ever-recurring problem; and it cannot but be of service to learn how the Greeks, masters of the art, solved it in their own case.

Besides the walls, the buildings, and the tombs, there have been found, as Mr. Clarke has explained, a considerable amount of smaller objects, — vases, glass, pottery, urns, etc.; and of these a considerable portion has been secured as property of the institute. The *firman* by which the excavations were authorized gives us one-third of the objects found, — the most interesting third, perhaps; but it is difficult to speak justly in regard to it. If anybody should maintain that the objects which are to come here are of surpassing interest, and that they will immediately lift our museum to the front rank of such institutions, a decided negative would have to be given to such aspirations. If anybody should assert that the things were not worth the cost of transportation; that they have no general or popular interest; that they belong to a poor period; that they are hardly fit to be seen beside the more beautiful works, which, in the original and in copies, are in our possession, — that, again, could not be for a moment admitted; for the fact remains that the small portion which is secured to us is of surpassing interest to those who take an intelligent interest in such things at all.

The lower drum of a column, the capital, a complete section of the entablature, including the unique sculptured architrave, the frieze, and the cornice, all have been secured, and may soon be placed in position. In addition to that, the best of the sculptures which were discovered are to be brought over; almost all the coins; among the glasses and vases those which, on the whole, were best worth preserving; and most of the inscriptions. But even if the objects secured to us from the discovery were less than they are, it would make little difference in our estimate of the success of the expedition. The real result was intellectual. And the new points which have been proved, the new discoveries which have been made, are such, that, if not a single object were brought here from Asia Minor, we should still have abundant reason to be satisfied with the results achieved. It is impossible that we should obtain any adequate idea of these from the few drawings that have been publicly shown. They are but a fragment of the whole.

How it was possible for these two or three young men, while occupied with the practical direction of from twenty to forty men, to make the surveys and supervise the excavations, and also to prepare the immense mass of drawings which have been executed, it is difficult to understand; and it furnishes abundant proof of the ability and devotion with which the work has been prosecuted. The nature of the results will be seen when the next annual report comes from the printer; but their whole value and importance cannot be estimated until the appearance of that final and monumental work which will, we may hope at no distant day, take rank among the authoritative publications of its kind.

I may add, that the increasing interest in archeological work, and the scientific and precise manner in which it is now conducted, give new encouragement to the prosecution of literary classical study. The competition between the literary and scientific method seems about to end in a reconciliation, in the prosecution of literature on scientific principles, and in allying archeological science as closely as possible with the literature of classical antiquity. Archeology is a common ground on which science, literature, and art meet and join hands, each helping the other. Such a school as that now established at Athens, which you are asked to favor with your approval, is their common home.

On motion of the Rev. Phillips Brooks, the meeting declared, by an enthusiastic vote, that the work of the institute should be generously supported.

THE AMERICAN ORIENTAL SOCIETY.

THE autumn meeting of this society was held in New Haven, Oct. 24 and 25. Letters were read from various members abroad, reporting progress in their work; among others, from Mr. Mills of Hannover, respecting his edition of the Old Persian Gathas (ancient Zoroastrian songs or odes), of which the first volume is printed, though not published.

A paper on the temple to Zeus Labranios in Cyprus was read by Mr. Isaac H. Hall of Philadelphia, one of the pioneers in Cypriote studies, and the chief authority on the Cypriote language in this country. A temple to this deity exists at Mylasa in Caria (described in Fellowes's 'Lycia'). He was, under the name of Zeus Stratios, a local deity of the Mylasians, certainly from the time of Darius to that of Lactantius. The only other temple to him is this one in Cyprus, at Fasuli (or Fasula), near Amathus. The notoriously Lycian-looking architectural and other art remains found in the neighborhood show that this part of Cyprus was settled by Carians from Mylasa or its vicinity. Mr. Hall derived the epithet 'labranios' from a Lydian, Carian, or Lycian word, 'labru' (preserved by Plutarch in the form 'labrus'), meaning 'axe,' the axe being the peculiar symbol of Zeus Stratios of the Mylasians. From this word came the Mylasian name 'Labranda' ('place of the axe'); but the Carian settlers in Cyprus dropped the *d* (which is a sort of locative termination), and called their deity Zeus Labranios; that is, the Zeus Stratios of the Mylasians, and not Zeus Labrandios, which would be the Zeus of the village Labranda. Lycian influence in Cyprus seems confined to this little part of the island.

Mr. Hall also read (supplementing it from his own knowledge of the facts) a short history, from Dr. Van Dyck of Beirut, of his Arabic translation of the Bible, — a version admirable in literary style and in typographical execution (printed at the American press in Beirut). The difficulties in the way of the production of this translation were very great, and the result is highly creditable to American scholarship and energy.

Professor Avery of Bowdoin college gave an analysis of the Khasi language, spoken by a people dwelling in the Nepaul Hills, a representative of the non-

Aryan dialects which preceded the Sanskrit in India. It has no inflections proper, but uses prepositions for the expression of case-relations, and forms tenses very much in the same way as the English. It is noteworthy that this language, though a slightly developed one, has a clear distinction of gender; but the value of gender-distinction as a linguistic differentia is not yet well made out. In common with most of the languages of eastern Asia, the Khasi has a system of tones. The same thing is true of the Siamese, on which Mr. George presented a paper, illustrating the tonic distinctions by a short Siamese reading.

The paper of the most general interest was one on the origin of the Phoenician alphabet, read by Mr. J.P. Peters of New York. For some years past, most students of the subject, accepting for the present the conclusions of the late Vicomte E. de Rougé, have been inclined to derive the Phoenician from the Egyptian. This conclusion is based on the close relations existing between Egypt and Phoenicia in historical times, and on the similarity between certain letters in the two alphabets. But recently the Babylonian-Assyrian alphabet has begun to press its claims to be considered the parent of the Phoenician. It is almost certain that Phoenicia was closely connected with the Tigris-Euphrates valley at a time earlier than the oldest known historical monument. As long ago as 1877, a German scholar, Deecke, came forward as the champion of the Babylonian alphabet; but he committed the anachronism of deriving the old Semitic or Phoenician from the more modern 'cursive' cuneiform. Mr. Peters took the most ancient cuneiform signs, and compared them with the oldest Phoenician, finding in several instances striking resemblances. He urged besides, against the Egyptian origin, the fact that the Phoenician alphabet contains no vowels, while the hieroglyphics have distinct vowel-signs [though this is true of the Babylonian also]; and, further, the fact that the Egyptian had a large number of different signs for the same sound, and would present greater difficulties in the way of deriving an alphabet than the Babylonian, which had fewer homophones. The question is yet far from being settled, one serious obstacle in the way of the Assyriologists being the difficulty of determining the oldest forms of the cuneiform writing; but all such sober investigations as that of Mr. Peters must advance the desired solution. Meantime the Egyptologists, on their part, are bringing forward new material.

The edition of Manu, which was undertaken by the eminent English Sanskritist, Mr. Burnell, has been committed by the publishers, since his death, to Mr. E. W. Hopkins of New-York City, who sent on two papers, — one on the Nandini commentary on Manu, the other on the quotations from Manu in the Mahabharata. The former was a defence of the commentary in question: the latter was a contribution to the criticism of the Manu text. Mr. Hopkins took those passages in the Mahabharata which are introduced by the phrase, 'Thus said Manu,' and, finding that they do not always agree with the existing text of the laws, concluded that both texts rest on an older tradition; that Manu was an ancient sage, with whom tradition connected a number of laws, whence grew the collection called by his name.

Professor Whitney read on the variants of the Sama-Veda, coming to the conclusion (against the position of Benfey and Weber, hitherto generally accepted), that, in most cases in which the Sama text differs from that of the Rig, the latter is entitled to the preference. Professor Bloomfield of Johns Hopkins university, who is engaged in editing the Kauçika-Sutra to the Atharva-Veda, sent an account of the manuscripts of the Sutra in his hands, most of which he had obtained through the kindness of English officials. Mr. Brown made a short report of the recent Oriental congress in Leiden, at which he was present.

The next meeting of the society will be held in Boston, May 7, 1884.

LETTERS TO THE EDITOR.

Geology of Philadelphia.

Dr. Persifor Frazer's explanations of his use of the term 'hydromica slate,' in his Lancaster-county report, as either 'not an equivalent for hydromica schist' or as a 'misprint,' renders it evident that he has changed his opinions since the writing of his report on York and Adams counties. In that volume the term 'hydromica slate' is employed ten times or more to designate 'hydromica schists,' and in several instances the terms are used synonymously. In two instances, localities marked in his printed section as hydromica schist are referred to in the accompanying descriptive text as hydromica slate (v. sections 2 b, 4, and p. 94, 101). As is evident from the context in a number of places, his 'hydromica slate' does not mean 'chlorite slate,' but 'hydromica schist' as it is elsewhere called (v. p. 83, 142, etc.).

There is, however, equal objection to his use of the term 'chlorite slate,' frequently employed in his different reports to distinguish greenish portions in the hydromica series. These are no more slates than are portions of the adjacent hydromicas, which are of identical structure. Nor, indeed, are they true chlorites, having but a low percentage of magnesia. (A recent analysis of some of the greenest of this so-called 'chlorite slate,' made for the writer by Prof. S. P. Sharples, gave only 4.28% of magnesia.)

Hydromica slate, as meaning hydromica schist, is also used several times in the report on Chester county, and the synonymous terms 'talc slate,' 'mica slate,' 'talc-mica slate,' 'talc-mica schist,' 'micaceous talcose slate,' and 'South Valley Hill slates,' are employed more than fifty times in the same report without distinction between slate and schist. Professor Rogers, as is well known, used most frequently the expression 'talc-mica slate.'

That the term 'slate' has been used synonymously with 'schist' in the region of the South Valley Hill, is not only shown by the indiscriminate use of those terms by Rogers, Lesley, and Hall, but is apparent in a remark by Dr. Frazer himself in the Chester-county report, p. 279, where he says:—

"South of the Valley limestone, which only touches the extreme angle of the township, are hydromicas and mica-schists, dipping about south 35°, east —62°. The southern contact of limestone and *slate* occurs in this corner. . . . The hydromica schists and mica-schists to the south, which enclose this, are principally vertical," etc.

Now, as the only slates which occur at this locality are hydromica slates belonging to the hydromica