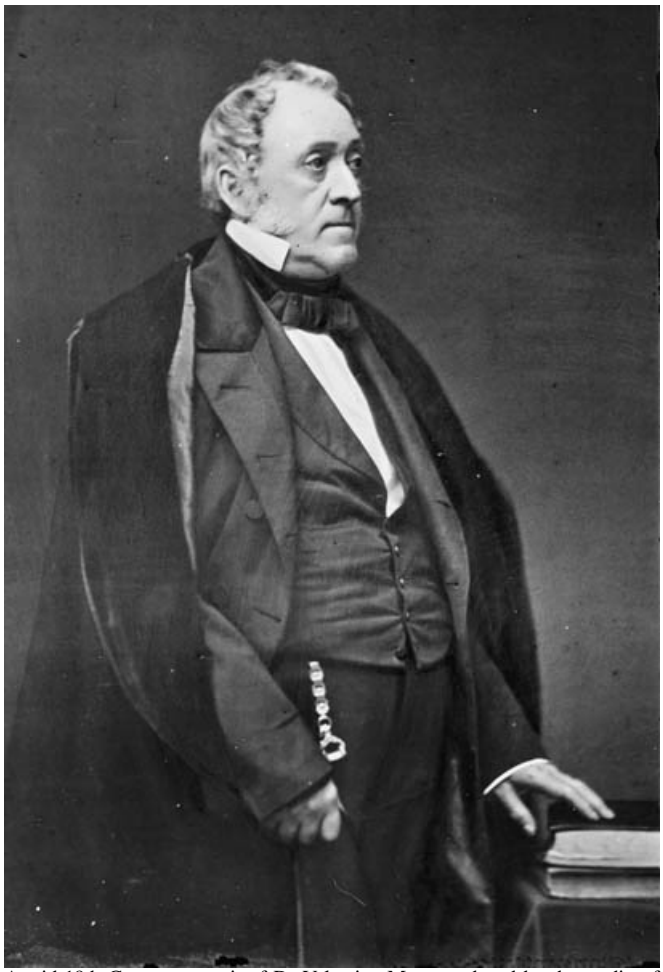
Valentine Mott, MD

One of the most famous American surgeons of the first half of the 19th Century was Dr. Valentine Mott, born in Glen Cove in 1785. His pioneering efforts in surgery, especially vascular surgery, won him international renown.

by Daniel E Russell
City Historian
City of Glen Cove, New York

The name of Dr. Valentine Mott was a household word more than a century and a half ago. Today, there are very few Glen Covers who have even heard of Dr. Mott, and even fewer who know of his scientific achievements. Mott was born in Glen Cove (then known as Mosquito Cove) in 1785, the son of local physician Henry Mott. Valentine received his early education the Glen Cove Academy, the one-room schoolhouse built in 1783.



A mid-19th Century portrait of Dr Valentine Mott, produced by the studio of the famous Civil War photographer Matthew Brady

In 1804, at the age of 19, Mott went to work in the office of his relative, Dr. Valentine Seaman, a prominent New York physician. He enrolled, in the same year, in the medical school at Columbia University. A short two years later, Mott graduated as a bona fide physician.

Dr. Mott left for London in 1807, for an additional two years of postgraduate instruction in surgery, studying under such famous men as Sir Astley Cooper, the internationally renowned anatomist. Mott showed such great potential that Cooper immediately appointed him as his assistant in surgery.

Upon his return to New York City in 1809, Mott immediately opened up an office as a surgeon. There were few patients to be found; operations were painful (anesthesia was not yet in common use) and, due to the lack of post-operative care, frequently fatal.

Mott turned, instead, to the medical school at Columbia College, where he began a highly successful lecture series on surgery and anatomy. He was appointed professor of surgery there in 1811. It was in 1818 that Dr. Valentine Mott gained an international reputation. He became the first surgeon in the world to operate on the innominate artery, a tiny vessel not more than two inches from the heart, to prevent the death of a patient from an aneurism – a life-threatening condition where the walls of a blood vessel balloon out and are at risk of bursting with fatal results. The operation was a success, but the patient died a month later of a secondary infection. The post mortem revealed that the healing processes had already been well advanced. It had been a daring operation the artery had to be ligated (tied off) to divert the circulation of blood to the other arteries. It was the first time any surgeon had attempted to use this technique on that particular artery.

During Dr. Matt's long career, he operated on the carotid artery which supplies blood to the brain 51 times, and on the femoral artery which supplies blood to the legs 57 times.

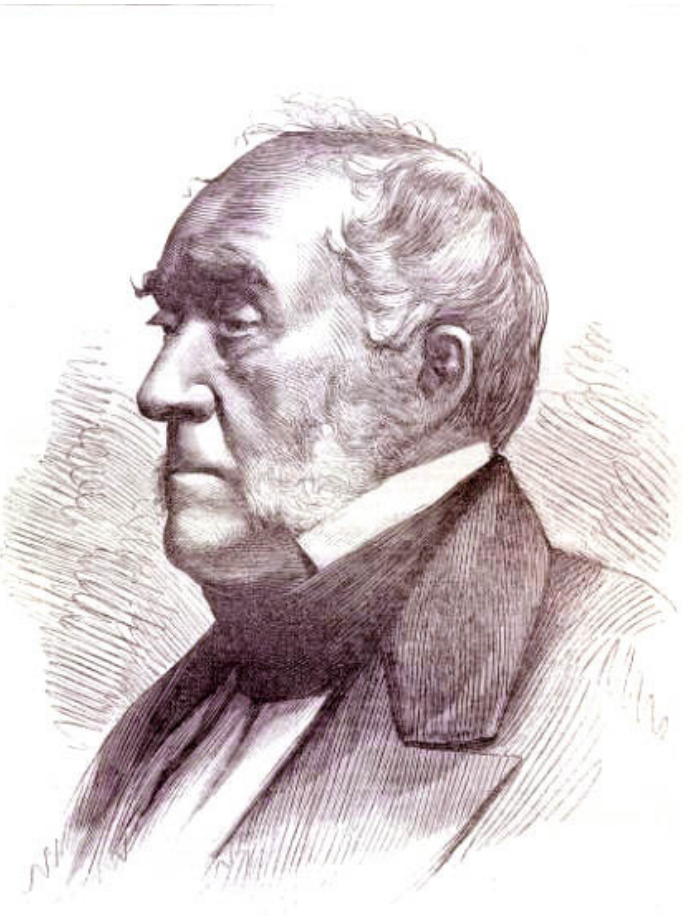
In 1827, Mott was one of the first surgeons to tie successfully the common iliac artery, located in the pelvis, and have the patient survive. In fact, the patient lived another 50 years.

According to Sir Astley Cooper, Mott's former instructor, "(Mott)... has performed more of the great operations than any man living, or that ever lived." It is reported that Mott amputated a thousand limbs in his life time, and was the second surgeon to have successfully amputated the leg at the hip joint. The fact that Mott was ambidextrous, allowing him to use both hands during an operation, added in no small degree to his surgical skill. His reputation was so widespread that he was even summoned to operate on the Sultan of Turkey.

Mott devoted a great deal of his time in bettering the medical schools in America. He was a founder and head of the New York University Medical School, of Rutgers Medical School, and the New York Academy of Medicine. He had one great disdain: the medical journals. Although he edited two professional journals in his early years, Mott published only 25 papers in his lifetime.

When the Civil War broke out, Mott, then 75 years old, placed his full services at the disposal of President Lincoln. He served as a consultant to the War Department, giving advice on the implementation of anesthesia in the battlefield hospitals.

In April, 1865, while being shaved by his barber, Mott received word of the assassination of Lincoln. Grief-stricken, the 80-year-old surgeon staggered home and died that night. He was scheduled to operate the next morning on a patient with cancer of the breast.



PAIN AND ANÆSTHETICS

by Valentine Mott, M.D.

(In an era where the use of anaesthesia was still controversial, Valentine Mott prepared an essay for the United States Sanitary Commission detailing the surgical use of anaesthetics (ether and chloroform) by military surgeons. This is his introduction)

Among the many improvements which characterize modern surgery, one of the most invaluable is the introduction of Anæsthetics. That we should be enabled safely and conveniently to place the human system in such a state, that the most painful operations may be performed without consciousness, is to have secured to man immunity from what he most dreads; for most men fear pain even more than death. When seeking death by suicide, the instinctive aversion to pain is apt to govern in the choice of means, and the person generally selects the method which he imagines will inflict upon him the least suffering.

Pain humbles the proudest and subdues the strongest. It was the great agent of the Spanish inquisition, because it was more effective to extort confession than death itself. It was pain that made Cæsar weep; and I have seen the most heroic and stout-hearted men shed tears like a child, when enduring the anguish of neuralgia. As in a powerful engine when the director turns some little key, and the monster is at once aroused, and plunges along the pathway, screaming and breathing forth flames in the majesty of his power, so the hero of a hundred battles, if perchance a filament of nerve is compressed, is seized with spasms, and struggles to escape the unendurable agony. We have then this, the first reason for the use of anæsthetics:-

To prevent pain is humane. No gentlemen, not to say Christian, would needlessly inflict pain on any creature. It was, indeed, a certain kind of humanity which led the Athenians to execute Socrates by means of a narcotic draught, and which also made the Romans give their malefactors, during crucifixion, drugged wine. Even the guillotine had its conception in a kind of humane sentiment. Only savages inflict upon their victims the horrors of torture. And I do not believe that there is a surgeon of the nineteenth century who would willingly inflict any unnecessary pain in his operations if once practically acquainted with the means of prevention, and once confident and facile in their use.

But, secondly: Pain is useless to the pained. So Galen said centuries ago, and so the late discussions of the question of anæsthesia have abundantly proved; and if any members of the medical profession still entertain the idea that pain may have some occult, mysterious use, with which it would be dangerous to dispense, we must remember that the general sentiment of our profession, together with the common sense of mankind, is now unquestionably far in the advance.

The torment of toothache and the griping of colic confer no benefit on the sufferers; and all experience proves that the step proper to be taken first in the cure of these diseases is to relieve the pain.

When the pain produced by a surgical operation, or by any other injury, is excessive, the exhaustion is greater, reaction comes on more slowly, the subsequent process of restoration is delayed, and the tendency to depression is increased. The practice of applying irritating applications and stimulating, plasters to phlegmons has long been confined to the ignorant - the educated surgeon preferring soothing poultices and sedative lotions. But this reason may be made stronger; since:

Pain is positively injurious to the pained. If sufficiently acute and long continued, it will of itself produce death. The collapse which follows severe injuries, where there is little loss of blood, is to be attributed entirely to pain. When death occurs in such cases without reaction, it is the direct effect of pain.