[as status lymphaticus] exists, but there is no doubt that certain children show an unusual susceptibility to sudden death from trivial causes, amongst which is the administration of an anaesthetic. Many anaesthetists are of the opinion that deaths during anaesthesia, which are attributed to status lymphaticus, are due in reality to an overdosage in a very susceptible patient, and the measures that should be taken, should respiration fail in such types of patients, are the same as in any other cases of respiratory arrest, namely, the provision of a clear airway, and artificial respiration combined with the administration of oxygen. This treatment will be successful if the overdose of anaesthetic has not been too great."

J. C. M. C.

GORHAM, A. P.: *Anaesthesia in Oral and Pharyngeal Surgery.* Med. Press & Circ. **214**: 216–219 (Oct. 3) 1945.

"Surgical operations which have to be performed with the patient's mouth open present special problems for the anaesthetist. . . . If a tube is not to be introduced, and it is by no means always necessary or even possible, then the patient will be induced by any well-practised and convenient method and the maintenance carried on by conducting the anaesthetic mixture through a nasal catheter, a small airway in the mouth or the tube on the tongue plate of a Boyle-Davis mouth gag, unless an intravenous route be used. Intravenous agents such as pentothal sodium or evipan can be used, but as they do not abolish the pharyngeal reflex they are not very suitable for this work. . . . For any prolonged or major procedure the use of the endotracheal tube is indicated and this method may also become the one of choice in a comparatively minor operation where there is a danger of some foreign substance entering the trachea or of the airway becoming occluded." 1 reference.

J. C. M. C.

MANNING, G. C., JR.: *Homemade Anesthesia Machine for Small Medical Facilities.* U. S. Nav. M. Bull. **45**: 974–976 (Nov.) 1945.

"The medical and surgical supply allotments to the smaller ships of the fleet are usually quite limited, yet many of these smaller ships, especially LSTs, are frequently designated as auxiliary hospital ships or casualty evacuation ships for amphibious operations. . . . A gas anesthesia machine is never aboard. Although spinal, local, and pentothal anesthetics are sufficient to handle the majority of casualties, an occasional patient requires an inhalation anesthetic, and for patients with thoracic wounds, positive-pressure anesthetic may be of considerable aid. . . . For this reason a gas-anesthesia machine was designed and built on one casualty evacuation ship. As gas cylinders were not attainable, ether was used as the anesthetic agent. The machine was constructed completely from material obtainable aboard ship, and differed in basic design from commercially built machines only in the method of introducing ether into the system. Oxygen was supplied from a cylinder of commercial gas such as is used for an oxyacetylene torch. . . . A tight-fitting old-type Army gas mask was used. All parts except the rubber portion of the mask which covers the nose and mouth, and which contains the inlet and the valve, were discarded. The valve was sealed with adhesive tape, and in order to make the mask easier to handle, the clips holding the head strap to the mask were pulled out on the left side, leaving a small hole through which buttons sewed to the ends of the head strap secured the mask. The rebreathing bag was a

punching-bag bladder with a hole cut in the top.

"The carbon dioxide absorber was made from an empty 2-quart tomato can to which was soldered a short length of copper pipe at each end. Three-way connections were made with ordinary 1-inch T-shaped pipe joints. Rubber connections were Army gas-mask tubing, with the exception of the connections to the carbon dioxide absorber which were from a Navy gas mask because of the convenient right-angle bend at one end of the tube. Ether was supplied from a bubble bottle such as is used for tonsillectomies; a 1,000-cc. saline solution bottle was used, although a smaller bottle would have been preferable. The manometer was a simple U-tube filled with an eosin solution. It was mounted on a board sufficiently solid so that the pressure gage of the sphygmomanometer could be attached. The oxygen, ether, manometer, and outlet connections were made with glass Y-tubes, and rubber infusion tubing. Tube clamps were placed at strategic points. . . . The entire apparatus was mounted on a plywood board and wired in place. This board was 24 inches long and 18 inches wide, but the size is unimportant. The board was mounted on a welded angle-iron frame 30 inches high. . . . The gases were routed either through the calcium hydroxide container or directly to the rebreathing bag by placing a large clamp on one or the other leg of the connection. This clamp was constructed from a large spring paper clip to which two wooden wedges were attached so that the arrangement worked like a large clothespin. The manometer was calibrated by having a number of persons breathe oxygen through the machine and noting the normal respiratory excursion."

J. C. M. C.

MACINTOSH, R. R., AND MUSHIN, W. W.: *Anaesthetics Research in Wartime.* Med. Times **73**: 253–255 (Sept.) 1945.

"The wartime policy of the Nuffield Department of Anaesthetics has been directed mainly to help overcome problems in the Armed Forces. . . . It soon became evident that a large number of additional anaesthetists would become necessary, and to help meet this demand teaching was given precedence in the Department over other pressing work. . . . With a scarcity of experienced anaesthetists the advantages of a simple and safe anaesthetic apparatus became more obvious. . . . The outcome was the Oxford Vaporizer. Through the generosity of Lord Nuffield some 2,000 Vaporizers have been widely distributed and have proved their worth in every theater of war all over the world. . . . In this way, during some of the worst fighting in North Africa and in Europe, anaesthetists working single-handed were able to supervise four operating tables at the same time and keep the surgeons supplied with a constant stream of anaesthetized patients. The apparatus has proved invaluable, too, in emergency surgery at sea. . . . Apart from its uses in war surgery the Oxford Vaporizer has supplied valuable information about the effects of known concentrations of ether vapor. . . . To the majority of anaesthetists chloroform is anathema. Yet its properties of non-inflammability, potency and low volatility, and its power of inducing anaesthesia smoothly inevitably commend themselves to paratroops' Medical Officers. At their request the E.S.O. chloroform inhaler ('Epstein, Suffolk, Oxford') was designed and produced. From it the patient breathes any desired concentration of chloroform in air up to 4½ per cent. . . . The inhaler, which was much used on the western front.