volumes. Volume 1 presents authoritative articles on specific aspects of law and administration relating to the nuclear-energy programs of the United States, the United Kingdom, Euratom, the International Atomic Energy Agency, and Israel. Volume 2 presents the texts of nuclear-energy legislation and regulations in effect in 25 countries, together with succinct commentaries on the history and status of atomic-energy control in each country.

Each chapter in volume 1 is written by a recognized authority. These chapters present a distillation of the history, conflicts, compromises, and status of the new legal and administrative arrangements that have evolved, primarily in the United States and Britain, as governments respond to the new nuclear technology. John Palfrey's opening chapter is an excellent "legal chronicle" of the United States federal statute, while William Krebs' chapter on state activities and Casper Ooms' chapter on patents are clearly indicative of the authors' deep understanding of the subject matter. I wish that chapters had been included on the new administrative arrangements evolving out of AEC-contractor relationships, or that there had been more specific material concerning the growing federal-state-local problem of licensing and control of private atomic-energy facilities. These minor criticisms, however, of a noteworthy treatise.

Volume 2, except for the commentaries, is a reference source on foreign legislation and procedures—clearly of limited interest to all but the specialist. The commentaries are useful summaries.

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The Emergence of the German Dye Industry. John Joseph Beer. University of Illinois Press, Urbana, 1959. vii + 168 pp. Cloth, \$4.50; paper, \$3.50.

This detailed account of the German dye industry begins with Perkin's discovery of mauve dye (analine purple) and terminates with the formation of the I. G. Farbenindustrie. It is less a history of the scientific and technical development of the industry than an analysis of the social, economic, and scientific factors which brought about that most

spectacular chapter in the extraordinary history of the chemical industry in the 19th century.

It is surprising that this story has not previously been recounted in English, especially since the German dye industry has been celebrated in the United States as an example of commercial and scientific iniquity. It is the more surprising inasmuch as a considerable number of general histories, company histories, and personal memoirs on the subject in German have long existed.

From this account, the *bête noire* appears to be little worse or better than the rest of us. In fact, while the influence of the chemical industry on German technical education and the patent system was instrumental in securing the initial advantage Germany enjoyed in World War I, Beer concludes that the failure of the German chemical industry consciously to prepare for war in 1914 constituted a limitation on that initial advantage. His conclusions are drawn from published data, plus a few unpublished German sources.

The extent to which Beer brings the German dye industry into the realm of the familiar is illustrated by his remark that "the only reason all the dye companies continued to spend heavily on dye research was for prestige reasons very similar to those which impel the American auto industry to change models every year" (page 123). He emphasizes the role of capitalistic enterprise as a factor in the spectacular growth of the dve companies and notes that Carl Duisberg (later board chairman of I. G. Farbenindustrie) credits to his observations of the American trusts in 1903 some of the ideas which led to the formation of the German combine. The detailed history of the I. G. Farbenindustrie is not a part of this book, how-

Having reduced the story of the German dye industry from the mysterious to the familiar, Beer points out that the factors cited point to the inevitable emergence of the institutional research activities represented by that industry. But he also points out that the coincidences of time and circumstance revealed by an analysis of a specific example such as this are often of the greatest importance in the world as it is. The truth of this is quite evident in the fascinating case history that he has written.

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Family Planning, Sterility, and Population Growth. Ronald Freedman, Pascal K. Whelpton, and Arthur A. Campbell. McGraw-Hill, New York, 1959. xi + 515 pp. Illus. \$9.50.

A quarter of a century ago, voluntary parenthood seemed inconsistent with population maintenance. Demographers forecast declining populations with reasonable surety, for birth rates had been moving downward for more than a century. Then birth rates increased in practically all social and economic groups except the lowest, where the decline continued. Moreover, the increases were generally greatest in the groups where the birth rates had been lowest. Voluntary parenthood was consistent not only with childlessness and disappearance of ethnic differences but with a familistic orientation of life that would sustain continuing increase of the population. The assessment of the future population of the nation became a topic of wide conjecture.

The studies made by P. K. Whelpton of the Scripps Foundation for Research in Population Problems had shown that the measurement of trends in fertility should be based on the life-time performance of cohorts of women rather than on the levels of general or agespecific birth rates in specific time periods. However, the past childbearing record of cohorts of women did not provide an empirical basis for estimating future childbearing. These future estimates required knowledge of the wishes and anticipations of families, and of the probable relationship between the numbers of children that were expected and the numbers that would be born. It is these new dimensions of population research that were the goals of the study reported in Family Planning, Sterility, and Population Growth.

The Survey Research Center of the University of Michigan and the Scripps Foundation for Research in Population Problems cooperated in this study of family planning and fertility. The 2713 white, married women who were interviewed represented a probability sample of the national population of some 17 million white wives aged 18 to 39 in 1955. The trained interviewers of the Survey Research Center met with unexpected frankness and cooperation in the responses to queries concerning attitudes toward, and practices of, family limitation. Interviews were secured