

## EDITORIAL

### HORACE WELLS CENTENARY

ONE hundred years ago this December, Horace Wells discovered in Hartford, Connecticut, the value of nitrous oxide in relieving the pain associated with dental surgery. Pain had long been a major obstacle to the progress of surgery of all types and Wells had vision enough to realize the possible benefits of his discovery to mankind. He was a real discoverer in that he observed a phenomenon and drew some conclusions. He experimented upon himself and others successfully brought his discovery to the attention of others by demonstration and teaching and thereby furnished the spark and partly lighted the way for many new discoveries and inventions based upon his original ideas.

Horace Wells was born and raised in Hartford, Vermont, of parents who had migrated from Connecticut and his education was the best that was available in northern New England at that time. Professional education in dentistry was obtained in Boston at the age of 19 and two years later he began to practice in the city where his discovery was made. Although sensitive and shy he made friends easily and carried on teaching in his office. His inquiring nature led him to the invention and construction of many of his dental instruments and machines and to the writing of a small monograph about dentistry by the time he had been in practice for five years.

According to records, Wells had been concerned about the pain which accompanied necessary surgical procedures. He had been seeking some drug to deaden this pain and had consulted a local college professor in chemistry about the problem. Thus we can readily see that his mind was prepared for the event of the evening of December 10, 1844. At an entertainment sponsored by a traveling lecturer, Wells observed the analgesic effect of nitrous oxide when a member of the audience injured himself after inhaling the gas yet noted no pain until the effects of the gas had disappeared. While the audience was amused Wells, the dreamer and inventor, became a man of Destiny. From that moment on his life was in short sequences one of success, failure and tragic end.

On the following day a practical experiment to test the analgesic action of nitrous oxide was carried out with Wells as the subject. After inhalation of the gas for a few moments one of Wells' teeth was extracted by his dental colleague, Dr. John Riggs, quite without pain. The great discovery had been made.

Nitrous oxide analgesia and anesthesia was practiced in Hartford from that eventful day and with success. Wells soon travelled to

Boston to demonstrate the method to his friends there. We are familiar with the partial failure of his demonstration before a class of medical students. We can understand today possible reasons for his failure during this one demonstration but in 1845 nothing was generally known about stages of anesthesia and thus the shy demonstrator was derided and dismissed as a quack. His disappointment and the controversy which followed the public demonstration of ether one year later led to discouragement, bitterness and failure in his chosen profession. His tragic death less than four years after his discovery is comprehensible when we review the lives of other notable men whose great discoveries brought not fame and fortune but oftentimes poverty and public ridicule.

Wells had taken the initial steps, however, and he fulfills the definition of a discoverer—he observed and drew conclusions, he made further experiments, he demonstrated and proclaimed them to the public, and finally he proved the validity of his observations. He gave us a method for producing analgesia and anesthesia which has been of benefit to millions of people. The scope of the method has widened to include general surgery yet nitrous oxide remains the general anesthetic agent of choice for the dentist.

Thus we pause in December, 1944, to remember and acclaim the work of Horace Wells, a dentist whose life was cut short by his great contribution to anesthesiology. It is time to forget the controversies of the late nineteenth century and give to the men who discovered methods of anesthesia their earned honor.

The American Dental Association has planned a national celebration to be held in Hartford in December of this year and has welcomed participation by the medical profession. The American Society of Anesthetists, Inc. will take an active part in this celebration as well as in the state dental conventions, many of which are being dedicated to the memory of Horace Wells. The purpose of the Centenary Celebration is not only to honor Wells for his work but better to acquaint the dental and medical profession as well as the public with the significance of the discovery of Wells in the development of anesthesiology.

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