clopropane and less frequent than with other inhalation agents. Distention is less, and when it does occur is less severe with nitrous oxide.’’ 4 references.

J. C. M. C.


“All general anesthetics alter the rhythm of the heart, and produce changes demonstrable by electrocardiography. The most startling cardiac changes occur during the administration of chloroform and of cyclopropane. . . . Arrhythmias under cyclopropane anesthesia are most marked at about apneic concentrations. Deepening the anesthesia with high concentrations (50-75 per cent) of cyclopropane in the breathing bag largely abolishes irregularities of the pulse and does not seem to increase the hazard to the patient. The indispensability of an intact hypothalamus for the production of the arrhythmias suggests that this structure, rather than the intrinsic cardiac tissues, is the site of action of the anesthetic agent in this regard.” 14 references.

J. C. M. C.


“A new technic to obtain caudal anesthesia has been devised in an effort to render the procedure more suitable to obstetrics. The technic is as follows: When labor has been well established and the patient has received her analgesia, she is turned on her side or asked to assume the knee-chest position. The skin overlying the sacral hiatus is prepared with green soap, alcohol, and tincture of merthiolate. The skin and subcutaneous tissue overlying the hiatus are anesthetized with 1 per cent novocain solution. Sterile rubber gloves are used by the operator. A small incision in the skin is then made with a No. 11 Bard-Parker blade. A 14 gauge 3½ inch needle is inserted through the sacral hiatus just entering the sacral canal. A No. 4 Nylon ureteral catheter is passed through the lumen of the needle and traverses the sacral canal until it is stopped by the dura. . . . The needle is withdrawn and the catheter left in place. . . . The visible portion of the catheter is enclosed in sterile gauze wrapping and bandaged securely to the back. The patient continues in labor and receives the routine analgesia. When caudal anesthesia is desired 30 cc. of 1 per cent novocain solution with 3 to 4 minims of adrenalin solution (1 to 1000) is injected through the catheter. A 30 cc. syringe with a 23 gauge 1½ inch needle is used in this latter procedure. Immediately following the injection the catheter is withdrawn, a sterile dressing applied to the skin wound, and the patient kept in the supine position until the anesthesia is noted. [A preliminary report of this work was presented before the Central Association of Obstetricians and Gynecologists, October 10-13, 1940, Indianapolis, Indiana.] The procedure as outlined was used on forty-six ward obstetric patients at the William II. Coleman Hospital for Women from August 13, 1940, to November 15, 1941. . . .

“The advantages this technic offers over the standard caudal block procedure in obstetrics are as follows: . . . The passage of the catheter beyond the end of the needle proves that it is in the sacral canal. . . . The time to perform this procedure can be determined within reasonable limits by the operator. . . . The danger of the needle piercing the dura is eliminated since only the catheter traverses the sacral canal. . . . The sacral canal is tra-