Book Reviews

Adolescent sterility: a study in the comparative physiology of the infecundity of the adolescent organism in mammals and man. M. F. Ashley Montagu. Springfield, Ill.: Charles C. Thomas, 1946. Pp. ix + 148. (Illustrated.) $3.50.

Any contribution to the understanding of the problem of human sterility is of considerable importance, for sterility in the human seems to be increasing. Prof. Montagu has made such a contribution in this volume. He brings together evidence from both comparative (mammalian) and human physiology that the onset of menstruation does not coincide with the ability to conceive. It is this interval between the first menstrual period and the first conception that is known as the period of adolescent sterility. Ovulation is not associated with the first menstruation, but follows sometime later, the number of years varying considerably in any given population. The physiological basis for the period of adolescent sterility is hormonal control. The mechanism that starts and maintains menstruation is not the same as that which initiates ovulation, the latter being the later and more mature function. During the interval between the first menstruation and the first ovulation the organism does not remain static, but matures the sexual equipment essential for the process of reproduction.

Prof. Montagu's book is most highly recommended to every physician whose practice involves obstetrics, gynecology, and endocrinology.

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Curare: its history, nature, and clinical use. A. R. McIntyre. Chicago: Univ. Chicago Press, 1947. Pp. vii + 240. (Illustrated.) $5.00.

Curare, the arrow poison of South America, is as scientifically interesting and exciting to the biologists of today as it was intriguing to the early explorers who discovered it and the natural philosophers who first wrote accounts of it. In the large scientific literature on this subject which is added to monthly there is at present no single publication of broader scope or more profound learning on the subject than the present study. Dr. McIntyre and his associates during the last 6 years have accomplished a large amount of experimentation on the physiological and pharmacological effects of curare. In this volume he not only undertakes to place all of this experimental material, including the work of others, in an orderly review, but also provides a very scholarly historical background for the whole subject. In developing the history of curare he has been able to correct numerous errors and false impressions. He shows the relation of this and other poisons to the beginnings of modern toxicology and the development of modern physiology. Numerous quotations have been included from several of the earlier, more significant accounts, particularly from witnesses who observed the preparation of the poison extracts which were to be used by the Indians in the Amazonian jungles.

Historical notes and references occur throughout the volume, but the major portion of the book is devoted to the presentation of a wide range of experimental work. Full chapters on the botanical and chemical aspects of curare are provided, tracing these lines of study from earliest times up to the present. Other chapters cover: nerve and muscle, circulation and respiration, the viscera, the central nervous system, absorption and excretion, and toxicity. There is a chapter on theories of curarization and one entitled "Miscellaneous Effects of Curare."

Laboratory studies already completed demonstrate that curare can be used successfully in connection with shock therapy to control and prevent trauma and is useful as an adjuvant in anesthesia. Details are given for the administration of the drug for these purposes, and the anticipated clinical results are discussed. Dr. McIntyre proposes areas where new or more extensive experimentation with curare appears to offer promise of developing further therapeutic uses. The work is noteworthy also as a bibliography on curare, since each chapter contains full references to the authors cited, and these pages make up nearly 25 per cent of the total. Subject and author indexes are very adequate. The University of Chicago Committee on Publications in Biology and Medicine has sponsored this book.

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Injection molding of plastics. Islyn Thomas. New York: Reinhold, 1947. Pp. viii + 534. (Illustrated.) $10.00.

Although the first patent on an injection molding machine was granted in 1878, this is the only comprehensive book to be published on the subject. The first part of the book is devoted to the history of injection molding, giving a detailed description of many of the commercial machines, both past and present; the characteristics of thermoplastic molding powders, information which the molder can use as a basis for selecting the proper plastic; general techniques and guiding principles for the molding of different types of thermoplastic materials; recommendations for laying out a molding plant, including a description of the necessary auxiliary equipment, storage space, utility requirements, etc. The latter half deals with mold design and construction, product design and finishing, cost estimation, and finally ends with tables on the physical properties of plastics.

The text is written in language which both the layman and engineer can understand; the hundreds of illustrations serve to increase its instructiveness. Very few references are quoted other than Modern Plastics although a good portion of the data, it appears, has been taken from trade literature. The author has rendered a valuable service in selectively assembling so much authoritative information on injection molding. His treatise should help ease many of the costly headaches involved in gaining experience in the molding field.

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