culatory effects of anesthetics. To what the anesthesiologist's appetite there are, among others, authoritative presentations on Integrated Aspects of Cardiovascular Regulation by B. Fulkow, C. Heymans and E. Neil; Physiology of Congestive Heart Failure by J. O. Davis, and Effect of Respiratory Acts on the Circulation by E. P. Sharpey-Schafer. Amidst this galaxy, "Anesthesiology" proves to be a great disappointment. One cannot fathom for whom it is intended, but it may be for the physiologist who uses anesthetics in his experiments. He will find little to help him here. The material is presented according to agents, including chloralose, urethane and steroids and an odd piece on "Preamsesthetic Medication Agents." As a rule it is unfair to take statements out of context, but a few will suffice to convey the tenor of this chapter. "Cardiac output has been determined in rats under ether anesthesia but unfortunately no unanesthetized controls are available for comparison." "Although ether may more or less paralyze the baroreceptors of cats under chloralose it can still stimulate their chemoreceptors and produce vasomotor reflexes." "If the carotid sinus mechanism in man has become hyperactive under digitalis therapy, the administration of ether may lead to sudden death due to cardiac arrest."

This discordant note should not deter the reader from perusing the *Handbook* and profiting by the overall remarkable standard of excellence.

**Lehot D. Vandam, M.D.**


The plan to have the second of two volumes on respiration of the *Handbook* Series cover applied problems, as opposed to the emphasis on basic mechanisms provided in the first volume has in general been followed. Yet in the three major areas covered—exposure to stress and hostile environments, methods for testing pulmonary function, abnormal pulmonary function, basic concepts have been emphasized throughout. Many of the 59 chapters will be of particular interest and relevance to the practising or research anesthesiologist. Among these are: physiological consequences of hyper and hypoventilation, drowning, respiration in anesthesia, respiratory and circulatory resuscitation, and blood gas concentrations and techniques for their measurement (the last three written by two anesthesiologists). Effects of oxygen at high partial pressure, and biochemical aspects of oxygen poisoning are timely topics in view of increasing use of hyperbaric oxygenation.

No less applicable to problems of anesthesia are the chapters on abnormal pulmonary function, including airway obstruction, neuromotor paralysis, pulmonary shunts, pulmonary changes due to aging, pulmonary resection and sequelae of thoracic surgery, ventilatory disturbances in disease, alveolar instability associated with altered surface tension, pulmonary edema, pneumoconioses, tuberculosis and pneumonia, and lung displacement caused by thoracic or abdominal deformities.

A chapter this reviewer would have liked would deal specifically with emphysema and chronic bronchitis, since in few other conditions are so many abnormalities of respiratory mechanics, gas exchange and control of respiration simultaneously present.

The anesthesiologist, the chest physician and the thoracic surgeon, as well as the basic respiratory physiologist, will welcome this great storehouse of knowledge of respiration, presented clearly, and from a quantitative point of view.

**John F. Perkins, Jr., M.D.**

**IN BRIEF**


Greatly enlarged, extensively revised, very inclusive, and up-to-date second edition of a leading textbook on anesthesia which first appeared in 1960, followed by two reprints and Italian and Polish editions. Many references and a limited index included. Highy recommended.


This publication contains 20 papers (13 in English) presented at the Postgraduate Course on Central Monitoring in Surgery and Medicine held in Leiden, November 5-6, 1965. The 15 speakers...