

## Factsheet: Medical Objects in Social History Collections

Dealing with medical equipment in social history collections can be quite challenging but the objects represent the richness of the history of health and medicine and an opportunity to engage in many different aspects of history of medicine, science, industry and local history. This factsheet will discuss some of the objects that are commonly found in social history collections, resources for identification and suggestions for further reading.

Much has been written on the history of medicine and there are also plenty of alternative resources to draw on, including medical museums, individual collectors and enthusiasts, as well as the Subject Specialist Network UK Medical Collections Group. Some trade catalogues have been digitised and made available online or are accessible in various libraries, museums and archives and these can help with identifying and dating objects. Contemporary handbooks can also help with identifying objects and understanding practices – Including guides for pharmacists such as *Pharmacy, Materia Medica and Therapeutics* (Bailliere, Tindall and Cox 1923) or medical dictionaries and vocabularies such as *Hadden's Pocket Vocabulary of Medical Terms* (Hadden, Best & Co 1906) by Henry Payne MD.

### Resources for history of medicine and object identification:

- UK Medical Collections Group, a Subject Specialist Network: <http://www.thackraymedicalmuseum.co.uk/library-resources/uk-medical-collections-group/>
- Porter, Roy *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present* Harper Collins 1997
- Science Museum history of medicine pages: [www.sciencemuseum.org.uk/broughttolife](http://www.sciencemuseum.org.uk/broughttolife)
- Royal Pharmaceutical Society Museum information sheets: <http://www.rpharms.com/learning-resources/information-sheets.asp>
- Wellcome Library : <http://wellcomelibrary.org/>

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## Equipment used in blood letting



Mechanical Leech set  
Wellcome Library, London

Bleeding was used therapeutically for thousands of years. In classical medicine, bleeding a patient redressed an imbalance in the four humours (blood, phlegm, yellow bile and black bile) which were thought to influence health and wellbeing. Bleeding as a treatment persisted through changing ideas about the causes of disease and continued well into the 19<sup>th</sup> century. Many different methods of bleeding were used, and there are various objects associated with the practice, from simple blades to mechanical leeches, which enjoyed a short-lived popularity in the mid 1800s. Live leeches were also used and leech jars and boxes of various designs can be found. Dating this material can be difficult as simple designs often stay the same for

centuries. However, ceramics can be dated through type and tools, or their cases, may have a hallmark or a maker's mark which might help to identify them further through trade catalogues. Materials and decoration can also give an idea of date.



Folding lancet set with tortoiseshell case  
Wellcome Library, London

## Lancets

These small blades are the simplest bleeding apparatus, and the hardest to date. The handles can be made of various materials, including bone, wood and tortoiseshell, and these folding sets in cases are commonly found. They are also found as part of a surgeon's portable kit, usually in a leather roll. The lancet would be used to make an incision and blood would be collected, measured and examined visually in a small bowl.



Folding fleam set  
St Albans Museums

## Fleams

Fleams are folding sets of blades for veterinary use. The leaf-shaped blade would be held over a vein on the animal and hit with a fleam stick, a small wooden club, to create a quick and clean incision. Smaller fleams were probably used on humans, without the aid of the fleam stick.



Pewter bleeding bowl  
Wellcome Library, London

### Bleeding bowl

Bleeding bowls were used to catch blood after an incision had been made. They can be marked with volumes, as in this example, to show how much blood is being let. Bleeding bowls were made in various materials including ceramic, metal and glass. Material and decoration can give an idea of date, as can any maker's mark.

### Cupping set

Cupping could be used as a treatment in itself or to aid blood letting. Scarificators were used from around 1700. They are brass instruments that contain several blades on a spring mechanism. When held over the skin and activated they create many small cuts. A heated cup was then placed over the incisions which cooled to create suction and draw blood from the wounds. Cupping could also be used without creating an incision. This is still practised in Traditional Chinese Medicine and other alternative therapies today.



Cupping set with scarificator 1860-1875  
Wellcome Library, London

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### Pharmacy equipment

During the Victorian period pharmacy was a growth area. Pharmacists made prescriptions up to order. They also conducted their own experiments and developed new products and new ways of administering medicine, as well as giving some treatment on their premises. New ways of administering medicines came about as new equipment was developed for production, lots of which can be found in social history collections today.



Pill machine (pill roller/pill cutter)  
Wellcome Library, London

### Pill making equipment

Pill machines were first used in Germany, from around 1750. A pharmacist would prepare a 'pill mass' with a pestle and mortar using a mixture of the dry active ingredients and a binding ingredient such as glucose syrup. This stiff paste would be hand-rolled into an even length which was then placed along slots on the pill machine. By rolling using the slotted roller this length was divided into equal pieces. The small equal sections would then be shaped using a pill rounder. This small, flat, circular wooden tool, which resembles a drinks coaster, would be held in the hand and rolled, with little pressure, in a figure of eight motion over these pieces until they were spherical. The pills could then be dried and coated.

The dry pills could be coated in varnish or talcum powder. Exceptionally, pills were coated in silver or gold leaf using a pill silverer, a hand held spherical container of turned wood. The leaf would be placed in the pill silverer, the pills added and the lid placed on top. This would then be gently rotated by hand and the pills would be coated in silver or gold leaf. Tablets, which were made in moulds and compressed, replaced pills gradually from the late 1800s.

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Pessary moulds  
Wellcome Library London

### Suppositories and pessaries

Suppositories and pessaries had been used for thousands of years but became popular during the Victorian period. These two piece brass moulds, and the similar suppository moulds, were used in a pharmacy to make pessaries of the correct shape for insertion. The active ingredient was mixed in to a melted oil or fat 'base' which was then poured into the mould and allowed to cool and set. The base would melt at body temperature. Once the mixture was set the mould was released and the suppositories packaged for use.

### Powder folder

This is another tool for a pharmacist to use in the preparation of a prescription. Dry, powdered medicines were prepared in bulk and then divided into individual doses to be added to water when taken. Each dose was wrapped in a neatly folded piece of paper and then boxed. These powder folders are usually cast metal, about 15cm in height, and have adjustable arms which could be set to ensure that each paper 'wrap' was the same size.



Powder folder

### Resources and further reading for pharmacy history and equipment

- Royal Pharmaceutical Society Museum information sheets: <http://www.rpharms.com/learning-resources/information-sheets.asp>
- WA Jackson *The Victorian Chemist and Druggist* Shire 2005



## Factsheet: Medical Objects in Social History Collections



Vaccination points  
Wellcome Library, London

### Vaccination points

Smallpox inoculation uses diseased material from smallpox itself to induce a mild attack of the disease. It was practised in Africa, India and China long before the 18<sup>th</sup> century when travellers from Europe encountered and wrote about it. The writer Lady Mary Wortley Montague (1689 - 1762) saw the practise while living in Istanbul. She had contracted smallpox in 1715 and survived but later lost her brother to the disease. Lady Montague had her son inoculated in 1718, and when she returned to London she had her small daughter inoculated in front of the physician to the Royal Court in 1721. Inoculation started to come into regular practise but was risky, 2-3% of people inoculated would die of the disease.

Later, in the 1790s, Edward Jenner famously conducted experiments in vaccination, where less dangerous cowpox material was used to give immunity from smallpox. This research paved the way for vaccination against other diseases.

These small ivory blades were covered in lymph from pustules on a person suffering from cowpox. The material would then be scratched in to the skin or inserted into a small incision.

### Further reading for vaccination history

- Stefan Riedel *Edward Jenner and the History of Smallpox and Vaccination* Baylor University Medical Centre proceedings (Volume 18 Number 1)
- Lewis Melville *Lady Mary Wortley Montague – Her Life and Letters*



Dr Nelson's Inhaler  
Wellcome Library, London

### Dr Nelson's Inhaler

The Nelson Inhaler was made by S Maw & Son from 1865 and became the most popular brand, though many similar inhalers were available.

Inhalation therapy for respiratory illness has a long history. It is a fast and efficient way to get a drug into the lungs. This steam inhaler was designed to be half-filled with a mixture of boiling water and one of several accepted treatments of the period. The large cork with a glass or metal mouthpiece was placed in the top once the inhaler was half-full. The medicated steam was then inhaled through the glass tube. The spout at the side meant that air could flow through and the vapours could be effectively inhaled. In the Victorian period a session of inhalation therapy could be administered by a pharmacist in a shop, and was also widely practised at home for a variety of ailments that could affect the respiratory system.

### Resources and further reading for inhalation therapy

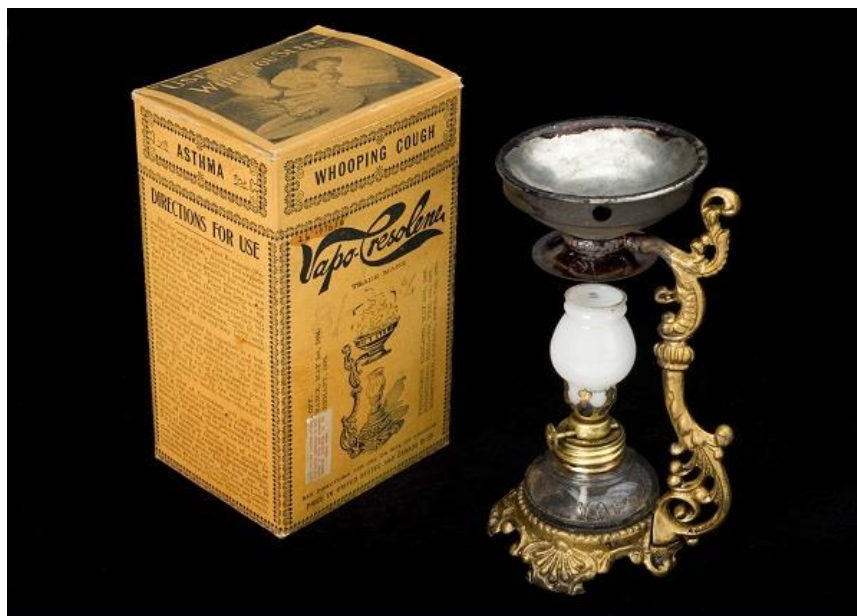
- *Inhalation Therapy: An Historical Review* in the Primary Care Respiratory Journal ([www.thepcrj.org](http://www.thepcrj.org)) by Mark Sanders
- Mark Sanders' website of associated objects at: [www.inhalatorium.com](http://www.inhalatorium.com).

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### Antiseptic diffusers

In the late 19<sup>th</sup> century the germ theory of disease was generally accepted by the medical profession and public alike. Since Joseph Lister's (1827-1912) initial experiments with antiseptics in the 1860s, many domestic antiseptic diffusers had become available. The Vapo-Cresolene lamp was produced from 1875 and became the most common brand, manufactured into the 1950s.

Early packaging specifically cites germ theory and the product is recommended for diphtheria, whooping cough and bronchitis, which were common illnesses until well into the 20<sup>th</sup> century. The bowl at the top was filled with Vapo-Cresolene liquid, an antiseptic, and the lamp underneath was filled with paraffin and lit. Instructions were to leave the lamp burning at a patient's bed side all night. The warming fumes would penetrate the room, breathed in by the patient as a form of inhalation therapy and it was also claimed to disinfect the space. The main ingredient in Vapo-Cresolene was Cresol, a derivative of coal tar.



Vapo-Cresolene Lamp  
Wellcome Library, London

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### Drug jars and containers

There are a huge variety of medicine containers in social history collections. They include ceramic or glass containers for storage by an apothecary or pharmacist in a shop and bottles, jars and boxes used by patients to take home a prescription. Earlier examples are often indistinguishable from storage containers for other purposes.



Gallipot  
Wellcome Library, London

### Gallipot

From 1600 up until about 1650 these small cylindrical jars with blue geometric decorations would be used to store drugs. The pot would be covered with parchment and secured with string to protect the contents. This term is also used for modern small plastic, metal or ceramic pots for drugs.

### Drug jars

The first *London Pharmacopoea* was published in 1618, the year after the formation of the Worshipful Society of Apothecaries. It was a list of medicines and ingredients and was an attempt at standardising drug production. As standardisation was gradually taken up drug jars started to be produced with labels. This one was used to store Caryocostin, a preparation used to treat gout.



Drug Jar  
Wellcome Library, London



Shop round  
Wellcome Library, London

### Shop rounds

In the 19<sup>th</sup> century containers were ceramic or glass. These glass containers are known as 'shop rounds' and would be used in a pharmacy to store liquid, oils and granular ingredients for preparations. They are usually clear glass, round in section, with a paper label that is either varnished on or, in later examples, incorporated into the glass. This one is labelled SP: AETHER – abbreviated Latin for spirit of ether. Poison bottles are distinguished by being green or blue ribbed glass. The shop rounds would have been kept on high shelves behind the pharmacy counter, above rows of drawers where dry ingredients were stored.



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Medicine jar  
Wellcome Library, London

### Medicine jars and pill boxes

Medicine had long been prescribed as a dry mixture which the patient would take home to brew into a dose. From the mid 1800s generally multiple doses of liquid medicine, mixed and ready to take, were bottled. In the late 1800s graduations were moulded on to bottles show dose amounts, and doses were later prescribed in teaspoons. They will sometimes have printed labels from local pharmacists, which can help to date and identify them. They often have handwritten instructions for the patient. 'Not to be taken' indicates that the medicine was for external use.



Paper pill boxes  
Wellcome Library, London

Pills, powders and suppositories were also prescribed during the 19<sup>th</sup> century. Pills were sold in these small paper pill boxes which are around 1.5 to 3.5cm in diameter. They sometimes have the name of the pharmacy or a handwritten instruction on the lid. From the mid 20<sup>th</sup> century tablets become the most common form of prescribed medicine.



Domestic medicine chest  
Wellcome Library, London

### Domestic medicine chest

These chests are often mistaken for traveling kit, but were used domestically in a wealthy home, and the contents vary as they were often made to order. They would typically contain a range of medicines and equipment, and were used alongside a variety of domestic medical advice books which became popular through the 18<sup>th</sup> and 19<sup>th</sup> centuries.

Any residual material left in medicine containers should be approached with caution.

### Resources and further reading for medical storage

- Advice for museums regarding pharmaceutical collections can be found on the Royal Pharmaceutical Society Museum website <http://www.rpharms.com/about-pharmacy/our-museum.asp>
- *Social history in museums: A Handbook for Professionals*
- The Health and Safety Executive [www.hse.gov.uk](http://www.hse.gov.uk) has advice, particularly on the control of hazardous substances
- W A Jackson *The Victorian Chemist and Druggist* Shire 2010
- JK Crellin *Medical ceramics in the Wellcome* Institute Wellcome Institute for the History of Medicine 1969

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### Surgical instruments

Surgery was very limited before the developments of anaesthesia and antiseptics. Although individual surgeons may have used anaesthetic agents, it was experiments with ether and chloroform from 1850 onwards that opened up possibilities for more complex surgery. Until this time patients would often die of shock. Early surgical equipment tends to be for amputations and relatively non-invasive procedures, such as removing lumps, although more invasive procedures such as removing bladder stones and cataract surgery did take place.



Amputation set  
Wellcome Library, London

As a general rule instruments with wooden or bone handles were no longer produced from the 1880s, by which time steam sterilisation was routine. Many instruments will carry a maker's mark and can be identified, and sometimes dated, through trade catalogues.

#### Amputation set

Amputations were only carried out only when there was no alternative option, because the risks of the surgery were so great. The procedure would involve a surgeon and several assistants and was over in a matter of minutes. Amputation kits contain various saws, knives and ligatures in a wooden box.

### Trephine

Trepanning is the therapeutic removal of a section of skull. It is one of the earliest known surgical practices. This 19<sup>th</sup> century trephine is approximately 10 cm tall. It would be rotated by hand to drill out a section of bone and relieve pressure on the skull, sometimes after a head injury. These often appear in larger surgical instrument sets along with other specialist saws for work on the skull.



Trephine c1850



Post mortem set  
Wellcome Library, London

#### Post mortem set

Post mortems were carried out from the early 1800s onwards to establish cause of death, link this to a previous diagnosis, and to observe the anatomical changes caused by disease. This kit contains a saw, various bladed instruments, chisels and a hammer. It also contains needles and thread to sew the openings up after the post mortem and prepare the body for funeral. Post mortem saws are more sloped and pointed than the similar sized amputation saws.

#### Resources and further reading

- Elisabeth Bennion *Antique Medical Instruments* University of California Press 1992
- Roy Porter *Blood and Guts: A History of Surgery* Allen Lane 2002
- David Warren *Old Medical and Dental Instruments* Shire 1999

## Factsheet: Medical Objects in Social History Collections

### Diagnostic medicine

The nineteenth century is known as the period of diagnostic medicine because physicians were using new means of examining and diagnosing patients, and drawing on the similarities in symptoms to understand disease.



Monoaural stethoscope  
St Albans Museums

### Monaural stethoscope

The stethoscope was invented in 1816 by René Laennec (1781-1826) as a way of avoiding direct contact with the patient, and was found to be a more effective form of auscultation (listening to a patient's body sounds) than direct touch. The original Laennec stethoscopes are rare. They are monaural devices (designed to be used with one ear), cylindrical turned wood with a removable conical end piece. Later monaural stethoscopes are more common, fluted in shape, and can be made from various materials. This one has a brass shaft and tortoiseshell ends. The more familiar binaural stethoscopes, which are more effective in that they mask background noise, were gradually developed and replaced monaural types from the 1850s onwards. The monaural form was retained for obstetric examination (listening to the foetal heartbeat during pregnancy).

### Laryngoscope

The Laryngoscope was another addition to a growing range of diagnostic tools developed during the 1800s. It is popularly attributed to Manuel Garcia (1805-1906), a Spanish singer and voice coach who used mirrors and natural light to view his own larynx (voice box) in 1854. There had, however, been previous attempts to view the larynx and from the mid-1800s specialists were investigating ways to use sets of mirrors and various light sources. This particular laryngoscope consists of an adjustable headband, a large mirror and several small angled mirrors. The larger mirror attaches to the headband and is worn by the physician, reflecting what natural light is available on to the subject. The smaller mirrors enable an indirect view of the larynx when held at the back of the throat. Laryngoscopes developed through the later 1800s and early 1900s, eventually incorporating a battery-powered head torch.



Laryngoscope, later 1800s  
St Albans Museums