ticians have been attempting to cope with this vexatious problem, with encouraging results.

Chapter II gives the present available sources of information on star counts, spectral types and the distribution of dark nebulae. A gratifying feature of Dr. Bok's discussion of the observational material is the manner in which he points out where new observations are most sorely needed. This feature, which is characteristic of the entire monograph, should prove highly stimulating to future research.

The third and final chapter deals with the general problems of galactic structure. Studies of the distribution of stars in directions perpendicular to the galactic plane are not complicated by the bogey of interstellar absorption, and considerable progress has been achieved in those directions, particularly by Oort. The author makes a critical survey of the arguments for and against the hypothesis of a local system of stars in which the sun is approximately central, and concludes that the hypothesis may at least be accepted as a working model. The monograph concludes on a highly optimistic note. Although only the most general features of galactic structure are now well established, Dr. Bok feels that the current rapid accumulation of observations will soon begin to reveal the finer details of stellar structure, and suggests that, as a working model, the galactic system may be regarded as a rather open spiral system, similar in form to Messier 33. On this basis, and accepting the hypothesis of a local system, the sun would be located in a spiral arm about two thirds of the distance from the center to one edge.

"The Distribution of the Stars in Space" is an extremely important contribution to the field of galactic structure, invaluable alike to both students and research workers in the field.

LEO GOLDBERG

THEORETICAL MECHANICS TREATED VECTORIALLY

Theoretical Mechanics, a Vectorial Treatment. By CARL JENNESS COE. New York: The Macmillan Company, 1938, 13 + 555 pages. Price, $5.00.

THIS text-book combines effectively an introduction to theoretical mechanics with training in the notation and methods of three-dimensional vector analysis (Gibbs's notation). Save for some words of caution in view of modern developments in relativity theory and quantum analysis, the selection of topics follows the classical tradition of such authors as Appell, Love, Routh, Webster and Whittaker. Rarely do mere physical facts intrude. Damped motion and sliding friction are touched upon, but the notions of elastic limit, atom, fluid, Young's modulus, oscillograph, viscosity or other commonplace terms of the physical laboratory find no place in this theoretical mathematical study. Included are chapters on the general principles of mechanics, on vector calculus and on potential theory (using three-dimensional vector calculus). But no attempt is made to introduce a generalized vector-space or tensor methods. Some prior training in calculus is assumed on the part of the student. An abundance of numerical exercises is provided which should give him facility and power in working with concepts which thereby can not but acquire clear significance.

ALBERT A. BENNETT

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SOCIETIES AND MEETINGS

THE ALABAMA ACADEMY OF SCIENCE

AT Montgomery, the capital, in the shadow of the spot where Jefferson Davis took the oath of office as president of the Confederacy, the Alabama Academy of Science held its sixteenth annual meeting, on April 14 and 15, with Huntingdon College as host. P. H. Yancey, of Spring Hill College, Mobile, presided. The historic background of this beautiful old southern "city of homes," together with the burst of bloom which is characteristic of the season, and the gracious hospitality of the college and of the Montgomery members, made this a memorable occasion. Eighty members, a number of visitors and over a hundred members of the Junior Academy, representing twenty-one schools, which met at the same time, registered. A certificate of award for the best paper and four certificates for the best exhibits in the various scientific fields were given the juniors by the senior academy. P. P. B. Brooks, head of the science department, Sidney Lanier High School, counselor at the place of meeting, assisted by James Holt Starling, head of the biology department, Troy High School, counselor to the president of the Junior Academy, had charge of arrangements for the Junior Academy, for which James H. Kassner, associate professor of chemistry, university, is acting permanent counselor.

Two symposia featured the program of the academy, which included forty-eight scientific papers, presented in four sections at Flowers and Bellingrath Halls and the Haughton Library on Friday afternoon and Saturday morning. Section I held a symposium on "The Biological Control of Malaria." This was presented by members of the health and safety department of the Tennessee Valley Authority, Wilson Dam, and the Alabama State Departments of Public Health and