

heart rate, systemic vascular resistance and diastolic pressure, the authors draw an analogy (or is it hyperbole?) between isoflurane and diethyl ether. They admit pancuronium could account for the change in heart rate but fail to mention that nitrous oxide, which they also used, could account for the change in systemic vascular resistance. The latter change consisted of a *statistically significant 2 per cent increase* in only one of four groups of patients studied.

I would like to think all this was an experiment by the Editorial Board to see how many readers actually read the text. If so, I am happy to take the bait. But deep down I believe the Editorial Board just had an off day.

ARTHUR S. KEATS, M.D.
Texas Heart Institute
Texas Medical Center
Houston, Texas

(Accepted for publication December 20, 1974.)

Book Reviews

Evaluations of Drug Interactions. First edition. American Pharmaceutical Association, Washington, D.C., 1974. Pages: 357. Price: \$10.00.

The committees that have prepared the "Evaluations of Drug Interactions" represent the American Pharmaceutical Association, assisted by the American Dental and Medical Associations, the American Society of Hospital Pharmacists, the FDA, and the National Library of Medicine. Close to 200 participants are listed as contributors or reviewers, and 26 pharmaceutical manufacturers are named as having helped. This formidable legion has concentrated on about 100 monographs dealing with interactions ranging from acetohexamide-phenylbutazone to warfarin-vitamin K, from reserpine-halothane to tubocurarine-quinidine. A second edition is already being planned.

This first edition has more than 350 pages, packed with condensed and often compulsively referenced information. Nothing like it on drug interactions and their mechanisms is available in such a handily referenced format.

J. S. GRAVENSTEIN, M.D.
Department of Anesthesiology
Case Western Reserve University
Cleveland, Ohio

The Physiological Basis of Starling's Law of the Heart. Ciba Symposium 24 (new series). New York, American Elsevier Publishing Company, Inc., 1974. Pages: 298. Price: \$15.40.

In this international symposium, physiologists, an electron microscopist, bioengineers, and pharmacologists explore the intrinsic mechanisms by which increased cardiac filling enhances cardiac output. Although the purported aim is a physiologic explanation of this phenomenon, contributions predominantly concern studies of isolated tissue. Presentations in biochemistry or electrophysiology are absent. Strictly speaking, "physiologic" overstates the symposium's scope.

Nonetheless, an effective review of current thoughts about the physical basis for cardiac muscle mechanical behavior is achieved. Prefaced by a review of pertinent developments in skeletal muscle physiology, the first half emphasizes length measurements in live fibers. Previous measurements of myofilament and sarcomere length in fixed tissue are critically appraised relative to new x-ray diffraction studies of living cardiac muscle.

Recent measurements of sarcomere length in cardiac muscle are correlated with length-dependent factors that alter contractile force. Other sections consider the relevance of force-velocity relations, the contribution of geometrical factors, and variations in regional myocardial perfusion as possible causes of increased contractile strength. As with other Ciba symposia, the open discussions contribute refreshingly unorthodox views. Attempts are made to clarify imprecise concepts such as contractile element, crossbridge and projections, active state.

What is the physiologic basis of Starling's Law? The symposium provides no ready answer, but clarifies a few alternatives and provocatively records what we thought we knew in 1973.

JOHN KRUEGER, PH.D.
Anesthesia Research Center
University of Washington
Seattle, Washington 98195

Sémiologie Chirurgicale. Third edition. EDITED BY LUCIEN LEGER. Paris, Masson & Cie, 1974. Pages: 480. Price: 100 French francs.

This third edition of *Surgical Physical Diagnosis* by Professor Leger and his colleagues is, as they state in the preface, "never meant to be a complete treatise, but rather an introductory text to facilitate contact with patients and their pathology." They have succeeded quite well in their limited goal. The 29 chapters cover a wide range of common surgical conditions. In addition, complications, particular cases such as those occurring in infants or aged patients, and brief outlines of treatment and expected results are given. The line drawings are excellent. Unfortunately, there are no references to the literature. This is particularly disadvantageous because the book itself does not go into detail regarding any particular disease. Another irritation is the continental habit of printing x-rays as positives rather than negatives. For those who read French this would be a worthwhile supplement to standard texts in surgical physical diagnosis.

THOMAS L. MARCHIORO, M.D.
Department of Surgery
University Hospital
Seattle, Washington 98195