The Early Pharmacy

The pharmacy collection at the Edward Hand Medical Heritage Foundation highlights over two hundred years of the pharmacy profession. The collection includes over one thousand bottles of chemicals and herbs used by pharmacists to make and dispense remedies for many of the diseases and illnesses of the day; as well as the accessories and equipment necessary to ply their trade.

Initially known as apothecaries, early pharmacists prepared and dispensed remedies while offering medical advice to many in the community. In very rural areas of the country, there were no doctors available so the local apothecary or pharmacy was the only medical resource to many.

The 18th and 19th centuries saw many pharmacists creating and distributing their own medicines, commonly referred to as "patent medicines". Claiming cures for scores of diseases and ailments, these pharmacists kept the formulas (or recipes) for these miracle cures secret. In the late 18th century, pharmacists began filling prescriptions for medicines from doctors. This began the process of separating the professions of the doctor and the pharmacist; although pharmacists would continue to dispense their own cures and offer advice for many years to come.

The first American college to formally train pharmacists was the Philadelphia College of Pharmacy, founded in 1821, while Lancaster, Pennsylvania has been the home of several pharmacies as far back as the early 18th century. According to the College of Pharmacy and their publication commemorating their 100 year history, they "sought to provide relief of human suffering and to conserve the public health".

Much of the pharmacy collection at the EHMHF can be viewed on our new virtual museum, accessible at our website: www.edwardhandmedicalheritage.org. Included are a variety of pharmacy accessories such as pill rollers, mortar & pestles, large storage bottles, known as "shop furniture" and a pharmacist’s prescription log book, as well as 18th and 19th century medicine bottles. With a visit to our museum, visitors can see these same items displayed in our mid-19th century pharmacy display cabinet.
From the President
By Nikitas Zervanos, MD

This is the fifth issue of the newsletter.

We would first wish to acknowledge the death of George M. Kent, MD, who has been a long standing member of our board and a major contributor to the development of the Edward Hand Medical Heritage Foundation (EHMHF). We will miss him dearly and wish to extend our warmest wishes to Hope and George’s family.

In behalf of the Edward Hand Medical Heritage Foundation, I would also like to publically thank the outgoing members of our board. They have served the Foundation for many years, and we are grateful to them for their outstanding service. They have been given emeritus status, and are welcomed to any of our board meetings; although they will not have voting privileges.

John Bowman, MD
William D. McCann, MD
Henry S. Wentz, MD
Roger D. Peterson, MD

The current board members include:

Joan Boben, RN
Laurence Carroll, MD
Lynn Dolan, DDS
Susan C. Eckert
Ann Foley, RN
Matthew Malick
Carl J. Manelius
Stephen T. Olin, MD
Alan S. Peterson, MD
Paul H. Ripple, MD
Myke Rogers
Angie Stephenson, CPA
J. Calvin Wenger, DC
Robert Wertz
William Wheatley, Esq.
David E. Wiley, DO
Ernie M. Wood, MD
Nikitas J. Zervanos, MD

Ex-Officio Members of the Board:

Jay R. Bucher, President, LGH Foundation
Heather Tennes, Curator, LancasterHistory.org
Samuel C. Slaymaker, Director, Rock Ford Foundation

In my last newsletter we indicated that we would be opening the EHMHF museum in March 2014. At our open house we had more than 100 visitors. We were delighted with the very positive reaction to our display. It is our mission to make accessible the rich heritage of the healing arts of Lancaster County. Obviously the museum has been a goal since the inception of the foundation, and is is now a reality. We can accommodate groups, even individuals who would like to visit our museum. It will take a phone call to Mrs. Donna Mann, our curator, who can help arrange your visit. We have also begun the development of a virtual museum (VM), which thanks to a generous grant from Lancaster General Health; we have begun to populate our website with many of the artifacts in our collection.

The VM is a work in progress, but we hope to have a sampling of all our current artifacts by the summer of 2016. You can access the VM by entering the URL edwardhandmedicalheritage.org on the address bar of your browser. Unfortunately the VM cannot be accessed on INTERNET EXPLORER. The most commonly used browsers to enter the VM are Google Chrome, Firefox or Safari. Mrs. Donna Mann, our curator/archivist will explain in her column, how to access and navigate our Virtual museum.

There are eighteen articles on the History of Medicine in Lancaster County on our website covering the broad subjects of Medicine (the history of the various medical disciplines); Institutions (the hospitals, etc); Allied professions (chiropractic, optic lens); and student papers (what killed Edward Hand? etc). I found particularly interesting Clarence Spohn’s paper on the Ephrata Hydroptic Institute, which was published by the Historical Society of Cocalico Valley, regarding the use of cold water cures.

We are going to begin an annual lecture series on the History of Medicine in Lancaster County. The first will be given by S. Kendrick Eshleman, MD on Thursday, May 7, 2015 at Rock Ford Plantation, the homestead of Dr. Edward Hand. There will be a reception of wine and cheese between 4:30 and 5:00 PM and the lecture to follow from 5 to 5:45 PM. His topic will be on 19th century medical practice in Lancaster County.

Anyone can visit our museum without charge by making an appointment to meet with our curator, Mrs. Donna Mann. She can be reached by calling: 717-419-1456.
Educating our Community

Through our Collection

EHMHF has initiated an effort by Lancaster County medical practitioners to document and preserve the history of the medical specialties and allied health professionals. These stories will be featured on our website, edwardhandmedicalheritage.org. The first of these includes the histories of ophthalmology, the history of Lancaster General Hospital, the First 100 Years, and the History of Contact Lenses. Other histories include that of radiology, urology, gastroenterology, and mental health services. The following are excerpts from articles that appear on our website.

Excerpt from:
The History of Urology in Lancaster

By Marvin C. Daley, MD, F.A.C.S.

AUTHOR’S NOTE: The reader will note relatively few references following this article. The entire section on Urology of the Ancients was drawn from The History of Urology by Leonard J. T. Murphy and Ernest Desnos, a volume from my personal library from which I gleaned information for a presentation years ago at the Torch Club of Lancaster. Much of the rest represents my personal experience, review of newspaper articles, perusal of Lancaster Medicine, and conversations with Dr. Henry Wentz and several urologists in central Pennsylvania.

UROLOGY OF THE ANCECTS
Before embarking on local history, it seems appropriate to include a brief review of the ancient dialogues and techniques regarding treatments of urinary tract disorders. Afflictions of the urinary system as well as ceremonial rituals dealing with the phallus have been recorded and depicted through the ages. The Ebers papyrus, an Egyptian medical papyrus dating from 1500 B.C., refers to “retention of urine” and enumerates various prescriptions, mostly empirical, for treatments regulating the “flow of urine.” Descriptions of surgery for bladder stones are recorded in ancient Hindu texts, as are ceremonies dealing with sacrifice of the prepuce to the gods. The Hindu system of medicine also notes the use of catheters for urinary retention, surgical drainage of scrotal abscesses, and urethral instillations for what was likely gonorrhea. In a similar vein, there are recordings of urological diseases and treatments in ancient Chinese, Babylonian, Hebrew, Persian, and Armenian literature.

Excerpt from:
Chiropractic in Lancaster County

By J. Calvin Wenger, D.C.

The Chiropractic profession was birthed nationwide in Davenport, Iowa in September 1895. It all started when a magnetic healer, Daniel David Palmer, noticed an unusual derangement in the cervical-thoracic spine of a deaf janitor by the name of Harvey Lillard. He performed a manipulation in this area and Mr. Lillard’s hearing was restored. Thus began a process of patient care that eventually evolved into what today is known as the chiropractic profession.

A friend of Daniel Palmer, Rev. Samuel Weed, was fluent in Greek and suggested the procedure be called chiropractic, a practice performed by the use of hands.

During the next decade the first chiropractic school was established which is still operating and known now as the Palmer University of Chiropractic. Dr. David Palmer’s son, Dr. B.J. Palmer, was an unusual and charismatic leader who succeeded his father and became known as the developer of chiropractic. His son Dr. David Palmer became a 3rd generation leader in the profession and married a Lancaster County native, Dr. Agnes High Palmer. In recent years, two other Palmer higher educational institutions have been established in San Jose, California and Port Orange, Florida.

Incidentally and interestingly, the other major manipulative health profession, osteopathy, was also discovered in the Mid-West in the latter 1800’s in Swiftwater, Missouri by a practitioner by the name of Andrew Still.

The major premise of the chiropractic profession is that dysfunctional spinal articulations and pelvic structures will initiate disturbances with the function of the nervous system in a particular spinal area which in tandem negatively influences the normal functions of the body in that particular area. In sequence, multiple spinal-pelvic areas in similar modes of dysfunction can and do occur and, as a consequence, the harmony of the spinal and neuromuscular systems are compromised. This becomes a major factor in the body maintaining homeostatic function and healthy well-being.

Doctors of Chiropractic receive classroom and practical hands-on training to develop and hone their skills and procedures to detect these spinal dysfunctions, sometimes referred to as subluxations and then to bring modification and/or corrections to them.
Curator/Archivist Update

By Donna M. Mann

This fall and winter we have been making steady progress on our new virtual museum. Split into “exhibits” documenting our various medical artifacts, visitors to our website can see examples of our collection online. At this time there are six exhibits available for online viewing. Many more will be added as we complete them.

Exhibits include microscopes that span over one hundred years, scales used by doctors as well as pharmacists, and devices used in alternative “quack” medicine. The Cardiology exhibit includes items such as pacemakers, stethoscopes, and EKG machines.

The pharmacy exhibit is split into several sections. Available for viewing so far is an exhibit containing 19th century pharmacy accessories such as mortar & pestles, pill rollers, and molds. The “shop furniture” exhibit includes examples of large pharmacy bottles used to store bulk chemicals used by pharmacists to manufacture their cures for dispensing to the community. Additional pharmacy exhibits will be available in the near future along with other medical specialty exhibits.

Along with pictures of each artifact, each one, has been extensively researched and dated. The description of each artifact includes the details of its medical purpose and use.

A unique feature of our virtual museum is that many of the artifacts also include a 3 dimensional image. This image can be turned by the viewer’s mouse so that the artifact can be viewed from all sides.

Our virtual museum can be accessed from our website: www.edwardhandmedicalheritage.org. From our homepage, just click on the “virtual museum” tab along the top of the page, then enter our virtual museum. There you will see a list of exhibits to choose from. Just choose an exhibit and scroll through the artifacts. If a 3 dimensional image is available, there will be a link to click on below the description of the artifact.

The 3 dimensional images are only able to be viewed using Google Chrome, Firefox, or Safari. Unfortunately, Internet Explorer cannot be used to view the 3 dimensional images. However, if you are using Internet Explorer, you will be able to view the rest of the virtual museum.

The photos to the right show the steps for accessing our virtual museum and 3 dimensional images.
The dental collection at EHMHF includes a large selection of dental instruments. The poster above shows two of our foot powered dental drills from the late 19th century. The dental exhibit in our museum display includes a dental exam chair and stool, ivory handled picks and tooth brushes, and various tools for tooth extractions, including an extraction “key” used to rock the molar back and forth, loosening it for extraction. One of the highlights of our dental collection is a dental x-ray machine, patented in 1914. Now considered one of the allied professions, dentistry had its beginnings in medicine until it became its own specialty with the opening of the first school of dentistry. You can read about the history of dentistry in Lancaster County in an article by John A. Cooper, Jr. D.M.D. in the Allied Professions section of the articles on our website at www.edwardhandmedicalheritage.org.
A 19th Century Doctor’s views on Yellow Fever

The library at Edward Hand Medical Heritage foundation includes approximately two hundred 19th century medical books. The following is an excerpt from the “New Domestic Physician or Home Book of Health”, published in 1860 and written by John C. Gunn, MD.

Yellow Fever prevails in, and is generally confined to, Africa, the West Indies, Mexico, bordering on the gulf, the Island of Cuba, and the southern portion of the United States, but extending frequently as far north as Philadelphia, New York, and Boston; all of which places have been, from time to time, visited with the fearful ravages of this disease; yet the march of Yellow Fever, like other epidemics is uncertain. For instance, in New Orleans, they are almost entirely free from this fever during one summer, while the next summer may be one of great fatality. A few years ago, it raged with greater violence than any year since the discovery of the country.

The exciting causes of this disease are the malaria or exhalations from alluvial, marshy soil, and that too from ground or marshes subject to inundation and draining, particularly when heavy rains have fallen for some time, swelling the creeks, ponds, rivers, and overflowing the low country. The rains having ceased, the country becomes drained and exposed to the intense heat of the sun, when the fever in due time makes its appearance, so that wherever this condition of country exists, Yellow Fever will prevail, and in the proportion to the exciting causes, or state of the weather. Wherever Yellow Fever prevails, there also is found every variety of Intermittent, and very generally, all varieties of Remittent and Bilious Fevers—these diseases arising from the same cause, are produced by different degrees of the virulence of the poison. The precise cause of the varying results of this principle have never yet been explained, nor fully comprehended by the most distinguished medical men, although its effects are constantly observed. The opinions of the medical profession differ as to the contagious and non-contagious character of Yellow Fever. The truth is this: that this fever is not contagious, and I found my opinion upon the fact that I have seen many persons exposed upon repeated occasions to this disease without contracting it; and in support of my opinion, I give you the dangerous experiments of Dr. Firth of Philadelphia, upon himself, as tasting black vomit, and inoculation with it, and the serum, and saliva of patients with this fever, without taking the disease.

The New Orleans Pharmacy Museum

by Donna Mann, Curator

The Edward Hand Medical Heritage Foundation is not the only organization dedicated to the preservation of the healing arts. On a recent trip to the city of New Orleans, Louisiana, I had to opportunity to tour the New Orleans Pharmacy Museum. Housed in the location of the first licensed pharmacist in the country, the New Orleans Pharmacy museum’s building is listed on the National Register of Historic Places as an historic building within the Vieux Carre Historic District. Much like EHMHF, the display at the New Orleans Pharmacy Museum showcases the progression of medicine from the 18th to the 20th centuries and is definitely worth a look if you should find yourself in New Orleans.
The Sphygmomanometer

The first real breakthrough in the search for a clinically workable blood pressure instrument came in 1876. Professor Samuel Von Basch, from Vienna, earned his place in medical history with his sphygmomanometer. The manometer was a "U" shaped tube with a pinch cock that could be opened to level the mercury at zero. A glass cup, faced with a stretched elastic membrane, was filled with water, as was the connecting manometer tubing. The physician gradually pressed the cup against the patient’s radial or temporal arteries, while feeling the diminishing pulse. Then the blood pressure was read from the scale in millimeters of mercury. While this particular instrument was not mass produced, it was the inspiration for the sphygmomanometers that followed.

In 1917, the Baumometer was developed by William A. Baum, a worker in a large clinic which engaged in pre-employment physical exams. Baum's design was the first of the sphygmomanometers which needed no adjustments or recalibration, and its well-sealed tube prevented oxidation of the mercury used for measurement. Its simplicity and striking accuracy caused it to catch on with physicians across America, and variations of Baum's simple design stand today as some of the most popular blood pressure instruments.

The collection at EHMHF contains several sphygmomanometers dating from the late 19th century to the mid 20th century. Shown above is an Oliver-Graham portable sphygmomanometer in wooden case. Manufactured between 1890 and 1910, the instrument consists of a hand blown outer tube which houses another hand blown tube that contains mercury at its base and is attached via rubber tubing to a Bakelite stem. There is an ivory scale on the wooden upright as well as a manufacturer's tag inside the top lid. The instrument rests in a form fitted wooden holder or upright which is hinged at its base and swings up and is held in place by a wire easel. There is a label on the underside with instructions on the instrument’s use as well as precautions (don't suck down the mercury). The box is lined with black velvet and it is covered with cloth to resemble leather.

The sphygmomanometer at the left is Dr. Von Recklinghausen's "Scala Alternans" Oscillotonometer. Von Recklinghausen was a German physician during the early 1900s. This model was first developed in 1932 as an improvement to the first model. The physician could steadily drop the pressure in the armlet to get a good reading instead of keeping constant pressure. This instrument is in a brown, Bakelite (world’s first synthetic plastic) case with a metal hinge. Inside, there is a tan and brown canvas armlet, orange and black rubber tubing and pump, and a gauge to monitor oscillations in blood pressure. It has a capacity of 300 millimeters mercury. There are also instructions of use in the case. This machine was donated to the EHMHF by Dr. Raymond Good D.O. of Strasburg, PA.

Made in 1926, the mercury sphygmomanometer to the right was made by W.A. Baum Co. Inc. in New York. It is a Lifetime Baumometer and is the Desk Model. It comes in a wooden box with a metal knob that turns to open. There is black rubber tubing and pump. The green arm cuff reads "Tycos pre-calibrated". It has a capacity of 300 millimeters mercury.
The above ad appeared in the August, 1902 edition of *The Therapeutic Gazette*, monthly journal of General, Special, and Physiological Therapeutics. The collection at EHMHF includes several of these types of syringe sets with many still including drug cylinders containing drugs such as strychnine and atropine.