intra-arterially on two different occasions, each followed by amputation; the paralyzing effect of injecting the wrong drug intrathecally; the tragedy of leaving the anaesthetized patient unattended for a short period to find him dead on return; of having been responsible for an explosion through ignorance of elementary physical facts; of giving chloroform under the impression that the bottle contained ether; of giving a lethal overdose of pentothal, or of local anaesthetic drugs such as cocaine and amethocaine. The cause of tragedies such as these is obvious; others are not so overt. Death on the table is a clinical problem, and in the great majority of cases the anaesthetist is the only one who can give a clue as to what went wrong; if he is frank enough to give a detailed anaesthetic history of the sequence of events prior to death his story will be far more illuminating than the most searching necropsy. A striking fact is that anaesthetists seldom make the same mistake twice. . . . The publication of anaesthetic misadventures in a form in which the victims can be identified by the lay public is obviously undesirable. I think, however, they could be collected and published in book form from time to time. To avoid social or legal repercussions it might be desirable to confer anonymity on the anaesthetist. The Association of Anaesthetists is now a large and powerful body. A Misadventure Subcommittee might be formed to which fellows and members could bind themselves to notify their misadventures. There would soon be available valuable reference books of what not to do. Alternatively, an investigation on these lines might be undertaken by some scientific or philanthropic body with adequate funds at its disposal. Such an investigation would pay a good dividend in terms of human life."

J. C. M. C.

SALAND, GAMLIEL AND KLEIN, CHARLES: *The Evaluation of Alcohol Lumbar Paravertebral Block in Peripheral Vascular Disease.* Am. J. M. Sc. 207: 749–753 (June) 1944.

"The use of alcohol to produce block of the sympathetic ganglia was first introduced in this country by Swetlow in 1923. Since then, various workers in the field of peripheral vascular diseases have used this procedure to induce vasodilatation in the lower extremities and obtain relief from ischemic symptoms and signs. No one has as yet determined objectively how long this vasodilatation exists. . . . In the past, particularly in the cases of angina pectoris, the evaluation of the effect of such injections has been made according to the patient's subjective feeling and, as in other evaluations, the patient's symptoms are unreliable criteria for determining the efficacy of a therapeutic procedure. It is well known that symptoms of vascular disease may be relieved spontaneously, and so we thought it would be important for us to know by an objective method exactly how long one may expect the vasodilatation in the lower extremities to last after the injection of the lumbar vertebral ganglia with alcohol. . . . We therefore tried to determine objectively: (1) exactly how long one may expect vasodilatation effects to last after alcohol paravertebral block in the lumbar region; (2) whether neuritis is produced by such a procedure, and if so, how often, how severe, and how long such neuritis might last; (3) whether the amount of alcohol used was a factor in producing vasodilatation or neuritis; (4) whether the use of novocaine in sweet almond oil would reduce the incidence of neuritis; (5) incidentally, we tried to determine if claudication time would be altered by such therapy. . . . The patients studied were those who applied to the vascular clinic for relief of

symptoms, and comprised a total of 16 patients. . . . It is well established that if, after the interruption of the vasoconstrictor pathways to an extremity, that extremity is exposed to a cold environment, the skin temperature of the blocked limb tends to be higher than the unblocked limb; at least 2.5° C. higher. The skin temperature of the unblocked limb, however, tends to approach the cool environmental temperature. In our series we tried to determine how long this temperature difference was maintained, and . . . as long as a significant difference in temperature existed in the two limbs at corresponding areas, vasodilatation as a result of the block was considered to be present. . . . The use of 100% alcohol in lumbar paravertebral block is of definite value in producing peripheral vasodilatation. This vasodilatation may be complete, and may last for varying periods of time, even up to 2 years and perhaps longer. The neuritis that is produced as a result of such a procedure occurs more often when larger amounts of alcohol are injected; it is not too severe and in no instance has lasted more than 45 days. The use of novocaine in sweet almond oil did not reduce the incidence of neuritis. Vasodilatation occurred more often when larger amounts of alcohol were used, but the amount of alcohol was not the factor that determined how long this vasodilatation lasted. There was no correlation between claudication time and the degree or duration of vasodilatation." 9 references.

J. C. M. C.

MILLAR, A. M.: *A Portable Warmed Ether-and-air Anaesthetic Apparatus.* Brit. M. J. 1: 623 (May 6) 1944.

"The object in designing this apparatus was to provide a machine which would be easily portable and deliver a warm mixture of ether and air, the concentration of which could be changed rapidly or maintained the same for a period of time, and to ensure that the mixture would arrive at the face warm. . . . The apparatus consists of two bottles, each fitted with a drip feed which is controlled by a needle valve; a quart vacuum flask; a U-tube of 3/4 in. diameter copper tubing, with one end open to the air and the other having a one-way directional valve permitting air to be drawn through the tube but not returned; a short length of rubber tubing (3/4 in. diam.); a face-piece and expiratory valve. . . . The vacuum flask is filled with hot water, and the U-tube immersed in it. Ether is put in one bottle and vinesthene anaesthetic mixture into the other. Either of these is fed into the U-tube, where it drops into the hot metal and vaporizes, mixing with the air, which has already become warm while in the U-tube. This mixture is drawn in by the patient. As the ether lands on the hot tubing it makes a hiss, which is easily heard, thus indicating the rate of flow. This varies with each case and as the case goes on. To ensure that too great cooling does not take place before the mixture reaches the patient's face, the length of tubing used is not more than 12 in. long."

J. C. M. C.

BINNING, REX: *The Use of Cyclopropane in the Field.* Brit. M. J. 1: 620–621 (May 6) 1944.

"Shortly before the second battle of Alamein I received . . . a cylinder of cyclopropane for use in the forward areas. Since then I have had a small but adequate supply, and I have used it at a C.C.S. during the Eighth Army's advance almost to the end of the campaign, at a field surgical unit for the Sicilian campaign, and also for four months in Italy, from the landing at Salerno onwards. . . . Approxi-