

rocks. The work of Van Hise and his collaborators and Walcott on the Algonkian and Cambrian has been freely incorporated in the present work. The author does not enter into the discussion as to the extent or importance of the supposed glacial period based upon the Baccus Marsh, Dwyka and Talchir conglomerates. The Dwyka (Africa) beds are, it is suggested in accordance with the work of a recent observer, of volcanic origin. Although Professor Geikie has made the freest use of the correlation papers recently published by the U. S. Geological Survey, it is evident that he was debarred from reference to the admirable résumés of Messrs. Clark and Dall on the tertiary and of Dr. White on the Cretaceous, since these are not referred to.

In the description of glacial deposits one misses the distinction made in this country between kames proper and eskers, as proposed by Chamberlin. No explanation of eskers is given, though American and Scandinavian geologists are generally agreed that they owe their peculiar shape to deposition within the ice-sheet, explanations varying only in regard to the place in the ice where the stream originally flowed. The question of succession of glacial epochs in North America is hardly up to date, but one could scarcely expect a writer not familiar with the ground to hazard a succinct statement in view of the present diversity of opinion in America. The evidence advanced on p. 1051 as a means of dividing the glacial period, pertains to moraines, both of which it has for some time been held are far more recent than the most ancient drift accepted by any geologists who have studied the deposits.

The pit-falls into which the most careful correlators are apt to fall find an illustration in the implied magnitude of the glacial deposits on the land skirting the New England Coast. It is hardly known even in America that in the highest part of Martha's Vineyard, for instance, Cretaceous clays may be pulled up in the grass-roots, since the bulk of the larger of these islands consists of upturned Cretaceous and Tertiary strata.

In the list of authors quoted the reader gains a ready measure of the influence of American geologists on the thought of their fellow-workers abroad. The familiar names of more than a score of American geologists need not be mentioned here. The index has been much extended and includes several scientific terms not found in the last edition. The whole shows the good, readable press-work of a well known publishing house.

While the American student will find the recently published correlations papers of the U. S. Geological Survey the most valuable hand-book for this country, this great work of Prof. Geikie will be indispensable both to the teacher and the professional geologist. Not the least important part of the book consists in the bibliographic references without which a text-book can now hardly be recommended to the advanced student. It may be objected to the work that is encyclopedic rather than didactic, but in so far it is a faithful exponent of the consensus of opinion of a host of geological workers. J. B. W.

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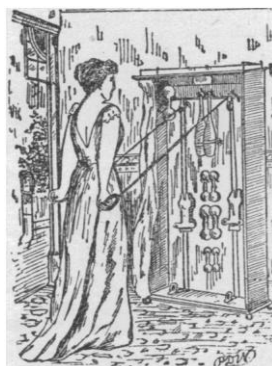
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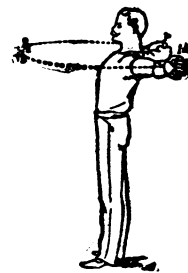
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