HERBS, BUGS AND BARNACLES

An antique collection of 84 samples from an old Montana pharmacy

Out of curiosity, I occasionally visit Ebay, the online auction site, and type in the word "herbs" in the search box. Usually, I see the ubiquitous weight loss herbal combinations, books, pretty tea towels and canister sets. Last time, however, "Herbalist Collection of Herbs CA. 1920"caught my eye. A seller in Montana was offering 6 small boxes that held one dried herb each. Digital pictures showed the contents of each open box. The six herbs represented were golden seal, cascara sagrada, buckthorn bark, cola nut, cotton root bark and sassafras. There was another photo of the six box lids. Each had lots of tiny writing on it. This legible script listed the botanical name, the common name(s), the plant part within the box, A.C. (active constituents), use, a description of the appearance, characteristics, taste and preparation. All this handwriting was in a 2"x 3" space. Judging from the style of writing, the condition of the boxes and vocabulary used, it appeared that they were old. I was fascinated.

I contacted the seller to learn more about them, and he said they had come out of an old pharmacy in a small town near the Continental Divide on the edge of the Bitterroot Forest in Montana. The owner of the pharmacy was retiring and was selling off some things. He told the seller that these little boxes were there when he bought the business forty years ago. "Were there any more of them?" I asked. "Yes, lots", he replied.

The seller was intending to sell the little boxes off a few at a time. I immediately thought that it would be a shame if the collection was broken up. From the little I knew, I had a hunch that the boxes held specimens of herb samples that were used in the old pharmacies; the kind that had a fountain that served up tasty soda tonics for whatever ailed you. As an herbal instructor, I thought, at the very least, they might be a good teaching tool. I was able to contact the retiring pharmacist, and he mentioned that they may have been used for just that very purpose but knew little else about the collection.

I asked the seller if he would consider selling the lot to me, and we settled on a price. He assured me the only ones that had been separated from the collection were the six on eBay. Though I had lost the bid, I kept a record of the boxes that sold along with the photos of them.

When the shipment arrived, I was not disappointed. There were 78 boxes in all, just like the ones that had been shown on eBay. I spent hours looking them over, needing a magnifying glass to see some of the minute writing. Some of the herbs seemed very familiar, obvious essentials for any herbal pharmacy. Others were totally unfamiliar to me like alkanet root, *Alkanna*. This small, twisted, red root was used as a coloring agent in ointments the box top said. Some boxes did not even have plant material in them. One contained insects, Cochineal, an insect that lives on cactus that was used as a coloring agent. Another box contained barnacles off of whales that were apparently used to thicken rose water ointments. One box held beeswax.

In order to organize what I had, I set the boxes in alphabetical order and transcribed all the writing to try to make some assessment. In doing so, I have enjoyed researching some of the more unusual materials and descriptions in hopes that there will be clues as to how old this collection is. There are many "purgatives" and flavoring agents like mints, citrus, saffron, anise, nutmeg, ginger, cardamom, and bitter apple, many of which were listed as carminatives too. I was surprised to read that one of the uses for slippery elm was "abortion" as well as the familiar "demulcent, emollient".

Some boxes listed pharmaceutical products that contained the herb within it like psyllium seed (*Plantago simin*). A Parke Davis product called Siblin was noted on the box. Though there is a lot of valuable information on each box, there is much that is quaint and old fashioned about the language and terms. I have transcribed it all as the words appear, grammatical errors, abbreviations, and misspelled words, of which there are many.

RESEARCH

In my continuing quest to place the collection in a chronological context, I contacted Maggie Heran, Director of the Lloyd Library and Museum, in Cincinnati. Through phone conversations, emails and faxes, we began piecing together information trying to determine the collection's age and use. She has shared very interesting articles she has discovered about such collections and copies of prints of pieces of furniture from circa 1899 offered by Parke Davis & Co. that were made to hold such samples. "Only by carefully examining and handling specimens can a student of pharmacy familiarize himself with the properties of drugs." reads an 1897 description of the collection's purpose.

In an article about artifacts from the *International Journal of Pharmaceutical Compounding* (Vol. 8 No. 5) titled "American Institute of the History of Pharmacy, Madison Wisconsin," by Lloyd scholar, Dennis B. Worthen, PhD, he writes about the specimen cabinets. "One of the more unusual items is a complete Parke Davis and Company cabinet of materia medica samples. These small tin boxes have a glass window in the lid for visitors to view the contents. The specimens were used by students to learn the botanicals and their parts, the mainstay of therapeutics throughout the early part of the 20th century." Ms. Heran found the listing of the inventory and there are 288 specimens.

Another interesting piece of Heran's research at the Lloyd Library turned up an 1890 copy of "Lilly's Bulletin" from Eli Lilly & Company which offered its own, scaled-down, less expensive version of "Student's Collection of Official Organic Drugs." The description reads,

"Students of medicine and pharmacy feel the need of a collection such as we offer. Those now found upon the market are quite expensive, or if not so are undesirable owing to careless collection or faulty packages.

To meet a demand we have prepared under expert supervision of our botanical department a substantial case containing 172 specimens of official organic drugs. Each specimen is so arranged as to show the characteristics of the drug. The boxes bear numbers only, a key for identification being provided.

In order to bring within reach of a large number of students we bring the low price of \$10. As this is intended for students only, we provide no profit for druggists, but make the same price to all."

In the pictures of fixtures that stored these collections there is one very modest cabinet called "Mulford's Compressed Tablet Case", and it looks like it holds at least 84 small boxes. Eli Lilly Co. and John Wyeth & Bro. offered similar cabinets. Could these boxes have been a scaled down collection that could be stored in such a cabinet? Why the handwritten lids? Did someone painstakingly copy the printed versions and take a bit of the herb in each box to provide specimens to a pharmacy in a remote Montana town?

And what of the town that the collection came from? It came out of the oldest pharmacy in the oldest town in Montana. The pharmacy is now called Valley Medical Supply. Stevensville is a small town brought up around the old St. Mary's Catholic Mission. Its history is very rich, and the people of Stevensville, obviously proud of their heritage, could not have been more helpful in directing me to historians who I could contact about my research. In a lengthy conversation with Colleen Meyer, Director of Historic St. Mary's Mission, she explained details about its history. Italian priest, Father Antonio Ravalli, ran the mission from 1845-1884. He was himself a physician, pharmacist, architect, machinist, and sculptor who befriended, ministered to and traveled great distances to heal and serve the Native American community. It is said he had the first "ride up window" to his small dispensary that is still standing at the mission today. I asked her if there might be anything in their antique collections from the 1920 period that might be useful in learning more about the collection. She mentioned that the people at Valley Drug and Variety had contributed an old book or ledger to the mission. I asked her to look inside it to see what it said. Through email she informed me that the book was a prescription book from the old Stevensville Drug Company that dated from March to May of 1908. There was even a name, "Joe Dagenais, Reg. Pharmacist." I sent a picture of the writing on the boxes to Colleen to see if she could compare the hand writing. In 1920 the town of Stevensville was a small agricultural community, not a boom town of mining or lumber, so it is fitting that this herb collection is homemade and modest.

Conversations with Michael Moore, 11/9/05, 12/6/05.

After sending my herb teacher, Michael Moore, a few pictures of the boxes and the transcription via email, we spoke on the phone. Michael is the director of the Southwest School of Botanical Medicine in Bisbee, Arizona (www.swsbm.com). Being a scholar of the history of botanical medicine, he had many insights into the purpose, use and period of the collection.

The first thing he said was that this was a homemade "self-teaching kit" for a student of pharmacy from the era of between 1915 and 1925. The handsomely designed collection of 288 specimens offered by Parke Davis circa 1899 (see picture) cost \$25 which was about four months wages, according to Michael, so it would seem this collection was created by someone of modest means.

He explained that until the 1920s, unless you attended the school of Pharmacy in Philadelphia, most students learned the profession by apprenticing for between 3-5 years with a professional pharmacist and home study. The student might have lived with the family above the pharmacy, and after the apprenticeship, could travel to a school, the closest one being in St. Lewis, to complete the education with a few courses before sitting for the board exam to certify or qualify as an RP or Resident Pharmacist. Then again, if the community was in need of a pharmacist in an area far from cities where such education could be obtained, the student might forgo the exam and the expense of it and go right to practicing pharmacy. The student may have obtained a diploma from the pharmacist he apprenticed with.

When I commented that the useful medicinal plants of the Bitteroots were conspicuously absent, he fired back, "The collection is strictly pharmaceutical and has nothing to do with regionalism! It is an accurate representation of plants of the USP, United States Pharmacopeia, and NF, National Formulary." He explained that students of pharmacy needed to learn the plants physically for a few reasons. First, by learning to identify the plant, they would have a discerning eye to know if an order received from afar was quality material and exactly the right plant and correct part of the plant. The pharmacist could use these samples in the boxes for comparison. Secondly, it was more profitable when the pharmacist made and compounded the medicine he sold so it was necessary to be extremely familiar with the plant material.

As we scrolled through the transcription together reading the language on the boxes, we studied "Cambogia" or "Gamboge". Michael thought I was mispronouncing the word, and I was thinking that perhaps the ink on the box had faded with age so the C should be written like a G. I double checked the box and told him I thought the transcription was accurate. He took a moment to look it up in Culbreth's *Manual of Materia Medica and Pharmacology,* and remarked that the name, "Cambogia" was not in use after 1926. The last line on the box reads, "Prep- in C.C. pills". I asked what C.C. stood for, and by once again skimming through his resources he knows so well, he found that it stood for "Cathartica Compositae". Translation, "bowel ripper" he said. He also noticed that the term Calabar Bean, *Physostigma venenosum*, fell out of favor before 1920. This helped us to place a date for the collection.

I was perplexed why some listings include a pharmaceutical company's name, such as psyllium which reads, "Prep- Parke Davis Siblin" or Karaya Gum which reads," Prep-squibs Granaya & cascara-savaka". Michael said that pharmacists would buy a few premade preparations of what they most commonly used or ones that were too toxic or difficult to manufacture themselves like opium, digitalis and cannabis. He said that with opium, it was hard to get the crude drug, and digitalis preparations had to be tested for potency on animals. He said that opium and cannabis were the most adulterated of the day.

As to why there are so many spelling and grammatical errors, he commented that like today, some people's education was limited and they just did not know how. There are so many misspellings, he seemed sure I had read the letters wrong, but we agreed that it just added to the character of the collection.

When Michael learned that the collection had come out of an old pharmacy in Stevensville, he recalled that the very famous homeopathic physician, James Tyler Kent, M.D, (1849-1916) had retired there. After having lectured in Europe and the U.S. we wondered what drew him there and also whether he was in any way associated with the pharmacy. In my second interview with Michael, I prepared by going over the transcription carefully and noting terms, uses, anything that seemed unusual or not clear to me. I tried to do my homework before calling to answer as many questions for myself by using his extensive resources and library of Eclectic Materia Medicas and manuals which he offers in a 2 CD set. It was a rich educational opportunity for me to peruse these texts seeking specific information. Culbreth, Petersen, Sarye's all had something I was looking for.

In our further discussion, I asked why the value of "Cactus Grandiflorus" (*Cereus*) was listed as "doubtful". "The plant was in and out of favor for 100 years", he said. In that era, he explained, they made preparations from dried, expressed juice which is useless. It is only the preparation from the fresh plant that is useful and this preparation was widely used by the eclectics. He claimed, "It is the difference between the vitalist and mechanist approach".

Under *Capsicum*, Cayenne, it reads, "Color-red-odor-charact. & stornatatory". Michael set me straight by explaining, "Is is sternatory, s-t-e-r-n-a-t-o-r-y. Makes you sneeze." Reading it over again, I realize it serves as a warning to the pharmacist when testing the material rather than a therapeutic recommendation.

Crocus was used to treat the measles? "Yes", he said, "it was used as an alterative to stimulate eruptions". It was the idea at the time that the sooner the illness worked its way out the faster a person would get well. "The same for chickenpox," he said.

Hematoxylon, log wood's, use was listed "as a dye and as a quaniitation indicator in alkaloidal assays". He had no clue what that was and we moved on. Karaya gum from *Cochlospermum gossypium* is listed. He claimed it was an old fashioned preparation.

The listing I most wanted an explanation for was under *Ulmus,* slippery elm. Under "Use" it read "abortion, demulcent, emollient". I had looked through the manuals and did not see any such reference for abortion. Yes, he knew all about this too. "A branch of the tree was inserted into the cervix, disturbing the uterine lining as the mucilaginous inner bark softened." He explained that this is part of "women's medicine" that one finds in such older texts.

CONCLUSION

Though there are still interpretations to be made, abbreviations and terms to be understood, and language to be scrutinized, I believe that Maggie Heran's helpful research and Michael Moore's informed perspectives unlock the mystery of this collection. His analysis dates the collection to before 1920. It is not known how complete the collection is, but it certainly holds a broad selection of not only the herbs that are essential to an early pharmacy but others that place it in historical context.

Unbelievably, the very day I submitted the article to HerbalGram, I was contacted by the seller who informed me he had another carton of little boxes that included some vials with labels on them. He emailed four names he could read and said there were about 80 little boxes and 20 or so vials. He had forgotten he had them but knew that they had come out of the same old Montana Pharmacy. Would I like to purchase them? I sent the check without so much as seeing a digital photo.

Merry Lycett Harrison, RH (AHG), is a trained, clinical herbalist and a professional member of the American Herbalists Guild. She received her training in 1998 through an intensive course of study with Michael Moore of the Southwest School of Botanical Medicine and has an herbal practice in Salt Lake City. Her broad view of herbalism led her to complete the Master Gardener Program, and to also study ethnobotany at the Baca Institute of Ethnobotany and the science of essential oils at Purdue University.

HerbalGram (#55), the Journal of the American Botanical Council, and the **Journal of Utah Archaeology** (2003) have published feature articles on Merry's research on the botanical parts of a 500 year old Native American Bundle from southern Utah called the Patterson bundle. Merry has written a monthly herb column for <u>Catalyst Magazine</u>, Salt Lake's monthly magazine for health and the arts. Catalyst also ran her column, <u>Creekside</u> <u>Observer</u>, about the wild and natural world surrounding her home on Millcreek. She has been a guest on radio and television programs that inform the public about botanical medicine.

She teaches classes in medicinal and culinary herbs, herb gardening, and leads summertime herb trips in the wild. She was a faculty member of <u>the Myotherapy</u> <u>College of Utah</u> and taught classes through <u>Utah's Red Butte Garden</u>, the Utah Museum of Natural History and the <u>University of Utah</u>. Merry currently teaches classes through the <u>Granite Peaks Community Education program</u>.

You can learn more about the use of herbs, the history of herbal medicine and Merry's research by visiting the Millcreek Herbs website at: www.millcreekherbs.com