the Renaissance on, a new approach to the problems of health and disease developed. When William Harvey published his discovery of the circulation of the blood, the theory of physiology, based on anatomy, replaced the older concepts. Morgagni applied the anatomic approach to the science of pathology. Methods of perceiving anatomic lesions on the living patient were developed. When physicians began to think in terms of anatomy their attitude toward surgery changed. Pain and the danger of infection prevented the development of surgery. General anesthesia freed the surgeon from one bond and the other was broken by Lister who introduced the method of antisepsis.

F. A. M.

**Austin, L. T., and Kruger, G. O.:**


At the Mayo Clinic the greater part of the work in dentistry requiring anesthesia is done under local anesthesia. Occasionally the patient’s physical condition indicates that a general anesthetic agent be used. In choosing the general anesthetic agent to be used, the dental surgeon must consider the operative procedure as well as the patient’s condition. For simple operations of short duration and if muscular relaxation is not essential nitrous oxide and oxygen or pentothal sodium can be used. For more difficult or longer operations the intratracheal administration of ether combined with other anesthetics produces satisfactory anesthesia. Nitrous oxide with oxygen may be used as the sole anesthetic or as an induction for ether. Pentothal sodium is useful for simple procedures and the simple apparatus for its administration eliminates bulky equipment from the field of operation. Control of bleeding is somewhat trouble-

some. Recovery from pentothal is slower than from nitrous oxide so more rest rooms and nursing attention are necessary.

Combination of anesthetic agents is being used with increasing frequency. Pentothal induction followed by nitrous oxide, oxygen and ether is a pleasant method for the patient. Use of the intratracheal tube is the method of choice for maintenance of deep anesthesia. In dental surgical operations the patient’s throat is packed with gauze after intubation. Physical examination of all patients who are to be anesthetized is carried out for the Section on Dental Surgery at the Mayo Clinic by an internist. The results of the examination govern the manner of procedure. 3 references.

F. A. M.


The centenary of the introduction of ether into surgical practice is also the one hundredth birthday of the controversy over who shall be called the discoverer of anesthesia. A fitting way to celebrate the centennial would be a sincere effort to come to an agreement and settle the differences of opinion. The history of the discovery of anesthesia is similar in basic outline to the story of the discovery of penicillin. In the case of anesthesia, Wells, who originated the idea, has received less recognition than Morton who introduced the method. In the case of penicillin, Florey and his co-workers have never denied Fleming the credit for his discovery. Although Wells’ attempt to introduce anesthesia into surgical practice failed it was a step along the road to success. It gave Morton warning of the mistake of removing the inhaler too soon. It made the Boston medical men more receptive.
to the idea when Morton offered it to them a second time.

No single candidate can be named discovery of anesthesia without stirring up opposition. An attempt to name more than one man has been tried without success. The mere naming of the men is not enough; an effort to name the right men should be made. Wells and Morton are the discoverers. Wells should be designated the "Father of Anesthesia," and Morton the "Messenger of Anesthesia." Other candidates should be classified as "Pioneers of Anesthesia." The striking thing about the history of anesthesia is the enduring usefulness of the first two agents, ether and nitrous oxide. The medical profession owes dentistry credit for the discovery of general anesthesia. The dental profession owes credit to physicians for the introduction of local anesthesia which started with the discovery of the anesthetic action of cocaine by Carl Koller in 1884. The anesthesiologist is an expert in the control of pain, he should be consulted, not only in anesthesia, but in a great many cases for any kind of pain. New drugs, new methods, a new specialty in medicine have all been developed in the last century. 3 references.

F. A. M.


"Prior facts and discoveries are essential to the success of the productive investigator. A review of the contributions of great discoverers indicates that success in enterprise is achieved largely by exploiting the experiences of students and observers who have contributed new knowledge and by extending and applying specific experimental gains that have been made by other workers in the same area of investigation. It is not too much to say that all scientific discovery of lasting value to society has stemmed from preliminary investigation and experiment of a useful, contributory character. The discovery of anesthesia followed such a pattern." Morton conformed to the pattern. He called upon his own courage, foresight and genius to fashion the method which brought such relief from the horror and pain of operations. The fact that he used the prior knowledge and earlier experiments to reach his objective does not take any credit from him. Although he tried to hide the identity of the new substance, when the true nature of the agent became known Morton conceded that he had received assistance from Jackson. "Any subsequent errors of judgement on his part with respect to material reward and benefits should be forgotten or looked upon with pity in the light of the positive values of the rich contribution he made to humanity." 1 reference.

F. A. M.


The dental service at the Massachusetts General Hospital, begun in 1868, is one of the outstanding features of the institute. Long before the dental department was inaugurated, dentists played an important part in the history of the hospital. The most important of these was that played by William Thomas Green Morton on October 16, 1846 when he gave the first public demonstration of the use of ether as an anesthetic. Morton's discovery removed the dread of surgery and made possible undreamed of advances and refinement in surgical technic. 1 reference.

F. A. M.