# History 3 - New Medical Building to Osler's Departure

# **Summary of Topics**

- 15. Move to the New Medical Building on the University Campus (1872) p 1
- 16. A Brief History of Light Microscopy p 7
- 17. William Osler (McGill: 1874-1884) p 14
- 18. Osler's Introduction of Laboratory Teaching in Histology p 17
- 19. Osler's Departure from McGill (1884) p 20

# 15. Move to the New Medical Building on the University Campus (1872)

By the 1860's, with increased enrollment, space in the downtown Côté Street building had become inadequate, and a new medical building was urgently needed. Enrollment had increased from 69 in 1851 to 184 in 1866 Hanaway 1: 37. By this time, the city of Montreal had expanded westward and roads had improved. Thus a return of the medical school to the McGill campus was now feasible in terms of transportation. Money was raised by the sale of Burnside Hall, and with these funds, a new excellent medical building was completed in 1872. This was located where the James Administration Building now stands. At a cost of \$27,000, this impressive structure had well equipped class rooms and laboratories, and most importantly, room for further expansion of its facilities to the north Hanaway 1:49, Frost 1:282.



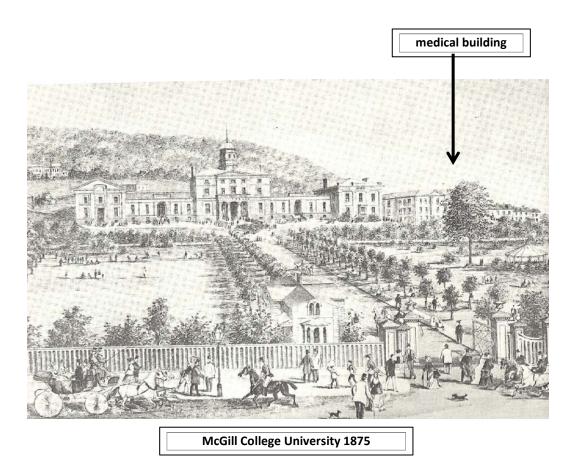
Original Building (1872)

Medical Building in 1890

From: Hanaway 1: 66



From: Osler's Montreal

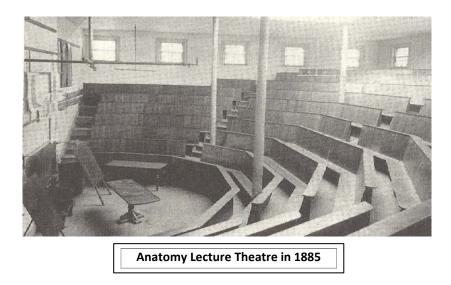


# From: Frost 1: 236

This Medical Building had a beautiful medical museum and student labs for Anatomy, and Histology. The top floor was reserved for Anatomy.



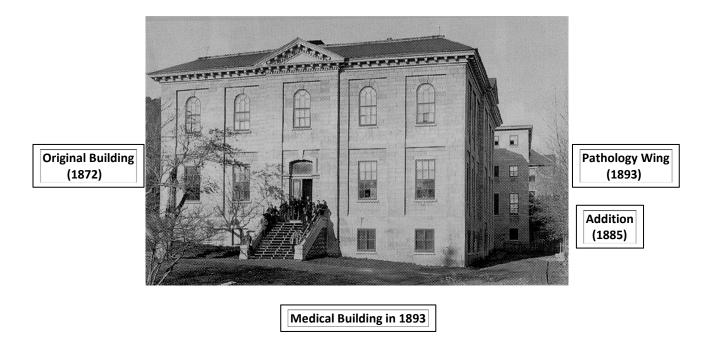
From: Hanaway 2: 13



From: Hanaway 2: 38

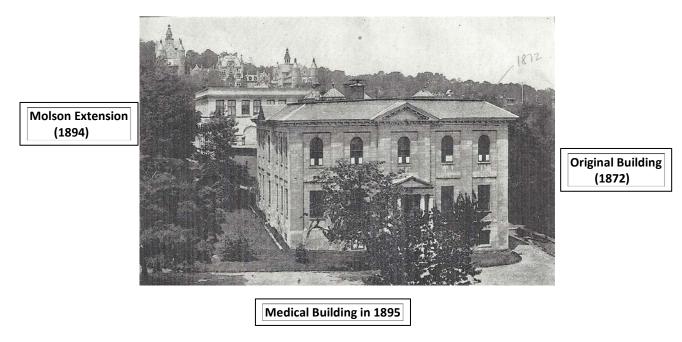
As anticipated, with rapidly increasing medical class sizes, this new space became inadequate, and in the subsequent years, the Medical building was dramatically enlarged in stages:

- 1) In 1885, a small new addition was built to the north.
- 2) In 1893, an existing nearby building to the east was converted into a Pathology Wing.



From: Osler's Montreal

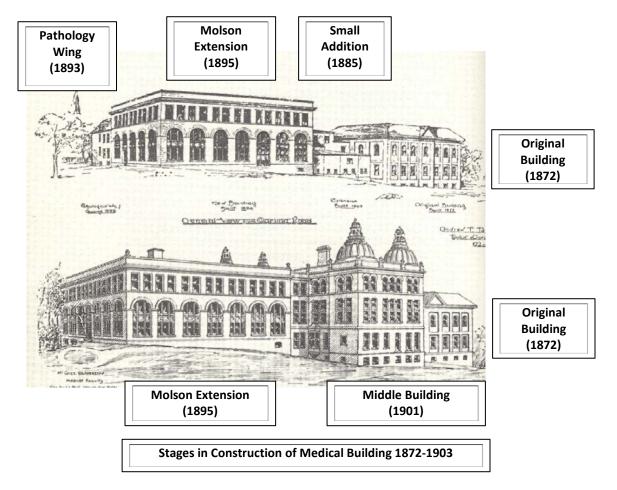
3) In 1894, a large new Molson Extension was added. This was attached to the Pathology Wing and the 1885 addition on the south. This Molson extension, contained two large lecture theatres and two large labs for Physiology, Pharmacology, and Biochemistry <sup>Hanaway 2:37- 41; Frost 2:11</sup>.



From: McGill University Calendar 1901-1902: 244

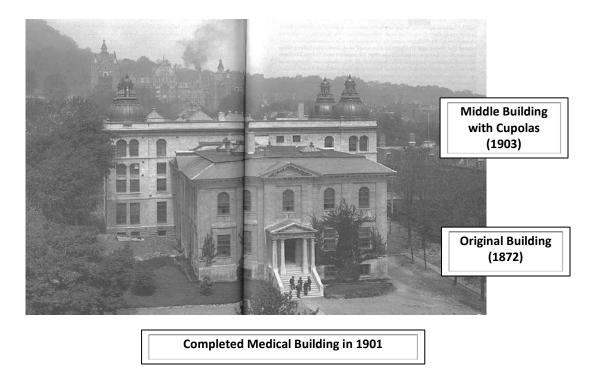
4) Still more space became needed in 1898 when the number of students in the four years of the program exceeded 400. At a faculty dinner, Lord Strathcona donated a further \$100,000, upon

which the students stood on their chairs and sang "For He's a Jolly Good Fellow" Frost 2:11! With this money, the small 1885 addition was replaced by a large new building with two wings, each with two handsome cupolas on its roof. This was completed in 1901.



[seen from north-west view (Dr. Penfield Avenue)]

From: Frost 2: 12



#### From: Hanaway 2: 44-45

The new medical complex now contained four lecture theatres – three for 250 students one for 450 <sup>How:163;</sup> <sup>Hanaway 2:43</sup>. One theatre was a specially built anatomical theatre similar to those in Europe. The whole structure, in its completed form, had a remarkably unified appearance, and Maude Abbott fondly called it "our faculty's pride and joy" <sup>Hanaway 2:43; Frost 2:1</sup>.

# 16. A Brief History of Light Microscopy

At the time of the McGill Medical School's founding (1829), microscopic investigation was still in its early stages, and the cell doctrine of Schleiden and Schwann (1838) was yet to be postulated. In these early years, the students' exposure to microscopic structure had been very limited.

Primitive microscopes has been around for some 150 years but it was only with the advent of scientific medicine and the development of better microscopes that investigation went into high gear.

The history of light microscopy is fascinating and it is worthwhile to review some of its highlights.

As mentioned previously, the two important fields which were opened to beginning scientific medical investigation in the 1600's were physiology (with the work of Harvey) and microscopic anatomy.

By the end of the 1500's most of the obvious features in the human body visible with the naked eye had been recognized and described. Many mysteries remained, however. For example, in the case of the circulation of blood, it was completely unclear how blood was transferred from the systemic arteries of the body to the veins. Harvey, in 1628, could not discern with the naked eye whether or not the blood remained in ever smaller blood vessels or passed into undescribed "pores and cavities" in the tissues en route <sup>Ack:115</sup>. Virtually nothing was known about the minute structure of these tissues. It was felt they might be composed of some sort of continuous spongy matrix <sup>Knight: 118</sup>.

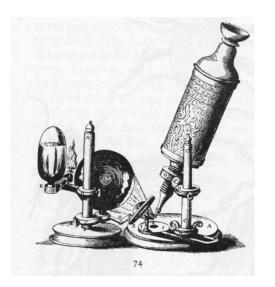
We now know that the smallest particle that the naked eye can distinguish is about 100  $\mu$ m in diameter. A typical animal cell is 10-20  $\mu$ m in diameter, and therefore invisible to the naked eye.

For further progress, some new investigative tool was needed, and this came with the development of magnifying lenses which, used in combination, would reveal a whole new world of anatomical structure.

It had been known since antiquity that a glass sphere could make objects look larger <sup>Singer Biol: 146</sup>. Nero had used a concave-shaped emerald to observe gladiatorial combats <sup>Pau: 34; Knight: 108</sup>. By the end of the 1400's, reading spectacles with convex and concave lenses were a familiar sight in Europe <sup>Singer Biol: 146; Knight: 108</sup>.

At the beginning of the 1600's, a Dutch spectacle maker, Zacharias Jannsen, assembled together a convex and concave lens in a tube, and presented it as a gift to his friend Galileo <sup>Knight: 126</sup>. This device constituted what became known as a "Galilean telescope". Galileo almost immediately turned his telescope to the stars, and, in 1610, published his great astronomical work "The Starry Messenger" recording for the first time the mountains of the moon, the rings of Saturn and the four satellites of Jupiter!

Viewed through the other end, this same device became the "compound" light microscope. Just as Galileo's telescope changed the face of astronomy, the light microscope, was to dramatically change the whole course of biological science.



Hooke's compound microscope, 1664

8

From Knight p 126

We now know that when any given radiation is used to examine a structure, one cannot discern details much smaller than the wave length of that radiation. Thus, in a modern light microscope, the resolving power (the smallest separating distance at which two objects appear distinct from one another) is limited by the wave length of visible light. This limitation occurs because the interaction of light with an object changes the phase relationships of the light waves in a way that produces complex interference effects. Because of these optical diffraction effects, a single point object seen through a microscope appears as a blurred disc, and two objects close together give overlapping images such that they may not be resolved from one another. The wave length of visible light ranges from about 0.4  $\mu$ m (violet) to 0.7  $\mu$ m (red). Therefore under the best conditions, using violet light, a light microscope can theoretically achieve a resolving power of about 0.2  $\mu$ m, or 200 nm (i.e. about 1/100<sup>th</sup> of the diameter of a large cell <sup>Alberts: 530</sup>.

Such a resolution was not obtainable in the early microscopes however: The resolution was seriously limited by chromatic aberration which was caused by refraction of the lenses. When an object was observed at a high magnification, the fine detail was blurred and appeared as a collection of colored fringes.

In spite of these difficulties, microscopes were used in the mid-1600's by a number of enthusiastic investigators, and many important discoveries were made.

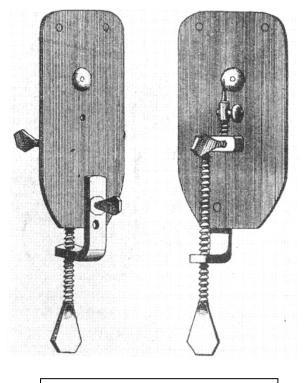
One of these investigators was the Italian anatomist, Marcello Malpighi, who used the light microscope to solve the great mystery of the circulatory system mentioned above, i.e. the route taken by the blood in travelling from the arteries of the body to the veins. In 1660, forty years after the studies of Harvey, Malpighi observed the flow of blood through capillary vessels in the lung of a living frog, thus finally revealing the secret route from arteries to veins <sup>Persaud 2:70; Ack: 115, 118; Singer Biol: 153</sup>. In addition to this important discovery, Malpighi also reported to the Royal Society the first microscopic studies of the lung, liver, kidney, and skin <sup>Pau 34; Persaud 2:227; SingerBiol:152</sup>.

A different approach to light microscopy came in 1668 when the Dutch investigator Leeuwenhoek used a "simple" microscope consisting of a single spherical glass lens to give a high magnification of almost 300 times. The lens was mounted in a hole in the middle of a small metal plate. The plate was then held very close to the eye, and the specimen, mounted on the tip of a pin-like holder was observed through the hole. With such a high magnifying power, the area of clear field became very small, and the instrument was much more difficult to use than a compound microscope. Remarkably, even with this simple instrument, Leeuwenhoek was able to observe and describe red blood cells, striations in skeletal muscle, several types of protozoa,

and even five types of bacteria. Perhaps his greatest achievement was the first observation and depiction of spermatozoa. Pau:34; Ack:118!



From: Persaud 2: 228



Antoni van Leeuwenhoek's Microscope

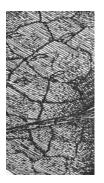
From: Persaud 2: 229

The beginnings of our knowledge of "cell biology" came with the pioneering study of Robert Hooke who discovered the first indication of the cellular nature of tissues. In 1665, he examined very thin sections of cork and described regular honeycomb-like structures which he called "cells" Ack:118; Persaud 2:227; SingerBiol:329. Hooke was actually looking at the thickened cell walls of dead plant cells, but he also observed similar small compartments on the surface of living plants. This discovery was followed two years later by the observation of cells in thin sections of living plants by Marcello Malpighi Singer Biol:154.



cell walls in cork

Drawings of Hooke (1665)



cell walls in surface of a leaf Drawings of Hooke (1665)

For the next 150 years, light microscopic investigations were limited by the chromatic aberration of the early compound microscopes available. During the early 1800's, however, the instrument was dramatically improved by making composite lenses consisting of two types of glass with different indices of refraction. These were arranged such that one lens would cancel out most of the chromatic aberrations produced by the other lens. The result was called an "achromatic" lens, and the image appeared much sharper <sup>Pau 35; Singer Biol: 173</sup>.

In 1805, for the first time vegetable cells were teased apart and shown to be individual units <sup>Knight:</sup> <sup>120</sup>. In 1838, Matthias Schleiden, a botanist at Jena, postulated that the cell was the basic unit of all plants <sup>Singer Biol:334</sup>. After meeting with Schleiden, the German anatomist, Theodor Schwann, recognized that animals were also made up of cells, and declared that "entire animals and plants are aggregates of cells or their products" <sup>Pau 36; Ack: 159; Hae:179; Persaud 2:228; Singer Biol: 336</sup>. This "cell doctrine", published in 1838, marked the formal birth of cell biology.

A final improvement in microscope design came in 1886 when the Zeiss optical works in Germany began making lenses consisting of an entirely new type of glass. These "apochromatic" lenses had considerably better resolution than the previous "achromatic" lenses. Even better resolution was achieved using substage illumination <sup>Singer Biol: 173</sup>. With this system, and oil-immersion lenses, the resolution of light microscopes finally approached their theoretical limit of 0.2  $\mu$ m (200 nm).

Another great challenge in microscopic investigation, however, was posed by the preparation of the biological samples to be examined. Even today, the results obtained in microscopic investigation depend as much on the techniques for preparing the specimen as on the performance of the microscope.

One initial difficulty was in light penetration. This was not a problem for unicellular organisms or blood tissues which could simply be placed on a glass slide and examined under a microscope. Most other tissues, however, were too thick for light to penetrate <sup>Ack: 160</sup>. These needed to be

teased apart, or, better still, cut into thin sections. The solution to the problem of obtaining thin sections was provided by the invention of the microtome by Wilhelm His in 1870 <sup>Ack: 159</sup>.

Two other problems were encountered in terms of section thickness and quality: 1) the tissue was frequently too soft to be easily cut into thin sections, and 2) the tissue biologically deteriorated over time. Both of these problems were addressed by the introduction of fixative chemicals. These included alcohol (1743) and osmium tetroxide (1864). Formaldehyde had not yet been discovered, and was introduced only in 1892. These fixatives not only preserved specimens for long-term examination. They also stiffened the specimens such that they could be cut more easily into thin sections.

Making very thin sections of tissues, however, required further hardening. This was achieved in 1879 by infiltration of the tissue with liquid paraffin at high temperature. This subsequently hardened upon cooling. This paraffin-embedded tissue could then be cut with a microtome to produce sections averaging 1-2  $\mu$ m in thickness.

A special difficulty was encountered in calcified tissues such as bone or teeth in which the extracellular material was too hard to be sectioned with a microtome. To facilitate these studies, Hershey Warshawsky in our Department developed a classic technique for the decalcification of hard tissues in 1967. This technique, using EDTA is used world-wide today.

Having solved the problem of light penetration, the early microscopists encountered a new problem, i.e. the visualization of components in the cells. Since animal cells are mostly colorless and translucent, their internal structures tended to be almost invisible. Thus it was necessary to develop a variety of stains to make these structures stand out. Basic fuchsin stain was introduced in 1863 and hematoxylin in 1865 <sup>Pau:37</sup>.

With the use of stains, investigators began to identify specific organelles within cells. Nuclei and nucleoi were observed in animal cells by Felix Fontana as early as 1781 <sup>Knight:119</sup>. They were observed in plant cells by Robert Brown in 1833 <sup>Pau 35</sup>, and mitosis was described by Walter Flemming in1882 <sup>Knight: 123</sup>.

In the cytoplasm, Richard Altman observed mitochondria in 1890, originally calling them "bioblasts" <sup>Pau 38.</sup> In 1899, Garnier discovered cytoplasmic material which stained with hematoxylin in the same manner as the chromatin in the nucleus. We now know that this stain has an affinity for negatively charged molecules and therefore reveals the presence of DNA, RNA and acidic proteins within cells. Garnier suspected that this material played an important role in secretion and named it "ergastoplasm" <sup>Pau: 38</sup>.

In 1896, the Italian histologist, Camillo Golgi, observed a network of threads in the cytoplasm around the nucleus when nerve cells were stained with silver nitrate <sup>Knight: 94,125</sup>. He called this

organelle the "reticular apparatus", but with time, it came to be known as the "Golgi apparatus", one of the only eponyms (i.e. a structure named after a person) in cell biology. The silver nitrate staining method which Golgi used was very capricious! In fact, the Spanish histologist, Ramon y Cajal, had observed the same apparatus in nerve cells of the cerebrum immersed in potassium bichromate-gold chloride solution, but had never published the observation. When asked the reason some years later, Cajal replied: "Well, the confounded reaction never appeared again" Ramon y Cajal, 1939. Both Golgi and Cajal were brilliant scientists who shared the 1906 Nobel Prize for their work on the nervous system.

Over the next 40 years, over 2,200 light microscopic papers described the Golgi apparatus in the majority of all cell types as a network of plates and threads. There was no understanding of its true nature, however, and there was, in fact, considerable debate as to whether or not the apparatus was even real. As late as 1949, George Palade (winner of the 1976 Nobel Prize for his work in cell biology) speculated that the Golgi apparatus was just an artifact of the preparation methods used at the time.

Thus, with the light microscope, the actual structure of the Golgi apparatus remained unclear, and its true nature only became known with the application of the electron microscope as described later in this work.

(For more recent developments in light microcopy see 'The New Light Microscopy: Confocal Fluorescence and STED Microscopy.)

# 17. William Osler (McGill: 1874-1884)

If Sir William Dawson may be considered the father of McGill University, then Sir William Osler is undoubtedly its most outstanding medical graduate and its best known faculty member.

When Osler joined McGill in 1874, major challenges were facing the university's medical school. These included a serious lack of underfunding, a faculty consisting of part-time members whose livelihood depended on the practice of Medicine and Surgery, teaching appointments which made on the basis of seniority rather than qualifications, lack of interest in scientific medical education, little interest in pathology and its teaching, and nonexistence of research at all levels Hanaway 1:50.

Osler was the first in a wave of four young McGill medical graduates who had recently received undertaken further training in Europe and brought needed reform to the university. These men, William Osler, Francis Shepherd, George Ross, and Thomas Roddick, with prodigious energy and modern thinking in their subject areas, brought about the fundamental changes needed in the McGill medical education system Hanaway1: xxiii.



From: Hanaway 1: 67

Osler had initially come to McGill as a medical student from the frontier area of Upper Canada (Ontario) north of Toronto Hanaway 1:179; Ben:43. Prior to his arrival, he had attended the exclusive Trinity College School in Toronto. The dean of this School, Reverend William Johnson, an enthusiastic amateur biologist, had shown him a sample of pond scum under a microscope, and he was enthralled with the image of algae intermixed with thousands upon thousands of small animals, all alive and kicking <sup>Bliss 41</sup>. Osler started his medical studies at the Toronto School of Medicine and then transferred to McGill, attracted by its Anatomy course. By the time he arrived at McGill in 1870, he had become an accomplished microscopist with a passion for nature studies.



William Osler Francis Shepherd George Ross

From: check

William Osler became McGill's most illustrious medical graduate in 1872. Upon graduation, Osler immediately travelled to Europe for postgraduate training, a practice becoming increasingly more common for North American medical school graduates. Here he was exposed to three major concepts which would profoundly shape his future career and philosophy.

The first concept impressed upon Osler was the importance of microscopy in the education of medical practitioners. Given his long interest in this technique, Osler went to the laboratory of John Burdon-Sanderson, a brilliant and renowned physiologist in London. Here he obtained a solid grounding in Histology and Cell Physiology. This was followed by several months of studying blood where he made one of his greatest contributions to scientific medicine, namely one of the first descriptions of platelets in the circulatory system Hanaway 1:65-66, 180.

On Burdon-Sanderson's recommendation, Osler then went to Berlin to study with the famous Berlin laboratory pathologist, Rudolf Virchow. Twelve years earlier, in 1858, Virchow had

published his famous book "Cellular Pathology" in which he formulated his theory the cell was also the ultimate unit of pathological disturbances <sup>Persaud 2: 24</sup>. From this time onwards, pathological investigation shifted from the gross to the microscopic level <sup>Ack: 166; Hae: 179; Porter: 180</sup>.

In addition to an emphasis on microscopic investigation, Virchow introduced to Osler the second concept, which, as described earlier, stressed the importance of making clinical-pathological correlations in the treatment of disease.

The third concept was impressed on Osler during a stay in Vienna in which he first saw the benefits of medical specialization Hanaway 1: 180. Since diseases could now be localized to specific anatomical organs, rather than being some vague humoral impairment of the whole body, it made sense for a physician to concentrate on the illnesses related to one organ or system of the body, i.e. a practice of specialization Ack: 145, 153. This was not yet regarded favorably by the medical faculty members at McGill. Educated in the English/Scottish tradition, they felt that a broad approach to the accepted body of knowledge was the only sound course to medical practice. Specialization was therefore considered as a compromise and a narrowing of academic focus Hanaway 1: xxii.

Seeing the results in the Viennese medical system, however, Osler came to acknowledge that no general practitioner could become competent to master and push back the frontiers of all of the different aspects of medical practice. He came to realize that specialization was "the most important single factor in the remarkable expansion of knowledge" Hanaway 1:68. In addition, the continual invention of new diagnostic instruments, such as the laryngoscope and the electrocardiograph, required specialized skills and knowledge which could only be realistically acquired by specialists in the field <sup>Porter:146</sup>.

These three concepts, the importance of microscopy, the need for clinical-pathological correlation and the importance of specialization all played a role in the return of William Osler to become a member of the McGill Medical Faculty. During Osler's stay in Europe, Robert Palmer Howard had given an introductory lecture to the McGill medical class in which he made reference to Osler's discovery of platelets. He expressed the wish that "some friend of the University would endow a Chair of Physiological and Pathological Histology and our young friend might be invited to accept the appointment and devote himself solely to the cultivation of his favorite subject" <sup>Hanaway 1:68</sup>. This position was established, and Osler became the first faculty member at McGill to be hired as a specialist on the basis of his scientific merit. In 1874, he became the new Professor of the Institutes of Medicine (Histology, Physiology, Embryology and Pathology) and also the first professor to earn his living mainly from teaching students rather than from private practice <sup>Hanaway 1:180</sup>.

# 18. Osler's Introduction of Laboratory Teaching in Histology

As mentioned above, Histology instruction in McGill's early days had been limited. For twentythree years (1849-1872), Histology had been included as a subject in the Institutes of Medicine along with Physiology, Embryology and Pathology. The professor, William Fraser, was a Scottish physician of no great ability and had no interest in laboratory instruction <sup>Hanaway 1:54</sup>. Francis Shephard later recalled that the only time he saw or used a microscope during his training at McGill was on one occasion when Thomas Roddick (then a resident at the Montreal General Hospital) demonstrated the circulation of blood in a frog's foot <sup>Hanaway 1:50</sup>.

When William Osler became Chair of the Institutes of Medicine in 1875, his first priority was to introduce practical laboratory teaching in the Histology course. There was a problem since the faculty felt that it could not afford the required microscopes. To earn the money, Osler took an extra job as an attendant in the smallpox ward of the Montreal General Hospital. This was a dangerous position since he was examining highly contagious patients and disease-ridden corpses in an age before rubber gloves, masks and gowns. In 1876, Osler himself came down with small pox but fortunately the case was not severe Hanaway 1:69; Bliss 85.

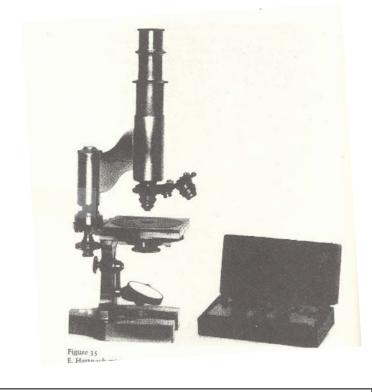
With the \$600 earned in the small pox service, Osler purchased twelve Hartnach microscopes from Paris <sup>Hanaway 1:69</sup>. These were used by students in the laboratory, accompanied by Osler's 1876 publication: "Introductory Comments and Synopsis of the Laboratory Course in the Institutes of Medicine".

In addition to the Histology laboratory sessions for the entire medical class, Osler gave an optional comprehensive course in which students learned how to use and maintain a microscope as well as how to fix, mount, section and stain tissue sections. These skills were thought to be valuable for later practice in doctors' offices which would likely have no available clinical facilities Hanaway 2:6.

According to Osler's outline, sessions in the course were as follows: Hanaway 1: 69-71.

- 1. General description of the microscope. How to clean it. How to tell its magnifying power. How to draw with it. Examination of dust, cotton fibers and air bubbles.
- 2. Protoplasm. Amoeba. White blood corpuscles.
- 3. Red blood corpuscles of frog, fish, bird and man. Hemoglobin crystals in rat's blood.
- 4. Epithelium: squamous, cylindrical, glandular and ciliated.
- 5. Connective tissues. Corpuscles, white fibrous and elastic tissues. Adiose tissues. Pigment.

- 6. Tendon, cartilage, bone and teeth.
- 7. Muscle: Voluntary and Involuntary.
- 8. Blood vessels. How to inject them.
- 9. Method of handling tissue. How to cut sections. Liver.
- 10. Lung
- 11. Alimentary lab.
- 12. Kidney
- 13. Lymphatic vessels and skin.
- 14. Nerve fibers, cells. Central organ.
- 15. Examination of sputum and vomit. Discharges from the uterus and vagina.
- 16. Pus and tubercle.
- 17. Examination of urine. Casts.
- 18. Examination of urine. Inorganic deposits.
- 19. Morbid gross. Cancer cells.
- 20. Parasites. Animal and vegetable.



Hartnach Microsocopes purchased by Osler for Teaching of Medical Histology in 1874

From: Hanaway 1: 70

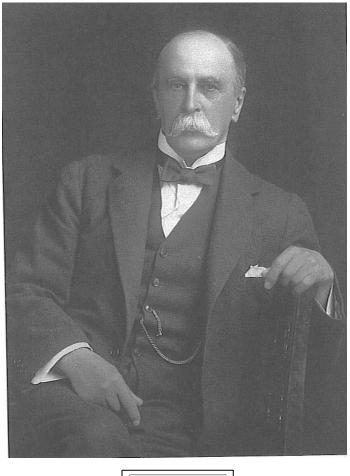
In 1881, Osler completing a manual entitled: "Students' Notes in Normal Histology", the first work of its kind in Canada. Histology was now taught in the laboratory separately from Physiology, and this began the official split between the two disciplines. Histology was now considered an anatomical science Hanaway 2:95.

In the more recent years of Histology laboratory in our Department, right up until the end of the 1900's, each student had their own microscope. This could be rented from the university but many students purchased their own instrument. This would have been a very expensive item. In class each student was loaned a box of standard microscope slides. An additional set of microscopes in a designated area of the laboratory showed special demonstrations of histological material. Pre-laboratory talks were given using lantern slide projectors which showed photographic images of histological preparations.

# 19. Osler's Departure from McGill (1884)

After ten years at McGill, Osler departed in 1884 to join the faculty at the University of Pennsylvania. Osler's main research interest was Pathology, and he wished to devote himself to the teaching the diagnosis and treatment of human diseases Hanaway 2:146. This required a professorship in Clinical Medicine, and unfortunately this position was already occupied at McGill. In addition, by this time, Osler felt that although McGill would always be an institution very beloved to him, he had achieved most of his aims here Hanaway 1:99. He also had a very strong philosophy which was summarized in the following question: Do we, as professors, not stay too long in one place? To a man of active mind, too long attachment to one college is apt to breed self-satisfaction, to narrow his outlook, to foster a local spirit, and to promote senility" Hanaway 2:81!

Thus when the opportunity presented itself, he accepted - to the great regret of all at McGill - the position of Chair of Clinical Medicine at the University of Pennsylvania, one of the top medical schools in the United States <sup>Hanaway 1:99; 181</sup>. Only a few years later, in 1889, having achieved his goals at Pennsylvania, Osler left again to become one of the founding professors of the prestigious Johns Hopkins Medical School at Baltimore. Finally, in his later years, he left Johns Hopkins to assume the Regis Professorship of Medicine at Oxford in 1904, a position which he held until his death in 1919 <sup>Hanaway 1: 182</sup>.



Sir William Osler

From: Bensley: 42

During his teaching years at McGill, Osler had left an indelible mark upon the faculty and professors <sup>Frost 1: 282</sup>. Throughout his life, he continued to communicate with McGill and to offer valuable advice. By the time of his death, Osler had accumulated one of the finest collections in the world of books and manuscripts on the History of Medicine, which he left to his alma mater. This priceless collection became the beginning of the present Osler Library which was transferred from Oxford to the Strathcona Medical Building at McGill in 1929. Located on the third floor, this library, with its elegant rooms, was described by Michael Bliss as "a mixture of shrine and mausoleum" <sup>Bliss: 491; Hanaway 2:133</sup>. In 1966, the Osler Library was moved intact to the new McIntyre Medical Building <sup>Han1:182-183; Hanaway 2:132-133</sup>. McGill also remembers Sir William Osler in its "Osler Society" with its annual lectures, as well as in handouts to students of Osler's books, and especially in the prestigious "Osler Teaching Award given by the graduating class of medical students to the teacher whom they thought contributed most to their medical training experience. Several of our Departmental members have had the honor of receiving this award.