where the operation was unexpectedly curtailed. . . .

"We have not found chest complications to be increased following this technique, but they have occurred in patients and operations where they might be expected. The incidence of postoperative vomiting is definitely diminished, and in our experience is mostly of minor degree. . . . In nine cases in this series, hiccup has arisen during the course of the operation. Hiccup is not necessarily associated with traction on the abdominal viscera. In one case it commenced during the closure of the peritoneum. It can frequently be stopped by a small dose of curare or pentothal. There were five deaths, all in 'poor risk' cases, within ten days of operation."

J. C. M. C.


"The Pulmonary Pump has now been in use for over 4 years, and valuable experience has been gained. The advantages of this method of conducting anaesthesia in chest surgery have become apparent. The apparatus consists essentially of two pumps, one of which takes over the respiration, while the other evacuates by suction secretion or pus from the trachea and bronchial tree. . . . The pump itself is provided with a method of adjusting stroke rate and volume, with large area release valves, and with a manometer. These devices have given no trouble and they effectively obviate the possibility of dangerous pressures, even if the patient should cough or resume active breathing efforts. . . .

"The average duration of operation was 3-6 hours, and of mechanically controlled respiration 1-9 hours. Pumping in all cases was continued until the operation was finished. The great majority were 'dry' cases. In most cases there was complete apnoea with no movement of diaphragm; in others slight movement, and in two or three a resumption from time to time of some efforts of respiration. . . . Suction was employed in all cases, and general was constant for 'wet' cases, being applied to the affected bronchus, and on the unaffected side to the bronchus or the lower end of the trachea. In almost all cases it was possible to keep the colour good. Towards the end of long operations the quality of the pulse often deteriorated; and not infrequently after the bandages had been applied and the patient put back to bed his condition would appear considerably worse than it had been 10 minutes earlier. This may be partly explained by the absence of such circulatory aid as the pumping had given; but a full explanation is wanting. In no case was it necessary to continue pumping beyond the end of the operation."

J. C. M. C.


"The achievements of transthoracic surgery in a large measure have been made possible by the concurrent advances in anesthesiology. . . . The choice of anesthetic agent or agents is secondary to the ability of the anesthetist to take care of the patient during operation. While it is possible with a tight face mask to maintain anesthesia, intubation of the trachea is preferred. . . . The technic of anesthesia usually is as follows: Prior to operation the surgeon discusses the general problems and the physical status of the patient with the anes-