the American savage?" Speaking for myself, I would suggest that his question contains its answer. My discoveries have established the glacial age of man on the Atlantic seaboard of America, and at that time his culture was that stage known as 'paleolithic.' Chas. C. Abbott, M.D.

Trenton, N.J., Sept. 18, 1883.

THE ALPHABET.

The alphabet, an account of the origin and development of letters. By Isaac Taylor, M.A., LL.D. 2 vols. London, Kegan Paul, Trench, & Co., 1883. 16+358; 398 p. 8°.

Mr. Taylor has produced an admirable work on the interesting subject of alphabetic It abounds in wealth of collected material, down to the very latest discoveries (some of them of the utmost importance). By lavish and well-chosen illustration it puts this material before the apprehension of the reader or student with the most desirable clearness; and its digest and criticism of former opinions is made with impartiality and independence of judgment, while the author adds abundantly of new views, and arguments to support them. No other existing work of a like character can bear any comparison with it; and it deserves to have, as it doubtless will attain, a wide circulation and popularity.

In the main, these volumes are filled with the history of our own alphabet and its relatives, or of the ancient Phoenician with its descendants and probable ancestor, since other systems of alphabetic writing are comparatively insignificant in number and in importance. The Chinese characters are not alphabetic, although one or two derivatives from them (as the Japanese kata-kana) have that character. The cuneiform mode of writing ended its career in an alphabetic system. the Persian; but all the peoples using cuneiform passed over, more than two thousand years ago, to the side of the Phoenician. There have been other hieroglyphic schemes, in the old world and the new, that made advances, no one can say just how far, toward alphabetism; but they are long since perished without descendants. All these, together with such theoretic basis as he chooses to lay for the science, Mr. Taylor despatches in the first chapter (seventy pages) of his first volume; the rest is devoted to our alphabet: the various kindred Semitic forms of it being treated in the former volume, and the Indo-European forms, with the few outside stragglers, in the latter, under the divisions of Greek, derivatives of Greek (Italian, Coptic, Slavonic, Albanian, Runic, Ogham), Iranian, and Indian. The method is not to be condemned,

although we might have desired a more ample theoretical introduction. The fundamental principle of alphabetic history is distinct, and briefly statable: all writing begins necessarily with the depiction of scenes and objects, or is purely pictorial; it everywhere tends to pass over into a depiction of the names of objects; and, when it has fully reached that condition, it has become alphabetic. There can be no such thing as an alphabet not starting from a pictorial stage, any more than a spoken language without an initial imitative root-stage. But while in language we can only get back by inference to such a state of things, because the beginnings of language are so remote from us, in writing we find the pictorial stage abundantly represented.

Whether that stage is discoverable in the actual history of our own alphabet, is a question not yet absolutely settled. Every step by which our familiar letters go back to the primitive Semitic alphabet, usually called by us Phoenician, is traced out with the utmost distinctness. The Phoenician is purely, though defectively, alphabetic. It must, then, have come from a pictorial original. Three such systems of writing are found in its neighborhood, - Egyptian, cuneiform (the perhaps sufficient, though rather scanty, evidences of whose hieroglyphic origin are given by our author), and the recently discovered and still obscure Hittite. Did it come demonstrably from one of these, or has it an ancestor now lost to us? As is well known, De Rougé's work, published less than ten years ago, attempted to show its derivation from Egyptian, from hieratic characters, of known hieroglyphic originals; and his view is widely, though by no means universally, accepted. Mr. Taylor is a firm believer in it, and sets it forth with much clearness and force. We find ourselves unable fully to share his conviction. Rougé endeavored to prove more than was reasonable, and found it so easy to prove all he undertook, that his very success casts a shade of unreality over the whole comparison. We may allow that his identifications are both possible, and, as a whole, plausible quite beyond any others yet made. Yet whereas the derivation of the Greek or of the Arabic alphabet, for example, is past all doubt, and he would rightly be passed by as a time-waster who should attempt to re-open the question, no reproach can attach to the scholar who, unconvinced by De Rougé, should try to find another and better solution of the problem, as some are actually doing. Mr. Taylor overstates the desirableness of acquiescing in the best solution hitherto discovered; the right to doubt an inference not yet made certain is a precious and indefeasible one. It would be highly gratifying to regard the derivation of Phoenician from Egyptian as not less certain than that of English from Phoenician, since then we should have followed up the history to its very beginning; for the character of the Egyptian as a wholly original mode of writing, carrying on its face the evidence of its steps of development from the initial stage, is beyond dispute. Considering that Mr. Taylor holds the hieroglyphics to be the antecedent phase of Phoenician letters, we wish that he had made his exposition of the system somewhat fuller, and especially that he had told in more detail how he regards the alphabetic value of certain of the hieroglyphs as having been arrived at: the point is by no means so clear as were to be wished.

It would take far too much space to go through the book and notice all the points of special interest in it; but attention may be called to a few. Mr. Taylor has a new and well-supported theory as to the Mediterranean alphabet from which the Germanic runes were taken: he holds it to have been the Greek of the Euxine colonies and Thrace, transmitted in peaceful intercourse along the commercial route of the Dnieper, some centuries before the Christian era. His discussion of the Ogham cryptograms is less satisfactory. The Glagolitic (an early Slavonic) alphabet receives from him a suggested explanation which has met with general favor. The earliest Semitic monuments—the sarcophagus of Sidon, the Moabite stele, the recently discovered Siloam inscription — are fully treated, the last being given in facsimile. Some of the most original parts of the author's work lie in the discussion of the South Semitic alphabets and their derivatives. It is to them that he traces the immense group of the alphabets of India by a theory which wears a more plausible and acceptable aspect than any other yet suggested; it must, of course, stand the test of time, and of examination by other experts, before it can be admitted as final. Even in so old and well-worked departments as the varieties of Semitic and Greek writing and their mutual relations, Mr. Taylor brings to light much that is new and interesting, laying under contribution the most recent finds, and combining them with independence of judgment and sound sense. There is nowhere any effort at brilliancy or show of profundity: sober, earnest work is the keynote of the treatise, which in this respect compares favorably with certain other recent publications, French and German, on the same subject.

In conclusion, we may notice adversely a point or two. The now accepted explanation of Pehlevi, as needing to be read out of its Semitic signs into Iranian words, should not be credited to 'the sagacity of Professor Haug' (ii. 239). That explanation was distinctly offered by the veteran Westergaard, in the preface to his Zendavesta, in 1854, when Haug was fresh from the university; and in the latter's earliest article 'on the Pehlevi language and the Bundepesh,' published in the same year, there is to be found no hint of the doctrine.

It is hardly correct to ascribe the success of right methods in paleography in any measure to Darwinism (ii. 363). That every successive phase of a historical institution is the outgrowth of a preceding phase, and differs little from it, is a truth long coming to clear recognition and fruitful application in every department of historic research, prior to and in complete independence of any doctrine of evolution in the natural world. Only error and confusion have come of the attempts made to connect Darwinism and philologic science. On the other hand, Mr. Taylor appears to make a too mechanical application of the doctrine of historical development in denying altogether the possibility of an element of free invention in alphabetic growth. Man is capable of devising something a little different from, or like and additional to, what he has already won and knows how to use. One who has a language can invent another, regarded by him as an improvement on the former: the thing has happened repeatedly, and is no violation of the law of gradual and unconscious growth of human speech. So, notwithstanding the law of alphabetic development, a man who practises various modes of writing can devise a new one, for cryptographic or tachygraphic purposes, or other. And a community that is receiving and adapting an alphabetic system from another community may, in like manner, well enough add a sign or two of its own device: hence the question whether our X is an out-and-out invention of the Greeks, or a differentiated K, is one of paleographic probabilities, not to be settled in favor of the latter alternative by denying the possibility of the former; and so in other like cases.

The number of interesting questions to which this work furnishes a trustworthy reply is surprising; and, while sparing of notes, it yet gives references sufficient to set upon the right track any one desirous of investigating more fully the matters with which it deals.