dental operations but there is no evidence of such use. In a book published in October, 1847, he refers to the first use of ether for a surgical operation in Portugal. The operation was done in May. In April Bernardino Antonio Gomes and A. P. Barral experimented with ether on two volunteer students. A. J. Pinheiro, a surgeon, used ether when extracting a tooth. Cardosa Klerk, Joaquin Augusto da Silva, J. Teotonio, Francisco Alberto d'Oliveira, J. M. Alves Branco, Oliveira Velho and L. P. Fonseca were among the physicians who used ether soon after its discovery. Others who contributed to the study of ether were Manuel Maria, Sousa Soares, Casado Giraldes, L. de Castro Carreira, J. R. Nuñes, F. Ferreira d'Abreu, J. M. Arnaud and João Felix Pereira. Many other physicians used ether and reported their experiences. Chloroform was tried by many surgeons. Amylène was used for anesthesia in 1852 by Casado Giraldes and later by other Portuguese physicians. Hypnotism was used by Portuguese surgeons for surgical anesthesia soon after it became known to them. Use of nitrous oxide was reported by Jearmell in 1869. 21 references.

F. A. M.


The first announcement of the discovery of ether reached Cuban physicians in an article in a daily newspaper on December 26, 1846. Vincente Antonio de Castro first used ether in surgical practice. During the year 1847 ether was used in almost all surgical operations in Cuba. Doctor Frini recommended a combination of morpeline and ether. Doctor Nicolás J. Guíñez was the first to use chloroform. Cuban medicine was influenced by French example and chloroform continued to be preferred over ether from 1848 to 1916. 6 references.

F. A. M.


Testimony of doctors who graduated from the year 1888 on was used to study the history of anesthesia in Ecuador. In 1882 surgical patients were anesthetized with chloroform applied by compress. President Garcia Moreno, observing the backwardness of his country's institutions, invited Gayraud and Domec from France to revise the medical teaching system. These French surgeons introduced chloroform. Ether was introduced by Dr. Francisco Martínez Aguirre about 1890. Local anesthesia was used a few years after 1888.

F. A. M.


"Man has always suffered pain... The fervor with which we today celebrate the centenary of the discovery of the anesthetic properties of nitrous oxide is nothing more than that constant eagerness which moves us to alleviate suffering and to ascend from the abyss of pain to the summit of anesthesia. ... No one knows pain so well as the doctor... I have always asserted, almost too strongly, that the great advances and discoveries of Medicine are due principally to the contemplation of human pain. ... We cannot forget that anesthesia, first, and antisepsis and asepsis, later, were the two great developments which made possible the progress of surgery... The discovery of the anesthetic properties of certain chemical substances was the product of chance and curiosity..."