ON THE PRESENT PROSPECTS OF ARCHÆOLOGY AT ATHENS.¹

BY THE REV. JOSEPH HIRST.

PART I. ATHENS.

According to an image as old as Pindar, the Acropolis of Athens was, as it were, the boss of a shield around which revolved four concentric circles, Athens, Attica, Greece, the World.² The reason of this figure is of deep suggestion. Of all cities in the world Athens was preeminent in philosophy, in literature, in art, and in the knowledge of a free and enlightened scheme of government; while the Acropolis, which, as a vast museum of sculpture and architecture, was the flower of Grecian culture, was to Athens, what Athens was to the world. No wonder then if in all ages the minds and hearts of men have turned for inspiration to this magic scene; and if modern nations have instinctively wished to imitate the ancient Romans, amongst whom, as they advanced in civilization, the opinion came to prevail that their education was incomplete without the study of Greek and a residence in Athens,3—that land, described by Euripides of old, as a land sacred and unconquered, nurturing sons "whose food is most glorious wisdom, and who ever walk delicately through the brightest air."4

It may be permitted then to a member of the Institute

Read at Derby, at the Meeting of the Institute, July 31st, 1885.
 v. Leake's Topography of Athens,

² v. Leake's Topography of Athens, I, p. 308.
³ Ib.

^{4 &#}x27;Ερεχθείδαι το παλαιον ολβιοι και θεων παίδες μακάρων, ίερας χώρας απορθήτου τ΄ αποφερβόμενοι κλεινοτάταν σοφίαν, αεί δια λαμπροτάτου βαίνοντες αβρώς αιθέρος Euripides, Medea, 824-8.

who has just returned from an eight months' residence in that classic home, to enlarge upon some of the material helps for the study of archæology that may be reckoned upon by those who may wish to take advantage of a stay in Athens, especially in connection with the now more than projected British school of classical studies in that city. Nothing need be said about the number of friends one will meet in Athens, where most of the educated understand and speak more or less fluently either English, German, Italian or French. It may, however, be well to observe that the chief English reviews and more serious literary and scientific serials can easily be consulted every day at the parliament house reading-room (with the proper introduction), while a great favour is accorded to foreigners at the university or national library, and at that of the Chamber of Deputies (which latter is very well stocked with English topographical works on Greece), by their being allowed to take out to their homes what-

ever books they may require.

I will begin with a brief description of three Institutions kindred to the one now to be founded by ourselves. The school of classical and of ancient art studies founded and supported in Athens by the French government has now been in existence forty years. It is a handsome and imposing building, and possesses a fine library. Its director, M. Foucart, is one of the first scholars of France, and a man of European reputation. There are in it six burses of 4000 fr. a year, to be held for three years, and one of these burses can be appropriated to the study of Christian archæology. In exceptional cases the place of a student may be held for a fourth year. The whole school is under the direction of the Paris Minister of Public Instruction, who, however, hands over all reports he receives therefrom to the Institute of France, which is divided into four academies. To one of those academies, that of Inscriptions et Belles Lettres each student must present a memoir on some subject connected with the work of the school, every year of his residence in Athens, exceptions however being made for the first year, which is naturally one of preparation. All excavations and researches are undertaken at the cost of the French government, and the journeys and expenses

students who are sent to superintend them are defrayed according to the guidance of the Director, who himself visits these distant sites from time to time to direct or control the outlay. During the past year students of the French school have been engaged in important studies and excavations at Elateia, at the Oracle of Apollo on Mount Ptoum, in Bœotia, and in Asia Minor.

Next to the French school comes that established by the German government some eleven years ago, in connection with the well-known German Institute founded by Bunsen and Niebuhr in Rome. It is presided over by Dr. Köhler, who has now been long acknowledged in Greece as a critic in ancient art and in epigraphy of a very high order. The Director of the German school at Athens receives 18,000 marks a year, besides rooms in the house belonging to the school, which was not however built for the purpose, but is sufficiently spacious and is conveniently situated near the Greek university, the Academy, and the Greek national library.

The German government provides five burses of 3000 marks a year between the two schools of Rome and Athens, one burse being available for the study of Christian archæology: but by exception a burse may be retained for a second year. In the Institute of both Rome and Athens a few rooms are placed at the disposal of the students, for which they pay rent. They do not however have their meals in the house as in the French school. This year three burses have been held by German students in Athens, but two other gentlemen are attached to the school, the one as librarian, and the other, an architect employed by the Director, as government representative for antiquities. No essay or memoir is required by rule from the students, but fortnightly meetings are held from November to May, at which there are papers or lectures each time from two or three of the members or associates of the school. meetings are open by courtesy to all those who understand

The students besides their salary have lodging and fuel, chamber and table-linen, cooking and attendance provided for them.

¹ The Director can allow each student, at his discretion, 1000 frs. a year for travelling expenses. The Director of the French school at Athens has a salary of 24,000 frs. a year, with house and fuel.

German, as were the meetings in French formerly held at the French school, and those in English at the

American, to those who wished to attend them.

The American school is at present located in a large and commodious house, underneath the Acropolis and near the temple of Olympian Zeus. The Greek government, however, has just presented America with a plot of land, between the site already granted for the British school and the gardens of the monastery of the "Incorporate," to which all the land thereabouts originally belonged. The English and American schools, having the advantage of a common mother-tongue, will be able to react on each other, and perhaps establish a serviceable bond of union and scheme of united action by means of joint discussions, meetings, lectures and exhibitions. American school of classical studies at Athens was projected by a society known as the Archæological Institute of America, and is organized and supported by some fifteen of the leading American colleges, which have agreed to contribute each an annual sum in furtherance of the object for which the school was founded, and to send each year from their number, according to election, a director to take charge of its work. Every effort is being made to raise the endowment to such a sum as will allow of the appointment of a permanent resident director in Athens. The school has now been in existence three full years, and during its second year had seven regular students in attendance. At present the committee contribute nothing towards the journey, board or lodging of the students; but it is hoped that scholarships may be founded in connection with the chief American seats of learning, which will enable a goodly succession of students to be maintained for one or more years at Athens. During the school year, which extends from the 1st of October to the 1st of June, each member of the school must pursue some definite subject of study or research in classical literature, art or antiquities, and must present yearly one or more theses embodying the results of his work. These theses, if recommended for publication, are issued in the papers of the school. Of these papers, the first volume has just been issued. The German school has long possessed a Quarterly Journal of high scientific value, and the French school has also a no less learned organ which appears eight times a year.¹

To the mention of these schools I must add that of the two Archæological Societies founded and directed by the Greeks themselves. The great Archæological Society of Athens, which now enjoys an income of some £4000 a year, was founded in 1837, and comprises some 250 paying members, a number more satisfactory than the 800 more or less complimentary names it once exhibited on its muster-roll. The funds of this society are spent in the most patriotic manner in discovering and in preserving the monuments of antiquity, and in publishing a beautifully illustrated and handsome journal in quarto, which appears four times a year. The society does its work in the most thorough manner, and wherever ancient remains of value are disinterred in out-lying districts, takes care to build small sheds or museums on the spot for their preservation, and to appoint a custodian at a fixed salary.

During the present year a kindred society has been founded in Athens for the Study and Preservation of Greek Christian Antiquities. This society has for its object the collection and preservation of the remains of Christian antiquity found in Greece, the preservation and study of which may be calculated to throw light on the history and art of the nation. Such remains are coins, inscriptions, crosses, rings, bells, baptismal fonts, seals, sacred vestments, images, church furniture, diptychs, sculptures, ornaments, manuscripts, &c., &c. This society has been founded none too soon, as irreparable harm has already been done to numberless Byzantine mosaics through the decay of time or through injudicious restoration. The originators and leading spirits of this new foundation are two Athenian gentlemen, Barouchas and G. Lamparchis.

however get board and lodging for less. A young archæologist I knew lived with a German family, where he was well satisfied, and paid only 160 frs. a month. A good authority however tells me that it would be difficult for an Englishman to live on less than 250 or 200 frs. a month, for board and lodging alone. At the French school, the students mess together at an expense of from 5 to 6 frs. a day, including the usual three meals and a sufficiently liberal diet.

¹ As regards the expense of a year's residence at Athens, journey and ordinary excursions included, Dr. Köhler estimates it at 4000 frs. for the year. Living is dear in Athens and lodging difficult to find. The German colony has established a kind of club called Philadelphia, where they pay 110 frs. a month for dinner and suppers. A room can hardly be obtained for less than 60 frs. a month, so the minimum expense for German students would be 170 frs. a month. Greek students

Let me now say something about the land itself.

We learn from Pliny' that after the spoliation of Greece by Nero (and, after Nero, Greece had not much to fear), there still remained 3000 statues at Athens, and as many at Olympia. Now the statues already found at Olympia, where the German Government has spent some £50,000 on excavations, are enough to fill a large museum, and one of them the Hermes of Praxiteles, the only authentic work we have of that artist, is perhaps the finest work of ancient art the world now possesses.

But those best qualified to judge have declared that twothirds of the site of Olympia still remain to be excavated.

Leake, in his Introduction to the Topography of Athens?, gives a list of some sixty places in Greece which are most likely to still preserve valuable remains of antiquity concealed below the surface, where the state of the soil appears to indicate that the sites have been little disturbed since the respective places fell to ruin, and to promise a rich harvest of ancient remains. still more favourable localities, he says, for excavation, affording better prospect of finding productions of ancient masters, are the "A $\lambda \sigma \eta$, or sacred groves, which were generally removed from the ordinary habitations of men, and sometimes in sequestered valleys or mountain solitudes, and have been comparatively secure from spoliation. such promising sites Leake mentions fourteen, but five of these have already been explored by the students of the French and German schools of Athens.

But the ground of Athens itself is still unexplored. The modern city has shifted altogether from the site occupied by the city of Pericles and Demosthenes. I have seen a field of barley growing, and half a dozen shepherds watching their flocks on a piece of ground between the Pnyx, the Areopagus and the Acropolis, which must have been the heart of the ancient town of Athens, but upon which not a single building is now visible. Further away, between the hills of the Muses and the Pnyx, are the remains of the Pelasgic or rock-built settlements of the very earliest times, and here the ground when furrowed by the hill-side torrents after rain is shewn to be full of ancient pottery. Though most of the tombs have been

¹ H. N. xxxiv, 7.

² pp. 100-1.

opened on this secluded spot, I can say that walking through this uncultivated waste with a friend, by what is the shortest way to Phalerum, we have come almost casually upon heaps of very interesting archaic pottery; while one day—passing along the dry bed of a stream in the very centre of this region, within call from Athens—we espied a gold olive leaf stuck in the neck of a broken lachrymatory peering out from the recently denuded

bank at a depth of 8 or 9 feet from the surface.

These however are mere trifles, though pieces of pottery with coloured patterns and mutilated painted figures rewarded our researches, made with no other help than the aid of an umbrella and a penknife. It must moreover be remembered that the whole of the north and west sides of the hill of the Acropolis, occupied by very sparsely scattered cottages, still remains to be explored, and the archæological society of Athens keeps this task steadily in view. The tombs outside the Ceramic Gate have also never yet been opened, and it has been resolved to open some ancient tombs here, aswell as on some of the islands, as at Syra and at Santorin, and within the walls of Mycenæ, on the occasion of the visit of the learned men of Europe for the congress of Prehistoric Anthropology to be held next spring in Athens. A still more important work of excavation has only just now been begun on the site of the ancient Athenian market place, known as the Stoa of Hadrian. Last summer an outbreak of fire destroyed the mean stalls and buildings of the Agora, over a space which may be roughly set down as sixty yards square. Lord Elgin's tower, which stood in the centre of this ancient market place, has entirely disappeared, and the area is now levelled. When we reflect that rubbish has there accumulated during the last two thousand years to a depth of 25 feet we can well imagine what a harvest of treasure trove may reward the labours of a well conducted and systematic search.

Such then are the prospects of profiting by actual research, and of gaining knowledge at first hand, for those whose good fortune may lead them to spend the coming years in Athens. There can be no manner of doubt that so many German and French students could not have obtained the world-wide reputation they now enjoy, had

they not been trained in the actual labour of deciphering day by day the inscriptions found, and of piecing and reconstructing the broken statues and architectural ornaments disinterred in the course of the excavations undertaken by their respective governments at Olympia, at Delos, and on a host of other historic sites.

This rapid sketch would not be complete without some mention of the rapidly increasing means of communication by which the various parts of Greece can be

reached and visited.

On my arrival in Greece in November 1884, the only railway open was the short span connecting Athens with the Piræus, and another 8 miles between Katakolo and Pyrgos on the way to Olympia. Since then I have seen the line connecting Attica with the Peloponnesus opened past Eleusis, as far as Megara, and later on as far as Corinth. In a few more months the line will be opened as far as Nauplia, passing Mycenæ and Argos on the way. Next came the line to Kephisia and Laurium, which has also been opened at intervals during the year. As for Thessaly, there is a railway running between Volo and Larissa, and from Volo to Pharsalus, and in a few weeks the line will be opened from Pharsalus to Karditza; while in another six months it will be carried on as far as Trikola and Kalabaka, where the Greek and Turkish frontiers meet. If Mr. Tricoupis had remained in power another fortnight the contract would have been signed for a railway between Athens and Salonica, all the necessary measures having been already taken; and this railway would have brought Greece into the life current of Europe by the establishment of daily intercourse with Vienna and the western capitals.

PART II. ELEUSIS.

I will conclude with the notice of some excavations which I have watched from month to month on the site of the celebrated ancient city of Eleusis, within a walk or afternoon drive from Athens.

The repeated discoveries of noble lines of masonry, often covered up again after a few weeks of exposure, and the strange 'transformation scenes,'or dissolving views as I may call them, the ruins thus seemed to present at each vol. XLIL.

succeeding visit, as different levels were struck, reminding one at times of the web woven by Penelope, when the work done in the day was undone at night, may give one some idea of the importance of a residence near the place where such important revelations of ancient architecture are made.

Unlike the temple of Diana at Ephesus, the site of the great temple of Eleusis has never been a secret to be made known in modern times by a course of skilful deductions, or by a chance stroke of the pickaxe. But so well has the secret of the solemn mysteries that adorned that temple been kept, that the eyes of all the world are continually turning to Eleusis in the vague hope that each fresh excavation may reveal something calculated to throw light upon them. I have known enthusiastic travellers even nowadays try to rehearse the grand annual or quadriennial procession, and starting from the virgin temple of the Acropolis at Athens, would painfully seek out the Sacred Way through the Ceramic Gate, across the moist plain, over the stream Kephissos by a bridge, which owed its far-reaching name to the coarse jests and mockery that there sometimes greeted the motley throng of pilgrims, and through the mountain pass to Daphne, down on to the shore over-against Salamis, where some would go over the bare shelving rock round the sacred fish-pools, for fear of missing one spot perhaps trod of old, and arrive at the far off shrine after having compressed into three or four hours, a journey that in former times occupied the whole of a long and exhausting day. Certainly a thrilling sense it is to be brought thus near to the thoughts and feelings of those ancient worshippers, by meeting in succession the same scenes that met their eyes, and by experiencing the same fatigue, mingled with some of the same joys, from the natural beauty of the scene, a realisation and an identification in the present of the past that has ever such a charm for the archæologist.

At Eleusis itself the excavations round about the once glorious temple have now been going on without interruption since June, 1882, and but for sundry buildings that stood in the way, for which too high a price was demanded, would have been finished long ago. All formalities having at length been concluded concerning the wished for expropriation of the two remaining

obstacles, namely, a small church with enclosure and a two-storied house, now occupied by the labourers, the archæological society of Athens hopes to bring the whole work to an end within the present year. From first to last the excavations at Eleusis have cost this well-deserving Greek society some £10,000, of which £8,000 had to be paid the villagers for cottages that then occupied the site

of the ancient temple.

At Eleusis the works are directed by Mr Philios, who represented the Greek government and watched the operations during Dr. Schliemann's famous excavations at Tiryns, excavations which have this spring been continued by him with the aid of Dr. Dorpfeld. Nothing can exceed the courtesy and intelligence with which Mr. Philios welcomes any visitor properly recommended to him, placing his plans and time entirely at their service. Without his assistance I should not have been able to compose the present record with exact measurements. Mr. Philios received his archæological training in Germany, and also speaks French and Italian fluently.

On my first visit, last November, I found that the unusually wet autumn having made the work of carrying off in baskets and in wheel barrows the mass of earth, in which parts of the noble Temple still lay embedded, more laborious and expensive, it had been interrupted for a time, only a few workman being then employed in rolling up the huge blocks of marble or of stone that required removing from the strange positions into which they had

fallen.

The excavations at that time had laid bare certain walls about the courtyard of the temple, just before the great eastern portico, but the nature of the buildings for which they served as foundations can be only surmised. Various buildings are mentioned in an ancient inscription as existing within the sacred enclosure which have not yet been discovered or identified. Such buildings are a temple of Bacchus, the house of the priestess, the treasury of the goddesses, the house of the sacrist.

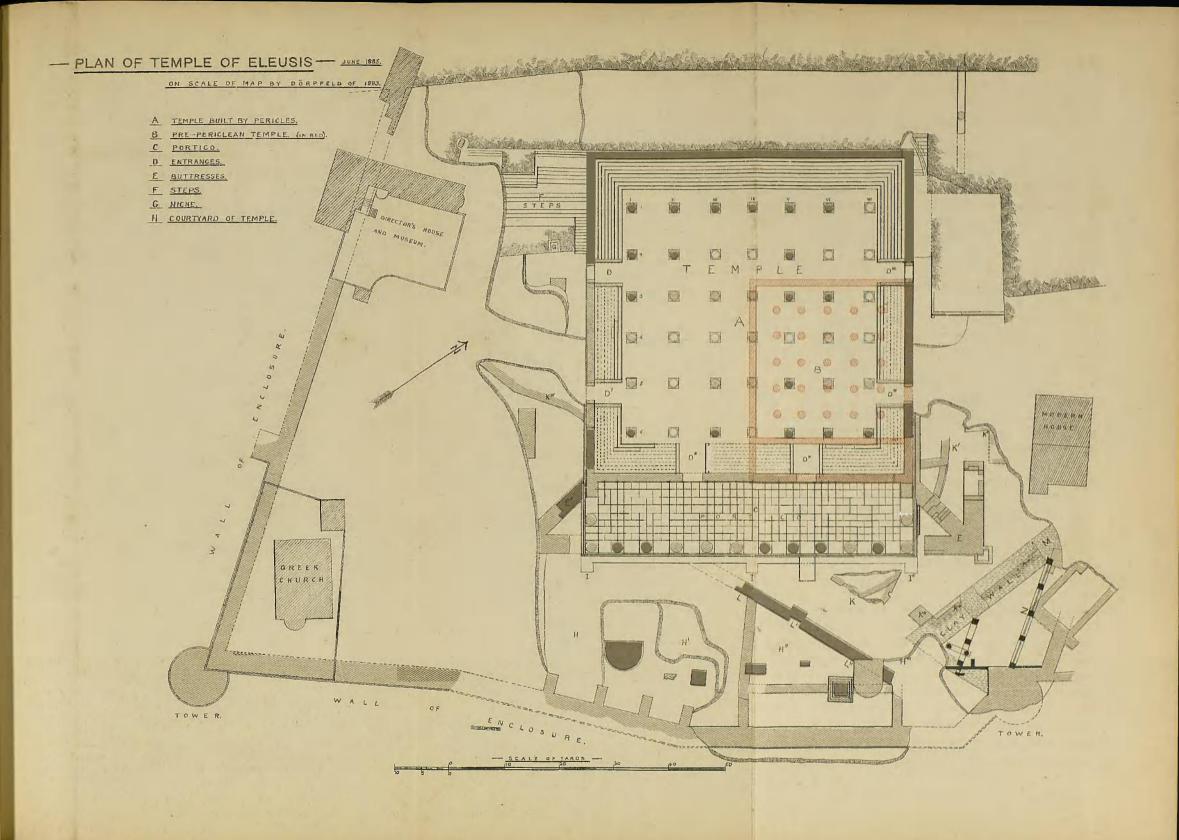
νεωκόριον, and the κηρυκείον or house of the heralds. It is expected that the sites of some of these may be discovered when the later buildings that still encumber the ancient area are removed.

The sacred heralds held the third rank amongst the sacred offices of Eleusis, coming immediately after the Hierophant or high priest, and the δαδοῦχος who carried the sacred torch of Ceres. The office of herald in the solemn ceremonies of Eleusis consisted in proclaiming the sacred truce during the days dedicated to the mysteries, then in making the numerous customary appeals and exhortations to the initiated during the course of the ceremonies, and lastly in fulfilling for the Eleusinian sacrifices the part played by other heralds in ordinary sacrifices.¹

The courtyard itself, which is an irregular space some 25 yards broad by 50 in its greatest length, seems at some far distant time to have been purposely filled in with pebbles and sand from the sea-shore, (as I was then able to see by the regular nature of the material, as revealed in the cuttings at that time visible all round,) apparently with the view of bringing up the area to the level of the portico or of the temple, to which it led, in order it would seem that houses might be more easily built upon the site, or the surface turned into gardens. Huge stones had already at that time been piled up upon the foundations of the outer wall of the courtyard, in order thus to preserve the lines of the original precinct, while the intermediate space has now been filled in again in order to form an inclined plane, affording an easy approach from the main road to the sacred ruins.

At my first visit in November of last year, there was visible immediately in front of the temple, at the far end of the newly disinterred courtyard H, a magnificent piece of masonry, I I' I', 50 metres long, by 8 m. in height, which served as the foundation for the grand eastern portico, a dodecastyle structure which now no longer exists. The ground before this wall had been dug out down to the very rock on which it stood, but the trench was even then being rapidly filled in again, and the wall itself was fast disappearing from view, so that when I returned a month hence it was no longer visible, save at the two ends. Where the rock was lowest I counted 17 courses of regular masonry, consisting of blocks of $\pi \bar{\omega}_{\theta} o_{\theta}$ stone from the Piræus, some two feet thick by four

¹ Lenormant Recherches Archeologiques à Eleusis, Paris 1862, p. 168.



in length. At the northern end, owing to the rock being slightly higher, the same level above was reached by the wall having only 15 courses of masonry, with a height of 7½ metres. Of course the wall was not meant to be seen, but having once seen it, one naturally regretted losing sight of a work two thousand two hundred years old.

In making this excavation (of which no trace now remains) some bones were found, but no certain remains of any tomb, and in clearing out the whole courtyard (now filled in again) nothing of importance was found. The haring, however, to view of the walls of the outer court, of the enclosure, of the foundations of the cella behind the portico, and of the two buttresses of which one on the southern and the other on the northern side support the substructure of the cella or temple proper itself, at the point where it was broken off and joined by the foundation wall of the great portico constructed at a later date. has clearly proved, from the fact of their all having the same mason's marks, which do not appear on the other walls, that all these walls are of the same early date. These marks consist of rude archaic Doric letters painted on the stone with some red pigment, the nature of which has not yet been made known by chemical analysis. On the interior face of the walls in the north-east corner of the courtyard (now no longer visible), I observed on one of these stores AIIH, the A and Π being ligulate, on another MH, on another a horizontal sigma, while on another stone on the wall facing south (now covered up) OEO written backwards way, while there was evidence of another red letter having stood both before and after in close connection with this word.1

Of the buttresses just mentioned the southern one consists of 16 courses of masonry, the four lower ones being of the common blue Eleusinian marble of the neighbourhood, and is $6\frac{1}{2}$ metres high. The foundation wall of the portico adjoining the northern buttress supporting the cella has been figured in the last annual

present surface was covered up and this little curiosity hidden from view. $\epsilon \delta$, "well," "good," was often put upon stones in the quarry by the architect to denote those that seemed to him to be of good quality and fit for his purpose.

¹ The fact of this word being inverted, thus O∃Ø, shews that it must have been painted on the stone before the latter was placed in position, where it may inadvertently in this outlying court-yard wall have been put wrong way up. On my last visit this bit of walling below the

report of the Athenian archæological society, as the singular appearance revealed by the spade and pickaxe at this point has come to the aid of science, and has confirmed the statement of history which assigned two

different epochs to the temple and the portico.

Where the northern buttress stands transverse line may be seen dividing the original wall of the cella from the new wall built for the foundation of the portico 120 years later. The older wall looks much whiter than the new one, though apparently built of the same kind of stone, and a thin outer coat breaks off from it now it is exposed to the air. The later wall however is still more easily discriminated by the rough mason's marks chiselled on every stone that has its end outwards. the other stones that lie longitudinally having their marks hidden from view. These marks consist of rude sprawling letters, and the commonest used are M, N and Ω ; P and A occur frequently ligulate and oftentimes askew. Thus do we verify the assertion of Vitruvius, who says that the temple planned by Ictinus in the days of Pericles was built a considerable time before hand was set under Demetrius Phalerius to that noble and lofty portico, which, looking out straight over the blue waters of the bay of Eleusis on to the hills of Attica, far beyond which could be seen the flowery flanks of Hymettus, while on the right the eye was captivated by the soft flesh-like slopes of the mountain Isle of Salamis, gave the throng of worshippers at that world-renowned shrine one of the most exquisite views in Greece.

Directly in front of this lettered northern wall were found cut in the rock four tombs, two of which were large enough for youths and two for infants. All these tombs, which were apparently older than the existing buildings, had been opened and rifled, except one of the larger tombs, which was found only half covered, and which yielded some crumbled bones, and two or three fragments of pottery, on one of which besides some black figures, could be read the letters LEO^{VD}, expanded ΛΕΟΚΡΑΤΗΣ.

Advancing to the front of the portico and turning to the north-east corner of the temple, we have displayed to view by the recent excavations a fine stretch of three

¹ Πρακτικά της εν' Αθήναις αρχαιολογικής εταιρίας του ετους 1883.

different kinds of walling, which happily remain undisturbed. The first of these extremely interesting structures, K, is a wall of polygonal uncemented blue marble, looking like an English granite wall, only the stones of the former fit in one to the other so much more cleverly, and present a more even face. This wall, which stands a few paces from and partially masks the unbroken line of the $\pi \tilde{\omega} \rho o c$ Piræus or island of Ægina stone of the foundations of the temple and portico, must be of very ancient date, as it has been cut through in order to build the latter. It is in two stages, the lower being of more regularly squared stones closely fitting together, the upper being of irregular shaped stones having smaller stones in their interstices. It is moreover at K, unmistakably blackened by fire, and in the burnt earth near it a gold ear-ring was discovered. This wall, as well as others both in and outside of the present temple, seems to have belonged to the buildings destroyed during the invasion of Attica by Xerxes.

Withdrawing further away from the temple, and looking towards it, we discern on the left another wall, L, running from north to south, which presents a very handsome appearance, being built of fine squared white stones drafted all round at the jointings, so that it looks panelled. This wall is faced only to the east and is filled in behind with earth (into which stones run at intervals lengthwise) as though it had supported a terrace. This terrace, which may have belonged to the pre-Periclean temple, would have faced due east, the later portico not being due

east but rather south-east.

Further off again to the north has been next discovered a thick wall of unbaked bricks, M, standing upon two courses of regular masonry. This wall, now reduced to the consistency of an almost undistinguishable mass of clay, will soon melt away from the action of the weather to which it has suddenly become exposed after a burial of more than 2000 years. Such walls are mentioned by Pausanias as common in the fifth century B.C., as they

¹ Bk. vii., ch. 8, 3. vii-viii. These mud walls are still common in the outrows and thus making a wall 8 ft. high. Their cost is some two frs. a piece and when covered, as is usual, with brushwood, will stand the brunt of the weather for twelve or fifteen years. It is supposed that the famous long walls of Athens were thus hastily built to a good height, on a solid stone foundation,

and fields. They are easily made and last a good time. The clay dug upon the spot is thrown into a mould some four feet square, and when dry is turned out and set up on a raised foundation, when sometimes one of these hardened

are common in Greece now, and this particular wall would seem to have been a wall of enclosure to the temple destroyed by the Persians. There are evidences that its thickness had been almost doubled at some later time by the addition of a slighter wall on its inner side. the space between the two being then filled in with rubble, and the whole width being thus raised to 412 mètres. Outside this wall, and cutting it at an obtuse angle, has been discovered a lozenge-shaped quadrangle, or rather trapezium, formed by eight square stone columns, N, the tops of which are not higher than the pavement of the portico of the temple. Though this structure, and a massive conglomerate or friable-looking stone wall towards the north, both belong to Byzantine times, the former buildings into which they were sunk as foundations, may have been subterranean apartments used for some purpose or other in connection with preparation for the mysteries.

As for the temple or sacred adytum itself, it may be described as a hall about 55 metres square, divided into six or eight aisles by seven rows of six pillars each, the whole number of pillars within the cella being 42. Only on my last visit, in the month of June, had the causeway of earth and rubbish, which until then ran at a raised level across the temple, been removed and the sites of those somewhat rude $\pi \tilde{\omega} \rho o c$ stone pillars ($1\frac{1}{2}$ metres in diameter) laid bare, as well as the openings, two on each of three sides, for doorways. On several of the foundation piers a few feet of the original stone pillars still remain, but all were at first covered by the mass of earth that encumbered the spot, and their number was ascertained only during the course of the

present excavations.

The back of the temple, facing the eastern portico, the only side on which there is no entrance, is cut out of the rock, that part being built up against the hill on which was the Eleusinian Acropolis. The rock is rudely cut all along that side of the cella, and for some way on each of the two sides contiguous to it, into seats for the accommodation of assistants or spectators at the solemn rites of worship, or for the initiated after the ceremony of their initiation was over. These steps or seats, arranged

one row towering above another as in an amphitheatre, instead of being cased with marble as in many of the ancient Greek theatres, seem more probably to have been

covered with cushions, carpets or matting.

Owing to the inequalities of the surface in the incomplete state of the excavations, visitors had hitherto almost invariably gone away with the notion, that the pavement of the temple was lower than that of the portico by which they had entered it, and many were the theories of dark caverns for initiation, &c., that were built upon this supposed fact. Only within the last two months has the floor of the temple been wholly cleared to view, and its level made apparent, but it had already been ascertained by actual measurement made by Mr. Penrose that the floor of the cella was just 25 centimetres higher than that of the portico, an imperceptible difference in that great space, but enough to allow of the outflow of water, when

the temple was cleaned.

Mr. Philios, the intelligent and learned director of the excavations, inclines to the opinion that the temple may have been divided into two stories, the ground-floor being in this case $5\frac{1}{2}$ metres high the height at which stands a platform cut in the rock behind the back of the temple. The cella would be thus almost wholly built up against, or cut out of the rock except on the side shut in by the portico, and the want of apertures for the admission of light would not be felt, as the more solemn mysteries of initiation took place in the dark, and indeed at night time. There is a flight of steps cut in the rock, just outside the cella on the south side, narrow at the beginning but of greater width above, where it widens out into a noble terrace, on which the worshippers might wander out to enjoy the fresh air and the view over sea and mountain, and these steps may have given access to the upper storey of the temple, reserved for those not at the time taking part in the rites of initiation or of sacrifice that were being performed in the hall or sanctuary below. This theory of the cella's being divided into two stories may find countenance in the circumstance mentioned by Plutarch, that the lower columns of the temple were erected by one architect and the upper ones by another. At the foot of the staircase leading up to the rocky platform which over-hangs the cella (the staircase itself was imbedded until recently in 20ft. of earth), a little to the left, has been disinterred a square niche cut in the rock, large enough for a life-sized statue or for an altar. The plaster on its sides, which has a finely polished surface, is now fast crumbling away from exposure to the

atmosphere.

On my second visit, at the end of December, I found a terraced wall of large blocks of the polygonal stone of the neighbourhood running across the southern end of the temple, of which it formed the hypothenuse. faced and regular only on its outer side, and filled in with earth and rubble at the back, seems to have been built to support some terrace or portico, of the pre-Pericleian temple, which would thus face due south. As however this newly discovered structure interfered with the level of the existing ruined temple, the floor of which a little further back is now simply the naked rock originally levelled for the purpose, it was even at that time being covered in again, so that when I returned later on all trace of it was gone. Even at that time fresh indications of walls had been discovered at the same depth nearer the centre of the present cella, while a foundation pier of a column found in the same southern angle of the temple pointed to some design or other not having been carried out, as the pier was out of line with the other pillars of the portico.

At my next visit, at the end of April, the scene all about the entrance of the temple from the portico seemed quite changed, so many pieces of wall below the surface running one way or another had been laid bare; but when I went again, on that day month, the director was able to point triumphantly to the piers of some eight columns crowded into the north-eastern angle of the cella, which belonged unmistakably to the original temple of Eleusis destroyed by Xerxes, to which these various walls had led, or with which they were somehow connected. On my return in another month the outer walls of this pre-historic temple were laid bare and its dimensions fixed with sufficient certainty. It may be described as a square, about half the dimensions and occupying therefore one quarter of the space of its successor, being

about 25 metres square, and contained apparently 25 pillars, disposed in five rows of five pillars each. It occupied almost so exactly the north-east angle of the later temple, that its eastern and northern walls seemed at first to coincide with those of the latter, as their exact line had not been quite made out when I left, nor had the foundations of all the pillars of this ancient cella been found. groove in the rocky floor at the south-west corner seemed to point to the site of the foundation walls of the old temple on that side and thus fix its dimensions. This discovery of the past two months is one of the most interesting imaginable, and was I think almost wholly unexpected. The earth is to be filled in around these primordial traces, but the surface of wall and pier is to be left visible so that within the last temple of Eleusis we may clearly read the outline of its venerable parent.

In the courtyard of the director's house are two rooms into which have been gathered all the architectural and artistic remains of small bulk that have been found during the course of the present excavations. These comprise many statues, chiefly however of the Roman period, inscriptions, friezes, and a large and very valuable

collection of archaic pottery.

In this temporary museum is preserved a small marble relief about a foot square, which seems to refer to the Eleusinian mysteries and their procession. So little is known about the rites and ceremonies of initiation that any record on stone or painted vase of the costumes, attitudes, or appurtenances used in the mysteries becomes of the highest value. Perhaps the only large representation of the kind having undoubted reference to the Eleusinian mysteries is the pedestal or altar now broken in twain, which being sculptured on three sides only, may, in Roman times, have stood with its back to the wall of the eastern portico, with the other stêlai or altars, amongst which on the outer ledge of the portico it now stands. On each of these three sides is represented a procession of men carrying torches, the leader of whom however may be a woman. The torch as is well known The figures themselves, is the attribute of Demeter. about a foot high, are so mutilated, that of some only the head appears, and of others only the feet. On the

best preserved side I counted 14 figures on the other two 13 and 12, but on these two sides the corners were broken off. On another white marble slab hard by may be observed a delicately carved sheaf of wheat elegantly bound, with, at the other end, the almost obliterated figure of the garlanded head of an ox, while in the middle there is the celebrated bread-basket, as is natural in the home of Ceres. Pausanias says the sacrificial cakes were made of barley; and Origen, according to Lenormant the younger, says that the apparition of a fresh cut sheaf of wheat τεθερισμένος στάχυς was the lofty symbol which concluded the mystic representation of ἐποπτέια.

The bread-basket may be a measure of corn. It stands on feet. Κάνεον is the name of the basket in which the sacred barley ὀυλάι was carried at sacrifices; hence Κανηφόρος the maiden basket-bearer of the Parthenon.

Both wheat and barley were however offered to the goddesses Demeter and Core at Eleusis. The Rharian plain, which stretches out immediately before Eleusis, where corn was first sown in Greece, is like the whole of Attica, the soil of which is light and poor, more suitable for the growth of oats and barley than of wheat. Hence the great bulk of the wheat was brought from beyond the State or from the islands. Of this fact we have an interesting confirmation in an ancient inscription discovered last year at Eleusis, and illustrated by my friend, M. Foucart, in the Bulletin de Correspondence Hellénique, for March 1884. The inscription is on the lower part of a stèle of which the upper part had been found the year before. It contains an extract from the accounts of Eleusis under the magistracy of Kephisophon, and a date, Olymp. 112-4, B.C. 329-8. From this inscription we learn that the Athenians in their ten tribes offered of first fruits at Eleusis 564 medimni of barley and a little less than 23 of wheat. The proportion between the cultivation of barley and wheat at that time was as ten to one. Salamis produced nothing but barley. At Skyros, at Myrina, at Lemnos the proportion was one to three; in another part of Lemnos, Hephæstia, it was one to five; at Imbros the proportion is inverted, there was twice as much wheat as grain. On the confines of Attica and

² Philosophoumena, v. viii, p. 115, ed. Miller.

Bæotia we observe from an account given in the inscription that the wheat produced is more than four times that of the barley, the proportion of barley to wheat in that place being 600 medimni of barley and 2900 medimni of wheat.

By an ordinance voted, under the administration of Pericles, in order to establish or rather re-inforce the ancient custom of offering the first fruits of the harvest to the Eleusinian goddesses, it was decreed that the Demarchs should make the levy by their demes, and that they should hand them over to the isponoid of Eleusis at Eleusis. Further that the latter should have built at Eleusis, according to the usage of their ancestors, three grain-pits on the spot that should be judged suitable by them and by the architect, and that they should pour therein the grain which they shall receive from the Demarchs.

Now in the inscription under consideration we find these same prescriptions of the fifth century still followed in 328. The first fruits are here offered in still greater abundance, the grain is delivered at Eleusis, however distant the colony whence it comes. In Attica it is levied and delivered by the Demarch; the allies however could choose whom they willed to fulfil that office. At Salamis it is a $\kappa\lambda\eta\rho\tilde{o}\nu\chi\sigma_{c}$; so also at Imbros; at Skyros a $\sigma\tau\rho\sigma\tau\eta\gamma\dot{\sigma}_{c}$; at Hephæstia and at Myrina the Athenian $\sigma\tau\rho\sigma\tau\eta\gamma\dot{\sigma}_{c}$ is assisted by two $\kappa\lambda\eta\rho\tilde{o}\nu\chi\sigma_{c}$. In place of the three $\sigma\iota\rho\sigma_{c}$ ordered to be dug, a tower had been fitted up to serve as a magazine for both the barley and the wheat. In the annexed plan the sites of two towers will be observed at the southeast and north-east corners of the outer enclosure of the sacred area, but whether for this purpose or not I cannot say.

An extraordinary and interesting circumstance revealed by this inscription is the series of bad harvests that then visited Greece, as may be argued from the diminished revenue of the sacred temple. This conjecture has been raised to certainty by some documents recently published by Dr. Kohler.¹ From these it appears that the preceding year B.C. 330-29, had been one of only moderate production. There is a decree granting a crown of gold, of the value of 500 drachmas, to a merchant of Cyprus who had brought to Athens 3000 medimni of wheat, and

¹ Mittheilungen of the German Institute at Athens, vol. viii., p. 311, &c.

had sold them to the people at 5 drachmas (about 5 frs.) the medimnus (very nearly 12 gallons). The harvest was still worse in the year when these accounts were made, for in the following year, under the magistracy of Euthycritos, (328-7) recourse had to be made to free gifts, in order to enable the people to purchase corn, and to sell it retail at the price of 5 drachmas the medimnus. The ordinary price of barley was 3 drachmas the medimnus and that of wheat 6. According to our inscription only 400,000 medimni were offered that year of bad harvest. This figure represents but one-third or one-fourth the regular contribution, which M. Foucart sets down at one million or at a million and a half, but which Boeckh thinks was twice as much.

As for the ox sacrificed at Eleusis, we have in a very important inscription, discovered in 1860, giving us the details of an official sacrifice at that place, $\theta \epsilon \tilde{a} \iota \nu \tau \rho \iota \tau \tilde{c} \omega a \nu \beta o \tilde{a} \rho \chi o \nu \dot{\epsilon} \nu \tau \tilde{\eta} \dot{\epsilon} o \rho \tau \tilde{\eta}$. In the inscription just discovered, we see that the sacrifices were according to ancient prescription. Three kinds of victims had to be bought, the ox, the sheep, and the goat, constituting altogether the $\tau \rho \iota \tau \tau o \iota a$. Three oxen had to be provided; indeed to each of the two goddesses a $\tau \rho \iota \tau \tau o \iota a$ $\beta o \iota a \rho \chi o c$ had to be sacrificed, namely, they began by offering an ox, while a third ox was destined for Athena.

The ox as trained to draw the plough was sacred to Ceres, though Lenormant¹ thinks Ovid mistaken when he deems that for that reason the ox was not sacrificed in the Eleusinian mysteries:

A bove succincti cultros removete ministri, Bos aret: ignavam sacrificate suem. Apta jugo cervix non est ferienda securi: Vivat, et in dura saepe laboret humo.

(Fasti, IV. v. 413, etc.)

The bones of oxen, as of other animals that had served for sacrifice, have been found in the subterranean chambers within the enclosure of the Hierum, in front of the great portico.

At a great depth and near the clay-built wall have been found grayish or yellowish coloured tiles, sun-baked

¹ Recherches, p.p. 55 and 84.

and afterwards hardened before a fire, as the outer surface is of a reddish hue and slightly burnt and glazed, which are supposed to have belonged to the first temple, or to the annexes of the later temple, as some of the substantial and handsome marble tiles of the latter have been found. In the temporary museum, the contents of which will be properly arranged in a more spacious building later, a great number of fragments of pottery are collected which have been found mostly at a great depth. Some of these are beautifully figured in red on a black ground with men, women and ornaments, and belong to the best period of Grecian art. Some however are very archaic, and date from long before Phidias. No single vase however has been found entire. A great number of lamps have been discovered, and a number of beautifully designed cup-like hearths, with perforated covers which must have been employed for burning perfumes.