ishes the sinus reflex. Simultaneous bilateral anesthetization of the region of the carotid sinus is not advisable because of the possible bilateral laryngeal palsy that might accompany it." 18 references.

J. C. M. C.

McCALL, J. W., AND FREEMAN, M. S.: *Postoperative Atelectasis: Presentation of Four Cases.* Ohio State M. J. 38: 546–550 (June) 1942.

"The predominating postoperative pulmonary complication is atelectasis, which may involve a portion of a lobe, a whole lobe, or a whole lung. Early recognition is important for two reasons: (*a*) it allows an earlier institution of therapy and facilitates a more prompt return of the atelectatic lobe to normal; (*b*) it prevents the more dreaded postoperative pneumonia which may occur in atelectasis of longer duration. Bronchial obstruction is the most important factor in producing atelectasis. Its removal can be achieved most satisfactorily by bronchoscopic aspiration. Patients receive almost instantaneous relief." 11 references.

J. C. M. C.

ANDERSON, B. M., AND ESSEX, H. E.: *Studies on Barbiturates, Especially Their Cyclic Disappearance from and Reappearance in the Blood Following Intravenous Injection.* Proc. Staff Meet., Mayo Clin. 17: 337–339 (June 3) 1942.

"In 1939 Delmonico reported a modification of the Koppanyi method of analyzing tissues for barbiturates which he and Osterberg had developed. He obtained recoveries of from 93 to 110 per cent of barbiturate added to blood in vitro. Employing this method for extraction of barbiturates from the blood in intact dogs and the unmodified Koppanyi method for analysis of minced dog and rabbit tissues Delmonico made the following observations.

"'In vitro, the liver exerts the most destructive action on nembutal (pentobarbital sodium) and sodium amytal and brain tissue the least. Kidney and muscle tissue are next to liver in the order named.' Essentially the same results were obtained from experiments made in vivo. 'Following the injection of dogs intravenously with anesthetic doses of nembutal, pentothal sodium and sodium amytal, during and without ether anesthesia, there was a more or less cyclic disappearance and reappearance, or vice versa in the general circulation of the barbiturate used. The same observation was made in the blood obtained from the venous return of a limb or an organ following intra-arterial injection of nembutal or sodium amytal.' This latter observation is apparently new. We have been unable to learn of any other substance which exhibits such behavior. Studies were made to test this observation further and to determine whether the blood perfused through isolated organs had variations of barbiturate content similar to those observed in blood from the intact dog. Preliminary control experiments with Delmonico's method yielded poor recoveries of barbiturate. Therefore it seemed necessary to seek a substitute method. The procedure reported by Levvy of Edinburgh was examined. The procedure was not entirely satisfactory but by minor modifications, especially in the length of the extraction time, which was prolonged to eight hours, we were able to obtain satisfactory recoveries of 80 per cent or more over a wide range of known concentrations of pentobarbital sodium in the blood.

"To check on the observation that the barbiturate appeared in the blood in a cyclic manner, four dogs were given 25 mg. per kilogram of pentobarbital sodium each, in one dose. Samples of blood were withdrawn at fifteen minute intervals and the barbiturate content was determined. The