BOOK REVIEWS


This is an excellent book. It should be read by those who are doing, or are contemplating doing, intratracheal anesthesia. It covers the field clearly and comprehensively and presents the several views of controversial subjects without resorting to dogmatic statements. The beginner should be greatly helped by it, while the one with experience should not only find new ideas but should be intensely interested and highly entertained by having recounted for him the many difficulties and circumstances which at one time caused "humiliation, vexation, and embarrassment" for the author. The section on the history of the subject with its many references is illuminating, and the list of references at the end of each chapter, combined with the extensive bibliography at the end of the book, is indeed stimulating to anyone wishing to investigate the subject. One can recommend this book highly to those who are interested in this branch of anesthesiology.

A. W. FRIEND, M.D.
R. M. TOVELL, M.D.


This book is intended primarily for neurosurgeons, since it is devoted, almost entirely, to the surgical aspects of the autonomic nervous system. Nevertheless, several parts of the monograph may be read with profit by the anesthesiologist.

The authors have made an excellent anatomical table of both the cranio-sacral and thoracolumbar outflow of the autonomic nervous system. This discussion is detailed and authoritative and may be used for reference purposes. There is a comprehensive discussion of the general physiology of the glands and smooth muscles which are not under the control of the cerebral cortex. The functions of the sympathetic and parasympathetic nerves are clearly outlined. The chapter on the pharmacology of the sympathomimetic and parasympathomimetic compounds is too brief and somewhat confusing. The authors state that atropine paralyzes the sympathetic nerves and also that atropine paralyzes the sweat glands. The authors explain this paradox by the fact that the sympathetic postganglionic fibers to the sweat glands are cholinergic in action. Most authorities are agreed that postganglionic sympathetic fibers are adrenergic in action and that the sweat glands are innervated by preganglionic fibers of the sympathetic nervous system, which accounts for the cholinergic action.

The major part of the monograph is devoted to the methods of study and
surgical treatment of diseases of the autonomic nervous system. One chapter on diagnosis and treatment is of interest to the anesthesiologist, namely, the use of paravertebral injection in disturbances of the sympathetic rami and their ganglia. This discussion is good, but unfortunately, too brief.

On the whole, this treatise on the autonomic nervous system makes interesting reading, but the chapters of importance to the anesthesiologist are too brief for this book to be used as a standard reference text on the autonomic nervous system.

Milton J. Marmer, M.D.

For the information of anesthesiologists who are contemplating application for certification by the American Board of Anesthesiology, Inc., or who are training physicians for the specialty, the following questions have been employed for Part I (written) examination in the past in *Physics and Chemistry*:

1. *a.* Why are drugs of the barbituric acid family commonly administered in the form of their sodium salts? *b.* Why does moisture form on the outside of an ether vaporizing jar?

2. For each of the following, give the chemical formula, and state whether the gas is lighter or heavier than air: *a.* ethylene; *b.* cyclopropane; *c.* carbon dioxide; *d.* carbon monoxide; *e.* helium; *f.* hydrogen; *g.* ether vapor; *h.* oxygen; *i.* ethyl chloride vapor; *j.* divinyl oxide vapor; *k.* chloroform vapor; *l.* nitrous oxide.

3. State dangers in the use of chloroform in the presence of *a.* an open flame; *b.* eclampsia.

4. For each of the following, give the chemical formula and molecular weight: *a.* cyclopropane; *b.* divinyl ether; *c.* chloroform; *d.* tribromomethanol.

5. What safeguards do you advise against hazard of explosion when inflammable anesthetic agents are being employed?

6. Are the following statements true or false? *a.* If the pressure does not change, the volume of a gas varies directly as the centigrade temperature. *b.* If the temperature does not change, the volume of a gas varies inversely as the pressure exerted. *c.* The upper limit of inflammability of cyclopropane when mixed with oxygen is 40%. *d.* Chloroform is inflammable. *e.* Chloroform can be safely used in the presence of an open flame.

7. What is the chemical composition of "soda lime"?

8. Use diagrams to illustrate the general principles of a "circle type" and "to and fro type" carbon dioxide absorbing unit for anesthesia. Discuss briefly the following factors: temperature, resistance and dead space for each appliance.


10. Outline for the operating room supervisor a 15 minute talk that she may use to instruct operating room nursing personnel in the prevention of explosions from static.