The Pharmacological Basis of Therapeutics. Fourth edition. EDITED BY LOUIS S. GOODMAN AND ALFRED GILMAN. New York, The Macmillan Company, 1970. Pp. 1,794. $25.00.

The format of this fourth edition of the familiar "blue bible" is similar to that of its predecessor, published in 1965. The herculean task of reviewing a flood of literature and updating this encyclopedic text on pharmacology, toxicology, and a rational approach to therapeutics for physicians and medical students has been assigned to the same distinguished group of 42 pharmacologists and clinicians responsible for the third edition. Individually or jointly, they have contributed 77 chapters in 18 sections. In spite of joint authorship the volume retains the distinctive prose, lucid language and composition of those earlier editions that made "Goodman and Gilman" one of the most widely read of medical texts.

Each chapter has been rewritten to present current pharmacologic thought and therapeutic indications. References as current as 1969 are included; a remarkable feat for a tome of this magnitude. Once again, extensive use has been made of extract (fine) type as a space-saving device. Generally, those portions of the text thought to be of lesser importance but still of interest are set in fine type. The reader concerned with historical development, chemical structure, structure–activity relationships, details of action, and therapeutic indications will find it necessary to consult the "small print."

Of particular interest to the anesthesiologist, especially as a source of reference, are the several sections dealing with drugs acting on synaptic and neuroeffector junction sites; cardiovascular drugs; water, salts, and ions; drugs affecting renal and electrolyte metabolism; oxytocics; gases and vapors; hormones and hormone antagonists. The section dealing with drugs acting on the central nervous system included chapters on anesthetics, alcohol, hypnotics and sedatives, narcotics and their antagonists, central nervous system stimulants, and tranquilizers, and an excellent timely chapter on drug addiction and drug abuse.

The task of condensing the pharmacology of the general and local anesthetic agents into 87 pages, less than 5 per cent of the overall text, was undertaken by Dr. Robert D. Dripps and his associates. They are to be commended for having been able to condense so much information into so little space. Experienced teachers and clinicians, they have sifted from a mass of detailed literature that body of knowledge that should be easily accessible to practitioners and medical students alike. If the chapters on anesthesia have any shortcoming, it is the abbreviated discussion of the intravenous agents, even though they have been treated extensively in the literature of the past decade.

This is the most comprehensive and current of pharmacology texts; it is well written, masterfully edited, and well produced. A standard reference work, "Goodman and Gilman" should occupy a prominent place in every physician's library.

HOWARD L. ZAUDER, M.D., PH.D.
The University of Texas Medical School at San Antonio
San Antonio, Texas 78229

Obstetrics and Pediatrics

AMNIOTIC FLUID EMBOLISM Amniotic fluid embolism, which has been described as the leading cause of maternal mortality, usually occurs when an anesthesiologist might be in attendance. The treatment of this syndrome is usually supportive, but experiments reversing the natural course of the disease are described. The injection of human amniotic fluid into the mesenteric microcirculation of the rabbit was studied by microcinephotography. Platelets and other cellular material adhered to the amniotic fluid debris, enlarging the mass and causing vascular obstruction. This was associated with a precipitous decrease in blood pressure. Infusion with a solution of polyoxypropylene and polyoxyethylene glycol (pluronic F-68, an industrial surfactant) reconstituted the microcirculation by disseminating, *post facto*, early thrombi about the cellular debris, and restored the systemic blood pressure. Since this compound is a plasma substitute, an attempt was made to restore the cardiac output by administering low-molecular-weight dextran, but without success. (*Hymes, A. C., Robb, H. J., and Margulis, A. R.: Influence of an Industrial Surfactant (Pluronic F-68) on Human Amniotic Fluid Embolism, Amer. J. Obstet. Gynec. 107: 1217 (Aug.) 1970.*) ABSTRACTER'S COMMENT: If this compound is not toxic to humans, this may be a major step forward in the immediate treatment of amniotic fluid embolism, a condition that is usually fatal.