familiar to him as a biological phenomenon, the disease can be seen in good perspective. He synthesizes for the reader the concept of brucellosis as a "universal" from which the particular clinical variant can be understood and possibly predicted. The clinician will certainly find what he should know.

The book is taken up with the history, the organism, the reservoirs, the spread, and the epidemiology and then with the pathogenesis, natural course, complications, diagnosis, treatment, prevention, and outlook; 906 references are given, and the content of the articles is dealt with critically. He has supported the general clinical descriptions with the protocols of 244 cases.

One form of the infection may have been underemphasized—the one not characterized by abortion; it is prevalent in goats in the Mediterranean area. Since the Soviet reports on human immunization are only just now being made available, it is not surprising to find them unmentioned.

One hopes that the book will be as widely distributed as the disease.

K. F. MEYER
George Williams Hooper Foundation, University of California Medical Center, San Francisco

Chazyan and Related Brachiopods. pt. 1, Text pt. 2, Plates. Smithsonian Miscellaneous Collections, vol. 127. G. Arthur Cooper. Smithsonian Institution, Washington, 1956. 1024 pp. + 241 pp. + 269 plates. $20.

This monograph represents the culmination of study in the field and laboratory over a period of some 20 years. It is essentially a sequel to an earlier monograph by Ulrich and Cooper on brachiopods in the subjacent Canadian and Ozarkian rocks. The complex nature of the Chazy and related rocks is well recognized by Ordovician stratigraphers, and the appearance of this long anticipated monograph is of significance to a better understanding of middle Ordovician correlations.

The largest part of the material was collected by Cooper, although he did not visit all the regions from which Chazy and related rocks were taken. In addition, much of the material represents gifts or loans from other collectors whose accuracy for formational designations must be accepted. The list of formations, arranged alphabetically, covers most of the Chazy and related formations and is the most comprehensive to date. These formations cover the principal regions of Chazy rock exposures. Brachiopod faunal lists accompany each formation. Where faunal lists of other workers are listed under certain formations, identifications considered questionable are so indicated. Details concerning lithology, contact relationships, age, correlation, thickness, type sections, and status of the formations are discussed.

Special consideration is given to Appalachian stratigraphy, where emphasis is placed on the interlocking type of facies development as opposed to barrier-type control. Some opposition to this is anticipated on the part of workers who accept and in cases have illustrated reasonable evidence for both types of phenomena. A restored section north-south across the structural belts in Tennessee is illustrated to show the middle Ordovician facies concept.

In Section II, annotated lists of genera and species summarize concisely the stratigraphic distribution, geographic distribution, and pertinent remarks concerning each described form. Page references for generic and specific descriptions are very helpful. A correlation chart shows the position of the formations and members from which brachiopods are mentioned, described, or illustrated in more than 60 areas throughout the country and into Canada. The units are tied in with the middle Ordovician standard proposed by Kay and into five newly proposed stages. These stages, in ascending order, the Whiterock, Marmor, Ashby, Porterfield, and Wilderness, comprise essentially a newly offered standard section which was believed necessary to define correctly the stratigraphy and the natural grouping of faunas, mostly brachiopods. It was recognized that correlations—as in the correlation chart—based on one group of animals seldom if ever give the true picture, for the forms might be retarded or advanced. However, the correlation chart represents a good basis for comparative faunal studies using additional groups of animals.

Some of the correlations differ noticeably from those of previous workers. The work has resulted in many new formational designations, largely in the southern Appalachians where most of the field work was done. There are several departures from the present standard section: (i) the Beekmantown, typically subjacent to the Chazy, is separated by a new stage (Whiterock); (ii) such stage terms as Chazy and Black River are no longer considered usable; (iii) the stage name Hatterian, typically subjacent to Hunterian, is considered equivalent when Cooper's correlations are compared with earlier correlations of the afore-mentioned names; (iv) the new stage Wilderness would include correlatives considered as both Black River and lower Trenton (Rockland) in earlier works. Thus, the new stage boundary does not coincide with those in the existing standard section, and it would restrict the Trenton; (v) typical Chazy would be subdivided into the Marmor and Ashby stages.

The faunal descriptions cover more than 1070 species from more than 150 genera. Of these, nearly 80 represent new genera and nearly 600 new species, indicating the comprehensiveness of this study and at the same time pointing to the paucity of brachiopod studies in Chazy and related rocks heretofore. In addition to detailed descriptions on the morphology, type specimens, locality, and geologic horizon, a discussion of each species gives the salient characteristics by which it may be distinguished from others. Part 2 consists of 269 plates. They indicate the degree of mastery developed by the author in the preparation and illustration of brachiopod forms.

This monograph represents a singularly significant contribution to middle Ordovician stratigraphy and at the same time offers a challenge to other workers who may base their work on other groups of animals, and to those who may find evidence based on physical and structural criteria or who may have differing basic concepts of facies development.

C. E. PROUTY
University of Pittsburgh

Observations on Krebiozen in the Management of Cancer. A. C. Ivy, John F. Pick, and W. F. P. Phillips. Regnery, Chicago, 1956. 88 pp. + tables and plates. $2.50.

The book *Observations on Krebiozen in the Management of Cancer* by A. C. Ivy, J. F. Pick, and W. F. P. Phillips purports to advance evidence in support of the senior author's claims made some years ago concerning a material alleged to be useful in treating cancer. The conclusions, which are based on reports of treated patients, are that the substance used, which has never been clearly defined, has brought about some improvement in a substantial proportion of the patients treated. The authors state that the improvement effected has occurred independently of other forms of treatment and too frequently to be considered examples of the well-known tendency of cancer to improve temporarily without any treatment. These claims are made for 4 percent of 189 patients.

The alleged material to which the term *Krebiozen* is applied is described as being made from the blood serum of horses that have been treated with a particular strain of microorganism. The method of preparation is not given in sufficient detail to permit it to be repeated