

GWATHMEY



FEBRUARY 11TH, 1944

U. S. Veteran's Hospital, Fayetteville, Ark.

He did not want to die.

He loved life and clung to it with the spirit of youth (or it seems just to say with the spirit of his second childhood). But—alas—while his wish to live was strong, his will and physical power were weak.

With his increasing age, 81 years in fact, death always appeared to him to be remote until he was frightened following one of his asthmatic attacks. Up to the last minute he would not believe his life's task had ended, up to the last minute he dreamed of regained health, of further activity and the possibility of adding to his achievements.

His way of living was extremely sound and geared for efficiency of mind and body. He was opposed to smoke and drink. (When Caruso had pneumonia, and again when Baskerville had pneumonia, he predicted, "He is not going to live, he was an excessive cigarette smoker, his tissues do not avail of the necessary resistance to overcome the disease." In both cases he was right.) Although not born with a perfect physique, one might say that he actually sculptured his body to perfection by athletic exercise and outdoor life. He was an athlete all his life, he *worshipped sun and oxygen*.

Before Gwathmey started to devote all his time to anesthesia he was a teacher of physical culture. In the beginning of this century he lived in a penthouse in Gramercy Park and was known as an ardent devotee of fresh air and water sports. He was a life-long member of the New York Athletic Club, spending spring, summer and fall week-ends at Huckleberry Island (stripped), and winter evenings at the gymnasium and indoor swimming pool of the Club.

To my recollection it was in 1907 when I was introduced to Gwathmey by a friend, who gave me the following introductory advice:

"Dr. Gwathmey is making a specialty of anesthesia. He is a very ambitious and active man who enjoys a good reputation. In fact, if not one already, he will be a great authority. I advise that you stick to him—when he has any ideas of anesthetic apparatus to be worked out do whatever you can to work with him; you do it right, when he grows you will grow with him."

I believe I can now say that I thoroughly followed the advice of this friend. At that time I had developed an Oxygen Generator utilizing the reaction of fused Sodium Peroxide (trade named Oxone) dissolved in water. Soon this resulted in the first Ether-Oxygen Outfit. The heat of reaction furnished by this little Generator effectuated one of Gwathmey's hobbies—"warmed Ether-Oxygen

well as Chloroform-Oxygen vapors." At that time also the first notions to boost up exhausted athletes with Oxygen made their appearance, and more than one night Gwathmey and I spent in Madison Square Garden feeding relay teams of 10-mile runners as well as 6 day bicycle racers with Oxygen from our Generator Tank. Oxygen was also used on competitive teams, but without exception our Oxygen, which was inhaled immediately after its nascentcy, produced the better results, and our teams were either first or second.

Gwathmey's height of activity was concentrated in the decade before the World War took him to France. Those were the years when gas anesthesia was transplanted from the original dental field to the surgical field, the years when it was recognized that the rather coarse dental gas machine, which administered the mixture of Nitrous Oxide-Oxygen by "forcing," was not the proper thing for surgical anesthesia; the years when Teeter in Cleveland, and Boothby in Boston, built their apparatus with the first "sightfeed," which Gwathmey immediately recognized as the most practical and far more economic means to administer gases. In 1912 Gwathmey demonstrated in Minneapolis the first Gwathmey-Woolsey sightfeed apparatus.

Those were also the years when Gwathmey, together with Baskerville, worked on their book, "Anesthesia," which was the first American book on the subject combining history, text and teaching. There was only one other book then, the English Hewlitt, which was not up-to-date.

Finally those were the years when Gwathmey organized American anesthesiologists to form the A.A.A. He was herein assisted by Erdman, who had already successfully organized New York anesthesiologists. Gwathmey's work in first discovering, then corresponding with every anesthesiologist of the United States was relentless. The idea of organizing M.D. anesthesiologists was original with Gwathmey. It was his biggest achievement. This, together with the knowledge spread by his book, gives him a permanent place in the history of anesthesia. At this stage of his life, his office on 40th Street, New York, was a mecca of information.

Gwathmey was typically a professional experimenter, promoting his ideas on a highly ethical basis. He never considered a cent of profit on the sale of his designs and was against patents under his name.

Gwathmey considered the nurse anesthetist as an assistant, extending his experience to her in the fairest manner, without ever fearing in her the danger of competition.

However, it happened that as a parallel to Gwathmey's organization, another active brain, McMechan, soon after set himself the task of organizing M.D. anesthesiologists throughout the world. It became his life's work, with lasting success.

By the end of the first World War, with the unsettled conditions of anesthesiologists and reconstruction as the main problem, Gwathmey's organization found itself in a state of hibernation, and continued slumbering until revived by the advocates of the younger school of anesthesia.

Gwathmey's knowledge of anesthesia was, quite in accordance with the state of its infancy, mostly empirical. He studied steadily. He had an answer for every symptom, or searched for it.

A believer in "cause and effect," he traced conditions to basic physiological functions, and their disturbances, and he was truly resourceful in human physiology. In his performance of anesthesia at the operating table, he set himself the rule, "Do unto others as thou would have others do unto you." Accordingly

resistance to respiration, forcing, oxygen starvation, secondary saturation, with the resulting cyanosis, were ruled out for him.

The period of Gwathmey's most successful activity as a specialist in inhalation anesthesia might be termed "the period of approximation." It was then recognized that certain proportions of Oxygen and Nitrous Oxide are necessary that deep surgical anesthesia with Nitrous Oxide and Oxygen was scarcely obtainable, and that the addition of "just a little ether," produced a better anesthesia in every respect. The patient was considered the indicator and adjustments of the gas flow were more or less guess work based on experience. Gwathmey's principle to consider the patient's welfare first, and to use no more anesthetic than absolutely necessary, won for him surgeons of similar ideas. However, surgeons who did not like their patients "too light," did not hesitate to criticize him.

Gwathmey was one of the first and among them probably the foremost advocate of specializing as individual anesthetist. He was entirely independent of hospital engagements, a free lance, engaged by surgeons in whatever hospital they operated, sending his fees to the patient. When asked, Gwathmey stated that his minimum fee was \$50.00, but he did not count his considerable work without any fee. At the beginning of World War I, Gwathmey's reputation was such that wealthy men paid large fees to him for their children's anesthesia. In fact his income from anesthesia at this time was believed to be unequalled.

Before Gwathmey went to France he spent much time in a free tonsil clinic with the result of his method "Anesthol, Nitrous Oxide, Oxygen and Ether, with the towel method for induction, on the principle of free re-breathing, against the use of positive pressure for nose and throat work. Better known yet and widely introduced is his Ether-Oil Colonic Anesthesia.

The peak of Gwathmey's professional life and his most useful activity was placed in the short space of time between publication of the first issue of his book and his service in the Red Cross Hospital in France. The first World War gave him the first set-back in France. The decline, in intermittent steps, seems unduly pronounced. A conflict with the Surgeon General in Paris, although without effect to the eyes of the world, left him with a permanent scar as far as concerned his standing with the Army.

Nervous strain of A.E.F. life, restless surroundings, disappointment by failure of French instrument makers to satisfy his ever-lasting experimental mind and finally on his return home, worries to regain lost business, all combined caused permanent detriment to his otherwise clear mind.

However, as a veteran in the prime of life, his greatest disappointment might have been when his leading position, almost unawares, was taken away from him as a natural course of scientific developments in anesthesia. The "period of approximation" in which Gwathmey flourished was gradually replaced by the "period of correct measurement," which was conditioned by the method of CO₂ absorption. The new technic, issuing from a new school, took laurels as well as leadership away from Gwathmey.

It was too late to convert himself from his life-long performance of anesthesia to a new method. It was not stubbornness nor conceit that tied him to the child of his brain, the Gwathmey apparatus, it was—to be truthful—a lack of comprehension of the new method.

Gwathmey's disease—Asthma—might be considered as effect of the daily inhalation of ether vapors during many years of his life.

Paradoxically, as a pretender of Meyer-Overton's theory of anesthesia, the idea never came to him that the effect of ether as a solvent of lipoids may prove similarly detrimental to the tissues of the lungs. A drying and hardening process, with resulting shrinkage, took possession of the organism which the athlete Gwathmey had so carefully and lavishly trained and drilled throughout his life. When last seen he had no energy to expand his chest to show the perfect living specimen, as he still did in his early seventies.

During his forced retirement in Texas he never lost hope and every touch of death was abhorrent to him. However, he realized that he had lost the energy to fill his lungs with his beloved Oxygen. The sun alone could not keep him alive.

When thinking of him and his past, full of ambition, full of achievements, full of disappointments, while ending his days in a Veteran's Hospital far from us, the feeling that he should have flowers while he lived instead of flowers to the dead, was foremost with me. It seemed to me that in the daily rush through life contemporaries never stopped long enough to fully recognize his worth.

However, while half forgotten in the desert of his retirement, his mind still active, his body frail—he did not want to die. I think he will live forever in the annals of anesthesia.

Gwathmey had many admirers at home and abroad and now has many mourners.

I hope I have spoken in their name as
a life-long friend,

RICHARD FOREGGER, PH.D.

CORRESPONDENCE RE ERRATUM

March 24, 1944

(180), the A. C. Clark machine was developed" instead of "In about 1909, according to Heidbrink (180), Burt Clark of Minneapolis, developed a gas machine."

To the Editor:

My attention has been called to an error in my last article, "The Development of Anesthesia." This was published in Volume 4 for July 1943. The last paragraph on page 424 should read:

"In about 1909, according to Heidbrink

THOMAS E. KEYS,
 Major, Sn. C., AUS
 Cleveland Branch
 Army Medical Library