Book Reviews

The Travels of William Bartram. Naturalist's edition. Francis Harper. Yale University Press, New Haven, 1958. lxii + 727 pp. Illus. + plates. $8.50.

Not since Samuel Eliot Morison followed in the wake of the "Admiral of the Ocean Sea" or Allan Nevins tracked "Fremont, Pathmarker of the West" has there been a painstaking study of an American explorer comparable to Harper's tracing of the travels of William Bartram for the twenty years prior to publication of this volume—a goalpost in natural-history literature. The story of William Bartram's life and travels has been more or less told by Darlington (1849), Coues (1875), Stone (1905), Van Doren (1928), Fagin (1933), Brannon (1939), Earnest (1940), Allen (1951), Cheston (1953), and Herbst (1954), but never before so comprehensively as by Francis Harper in what has been appropriately called the "naturalist's edition" of Bartram's *Travels.* The author built, on the careful studies published in 1942 and 1943, around a plan to reproduce, verbatim and *literatim,* the *Travels* of Puc Puggy (as the Seminoles called Bartram) in such a way that this volume may be used with as much confidence as the original 1791 Philadelphia edition; to interpret the scene day by day; and to place the critical words of the narrative in what amounts to a variorum index worthy of a Shakespearian scholar. This annotated index opens up the text at once to the biologist, anthropologist, geographer, or whosoever seeks to know 18th century Florida in its "Eden" days. A field naturalist's affection for the Okefinokee, the Tallapoosa, and the Suwannee and for Bartram's favorite Alachua Savanna is evident on every page of Harper's commentary. The Seminole, wolf, deer, and sand-hill crane that lived on the Savanna are gone, and every true naturalist is saddened by that loss. Lesser prizes survive: the toothache tree still grows at the Rigolets, and the splendid *Magnolia macrophylla* (*"M. auriculata"* of Bartram) at its type locality (unless it has been wiped out in the last two decades). Evidence of Harper's careful pursuit of the Bartram trail is his reporting that tabanid flies, which plagued Billy Bartram in Taylor County, Georgia, also proved so annoying to John Lyon, who passed the same spot in July 1803, 28 years later, that Lyon noted it down in his journal. Records from letters of Muhlenberg and many others sharpen the focus on indistinct passages, and Harper has searched out marginalia, association copies, and the like to enrich the glosses. Here is a 20th century "book of distinction" to read and to treasure. I predict that the book will win a publisher's award for its physical format. Best of all, this "naturalist's edition" of a classic is consummately satisfying for the naturalist reader of scholarly tastes.

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Mitotic Poisons and the Cancer Problem. John J. Biesele. Elsevier, New York, 1958. 214 pp. $7.50.

The many screening programs in cancer chemotherapy carried out especially during the last decade involved testing of thousands of compounds. These screening procedures made use of different approaches—studies of transplanted tumors, tissue culture, microorganisms, and so forth. However, all were concerned with the primary target, the cell, and the effect on it of a chemical agent. A large number of such agents was found to affect mitosis, and a considerable body of information has been accumulated with regard to such "mitotic poisons."

Beginning with a discussion of the concept of mitotic poisons and a classification of such agents, this book is concerned with the response of cells to such substances, presented from the biochemical viewpoint as well as from that of traditional cytomorphology. Inhibition of cell division, damage to the spindle and to the chromosomes during the several phases of the mitotic cycle, and the behavior of other cellular components are discussed from the standpoint of the changes produced, the probable mechanisms underlying such aberrations, and the possible meaning of these changes. The deleterious effects on the mechanics of cell growth and proliferation of antimetabolites and the more newly studied therapeutic agents, as well as the classic mitotic poisons, are discussed.

This is an active area, and the writer has collected and critically presented a sizable mass of data in admirably concise and readable form. The substantial bibliography should be of great value to all interested investigators. Of particular usefulness to workers in the cancer field, this book should also appeal to workers in many disciplines who are interested in basic cytology and the phenomena of cellular damage inflicted by chemical agents.

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Flora of the British Isles: Illustrations. Part I, *Pteridophyta-Papilionaceae.* A. R. Clapham, T. G. Tutin, E. F. Warburg; drawings by Sybil J. Roles. Cambridge University Press, New York, 1958. 144 pp. $5.

This quarto-size book is a companion volume to the smaller but thicker *Flora of the British Isles* by the same authors and is designed to be used with it in identification. The arrangement of the figures (there is no text) follows that of the *Flora,* as does the nomenclature, except for rare changes that bring the names up to date. Some species not in the *Flora* are illustrated if they have become recognized or established recently, while a few aliens so rare that fresh material could not be got have been omitted.

The drawings have been made in nearly every instance from fresh specimens, and the aim has been to show the appearance of living plants. In general they accomplish this very well. For each species there is shown the habit of the plant as well as details of pubescence, bracts, flowers, seeds, or other critical parts. The figures are labeled with the scientific name, the common name, and the flower color, and a scale of magnification is provided.

Illustrations of this sort are very useful, for the amateur as well as for the expert, in identification, in particular, of introduced or hard-to-identify groups of plants. This flora may be compared with the new Britton and Brown *Illustrated Flora,* by Gleason, and the *Illustrated Flora of the Pacific States,* by Abrams. The illustrations in the three books are of approximately the same quality, those of the later volumes of Abrams being perhaps the best, and there are approximately the same number. In the two American books the illustrations and text