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.


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 stir-
ing up opposition. An attempt to
name more than one man has been
tried without success. The mere nam-
ing of the men is not enough; an ef-
tort to name the right men should be
made. Wells and Morton are the dis-
covers. Wells should be designated
the “Father of Anesthesia,” and Mor-
ton 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 ni-
trous oxide. The medical profession
owes dentistry credit for the discovery
of general anesthesia. The dental pro-
fession 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 anesthesi-
ologist 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.

ROBINSON, J. B.: William T. G. Morton

“Prior facts and discoveries are es-
ential to the success of the productive
investigator. A review of the contri-
butions 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 experi-
mental gains that have been made by
other workers in the same area of in-
vestigation. It is not too much to say
that all scientific discovery of lasting
value to society has stemmed from pre-
liminary 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
fungion the method which brought such
relief from the horror and pain of
operations. The fact that he used the
prior knowledge and earlier experimen-
tations 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 assist-
ance 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.

THOMA, K. H.: William T. G. Morton
at the Massachusetts General Hospital.
J. Am. Dent. A. 33: 1519–
1521 (Dec. 1) 1946.

The dental service at the Massachu-
setts 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 his-
tory of the hospital. The most im-
portant of these was that played by Wil-
liam 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 re-
moved the dread of surgery and made
possible undreamed of advances and
refinement in surgical technic. 1 re-
ference.

F. A. M.