

anaesthetic agent which permits the use of the greatest amount of oxygen will prove the safest. . . .

"Every anaesthetist will have his own preference, and it is well to remember that well-given ether and oxygen are safer than badly given nitrous oxide or cyclopropane. I would therefore suggest that, providing sufficient oxygen can be given and the airway kept open, a safe rule is to employ the anaesthetic agent you know best for use in shock. In my own experience I have had excellent results from the use of 'pentothal sodium' with the addition of oxygen. In some cases a Magill tube has been employed to maintain a good airway. When necessary this is introduced under local anaesthesia before the intravenous injection is begun. . . . Local infiltration and field block in expert hands have a wide range of usefulness, ether alone or combined with general anaesthesia. . . . 'Avertin,' chloroform and spinal analgesia are contraindicated for patients suffering from shock. . . . The anaesthetic technique in war injuries of the chest is the same as that frequently used for lung surgery in civil practice. It is called controlled respiration. In connexion with acute intestinal obstruction there are two problems for the anaesthetist: vomiting and distention. . . . If the amounts of vomitus are small, it is wiser to omit the wash-out and rely for induction on a rapidly acting agent, such as 'pentothal sodium,' then deepen the anaesthetic level and pass an endotracheal tube fitted with an inflatable cuff. Once this is in place, the administration of the anaesthetic agents, such as nitrous oxide, oxygen and ether, may proceed with safety. . . . If distention is the predominant feature, it may be well to consider employing spinal analgesia, this being the one exception that proves the rule about not using spinal analgesia in shock."

J. C. M. C.

LAHEY, F. H.: *Participation in the War Effort*. Lahey Clin. Bull. 3: 66-68 (Jan.) 1943.

"Soon after the declaration of war this Clinic arranged to provide opportunities for the training of commissioned and enlisted personnel of the armed forces. It seemed obvious that in a clinic with such an ample supply of clinical material, special training could be provided along lines valuable to the medical personnel of the armed forces, particularly in such fields as anesthesia, roentgenology and laboratory and x-ray technic. A request was made to Admiral McIntire, Surgeon General of the Navy, and General Magee, Surgeon General of the Army, that men be assigned to this Clinic for such training, and promptly commissioned officers from the Navy were assigned in anesthesia and roentgenology, and Naval corps men were assigned for training in x-ray and laboratory technic.

"It has proved possible to turn out quite well trained anesthetists in a six months' period in the Department of Anesthesia under the direction of Dr. U. H. Eversole and his staff. This course consists of the administration of anesthetics, instruction in the operating room and during the regular meetings of the anesthesia staff, with a review of articles, the presentation of papers and the discussion of problems. Each man personally gives approximately 500 anesthetics of various types, with less and less guidance as he demonstrates his ability to work independently. Experience is obtained in anesthesia for neurosurgery, ear, nose and throat surgery, urologic surgery, bone and joint surgery, and all types of general surgery. A great many spinal anesthetics with pontocaine, nupercaine, and fractional spinal anesthesia are administered for procedures below the diaphragm. Experience is obtained in the use of pentothal

and cyclopropane, ethylene, nitrous oxide, helium, vinethene and ether. During the six months' course each man does eighty to a hundred endotracheal intubations. Instruction is also given in regional anesthesia, and experience is obtained in the use of regional field blocks as a diagnostic and therapeutic measure. Since post-operative suction bronchoscopy is taken care of by the Department of Anesthesia, instruction is also made available in this important phase of the surgical patient's care. . . .

"While the training of these men perhaps has added a little to the burden of the Clinic staff members in completing the day's work, the appreciation of the Naval men and their high character and intelligence, both commissioned and enlisted, is such as to make the undertaking a gratifying one, not only from the personal point of view but also from the point of view of national effort. In addition, I am hopeful that as the Army obtains the number of physicians which it considers sufficient, similar training can be given to Army medical officers and enlisted personnel. . . .

"Any replacements of professional personnel in the Clinic have been either women physicians or men who have applied for a commission and have been rejected."

P. M. W.

(EDITORIAL) WATERS, R. M.: *Modern Methods in Anesthesia and the War*. Surg., Gynec. & Obst. 76: 125-127 (Jan.) 1943.

"It is probable that neither the care of accidents in civil practice nor the performance of necessary surgical procedures for soldiers and sailors in time of peace have constituted an adequate background of experience from which to predetermine our conduct under the circumstances of war. Doubtless both

surgeon and anesthetist will modify their plans of action as experience with battle casualties become extensive in the months and years to come. . . . On superficial consideration, it might be concluded in the interest of simplicity that one or two drugs given by one or two techniques should be chosen for military practice. . . . The demand for a varied attack by the military anesthetist may be even greater than in civil practice. A physician trained in anesthesiology may contribute many services in addition to the prevention of pain due to operations. . . . As soon as the number of well qualified officers is sufficient, it should be recognized that one anesthetist may be assigned with advantage to every surgical team. Particularly is this true of units dealing with chest and abdominal wounds. . . . The type of apparatus provided for the anesthetist in our armed forces is of some importance. . . . News from anesthetists in active service indicates that certain of the simpler but more essential and less expensive pieces of equipment are not available. . . . Medical officers, whether serving on land or sea, not infrequently find themselves under the necessity of being 'all things to all men.' Knowledge or skill in only one specialty cannot avail at such times. Common sense is the best substitute for deficiency of either knowledge or skill. . . . Those officers receiving instruction and experience during the war will be in a position to render better service than formerly to their patients when they return to civil practice, regardless of whether or not they choose anesthesia as their special field. The Surgeons General of the Army and of the Navy are to be congratulated upon their efforts to provide modern anesthesia, as well as modern medical service of every sort, to the armed forces. It seems probable that the results will justify this attitude."

J. C. M. C.