they yielded any information on the walnut as a remedy for venereal disease. I also undertook an exhaustive internet search on the "decoction Pollini," medical uses of the walnut, and a host of other leads, most of them resulting in dead ends. While I could find plenty in LLM's collection on the healing power of the walnut, I didn't learn much about this particular mysterious remedy. In fact, sources seemed to be not only confusing (mostly due to ever-changing medical terminology from century to century as well as difficulties with foreign languages) but also contradictory; however, in an effort to keep this clear and short, I will proceed, first, with the walnut's use in medical treatments, then go on with my findings regarding the Decoction Pollini.



Gerard (*The Herbal* by John Gerard, 1633) revealed nothing about treatments for venereal disease and had little good to say about the walnut; although he cites Dioscorides on the medicinal properties of the walnut, who wrote that it is good for infection "of the plague," comforts the stomach, expels poison, and heals gangrene, carbuncles and aegilops, which, in medical terms is "an ulcer of fistula in the inner corner of the eye." [In botany aegilops is goatgrass see source numbers 1 and 2]. Elizabeth Blackwell, in her 1737-1739 *A Curious Herbal*, volume 1, credits the walnut bark with being a strong emetic, its green nuts of use in all contagious malignant distempers and the plague, its nuts [presumably the ripe ones as opposed to the green] prevent infection, and the expressed oil of the walnut is good medicine for "stone and gravel," i.e. of the kidney. Reproduction at left is Blackwell's illustration of the "Wallnut."

Nicholas Culpeper, in his 1656 *English Physician Enlarged*, wrote a rather lengthy entry on the walnut [pages 190-191]. Some of the medicinal uses he ascribes to the walnut [keep in mind that these are made from different parts of the walnut and are often mixed with other natural ingredients, i.e. figs and rue, with wine] are: prevention of poison; a remedy for sore mouths and inflammations of the throat and stomach; healing of wounds, gangrenes, and carbuncles; inhibiting hair loss; helping with the "quinsy," now known as Peritonsillar abscess, which is an infection of the tonsils that may spread to the roof of the mouth, neck and chest; to kill broad worms; to help after a bite from a rabid dog; and, many others—some remedies used topically, some internally.

Several pre-1798 editions of the *Edinburgh New Dispensatory* mention the walnut, but go on to say

Continued on next page

that although it is found and recommended in foreign dispensatories and pharmacopoeias, it is not used in Scotland. One of the “foreign” pharmacopoeias identified in the *Edinburgh New Dispensatory* is *Pharmacopoeia Londinensis*, which was first printed in 1618, with many subsequent editions. In a facsimile of the 1618 edition, (*Pharmacopoeia Londinensis of 1613...* by George Urdang, 1944), held by the Lloyd, *Juglans* is found in the catalog of simples; however, I could make no clear sense of its uses. In the Lloyd’s copy of *Pharmacopoeia Londinensis* published in 1653, with translation and additions by Nicholas Culpeper, walnut is listed under Fruit and their Buds (as it is listed in the 1618) but with the notation that it “kills worms, resist[s] the Pestilence....” on page 27. Perhaps one of the earliest mentions of walnut in English is found in Thomas Newton’s *Approved Medicines and Cordiall Receipes*, 1580, published in London [see source number 6]. Newton assigned walnut juice the healing property of being good for the inflamed mouth and throat.

Probably the two treatments for venereal disease that are most discussed in the early literature are *Guaiaicum* and mercury. I intentionally did not assign a species to *Guaiaicum* since early nomenclature and its evolution are somewhat confusing; however, its place of origin would be South America or the Caribbean, because: “[i]n the years following Columbus’s return from the New World, European physicians identified a new ‘pox’ and assigned it various names, including the Spanish pox, the French disease, and... syphilis,.... An old principle held that a disease’s place of origin must also harbor its cure. So it was that the woody part of the guaiacum plant was identified early in the sixteenth century as a source of medication and cure for those suffering from the ‘new’ disease” [see source number 7]. Therefore, from the 16th–18th centuries, *Guaiaicum* and mercury were the most recommended treatments for venereal disease.

The first edition of William Buchan’s *Domestic Medicine* (1769) makes no mention of treatments for venereal disease; however, the second edition (1785) includes an entire chapter on the topic. “...Buchan himself notes, an entire chapter, one dealing with a delicate subject, was deliberately omitted from the earlier work” [see source number 3]. Chapter 47, “Of the Venereal Disease,” lists numerous treatments for the many manifestations of the disease; however, the most frequently mentioned are mercury, guaiacum, Peruvian bark, and sassafras. Buchan concludes that “[m]any other roots and woods might be mentioned which have been extolled for curing the venereal disease...but none of these have been found to possess [superior virtues]...for the sake of brevity, [we] pass them over” [see source number 3]. One might infer, though unadvisedly, that walnut *could* be one of the woods Buchan decided to pass over; although, this source makes no specific case for the use of walnut.

Just when it seemed I was at a dead-end for walnut as a treatment for venereal disease, for an explanation of Pollini’s decoction, and for any information on who this Pollini was, a couple of interesting things “popped” up at last [see source number 8]. There was a Cyrus Pollini, 1782-1833, identified as a physician and a botanist, as well as a few other professions [see source number 4]; however, it seems unlikely that this was the Pollini who created the so-called mysterious decoction—he would have been only 16 when Friderich’s book was published. But I had better luck finding the list of ingredients in Pollini’s decoction. A reference retrieved by Google was an e-book of Félix-Séverin Ratier’s *Formulaire Patrique de Hôspitiaux Civils de Paris*, 1831; so, the first thing I did was check LLM’s catalog. In another remarkable find, this book was located in LLM’s Rare Books Room. A translation into English of the 3rd French edition, page 175 revealed the ingredient list for what the book titled “Liquor of Pollini,” a preparation which had been tried at the Venereal Hospital (presumably in Paris). The decoction had been prepared for patients who were not cured by mercury and contained such medicinal plants as Sassafras, quinine, and (at last!) the walnut, *Juglans regia*. Admittedly, this was published in a book written over 30 years after our recently purchased *Das Pollinische Decoct* by Joseph Ferdinand Friderich; and while, there seemed to be some history of walnut used for venereal disease missing before, after, and between Friderich and Ratier, I nevertheless felt somewhat triumphant.

So, here is a great example of some needed research into this question. Friderich’s book, on pages 34-38 cites a long list of authors (most held LLM) who wrote about the walnut; wherein, perhaps, is the information that eluded me. As usual there is simply not enough time to do a thorough investigation; although, it would be fascinating to actually find a solid answer for the walnut/venereal disease connection, as well as the Pollini the decoction was named for—I invite any and all scholars to investigate this topic at the Lloyd. The answer could well be found here for the scholar inspired to find it!

SOURCES USED:

1. <http://www.thefreedictionary.com/AEgilops>

2. <http://plants.usda.gov/java/profile?symbol=AECY>
3. <http://www.americanrevolution.org/medicine/med47.html>
4. http://es.wikipedia.org/wiki/Ciro_Pollini
5. http://eebo.chadwyck.com.proxy.libraries.uc.edu/search/full_rec
6. http://www.brown.edu/Facilities/John_Carter_Brown_Library/drugs/pages/venereal.html
7. <http://www.ebooksread.com/authors-eng/f-s-flix-sverein-ratier/a-practical-formulary-of-the-parisian-hospitals--exhibiting-the-prescriptions-e-hci/page-10-a-practical-formulary-of-the-parisian-hospitals--exhibiting-the-prescriptions-e-hci.shtm> ■

LLOYD UNPLUGGED

By

Anna Heran, Archivist/IT Specialist

What's new in the digital world for the Lloyd?

The big news has to be the new online exhibit, "The Magic and Myth of Alchemy," which you will read about on page 3 in the newsletter.

However, there have been other changes and additions as well. First, as reported in the previous *Lloydiana*, we were contemplating switching the group page on Facebook to a regular "like" page. That has happened, so if you haven't "liked" us yet, please do so soon so that you can keep up with the latest happenings and events at the Library. You can search for Lloyd Library and Museum within Facebook, or you can "like" us right from our home page.

We have also made the jump to sharing photos online. This past summer, our Assistant Archivist, Erin Dornbusch completed processing the American Society of Pharmacognosy (ASP) collection. Along with that collection came several hundred photographs (mostly digital, but some hardcopy which we scanned) from the very earliest days of ASP up through photos from events within the last several years. Unfortunately, many of these arrived without having been identified beyond perhaps a time and place. This leaves us with many unknown people represented in the collection. We have begun the process of uploading these photos to FlickrR (<http://www.flickr.com/photos/67350660@N06/>) and hope to get some help with identifying people and places in the ASP collection. That said, this means that we will be using this opportunity to evaluate other photographic collections to load into FlickrR for public comment and sharing. ■



**Do you know these gentlemen?
Norman Farnsworth is far left.**

THE MAKING OF A BOTANIST: JOSEPH DALTON HOOKER, 1817-1911 OCTOBER 8 THROUGH DECEMBER 31, 2011

Our newest exhibit opened on October 8, 2011 and was kicked off with a fascinating lecture by Gene Kritsky, PhD., Professor of Biology at the College of Mount St. Joseph, who spoke on the relationship between Darwin and Joseph Dalton Hooker. For those of you who were unable to attend the opening reception, there is still plenty of time to see our current exhibit, "The Making of a Botanist: Joseph Dalton Hooker, 1817-1911." On display is a select sampling of the many resources held at LLM by Joseph Dalton Hooker and his father. In addition, the exhibit demonstrates Hooker's connections with other well-known 19th century naturalists, such as Darwin, Thomas Huxley, Alfred Russel Wallace, and Charles Lyell, all of whom he considered friends as well as colleagues. Together these resources reveal how and why Hooker became the great botanist that he was. Highlights of the exhibit include the first edition of Darwin's *On the origin of species by means of natural selection* (1859), *Victoria regia, or the Great Water-Lily of South America* by William Jackson Hooker

Continued on next page

(1847), and *The rhododendrons of Sikkim-Himalaya* by Joseph Dalton Hooker (1849), of which the latter two contain stunning, over-sized examples of botanical illustration.

And, check out this one-of-a-kind poster (18x24" and suitable for framing) designed by LLM staff and available at our website or at the library. Commemorating the life and career of Joseph Dalton Hooker, the design features one of the many plants that Hooker documented while in India and the Himalayas. You won't find this anywhere else!

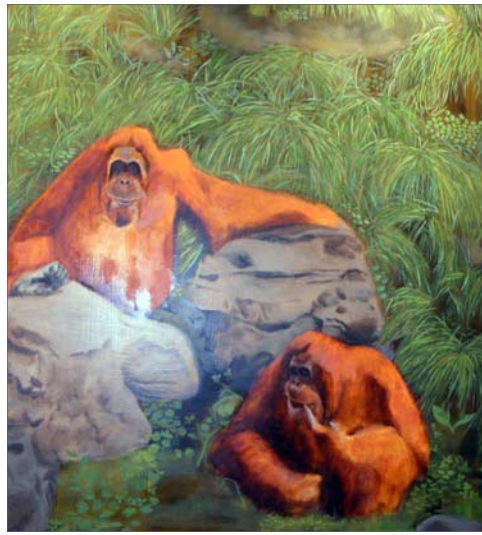
Complementing the book collection, the LLM art gallery displays an eclectic exhibit by a variety of local and regional artists on the subjects of the natural history of India, the Himalayas, and the broader Asian region. From orchids to orangutans and botanical illustration to sculptures to multi-media works, the art exhibit promises to be a unique experience. It will also run from October 8 through December 30, 2011.



HIGHLIGHTS OF THE EXHIBITS



From art exhibit: above, Matt Kotlarczyk "Robin's Garden at Noon;" below from left to right, Dianne McElwain's "Vanda manuvadee," Kate Holterhoff's "Orangutans," and Lynn Carden's "Small two-tone Iris."



From book exhibit: below from left to right: Illustration from J.D. Hooker's *Flora Antarctica*; Alfred Russel Wallace's *Malay Archipelago*; introduction display to exhibit; and a display of Hooker's other publications.



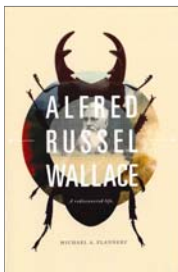
RELATED EVENT

SAVE THE DATE:
November 30, 2011, 7–9 p.m.



Michael A. Flannery, Professor and Associate Director for Historical Collections University of Alabama at Birmingham and former LLM Director will present **“An Evening with Alfred Russel Wallace.”** Included will be a brief introduction to this famous Victorian naturalist’s life

and work and a screening of the 20-minute documentary, **“Darwin’s Heretic: How the Co-Founder of Evolution Embraced Intelligent Design.”** A book-signing of Professor Flannery’s recent biography, ***Alfred Russel Wallace: A Rediscovered Life***, and dessert and coffee reception will follow.



Synopsis of:
Alfred Russel Wallace: A Rediscovered Life

Michael A. Flannery’s latest volume explores the life and contributions of Alfred Russel Wallace. Wallace, a co-discoverer of the theory of evolution, was in his lifetime and for most of the following century overshadowed by the figure of Charles Darwin. Wallace, though equally brilliant, lived in obscurity, at least in the minds of scientists and the popular culture, who all lauded Darwin and his work. Flannery is part of a recent movement to reawaken Wallace’s own significant legacy and place it where it belongs, at the forefront of scientific growth and theory in the 19th century and beyond. Flannery’s particular take on Wallace and evolution focuses on what Flannery considers Wallace’s adherence to a theory of evolution dependent on Intelligent Design. This can be a controversial stance, but one which Flannery has researched and stands by in a collegial, yet firm, way. Don’t miss your chance to hear this interesting lecture and presentation. *Anna K. Heran*

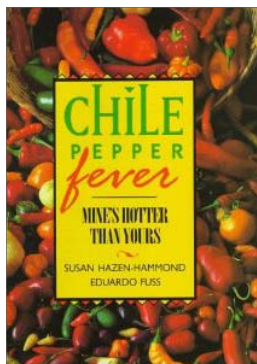
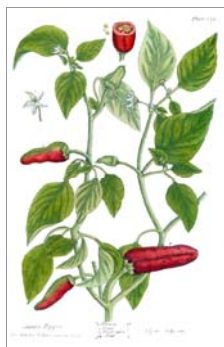
NEXT EXHIBIT AT THE LLOYD LIBRARY AND MUSEUM

“TURNING UP THE HEAT THIS WINTER: PEPPERS IN IMAGE AND WORD”
AT THE LLOYD LIBRARY AND MUSEUM
JANUARY 14 THROUGH APRIL 13, 2012

This exciting, upcoming exhibit at the Lloyd is all about *Capsicum annuum*, known to most of us as the red pepper. It is the number one condiment world-wide. But, what’s so exciting about it? Why do we love this amazing New World plant that’s now grown world-wide and comes in more varieties than you can count? Find out why when this exhibit opens on January (**brrrr...**) 14, 2012. Exhibit runs through April 13, 2012. The opening festivities will feature a lecture by world-renowned capsicum expert, W. Hardy Eshbaugh, entitled “Some Like it Hot: The Little Known World of Chili Peppers,” and a catered reception featuring some interesting uses of red pepper. Plus, a fabulous art exhibit will feature a variety of images of the pepper, including some by Eshbaugh, who has travelled extensively through South America and captured some of his more interesting finds in photos. Also, phenomenal images of peppers by Eduardo Fuss, on loan to the Lloyd from the University of New Mexico, will be on display. You won’t want to miss this **Hot** Event in **Cold** January.

SNEAK PEAK THAT WILL MAKE YOU WANT TO COME IN FROM THE **COLD**
TO SEE THIS **HOT EXHIBIT!**

From left to right: Elizabeth Blackwell’s *Guinea Pepper*, vol. 1, pl. 29, *A Curious Herbal*, 1737; cover of *Chile Pepper Fever: Mine’s Hotter than Yours* by Susan Hazen-Hammond and Eduardo Fuss, 1996; and *Capsicum annuum* from Peter P. Good’s *The Family Flora and Materia Medica Botanica*, 1847. ■



SCHOLAR'S CORNER

By

Dennis B. Worthen, PhD., Lloyd Scholar



In my previous Scholar's Corner I wished you a mild summer. Unfortunately that did not materialize; we experienced blistering heat, hurricanes, floods, and even an aberrant earthquake centered in the Washington, DC area. Perhaps the fall/winter season will be more moderate and enjoyable.

In June, I was invited to make the keynote presentation for the annual meeting of the Iowa Pharmacy Association's annual meeting. The assigned topic was pharmacy's defining moments which I thought would be relatively easy to prepare. However, the need to define a 'defining moment' and then select which to focus on was more challenging than anticipated. I choose to focus on the evolution of pharmacy from a distributive focused profession to one that was becoming increasingly outcomes-driven with a focus on the safe and appropriate use of medicines. This allowed me to highlight topics such as practice, legislation, and education.

The *Journal of the American Pharmaceutical Association* centennial series is drawing to a conclusion. Five installments have been published, the 6th is with the editor, and I am working on the 7th and final. Plans for a joint symposium with the *Journal* and the American Institute of the History of Pharmacy at the annual meeting of the American Pharmacists Association in March are progressing.

The 2nd edition of *Heroes of Pharmacy: Professional Leadership in Times of Change* is in the early stages of production. Everything is on track for release in March.

Research into the 1848 Drug Import Act has taken me to Washington DC to work in the National Archives and the Library of Congress twice this summer. The initial steps were to trace the legislative process of the Act. The *Reporter of the House of Representatives and Senate* (similar in function to today's *Federal Register*) provides a day-by-day record of legislative actions. An examination of the *Reporter* provides notation of when petitions in support of the passage of an import act were received. However, they do not provide any detail about the content of the petition or a list of signers. A number of the original petitions were found in the National Archives. An examination of the petitions provides significant details about the form of the petition, the names of individual supporters, and some insights into the legislative process. One great find was the language of the original proposed legislation that had been developed by the New York City College of Pharmacy. This served as the basis for first a Senate bill and subsequently the House version which was passed and signed into law in June 1848.

Work in the Manuscript Division of the Library of Congress failed to locate any information specific to the passage of the Act. What did emerge, however, was evidence of family links between Secretary of Treasury Robert J. Walker, his brother-in-law Alexander Dallas Bache, and Vice-president George Mifflin Dallas, the uncle of Walker's wife. Correspondence documented the close relationships of the Bache and Dallas families and continues to support the hypothesis that Franklin Bache was able to champion the inclusion of the *United States Pharmacopoeia* into the first food and drug legislation.

Work in the records of the Department of Treasury at the National Archives failed to produce any significant documentation about the importation of adulterated substances. While some documentation on the appointments and processes set forth by the 1848 Act was located, nothing was discovered that related to the work of the special examiners. It is likely that the materials are in one of the New York archives and a trip is planned early next year.

Part of the 'fun' of this project is the way that factoids continue to emerge as research progresses. For example, the Mississippi legislature was the only state that petitioned Congress for passage of an act restricting the importation of adulterated drugs. One of the Senate proponents for the Act was the Senator from Mississippi, Jefferson Davis. Davis was a close personal friend of Walker and A.D. Bache, who was his professor of chemistry at West Point. Davis had commanded the famous Mississippi Rifles regiment during the Mexican War and, in 1861, would become the first and only President of the Confederate States of America.

I have also made two trips to Madison, WI to work in the American Institute of the History of Pharmacy Kremers Reference Files and the Wisconsin Historical Society. The Historical Society holds the surviving records of the New York City College of Pharmacy, the organization that first championed the passage of the Drug Import Act. Unfortunately, the Trustees Minute Book for 1845-61 is missing. The Members Minute

Book for the period survives but no details on the efforts to pass the Act were recorded. During the second trip I discovered the papers of Dr. Otis Hoyt, an Army surgeon at the Jalapa hospital during the Mexican War. Dr. Hoyt was a keeper and his papers include numerous records from his time in Mexico, including lengthy correspondence with his wife.

I'm looking forward to sharing more about the 1848 project in coming months. ■

JOHN URI LLOYD: FROM AN INTENTION TO MANUFACTURE CHEMICALS . . .

Thursday, December 8, 1870.

Today Ashley & I rented a room on Broadway to commence manufacturing chemicals, on the 1st of June, pay twenty five dollars per month rent, have steam from the Boiler through a 1/2 inch pipe.

Hope we will get along well and make a living,

The lease runs one year and was signed and witnessed today, Ashley notified W. G. M. Gordon today that we would leave him, I, on Thursday Dec., 29th and Ashley on Saturday Dec., 31st 1870.

Entry from John Uri Lloyd's 1870 Diary

John Uri Lloyd Papers, 1849–1936, Collection 1, Box 1, Folder 4

. . . TO CONTRIBUTIONS TO COLLOIDAL CHEMISTRY

Brief History of Colloidal Chemistry

Mike Flannery, in his biography of John Uri Lloyd (JUL), *John Uri Lloyd: The Great American Eclectic*, 1998, covers JUL's contributions to many facets of pharmacy, chemistry, and phytomedicine in Chapter 5, "The Wizard of American Plant Pharmacy and Chemistry": John Uri Lloyd in His Laboratory" (pages 61–75). On page 63, Flannery wrote that the study of colloids went back to the late 18th century with Imperial Russian Court Pharmacy and pharmacist-chemist Tobias Lowitz (1757–1804), whose work earned him the title "father of colloidal chemistry. Strides in this relatively new field continued through JUL's life and beyond, into the present. Some early contributors to this field were, in addition to Lowitz, Robert Brown (botanist, 1773–1858), Thomas Graham (1805–1869), and William B. Hardy (1864–1934).



Regarding JUL's contribution to the field, Flannery wrote, "In a series of experiments originally designed to eliminate precipitates in fluid extracts and tinctures, Lloyd made new contributions to colloidal chemistry and in so doing discovered a reagent [Lloyd's reagent found its way into the pharmaceutical industry in 1913 when the firm of Eli Lilly & Company became the sole manufacturer] that effectively caused a precipitate action when fuller's earth [any non-plastic clay or claylike earthy material used to decolorize, filter, and purify animal, mineral, and vegetable oils and greases, Wikipedia http://en.wikipedia.org/wiki/Fuller's_earth, accessed November 2, 2011] was brought to a colloidal condition." This contribution was noticed by other pharmacists and chemists, such as Atheron Seidell (1878–1961) and Wolfgang Ostwald (1883–1943). Ostwald was duly impressed with JUL's work, as were others, both in Europe and America, who were becoming aware of JUL's rising stature in the American pharmaceutical community. Ostwald's acclamation of JUL's work led "[h]istorian George Urdang [to rightly call this] 'one of the greatest tributes paid to an American scientist by European science'." (Flannery, page 70).

**On pages 16 through 19
Reprint of "Colloids in Pharmacy" by John Uri Lloyd in:
Jerome Alexander's *Colloid Chemistry*, vol. 2, pages 931–934**

Colloids in Pharmacy *

BY JOHN URI LLOYD, Cincinnati, Ohio

Restricting thought to the pharmacy of plant structures, one may allow that the study of systematic pharmacy is based upon colloidal aggregations and colloidal reactions. Consider the blanket terms—tinctures, syrups, wines, elixirs, infusions, decoctions, fluid and solid extracts. These and such as these apply to complex associations, mixtures, adhesion compounds, structureless materials and mass complications. They are "bunched" together by means of liquid solvents and liquid excluders in which the totality of it all is made up of colloids derived from the vegetable structures that contain or yield them.

Inasmuch as from the beginning of man's historical records, processes such as are above mentioned have been employed in medicine manipulation, it may be largely argued that the study of plant pharmacy has ever been and is yet based upon colloidal complications. And inasmuch as the normal structures and juices of most, if not all, plants are colloidal, it fundamentally follows that the study of pharmacy as applied to natural plant structures is that of colloidal research and colloidal manipulation.

Nearly a half century ago this writer became enthusiastic in his views concerning the attributes of plant structures lying in the borderland and even outside the limits of what was then included in both legitimate chemistry and recognized pharmacy. In his lectures and contributions to print he usually employed the terms *structural affinity* and *mass actions* to express colloidal reactions and attributes outside the realms of established atomic and molecular chemistry. This field of investigation from his viewpoint, proved a wonderland of mysteries that become more entrancing as the years passed, and yet increasingly perplexing. The "irregularity" of concept approached the fanciful, as pharmacy was then taught, and with well meaning advisers was handled with a degree of hostility based on the accepted views concerning atomic migrations in which colloidal compounds as well as adhesion phenomena were neglected. But within recent years such mental reasonings regarding extension possibilities are more generously received, partly because of the clearer view that now prevails regarding the utility of structureless compounds, partly because advanced thought in pharmacy more fully comprehends that its inherited opportunity, voiced in the pseudo-pharmaceutical compounds of times gone by, is really scientific in both theory and application.

But colloidal pharmacy is not now and has never been restricted altogether in its application to plant and animal. Possibly the nearest approach to semi-official recognition of the colloid in pharmacy was *Dialyzed Iron*, a preparation in which most of the crystallized chlorides or sulfates are, by means of bladder or parchment dialyzers, separated from the colloidal iron

* In this attempt to abridge a subject that has taken the writer's life work, it must be comprehended that details essential to the problem as a whole are necessarily excluded. These pages give but a touch to the subject embraced in the title. J. U. L.

oxides. Even there the term *colloid* seems to have been, and yet is, totally ignored in pharmaceutical literature, the commercial as well as the descriptive title of the product, *Dialyzed Iron*, being yet universally applied.

In like manner, scaled ammonia-citrate of iron and potassium, as well as scaled tartrate of iron and potassium, then considered and called "amorphous" were a half century ago great favorites. All these lay within colloidal boundaries, to which it may be added that solution of ammonio-citrate of bismuth (Liquor Bismuth) might likewise be given a setting as the result of early pharmaceutical colloidal effort. Such as these answered in some respects the nature of Graham's colloids (although not made by dialysis). Surely the pharmacist need not go out of his home to find among the inorganics, very early colloidal recognition.

But pharmaceutical effort amid colloidal structures, although long dormant in its original home, has been recently and elsewhere very active. Renewed colloidal research in pharmacy came recently in the study of animal juices and products, all of them structureless, as far as this writer is aware, if molecular formulas capable of blackboard exposition be taken as the standard. Here, too, we find the term *colloidal* neglected, although products such as these wedge into the society of Graham's typical colloid, glue, which gave the very name "colloid."

In closely allied lines we find the term *vaccine* which seems expressive of a use of the product, and the term *serum* which reminds one of the juice, the makers of these products crystallizing none of them, even those most energetic. Let us now consider the vegetable field, in which, as already stated, colloidal problems have confronted the pharmacist since the dawn of history.

Very complicated is every natural plant structure, both as concerns its liquid and solid content. Interlaced and interlacing are the juices and the cells containing juices, that make the thing a living whole. In connection with that structure, we find that if it be normal, colloids, liquid and solid, dominate wherever research is applied. As the living animal is a colloidal collection, so is the plant that nourishes the animal. Let us now briefly consider in the vegetable field some of the problems confronting the pharmacist.

Accepting that interlaced, non-crystalline substances compose the major part of either fresh or dried plant textures, it becomes the pharmacist's duty in the object of obtaining a natural separate, to untangle these complicated structures without integral alterations that involve fundamental re-arrangements. In this object, the writer is convinced that heroic chemicals must be excluded from such manipulative processes. Even the influence of acid or alkali may be fatal to the equilibrium of structures as delicately balanced as are many plant colloids in their natural settings. Very kind must be the touch that to sensitively balanced plant structures, brings not textural reconstructions. For example:

In the process of extraction if natural colloidal groups be in mind, be it by means of maceration or percolation, the most promising neutral liquids in the writer's experimentation are embraced in the discriminative service of a set of fourteen that, several decades ago, were by him selected for elective solvent as well as excluding purposes. These are glycerin, water, alcohol (U.S.P. 1880) methanol, acetone, chloroform, amyl alcohol, acetic ether, sulfuric ether (U.S.P. 1880), benzene, carbon disulfide, benzine, turpentine oil

(rectified), and liquid petrolatum. (See *Proc. Am. Pharm. Assoc.*, 1879-1884-1918, "Precipitates in Fluid Extracts," etc.) The chief components of the vegetable groups to be considered as making up bundles,* of which the constituents have friendly solvent attributes, are:

1. Materials soluble in water (gums, albuminates, glucose, sugar, earthy salt, compounds, many alkaloidal colloids, etc.).
2. Materials soluble in alcohol (resins, essential oils, flavone derivatives, some fixed oils and fats, chlorophyl, chlorophyl-wax, etc.).
3. Materials soluble in ether (fats, fixed oils, wax, etc.).
4. Materials soluble in glycerin (tannates and related bodies).

By means of the neutral solvents named (some substances are quite soluble in several of the liquids) successively applied, most plants, be they green or dry, may be practically abstracted of their distinguishing colloidal contents. Each saturate is, however, not an ultimate, but in itself may constitute a bundle of associated constituents which by further subdivision is capable of yielding yet more closely related sub-bundles.

Each primary bundle, regardless of the solvent used, may carry contaminations (adhesions) of the others. For example, if water be first used as a manipulative solvent, the product may be contaminated by adhering fat and resin, although when pure fats, resins and fixed oils are (unless in dispersed condition) practically insoluble in water. When undesirable in the final product, such a fat must be separated by an elective solvent. In like manner primary "bundles" derived by means of other solvents, may carry adhering materials whose location as regards solvents is elsewhere, and which may be transferred to their natural homes by subsequent manipulations with appropriate cleansing solvents. Transference of yet other adhesion slivers can be accomplished by means of yet other neutral liquids having the power of making closer cleavages.

In some cases the process of discriminative precipitation by means of a liquid affiliating with the original menstruum, but in which one or more of the constituents soluble in the original liquid is insoluble, may be employed to dissect a bundle of plant colloids. Thus, if the gum of an extracted drug is desired, the addition of alcohol to the water-extracted colloidal complexity makes a precipitate of the gummy part of the substance, practically free from water-soluble materials. Without the use of energetic chemicals, colloidal plant structures by such manipulative processes may be dissected and individualized to a degree of pharmaceutical satisfaction, even though not always to absolute chemical perfection. Occasionally unexpected destruction of natural structures follows the use of liquids seemingly innocent. For example, the pronounced alkaloidal structure in fresh *Sanguinaria* is utterly destroyed by contact with acetone for a very limited period. Chloroform likewise reacts destructively in special cases.

For special purposes dialysis may be employed. Spontaneous evaporation through an absorbent mass-medium is likewise often applicable, where capillarity differentiates colloidal mixtures closely connected as far as solvency is concerned. This particularly applies to separation of crystalline contaminations and to separation of coloring materials, where the drying of a magma in a muslin strainer is all-sufficient. The most soluble material passes

*The writer has long used the term "bundle" in this sense, but so far as he is aware, it is not elsewhere thus employed.

to the outside of the strainer. Purification by adhesion attractions, through a capillary medium such as blotting paper (paper pulp), may be absolutely necessary as a final separator of certain closely locked structures. This latter process enables one to make very complete cleavage separations of materials which bear nearly exact solubilities.

Whoever enters this field must needs liberate himself from some of the limitations concerning both thought and action embraced in past authoritative pharmaceutical processes as applied to plant structures. It should be comprehended that every root, bark, flower or herb is a separate creation, carrying group entities ("bundles") that need be individually studied in a new light as concerns applied pharmacy.

SUMMARY. Does not the fact that colloidal substances constitute the bulk of the animal and vegetable kingdoms; that colloidal phenomena dominate life-building as well as life-destroying processes in both; that the most valuable and kindly of all plant remedial agents, as well as those most energetic (does not this apply also to animal vaccines and serums?) are colloidal, bid one absorbed in seemingly distant fields, be patient with a neighbor entangled in the intricacies of these stupendous outreaches? Do not numberless examples in which crystallization is necessary to the purity perfection, of the material that assumes the crystal form, likewise bid him involved in the magnitude of the colloidal world of vegetation be very patient with the man content by reason of inherited views to argue that only structures that will crystallize are entitled to scientific recognition?

Lastly. In the rivalries of theoretical or academic discussion, the practical pharmacist has, as a rule, little concern, unless it be as an avocational diversion. His first aim is the utilization of materials serviceable to humanity—in this object he both thankfully accepts and gladly utilizes whatever comes from all directions. To him a jelly or a crystal alike appeals, if it be adapted to the relief of mankind's ailments. ■

BOOK REVIEW

From Alchemy to Chemistry in Picture and Story

By Arthur Greenberg

Wiley-Interscience, 2006. Hardback. 637 pages. ISBN 9780471751540.

\$69.95.

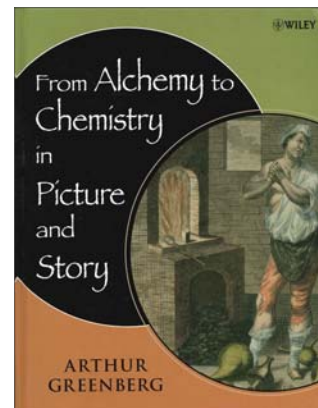
Lloyd Call Number: QD11.G744 2007

Reviewer: David Knight

Reprinted with permission from *Isis*, vol. 100, no. 2, June 2009, pages 378-379 and the University of Chicago Press

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[Any errors, typos, etc. are the responsibility of Maggie Heran, Executive Director, LLM]



Chemistry has always relied heavily on visual language; the great strength of this book is its 354 black-and-white illustrations throughout the text, 24 of which are also reproduced in color. They begin with alchemical symbols and allegories, continue through pictures of apparatus, portraits of chemists, tables of affinities and of substances, and then move on to the diagrams indicating structures and reaction mechanisms with which modern chemists are familiar. The range is wide, including oil paintings, doodles, and cartoons as well as plates from standard works; we also get some titles

Continued on next page

pages of books and pages from journals. Illustrations have not only displayed (and perhaps advertised) apparatus but shown how to assemble and use it. These pictures not only reveal a long, rich, and evolving chemical tradition but are valuable reminders of the importance of the image as well as the written word in science generally: it has always been recognized that in natural history a good illustration is worth a thousand words, but in chemistry (even today almost as much a craft as science) it is also true.

But Arthur Greenberg's book is not a history of chemical illustration. In fact, it is not really a history at all, but, as he puts it, "a light-hearted tour through selected highlights of chemical history (p. xiii). The tourist in a foreign city, or the pilgrim in the Holy Land, warms to a genial folksy, and well-informed guide, as the party sometimes trots and sometimes ambles around the sights or sites; and the chemist-historian Greenberg is a good cicerone for those voyaging through these strange seas of thought and practice. His style is informal, incorporating anecdotes, jokey captions, wise saws, and modern examples. Like a guide stopping and holding forth at places of interest, Greenberg writes in brief sections or chapters, usually just a page or two, devoted to an author, publication, or discovery. This makes for repetition: only a viewer would undertake the whole tour in one go, and I would recommend that readers dip and be selective.

We all know that tour guides are not on oath, and when listening to good stories we are happy, as on holiday, to suspend disbelief, setting aside the critical faculty and the nagging awareness of current scholarship as we go along with our garrulous friend. Similarly, it must be noted that Greenberg has not kept up to date with the tiresome way in which scholarly investigations mess up good simple narratives. Thus the reader familiar with *Isis* may flinch on reading (more than once) over-brisk accounts of the triumph of oxygen theory over a rather unsophisticated phlogiston, the overthrow of "vitalism" by Friedrich Wöhler, or the disproof of the luminiferous ether by Albert Michelson and Edward Morley. The joke (on pp. 427 and 435) about Wöhler's witty polemical spoof paper is rather spoilt because his alias is misprinted as "S.C.H. Windier" when it should be S.C.H. Windler. The paternity of chemistry remains a little mysterious: on page 200 we are told that Robert Boyle is generally considered its father but on page 305 that Antoine Lavoisier is justifiably said to be. Robert Kerr's translation of Lavoisier's *Elements* (1790) is said on page 306 to have been published in London, but in fact it was Edinburgh—a point of interest not only to Scottish nationalists.

Enough nit-picking. This book is, after all, addressed not to the small group of professional historians of chemistry but to chemists and, especially, to students—who at one time got a lot of history in their courses but no longer do. The coverage is generous: we meet popularizers and their works as well as researchers and textbook writers, and the illustrations include an attempt to depict chemical processes (on pp. 483-487) and some occult chemistry on clairvoyance (pp. 600-603) in addition to the very handsome but more standard plates of apparatus and tables of data, some well known and some not. We get a good deal of American chemistry from the time before the United States became the world leader in the twentieth century. There is much curious information, like the origin of the conventional colors of atoms in structural models on page 429; and a discussion of the genealogies that chemists like to trace back through their doctor-fathers (pp. 626-632).

In short, this is an accessible and beautiful book by a distinguished retired chemist and teacher of chemistry, based on works that he has enjoyed. Some of them are rare—often, no doubt, because they were used in laboratories rather than in libraries. Industrial processes and applied chemistry are touched on, but the focus is on chemical science. *From Alchemy to Chemistry in Picture and Story* is a source of anecdotes and background that could enrich chemistry courses by introducing historical perspective, a somewhat idiosyncratic book to be dipped into and enjoyed, from which every reader will learn something new and to see things differently. Anyone interested in visual language, as a vehicle for communicating technique, information, and concepts (and even jesting) in science, will find useful material here.

*David Knight, Professor Emeritus,
Department of Philosophy, Durham University, England* ■

BOOK NOTES ON RECENT ACQUISITIONS

By
Alex Herrlein, Reference Librarian

The Book of Fungi: a Life-Size Guide to Six Hundred Species from Around the World by Peter Roberts and Shelley Evans. Lloyd Call Number QK603 .R57 2011.

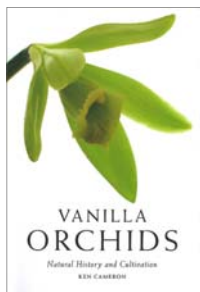
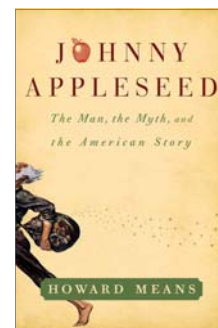
In this detailed and illustrated volume, readers will find full-size, full-color images, a collection of vital information, and location maps for hundreds of species of fungi. The often strange and fascinating fungi form a vital link in the ecosystem, and can be found in nearly every part of the world. Roberts and Evans have provided a valuable reference work for individual fungi, which also include chapters on human uses of fungi and the relationships between fungi and other organisms.

In the Footsteps of Augustine Henry and his Chinese Plant Collectors by Seamus O'Brien. Lloyd Call Number QK355 .O26 2011.

While a medical officer for the customs service in late 19th-century China, Augustine Henry developed an interest in botany and a talent for plant collecting—1,726 new species would be identified from his collection of over 158,000 specimens. Through contact with Joseph Dalton Hooker, Henry's efforts continued with E.H. Wilson of Kew Gardens, who worked with Chinese plant collectors to acquire new species for cultivation. Author Seamus O'Brien combines this historical record with that of his own twenty-first-century journey to follow in Henry's footsteps. Working against time, O'Brien revisits some of Henry's botanically rich locales before they disappear forever under the floodwaters of the enormous Three Gorges Dam.

Johnny Appleseed: the Man, the Myth, the American Story by Howard Means. Lloyd Call Number SB63 .C46 M43 2011.

The legend of Johnny Appleseed in his cooking-pot hat is forever woven into the fabric of American folklore. He has been memorialized with a statue in Spring Grove Cemetery, not far from the Lloyd Library in Cincinnati, and honored by several other cities in Ohio—but what was he really like? This new biography shows John Chapman, as was his real name, to be a skilled nurseryman, a devout missionary, and an eccentric nomad happy to sleep outside as he traversed the forests of the American Midwest. Means creates his biography of Chapman the man without diminishing the qualities that created Appleseed the legend, while providing the historical detail and context of his place and time.



Vanilla Orchids: Natural History and Cultivation by Ken Cameron. Lloyd Call Number SB307 .V2 C25 2011.

As a flavor and fragrance, vanilla continues to be popular and unmistakable several centuries after its discovery by Europeans. What may come as a surprise is that the trademark vanilla beans are actually the fruit of an orchid, as explained in Cameron's new book. Featuring many color illustrations, it brings together the history, botany, cultivation, and uses of vanilla orchids into a single work. Using photographs of both plants and products to help tell the tale, Cameron even includes Thomas Jefferson's original recipe for vanilla ice cream.

Natural History Drawings: the Complete William Farquhar Collection, Malay Peninsula 1803-1818, edited by Laura Dozier. Lloyd Call Number QH46.5 .N388 2010.

A visitor to the Lloyd needs only glance around the reading room at the framed prints on the walls to get an idea of how art can be born out of science, making this recently-published book worth the attention of anyone interested in the overlap of the two fields. British commandant William Farquhar commissioned nearly 500 watercolors by Chinese artists to document the flora and fauna of the Malaccan region during his tenure there in the early 19th century. The artists' distinctive style blends traditional Chinese brush technique with a Western approach to scientific illustration, and includes species that have since become extinct. In addition to the vibrant artwork, Dozier provides background on Farquhar himself and information on individual illustrations. ■



OUR FRIENDS AND DONORS

Welcome to New Friends!

**Kenneth A. Grabach
Emilie Marcikic
Jana Morse
The Vesalius Trust**

Thanks for joining!



NORMAN R. FARNSWORTH, 1930–2011

Excerpted, in part, from Mark Blumenthal's obituary, [#">http://cms.herbalgram.org/searchresult.html?&searchfor=farnsworth&option=any&KY_WS_LOW=2636|2631|2626|2627|2629|2633|2638|2641">#](http://cms.herbalgram.org/searchresult.html?&searchfor=farnsworth&option=any&KY_WS_LOW=2636|2631|2626|2627|2629|2633|2638|2641) Press Releases, Accessed November 4, 2011

Renowned pharmacognosist and internationally-respected medicinal plant research expert, Norman R. Farnsworth, PhD, died on September 10 at a Chicago hospital. He was 81 and had been in declining health for months, suffering from long-term congestive heart failure and type 2-diabetes.



Farnsworth was a long-time Friend and Donor to the Lloyd Library & Museum (LLM); his presence and support will be greatly missed, as will his vibrant, carefree, and thoroughly enjoyable personality. In addition to donating his papers to LLM's archives, Farnsworth recently gave LLM free access to NAPRALERT (acronym for Natural Products Alert) database so that staff could use it to benefit our researchers. Farnsworth's association with LLM lasted several decades. He was instrumental in establishing an association with American Society of Pharmacognosy's (ASP) and LLM's journal *Lloydia* in ASP's early history. ASP and LLM co-published *Lloydia*, which later became *The Journal of Natural Products*, until 1995 when ASP began co-publishing with the American Society of Chemistry. At left: Quintessential Norm with cigar and holding up a picture of a gorilla that reads "Be Nice to Me...I've had a hard day," from ASP Digital Photo Collection at LLM.

Farnsworth received his degree in pharmacy from the Massachusetts College of Pharmacy in 1953 and his PhD in pharmacognosy, the study of drugs from natural origins (including medicinal plants, microbes, marine organisms, and fungi), from the University of Pittsburgh in 1959. At Pitt, he helped to institute a pharmacognosy PhD program at the university and was the first to chair it.

In 1970, Farnsworth left the University of Pittsburgh for a post in the College of Pharmacy at the University of Illinois at Chicago (UIC) where he served as Head of the Department of Pharmacognosy and Pharmacology from 1970-1982. At UIC, he was also Research Professor of Pharmacognosy, the Director of the Pharmacognosy Graduate Program, and Director of the World Health Organization Program for Collaborative Research in the Pharmaceutical Sciences—a multidisciplinary program which brought together, for the first time, scientists in numerous fields of medicinal plant research to collaborate on drug discovery from medicinal plants. In 1988, he was named Senior University Scholar at UIC. He held the title of Distinguished Professor of Pharmacognosy, which he received for his "scholarship, creativity and leadership," from 2001 until his death.

Farnsworth was an internationally-recognized scholar and initiator or co-initiator of many significant projects in the fields of pharmacognosy and medicinal plant research. Among other accomplishments, he was a founding member of the ASP in 1959 and a founding member of the Society for Economic Botany (1959).

In 1975, Farnsworth created the NAPRALERT database at UIC, the world's first computerized database of ethnobotany, chemistry, pharmacology, toxicology, and clinical trials on medicinal plants.

The author or co-author of hundreds of research papers published in peer-reviewed journals, Farnsworth co-founded the peer-reviewed journal *Phytomedicine*, the *International Journal of Phytotherapy and Phytopharmacology*, along with Professor Hildebert Wagner, PhD, at the University of Munich, who remains the journal's editor-in-chief. This journal is now acknowledged as one of the leading scientific journals in this field.

Among many other organizations and publications with which he was involved, Farnsworth was also a co-founder of the American Botanical Council (ABC), an independent nonprofit research and education organization, and the longest-serving member of its Board of Trustees. In 2005, the ASP renamed its annual Research Achieve-

ment Award in honor of Farnsworth, given to outstanding members of the medicinal plant research community. And, in 2005, ABC established its Norman R. Farnsworth Excellence in Botanical Research Award, given to medicinal plant researchers who have made significant contributions to the field of medicinal plants and herbal dietary supplements.

In 2010, UIC also established the Norman R. Farnsworth Professor in Pharmacognosy Endowed Professorship which is chaired by Prof. Chuan-Tao Che, PhD, one of Farnsworth's former doctoral students.

Norman Farnsworth is survived by his devoted wife, Priscilla Marston Farnsworth, his brother, Bruce, and sister-in-law, Donna, of Massachusetts, a niece and nephew, and hundreds of graduate students, PhDs, post-doctoral fellows, and close colleagues, including the staff of LLM, who will always cherish his beloved memory. ■

RECENT NEWS AND YEAR-END UPDATES

Collections

Thanks to our Friends and Donors who made it possible for LLM to enhance its collection in 2011 through the purchase of three historic and rare books. The are ***La Chimica per le Donne* by Guiseppe Compagnoni, 3rd Edition, 1805** (see page 7); ***Das Pollinische Decoct* by Joseph Ferdinand Friderich, 1798** (see page 9); and ***Discorso della differenza tra gli semplici freschi et I secchi... Rome, Mascardi, 1629, by P. Castelli*** (see volume 15, numbers 1-2, 2011, page 12).

Update on Projects Needing External Funding: Opportunities for Donors and Friends to Make Tax-Deductible Contributions

Regarding the **NEH grant for the compact-shelving project**, LLM was not awarded funds; however, the evaluators comments were so very good (out of five reviewers, the grant scored two "excellent" and three "very goods." Therefore, we will resubmit this year based on the positive review of LLM's grant request. In the meantime, we have been given Board approval to begin installation of one module on the Lower Level where the archives, artifacts, and other unique items are housed. And, a grant proposal has been submitted to a local foundation for partial funds to move the project forward. *A donation or grant award of any amount will go a long way in completing the project in a timely fashion. Thanks for your consideration.*

Two donations were received for the **Reading Room Permanent Exhibit Project**. Following our appeal in volume 14, numbers 3-4, 2010 for financial assistance, two Friends stepped up to the plate and we now have \$2,600 set aside for this project. In a surprising development, Phyto-Technologies, Inc., who housed the Lloyd Cold Still for AYSL Corporation in Woodbine, Iowa, sadly was forced to go out of business and the decision has been made to donate outright a superb example of JUL's invention that the company originally agreed to allow LLM to house on "indefinite loan." Together with the monetary donations, this project is inching its way to realization. A grant proposal for this project has also been submitted to a local foundation. As mentioned above: *a donation or grant award of any amount will go a long way in completing the project in a timely fashion. Thanks for your consideration.*

Summary of Donors and Friends 2011 Statistics

In 2011, the Friends Group welcomed 10 (including those mentioned above) new members; and, another 63 renewed their membership. Thanks to all who consider LLM a worthy institution to support!

In addition to the monetary and in-kind gifts reported in the last issue of *Lloydiana*, the library has received a total of 11 in-kind gifts and nine monetary donations! It's been a great year, Friends; let's make 2012 an even better one!!

*The Lloyd Library and Museum wishes our Friends and Donors
a Happy and Safe Holiday Season!
And, a Happy New Year!*



Lloydiana is published quarterly by the Lloyd Library and Museum whose mission since 1898 is to collect and maintain a library on botanical, medical, pharmaceutical and scientific books and periodicals and works of allied sciences that serve the scientific research community as well as constituents of the general public, through library services and programming that bring science, art, and history to life.

Lloydiana (ISSN: 1094-818X) is distributed to Friends of the Lloyd Library and Museum. For membership information, contact: Lloyd Library and Museum, 917 Plum Street, Cincinnati, OH 45202, 513-721-3707, www.lloydlibrary.org

Editor
Maggie Heran

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Winter issue—December 15

Spring issue—March 15

Summer issue—June 15

Autumn issue—September 15

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The Lloyd Library is open to all who are interested in using LLM's research collections or viewing current or permanent art and collections exhibits Monday–Friday 8:30 a.m. to 4:00 p.m. and 9:00 a.m. to 4:00 p.m. the third Saturday of each month September through May.

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