can be no certainty whether these leaves belong to the genus *Populus*. Mr. Seward is content to place them in the general group Phyllites. It is greatly to be hoped that the Stonesfield beds may be more thoroughly searched for further material of this class.

Lester F. Ward.

Geology of the City of New York, with a geological map. By L. P. Gratacap, A.M., of the American Museum of Natural History. Second edition. 1904. Privately issued. Royal 8vo. Pp. 119; 35 figs., 3 plates.

Interest in nature-study has become of great and increasing importance in our general system of secondary schools. Both teachers and pupils are being led to observe more clearly the world about them, and are coming to know the plants, animals and rocks. In a great center of population like New York city the teachers and pupils make up a well-nigh countless multitude, and as regards the local geology the call for a book of instruction and reference is very urgent, as is the need for good but elementary lectures. The latter need, the authorities of the American Museum of Natural History with their rich equipment in specimens, lantern slides and charts, have met; and the former need, the author of the work before us has satisfied in a very interesting and attractive way. Congratulations are due him that the book has reached a second edition.

The work opens with a brief geographical outline and takes up next the topographical features of the four constituent boroughs. The original outlines of Manhattan Island have of course suffered great modification and a very interesting and detailed record of these is given. The matter is timely, because the tendency to remove and forget the ancient landmark, is all too great in American cities and an interest in early local history and a fondness for one's home and dwelling place are all too slightly developed.

A discussion of the rock formations follows with some very good pictures illustrating their mode of occurrence and structural features. The author is almost ultra-conscientious in his endeavor to give due credit to the several writers who are cited. The topic of the waterways receives attention, as does that of the bibliography and of the minerals. Following these the other boroughs than Manhattan are passed in review and a discussion of the glacial geology closes the work.

Mr. Gratacap still adheres to the Archæan age of the metamorphic rocks of Manhattan Island (p. 45) as against the Palæozoic determinations more especially of Professor J. D. Dana and Dr. F. J. H. Merrill, and as the latter's views have been fully set forth it would be of interest to hear the other side defended at length.

Mr. Gratacap ought to have included in the preparation of his work a table of contents and an index. It is a great handicap to the usefulness of a book of 119 pages, with many figures and a map, to lack these essentials.

J. F. Kemp.

Materialen der Stereochemie, in Form von Jahresberichten. Edited by C. A. Bischoff. Vols. I. and II., pp. cxxvi + 1978. Braunschweig, F. Vieweg und Sohn.

This comprehensive work consisting of two large volumes aggregating over two thousand pages, is a continuation of the well-known work on the same subject, published in 1894 by the same author in company with Professor P. Walden. This collaborator has also assisted occasionally in the new compilation, but the great bulk of the work has been done by Professor Bischoff. The matter is developed year by year, each yearly section being divided into four subdivisions, namely:

I., General Stereochemistry; II., Optical Isomerism; III., Geometric Isomerism of Optically Inactive Bodies; IV., Relations Between Space-distribution and Chemical Reactions.

Obviously the form of arrangement demands elaborate indexing; hence the editor has prefaced his work by a table of contents of 126 pages, and given it an index of 99 pages as epilogue. Even as it is, the table of contents almost needs an especial index of its own.

The work is characterized by the qualities which are already familiar in the earlier work.