

It can be confidently predicted also that, when the canyons have all been mapped, there will be found an almost innumerable series leaving the front of the Greenland glacier of that time and flowing into the two forks represented on *Life's* map. Lougee and Vander Pyl have recently described a line of no vertical movement, which follows the axis of Long Island Sound and continues on the floor of the Atlantic (Fig. 4). South of this axis of neither upward nor downward movement the ocean floor has been sinking at a rapidly increasing rate southward. This has been the main

cause of the land bridge which, at the end of the glacial period, joined Europe to America and on which the meltwater of the Greenland glacier took its course and cut the canyons.

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#### References

1. HOBBS, W. H. *Glacial Studies of the Pleistocene of North America*. Part II. *The Glacial History of Iowa and Neighboring Portions of Missouri*. Ann Arbor, Mich.: J. W. Edwards, 41-109, Fig. 21 (1947).
2. *Life*, **33**, (17), 139 (1952).

## Book Reviews

*Atomic Energy Levels as Derived from the Analyses of Optical Spectra, 24Cr-41Nb*, Vol. II. Circ. 467; National Bureau of Standards. Charlotte E. Moore. Washington, D. C.: GPO, 1952. 227 pp. \$2.25.

Two years have elapsed since the publication of the first volume of this valuable standard work on atomic energy levels. This is an astonishingly short interval if one considers the enormous amount of work connected with a critical compilation of this kind. Everyone familiar with this type of work is filled with admiration for the author who has carried on this important task with such high efficiency.

This second volume contains the spectroscopic data of the elements chromium to niobium and gives the energy levels of 152 spectra. The arrangement of the tables is the same as in the first volume. The elements are treated in order of increasing atomic number and, for a given element, the spectra follow in the order of increasing ionization stage (Lockyer's symbols). The tables of an element in a given ionization stage are preceded by data concerning ground state configuration, term value of the ground state, ionization potential, explanatory notes, and references. The tables proper contain the data of each level, namely, electron configuration, abbreviated level designation, *J*-values, level with respect to the ground state in  $\text{cm}^{-1}$ , and, if known, Lande's *g*-value. As far as suitable, each level table is followed by an array containing all observed levels and the reference to tables of predicted levels given in Volumes I and II. Two pages of valuable revisions concerning spectra treated in the first volume conclude the impressive work.

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*Rheumatic Diseases: Diagnosis and Treatment*. Eugene F. Traut. St. Louis: Mosby, 1952. 942 pp. Illus. \$20.00.

A growing interest in the rheumatic diseases is reflected by an increasing number of publications on this subject. A general division of Dr. Traut's text is in-

dicated by the subtitle: "Diagnosis and Treatment." The former constitutes about two thirds and the latter about one third of the book, but there are repetition and overlapping of these subjects in various chapters. Special subjects relating to rheumatic disease are discussed in six chapters contributed separately by other authors.

Uniformity of opinion about rheumatic diseases is perhaps not to be anticipated in the current era of changing concepts. Dr. Traut, in a number of generalized discussions, seems to favor a unitarian concept of rheumatic diseases.

The author discusses his therapeutic experiences in clinical practice and compiles numerous reports from the medical literature. He notes that standardized treatment does not exist and that "improvement obtained by 'psychology' or suggestion need not be condemned." In his opinion, enthusiasm for gold therapy in arthritis is waning. He also has "tried not to display unjustified enthusiasm . . . [for] the exciting new endocrinologic therapy of rheumatic disease." Hence there is limited consideration of this timely aspect of the study and treatment of certain rheumatic diseases.

Dr. Traut regards a stock vaccine "as an indispensable part of my armamentarium" in the therapy of rheumatoid arthritis. He also uses a vaccine for patients convalescing from rheumatic fever, as it has seemed to him that such patients "had decidedly fewer recurrences than those not receiving vaccine."

References are conveniently indicated at the bottom of the pages in most of the chapters. There are charts on differential aspects of some types of articular disease or joints affected. The text is very readable and is free of typographical irregularities. The author has undertaken a comprehensive task in the compilation of a text intended to be "understandable to the medical student, of practical use to the internist and the physician in general practice, and valuable as a reference and source book to the rheumatologist."

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