frequently employed for the relief of intestinal distention. At the present time the judicious use of the Miller-Abbott tube has more or less supplanted the administration of oxygen. . . . Venous intravascular clotting is always considered a special hazard in surgical procedures on the bowel when there has been considerable manipulation or if the operation is carried out in and around the iliac vessels. The three general types of venous intravascular clotting are superficial thrombophlebitis, phlebothrombosis and femoroliiac thrombophlebitis or 'phlebgmasia alba dolens.' . . . Phlebothrombosis arises in the deep veins of the lower extremities. . . . In this type the best treatment is early ligation of the femoral vein distal to the profunda branch. Femoraliliac thrombophlebitis is the type of clotting thought to be the result of mechanical trauma to the endothelial lining of the vein, bacterial invasion or chemical injury. The clot is usually fixed and adherent to the vessel wall. Clinically, the onset is usually sudden, with pain, leg edema, elevation of temperature or combinations of these symptoms. Pulmonary emboli rarely arises from this type of thrombosis. It is best treated by a combination of anticoagulant therapy and paravertebral sympathetic nerve block. In most instances, the best results with the paravertebral sympathetic nerve block are obtained during the acute stage of the complication. As a rule, daily blocks are employed until the patient's temperature returns to normal. The accompanying pain is usually relieved by the first or second block. The pyrexia and associated edema are usually relieved by the end of the third daily block. In instances of chronic thrombophlebitis, the results of paravertebral sympathetic block alone have not been encouraging. The results are usually transitory and the initial disturbances return on the resumption of normal activities. At the present time medical anticoagulant therapy plus paravertebral sympathetic nerve block is the method of choice in the treatment of acute femoro-iliac thrombophlebitis complicating operations on the bowel."

J. C. M. C.


"The following case is reported because it is felt that it points a lesson in anaesthetic practice and in the prevention of post-anaesthetic morbidity in the respiratory system: At 1 a.m. on the 20th October, 1945, O. S. D., a married European female, aged 27 years, was admitted to one of the surgical wards of this hospital. Her temperature was 99° F., her pulse-rate 100 per minute, and her respiratory rate 20 per minute. The history and examination led to a diagnosis of acute appendicitis, and it was decided to operate immediately. She was given 1/3 gr. of omnopon followed by 1/100 gr. of atropine by the house surgeon without consulting the anaesthetist, and prepared for operation. She was first seen by the anaesthetist in the theatre and examined briefly to confirm that she had no lesions of heart and lungs. . . . She was induced with nitrous oxide in a semi-closed circuit, and when cyanosed and on the point of jactitating, the mask was lifted and a size 6 Magill tube cut down to half-length was passed down the right nostril. There was slight resistance to its passage at the nasopharyngeal junction, which was easily overcome. This tube, with its point lying behind the tongue and just above the glottis, acted as a nasal air-way. After this manoeuvre the mask was replaced, a couple of breaths of pure oxygen given, the ni-
trous oxide discontinued, the circuit closed entirely, and about 200 cc. of oxygen per minute added as the basal requirement. The soda lime was switched into the circuit and ether added gradually until the patient was sufficiently deep, when the operation commenced. . . About half-way through the operation it was noticed that the lobules of the patient's ears were slightly cyanosed. . . Her basal oxygen supply was increased, and the cyanosis disappeared and did not return during the rest of the time the anaesthetic was administered. The etherization was deepened to lower third plane of third stage once the appendix was removed, while the pelvis was explored and preparatory to suture of the peritoneum. The surgeon had just commenced suture of the peritoneum and the ether had not been completely withdrawn, when twitchings of the face were noted. The ether was immediately discontinued, the rebreathing bag emptied and refilled with oxygen only, the oxygen flow increased to 6 litres per minute, and the circuit opened to semi-closed. During these operations the twitchings became generalized and developed into convulsions.

"The convulsions showed no signs of abating during the three or four minutes it took to obtain and prepare a 5 per cent solution of pentothal sodium. Intravenous administration of the pentothal was cautiously begun after some difficulty, on account of the spasms, in securing veni-puncture. After 4 cc. had been administered the convulsions ceased dramatically and the surgeon was able to continue. Over the next three minutes a further 2 cc. were slowly given, and the administration was then discontinued. At no time did the patient's respiration stop, and her colour and pulse remained good throughout. At the conclusion of the operation the mask was removed, an oral air-way inserted and the nasal air-way withdrawn. It had a little coagulated blood at its tip. Although the oral air-way was quite clear, it was noticed that the patient was becoming cyanosed. . . Breath sounds and air entry were normal on the left side, but on the right air entry was completely absent over the whole of the lung, and there were only several very coarse bubbling sounds on respiration. Oxygen administration was continued while preparations were quickly made for bronchoscopic examination. . . The right main bronchus . . . showed complete occlusion by a soft blood-clot about 3/4 inch from the bifurcation. . . During this manoeuvre, carried out in a darkened theatre, the surgeon reported that the patient's pulse was becoming thready, and on switching on the lights it was found that the patient was extremely cyanosed and that respiration was imperceptible, although the pulse could still be felt. The bronchoscope, into which oxygen had been fed by the side-opening provided throughout all these operations, was withdrawn until the point was lying just within the trachea and artificial respiration instituted. The pulse improved rapidly and the cyanosis cleared slowly, but it was some five minutes before spontaneous respiration began. The bronchoscope was now withdrawn completely and a size 6 Magill tube was passed into the trachea and left in situ.

"The Magill tube was removed when she regained consciousness at 9 a.m., six hours after leaving the theatre. . . She remained somnolent and had a lowered respiratory rate for about 36 hours, but her pulse, blood-pressure, colour and breath sounds remained normal. Further convalescence was uneventful, and she was discharged from hospital on the ninth post-operative day."

J. C. M. C.