out the diseases which have been caused by these visits."

Pages 30–34 are taken up with notes on the Tinneh tribe of Nicola Valley, now extinct, whose language Dr. Boas shows "was much more closely related to the Tinneh languages of British Columbia than to those farther south, although it would seem to have differed from the former also considerably." A noteworthy addition to our knowledge of British Columbian peoples is the sketch of the Ts'ets'ā'ut, first scientifically studied by Dr. Boas (pp. 34–48) and of the Nîskâ (pp. 49–62), details of whose sociology and folk-lore, etc., are given. The linguistics of the report (pp. 62–71), though not extensive, are new and valuable. Taken all together this excellent report fitly crowns the work of the committee under whose auspices these investigations were inaugurated. It is sincerely to be hoped that some way will be found to continue researches that have been productive of such great results and added so much to American anthropology and linguistics.

ALEX. F. CHAMBERLAIN.

Solution and Electrolysis. By W. C. D. WETHAM, M. A. Macmillan & Co., London and New York. Price $1.90.

This book forms one of the physical series of the Cambridge Natural Science Manuals. It gives a summary of the work which has been done up to the present time, but particularly during the last twenty years, on the physical properties of solutions. This subject forms a branch of physical chemistry which has, within the last few years, attracted towards it a number of eminent investigators, who have obtained results of great interest and importance. To the student of the properties of matter it is difficult to conceive of any more fascinating branch of study than that of diffusion, osmotic pressure, the influence of dissolved substances on the freezing point, boiling point and vapor pressure of solvents, and the very curious difference between electrolytic and non-electrolytic solutions. The subject is only beginning to crystallize and few systematic treatises, and these mostly German, are devoted to it. The present work will therefore be welcomed by readers who prefer works written in the English language. It gives in brief form an account of the results so far arrived at and the theories towards which they point. This summary will no doubt prove of great service to students and also to physicists and chemists who have not followed the investigations in the publications of scientific societies and the journals.

The treatment of the subject is perhaps rather too brief, but outside of that the presentation of the subject is good and the printing is, as usual, very satisfactory. A few instances of somewhat careless statement exist as, for instance, the statement of the thermodynamic cycle on p. 26, which is incomplete. This is unfortunate, because everything with regard to the second law of thermodynamics seems to be a source of difficulty to students. Again, the references are occasionally misleading. Take, for example, that to Jahn's work on the Peltier effect given on p. 117. Most students would interpret it to mean that the idea of testing contact difference of potential through Peltier's effect originated with Jahn, whereas it has been in the minds of physicists and has given rise to discussion for forty years or more.

The paragraph on p. 204 on the explanation of the possible effect of specific inductive capacity on ionization power seems unsatisfactory. To any one who requires an explanation that given is probably useless.

Fitzpatrick's tables on the 'electro-chemical properties of solutions,' originally printed in the British Association proceedings, are given in an appendix and will no doubt be welcomed by many.

The book is well worth perusal and is a valuable addition to our works on physics and chemistry.

THOMAS GRAY.

Critical Periods in the History of the Earth. By JOSEPH LE CONTE. Bulletin Dept. Geology, University of California. Vol. I., No. 11, pp. 313–336. Berkeley, August, 1895. (Reprinted.)

This is, in a somewhat condensed form, the address which opened the discussion, by the Congress of Geologists at Chicago, August, 1893, on the question "Are there any natural divisions of the geological record which are of world-wide extent?" The author begins with a brief refer-