This greatly lessens the amount of sedative needed by preventing pain. Here again the use of the machine was a big advantage and we tried to run it at about 60°F., which would keep the temperature in the stump slightly lower than room temperature. The claim of freedom from shock during operation was well substantiated. . . . There were five deaths in hospital, the earliest, the second day postoperatively and the latest after one month. . . . The thirteenth case deserves special mention. This was a mid-thigh amputation in a diabetic woman of 65 who was in good condition. It was an attempt to try out refrigeration by packing the leg in ice without the use of the tourniquet. At the Ottawa General Hospital where this was done, the experience with refrigeration anaesthesia had not been favourable. Of six cases one had died the third day, in two the healing was satisfactory, in two it was poor and in the sixth it was so bad that the patient finally died of sepsis following a secondary amputation under cyclopropane. . . . In spite of morphia and nembutal, the patient complained bitterly of the coldness of the pack. After an hour and a half when the distress did not appear to be lessening, we were about to take the whole thing off, when it was suggested we try small doses of intravenous pentothal. General body chilling occurred, the patient became blue and shivering and mouth temperature went down to 96°F. The pack was on five and a half hours yet there was not complete anaesthesia for the operation.

“This whole subject of refrigeration may still be said to be controversial because of the healing factor. Yet I am convinced it should hold a real place in surgery both as a therapeutic agent and as an anaesthetic.”

J. C. M. C.


“The surgeon has become more and more dependent upon the judgement of his anaesthetist for pre- and post-operative advice, in the treatment of his patient. The surgeon, however, still relies upon his anaesthetist chiefly for his skill in the administration of the anaesthetic and for his supportive treatment during the anaesthetic period. . . . Respiratory movements should at all times be under the direct observation of the anaesthetist. . . . The mechanical control of normal respiration depends upon a free airway and intact thorax. The vital capacity and tidal air are limiting factors. . . . The observations of skin colour and temperature provide information regarding the physiology of circulation and respiration. . . . The chief concern of the anaesthetist with regard to heat regulation during anaesthesia is its loss. . . . The mental state of the patient is important to the anaesthetist in its effects upon the other systems of the body. . . . In his supportive treatment during the anaesthetic period, the anaesthetist must direct his treatment to approach as closely as possible the normal physiological standards. His methods of control must follow his knowledge of physiology and pharmacology. In other words, he must follow his observations and must not be led astray by empirical thinking.”

J. C. M. C.


“In December, 1946, following an investigation of numerous a-substituted ethers of glycerol, Berger and Bradley reported on the pharmacological prop-