

Newsletter AUGUST 2021

Spasm HealthCare Museum Building 6 Victoria Rd Gladesville
No 1 gate house at the Crown Street bus stop on Victoria Road Gladesville



Sadly our AGM is to be postponed again this year due to the Covid Virus. We were so looking forward to gathering on the lawn behind Building 1, but lockdown continues and we comply. The executive reports will be sent soon.

Still good things come from being at home and having not a lot to do. Our web page has been tidied up a little. We have a new membership renewal page on line **so members and public may renew or join on-line**. Our newsletters are now on-line, accessed by a code given to members & friends: <http://www.spasmmuseum.org.au/newsletters.html>

We chose not to put the code on the web site but rather provide this link for members and special friends only. This means you can now look at the newsletters in greater clarity than before, and look back to the more historical ones. Not all the newsletters are there – just a selection. Apologies to those having difficulty seeing them previously.

Last month was a time for preparing the Webinar “SPASM health Care Museum Reflections on the past present & future” Sally Sutherland Fraser has organised. It was partly filmed at the Museum by Molnlycke and is scheduled to air August 11th at 2pm from the ACORN website. Jo Douglas and her team, from Molnlycke, were so impressed with the museum that **Molnlycke has Joined the museum as a Corporate Member** so we are very pleased to welcome them as Member No 129. They are **our 3rd Corporate Members!** The NSW OTA and The NSW Nurses Association being the other 2 long term supporters.

Also a very warm **welcome to a new Life Member - Gordon Stenning** who over the years has generously donated a number of items to the museum.

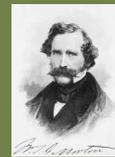
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Attendance at a Health Care Museum such as SPASM allows visitors to reflect on the past, to contrast with the present and contemplate the future



Molnlycke has been designing and supplying medical solutions since 1849

Since 1849 Molnlycke has been designing and supplying medical solutions as a textile and manufacturer supplying gauze to Swedish hospitals. – That was just 3 years after William Morton’s demonstration of “Letheon”



In 1846 William Morton demonstrated his secret substance “Letheon”

Page 2 this month features **unusual instruments** in SPASM’s collection. This very early semi flexible Cameron Gastroscope 1940-1959. A chromium plated brass scope with flexible rubber tip.



Visiting the HealthCare Museum in real time or online.

Opening hours for the Museum is normally 11 am – 3pm on the 2nd Saturday and 4th Monday of each month - February to November. **The museum is closed to the public until further notice due to Covid restrictions.**

Executive Members : President Sandra Solarz
Curator: Dr. Gary Klopfer
Secretary /Treasurer: Ros Berryman
Volunteer Guides: Val Corcoran, Kate Paton, Dr. Kerry Maroney & Peter Hartigan

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SPASM web sites at www.spasmmuseum.org.au

<https://ehive.com/account/5547>

www.discoverhuntershill.com.au/whats-on

Like us on Facebook: [Society for the Preservation of Artefacts of surgery and medicine SPASM](https://www.facebook.com/SocietyforthePreservationofArtefacts/)

Entry to the Museum takes you to another era: “of INSTRUMENTS”

When researching “Medical Instruments” on line the name that frequently comes to the screen is that of Dr. **John Kirkup FRCS (1)** Consultant Orthopaedic surgeon Bath Clinical Area, now retired, then Honorary Curator Instrument collection of The Royal College of Surgeons England. Dr. Kirkup has also written a book called **“The Evolution of Surgical Instruments An illustrated history from ancient times to the twentieth century.”** A review of this book discusses “the heart” of the book which relates to the “Materials structure and form” of various instruments. It states “Relations between instrument construction and the discovery of new materials are well-grounded. Cast steel in the eighteenth century created finer and sharper knives that improved surgical techniques; traction equipment, portable urinals and catheters were a few of the items developed using hard rubber in the nineteenth century; and the production of stainless steel alloys around 1916 permitted the creation of non-rusting scissors and forceps, even though use of the steel increased costs between 30 and 50 per cent.”



This small replica of unusual ancient instruments was donated to SPASM depicting
:
Bronze Scalpel from Babylon 1700BC.
Knife from Egypt used for removal of tumors 1300BC
Trephination drill 18th C Europe
Metal Forceps Arabic 10th C
Hatchet used for trephination in Peru Inca 1200 AD

HOW INSTRUMENTS WERE MADE

This article is taken (with permission) from a blog written in 2009 by Elaine Duigenan who worked at the College of Surgeons in England on an exhibition (2) “Armamentaria”. She wrote: “Internet wandering throws up some fascinating insights...Was actually researching on how steel is being used from old railway lines for the manufacturing of tools but came across the following.”

“The facts: Instruments are manufactured in Russia from steel sheets imported from Germany. In Russia, the steel sheets undergo a process of **approximately 60 steps** to result in the finished surgical instruments. First the steel sheets are shipped to one manufacturer who **cuts** the sheets into “ribbon shapes”, **anneals** the steel by means of heating and cooling process to strengthen the steels ribbons **forges** the steel into a rough shape by heating and hammering the annealed steel, and **trims** the rough shapes of any excess material remaining from the forging.

The steel shapes are then shipped to another Russian manufacturer where they are made into finished surgical instruments. The shaped steel pieces are first rough-polished by means of a **six step polishing process** that includes removing the oxidized steel, Then the pieces undergo **six different machining steps** that include cutting the steel into more refined, jointed pieces, and cutting “teeth” into the ratchet area of each instrument, Next the jointed pieces are assembled by means of a **nine step process**, and **set** (i.e. aligning the jaws and handles). The assembled articles are then **polished** by sandblasting them with glass beads, **washed** to remove the sandblast material, and **set again** (to re-align the jaws after undergoing the sandblasting) Finally the instruments are **heat treated** to attain the desired hardness, given a final finish, and put through a **passivation process**.” The passivation process chemically removes impurities by putting the instruments through **nine different rinses** and dipping them in acid to **seal the steel**. Lastly, the instruments are **labeled, inspected and packed** for shipment. The finished surgical instruments will then be shipped to the U.S.”



Thermal sterilization of instruments, began between 1885 and 1910. It was very destructive to equipment that had **ebony**, ivory and tortoiseshell handles.

Items such as this pocket lancet set with tortoiseshell handles and silver case were made obsolete following the age of antiseptics & asepsis.



By 1925 Stainless steel replaced all other metals except silver for tracheostomy tubes and probes. Alloys and titanium are used for prosthesis retained in the body.



Softer, sterile, disposable, synthetic PVC tubes generally replaced reusable silver/metal tracheostomy tubes. The older Non PVC tubes require special adapters to connect to a ventilator in a critical care environment.



Due to non-invasive techniques, as less open surgery is performed, fewer general instruments will be required. Power tools have replaced many hand held instruments.

Research Question: What is Ebony? Why was it used? SEND YOUR ANSWER to us at SPASM for a chance to be published in the next newsletter

Certainly these cross action towel clips and the smaller Spencer Wells artery forceps (with screw joints) have been replaced by alternate styles of instruments better suited to modern requirements.

Many instruments have become redundant as disposable equipment is routinely preferred due to lower reprocessing costs, leaving hospitals with a plethora of once useful instruments languishing in cupboards

Corporate Members of SPASM
NSW OTA.
NSW Nurses Association
Molnlycke



Founded by Prof Ross Holland AM 1928-2017

REFERENCES
(1)<https://www.historyofscience.com/norman-publishing/instruments/kirkup.php>
(2) <https://armamentaria.wordpress.com>