

any atropine preoperatively. Another case required controlled breathing and coramine for about four minutes due to an overdose. . . . One is impressed by the number of ratings returning from overseas who request pentothal sodium anaesthesia. During a nine-month period in 1943, cyclopropane was administered in 40.28% of all inhalation anaesthetics; cyclopropane and ether in 29.17%; nitrous oxide, oxygen, and ether in 30.55%. Endotracheal anaesthesia was used in 41.66% of cases. I consider cyclopropane as one of our best choices as an anaesthetic agent in shock or potential shock cases. . . . Ether was added when adequate relaxation of the abdominal muscles could not be accomplished by cyclopropane alone. A switch to ether was made when cardiac irregularities occurred and did not disappear on lightening the anaesthesia. Ether was also used in operations of the ear, nose and throat. . . . Local and regional nerve blocks comprised 5.23% of all cases. . . . We were somewhat disappointed with the number of requests for diagnostic and therapeutic nerve blocks. . . . Oxygen therapy, resuscitation and intravenous therapy is supervised and controlled by the Department of Anaesthesia. . . . At sea, local, spinal and intravenous anaesthesia will take care of the usual types of cases. For the untrained anaesthetist ether by the open drop method or Oxford vaporizer will be the anaesthetic agent of choice for major surgery in the severely injured at sea." 7 references.

J. C. M. C.

SAKLAD, MEYER; SAKLAD, ELIHU, AND SELLMAN, PRISCILLA: *Anesthesia for War Surgery*. Connecticut State M. J. 8: 735-743 (Nov.) 1944.

"The problems of transport prohibit the use of many anesthetic agents and apparatus, particularly in ad-

vanced areas, so that the dependence must be placed on a few easily transportable drugs. . . . Since the influx of casualties may be rapid, the necessity of treating large numbers of wounded in a short space of time limits the anesthetist to simple and effective procedures. . . . Shock is, of course, a serious factor in war casualties. . . . Advanced sepsis should have a definite influence upon the choice of anesthesia. Septic patients do not tolerate anesthesia well. . . . In advanced areas where minimum equipment is available and where a limited amount of surgery can be performed, shock therapy and the relief of pain are paramount measures. The greatest single aid in the relief of pain is morphine, but this drug has a serious drawback in its depressant effect on respiration. . . . Chloroform has little if any place in civilian anesthesia, but in war surgery the demand for it outweighs the pharmacologic disadvantages. . . . It is best given by slowly dropping upon a wire mesh mask not too thickly covered by gauze. In spite of all that has been claimed for the intravenous barbiturates in the medical, lay and commercial press, they have no place in the treatment of patients suffering from active or incipient shock. . . . Procain (novocain) has a vital role in anesthesia in advanced areas. . . . The greatest single advantage of the barbiturates in advanced areas is associated with regional anesthesia in the treatment of procaine reactions. . . . The fire hazard presented by ether and the bulk it occupies, in addition to the difficulties encountered in induction, may prevent the use of this agent in advanced areas. Airways, both oral and nasal, should always be at hand. . . . For anesthesia in intermediate areas one may reasonably expect to have agents, methods and conveniences not available in forward areas, although not to the same

degree as in areas farther to the rear. . . . Ether will probably prove to be the general anesthetic most commonly employed in intermediate areas. . . . Spinal anesthesia has almost no sphere of usefulness in advanced areas, but should be of value in intermediate stations. . . .

"The desirability of having readily available an apparatus that can be used for satisfactory artificial respiration [must be] . . . emphasized; an apparatus that delivers oxygen, a good bag, and a tightly fitting mask are sufficient for this. . . . Anesthesia in rear areas should approximate that employed in civilian life. . . . 4 references. J. C. M. C.

JACOBS, W. H.: *Horace Wells*. Connecticut State M. J. 8: 729-735 (Nov.) 1944.

"To be honest with the facts of history, it must be stated that all was not new in the discovery of Wells. Nitrous oxide gas had been known for a long time and had been inhaled many times. . . . The manner in which the discovery was made is best described in the book, 'Notes on the History of Anesthesia,' by Dr. James McManus, . . . part of which reads as follows: 'Early in December 1844, Professor G. Q. Colton gave a course of lectures on chemistry and natural philosophy in Hartford. . . . Dr. Horace Wells, well known in Hartford as a skilful dentist, attended with his wife the lecture given on the evening of December 11, 1844. Dr. Wells inhaled the gas. . . . Dr. Wells went to that lecture to see, hear and learn. He inhaled the gas and subsequently watched its effects on others. . . . Dr. Wells, turning to David Clark, said, 'I believe a man, by taking that gas, could have a tooth extracted or a limb amputated and not feel the pain.' Before leaving the lecture hall, Dr. Wells asked Professor Colton whether

one could inhale the gas and have a tooth extracted without feeling pain. The professor replied that he had not given the subject any thought and that, while he had been giving demonstrations of laughing-gas for more than a year, the idea of using it thus had never occurred to him. Dr. Wells said that he was inclined to try the experiment on himself, and have a troublesome tooth extracted if Professor Colton would bring a bag of the gas to his office the next day. Late that evening Dr. Wells called on Dr. Riggs to tell him of his experience at the lecture. . . . As requested, Professor Colton brought a bag of gas to Dr. Wells' office the next morning. . . . Dr. Wells sat down in the operating chair, took the bag in his hands and, at the possible risk of his life, inhaled the gas until he was insensible. Then Dr. Riggs extracted an upper wisdom tooth. Dr. Wells remained unconscious for a short time and, on recovering, exclaimed: 'I did not feel so much as the prick of a pin. A new era in tooth-pulling has come. It is the greatest discovery ever made.'"

"The fact remains that immediately after Wells had been convinced of the possibility of the discovery, he hastened to one of the greatest medical centers in the United States at that time, Boston, to make known to the entire medical and scientific world the realization of surgical anesthesia. . . . It was arranged to give Wells a chance to demonstrate the use of the gas in a surgical operation before the Cambridge Medical College. . . . The patient, a boy, made an outcry as the tooth was extracted. The students and spectators hissed and denounced Wells as a faker. Thus the first and only public trial was termed a failure. Wells, extremely sensitive and of a retiring nature, returned to Hartford discouraged and disheartened. . . .