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## for the $\mathbb{P}$ promotion of hellenic $\mathfrak{W t u d i e s}$

## SUPPLEMENTARY PAPERS

No. 1

EXCAVATIONS AT MEGALOPOLIS
1890-1891.


ERNEST ARTHUR GARDNER, WILLIAM LURING, G. C. RICHARDS's; W. J. WOODHOUSE

## WITH AN ARCHITECTURAL DESCRIPTION

BY
ROBERT WEIR SCHULTZ

4, 4

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## PREFACE

The present Special Number of the Journal of Hellenic Studies contains the result of the excavations carried on at Megalopolis by the British School at Athens between March 1890 and October 1891. The work of publication has been distributed by mutual agreement among those engaged in the excavations, but the collaborator whose name is appended to each chapter is individually responsible for its contents.

The excavations at Megalopolis were undertaken by the British School at Athens in the spring of 1890. The first suggestion of the site came from M. Cavvadias, Greek Ephor-General of Antiquities, whom we wish also to thank for the readiness with which he has granted and renewed the authorization necessary for our work. In December 1889 I had examined Megalopolis with a view to excavation, accompanied by Mr. Loring. After receiving my report, the Committee of the School decided in favour of the undertaking, although it was clear that the extensiveness of the site and the great accumulation of soil in many parts of it would involve a large expenditure of money; this money was supplied at first from the general fund of the School, and later from a fund raised specially for the purpose by subscription.

During the whole of the excavations, of which the results are now published, Mr. Loring was present at Megalopolis. In the spring of 1890 he was associated with Mr . Richards and with Mr. Woodhouse, and in the autumn of the same year with Mr. Richards. In the spring of 1891 he was joined for a month by Mr. J. G. Milne. I have myself visited Megalopolis several times, both at the beginning of the work and at various stages in its progress, staying for some days on each occasion. Mr. Penrose, who was acting temporarily as Director of the School, spent several days at Megalopolis at the end of March 1891, and gave the excavators valuable assistance. Other members of the School visited the site at various times, without taking any direct part in the work.

In September 1891, Mr. Schultz was sent dut from England by the Committee of the School, to make plans of the Theatre and other buildings at Megalopolis, and to report upon all architectural questions. He spent about a month at Megalopolis, for three weeks of which I accompanied him; we were thus able to discuss doubtful points upon the spot. Mr. Loring
was also at Megalopolis during the last fortnight of Mr. Schultz's visit, and contributed some data to the theatre plan. Mr. Loring's topographical work upon the site, which lasted about. three months, and was supplemented by some small excavations conducted on his own account, is embodied in his map and a special chopter.

Our obligations to those not directly connected with the School call for special mention in this place, and most of all those which we owe to Professor Dörpfeld. In his various visits to Megalopolis he made several valuable suggestions as to the arehitectural remains, most of which we have, after due consideration, accepted without reserve in the place of our previous opinions. Indeed, so far as purely architectural evidence is concerned, we are glad now to find ourselves upon many points in accord with so high an authority. If we have ventured to differ from him very widely as to some of our archaeological conclusions about the Theatre, it has not been without a very careful weighing of the evidence upon both sides; and we trust that we shall at least be found to have given ample grounds for every opinion that we have expressed. We are glad to have this opportunity of expressing our gratitude to Professor Dörpfeld for his generous advice and help, the exact nature of which is described in its proper place.

Dr. P. Kastromenos represented the Greek Government in the capacity of Ephor (Eфopos) during the first two seasons; afterwards we had no Government supervision but that of an overseer ( $\quad \pi \iota \sigma \tau a ́ \tau \eta s$ ).
M. Leonidas Zervas, now Deputy (ßou入єurn's) for his division of Arcadia, was Mayor ( $\delta \dot{\eta} \mu a \rho \chi^{\rho s}$ ) of Megalopolis during the first two years of our excavations. In all the little difficulties that beset an excavator in Greece, his help was invariably prompt and efficient, and our obligation to him was increased yet further by the hospitality and friendship which he invariably showed us.

Nikolas Boveros, a local archacologist and diligent student of Pausanias, offered us many suggestions, and materially assisted Mr. Loring during his topographical work by taking charge of his workmen while he was engaged in surveying other parts of the site.

The people of Megalopolis generally have shown goodwill towards our work, and with our workmen in particular our relations throughout have been of the most friendly nature.

On behalf of myself and my collaborators, I wish also to thank the Council of the Hellenic Society and the editors of this Journal for the readiness with which they have undertaken the present publication, thus relieving the School at Athens, already so deeply indebted to the Society, of a heavy burden of trouble and expense. And to Professor Percy Gardner our thanks are especially due for his help in seeing this volume through the press at a time when those contributing to it are widely scattered, and some of them at a distance from England-a task which circumstances have made peculiarly difficult.

The excavations at Megalopolis have now been completed. They were continued by other members of the British School in the Spring of 1892, and cluring the present season (1892-3); in particular the Thersilion has now been entirely cleared. The results of this further work will be published in due time; but as they do not seem likely to affect the explanation of what has previously been discovered, we have not thought it advisable to delay the present publication any longer.

We feel that the delay which has already occurred calls for explanation, especially after our withdrawal of some of the statements made in our provisional publication of the Theatre, and our reservation of opinion as to some crucial points. We had not before us the materials for forming a final decision until last spring, and then we were daily expecting to be able to publish at once our final results. Thus any further provisional statement seemed superfluous. The delay which has occurred since that time was quite unexpected, being due to the difficulty of completing the detailed plans which accompany this volume. We trust however that some compensation for this delay will be found in the completeness with which all the facts we have had to consider are now made accessible to the public.

## Ernest Gardner.

Atinks.
.May 5th, 1893.


## CHAPTER I.

## HISTORICAL SKETCH.

The news of the Spartan defeat at Leuktra in 371 b.c. electrified the whole Greek world, but it was in Arkadia that the results of the battle were especially interesting and important. In both the great cities of the province-Tegea and Mantincia-it was the signal for a fierce democratic reaction against Lacedaemonian influence. In Mantincia this took the form of a political resurrection. The villages into which the Mantineians had been dispersed in 385 b.c. reunited and refortified their old city. In Tegea, not without opposition, the movement issucd in a new political creation-the formation of a Pan-Arkadian Confederacy and the foundation of Megalopolis as its centre and meeting-place. Parallel movements were visible in Boeotia and Argos; everywhere forces were at work erecting firm barriers against the power of Sparta on the strong foundations of nationality.

When 'Synoecism' was in the air it is not surprising to find the idea of a united Arkadia arising in various quarters simultancously. It does not in fact seem possible to name its actual author. Xenophon Hell. vi. 5. 6 ascribes the suggestion to Kallibios and Proxenos of Tegea who,
 rầ mó $\lambda \epsilon \omega \nu$. Diodoros however, in xv. 59, gives the credit of the proposal to Lykomedes of Mantincia, in this passage called by mistake a Tegean, but cp. cap. 62, who persuaded the Arkadians to form a union with a common Council, $\dot{\epsilon} \xi$ á $\nu \delta \rho \hat{\omega} \nu \mu \nu \rho i \omega \nu$, with full power of decision in all subjects. In any case it is clear that the notion fell in with the policy of Thebes, that is of Epameinondas, to whose military genius we must attribute the site chosen for the new city. The choice of a site so important strategically was perhaps the chief contribution of the Theban general to the movement, while the proposal for union seems to have come first from the Arkadians themselves. Pausanias viii. 27. 2 is right therefore in his remark
 contemporancous the building of Megalopolis and the formation of a Pan-Arkadian Confederacy must be kept quite distinct. The Great City served two purposes. It was, firstly, the meeting-
 a member in that system of fortresses extending from Messene to Argos which shut in Sparta
 aúvìv oi 'Apкádss, and in this they followed an example set by Argos: Paus. viii. 27. 1.

In spite of the opposition of Orchomenos and Heraia the first meeting of the Confederacy was held at Asea, and under the protection of a thousand chosen troops sent by Epameinondas under Pammenes the foundations of Megalopolis were laid, 'a few months after the battle of Leuktra': Paus, viii. 27. 8. To direct the Synoecism and to act as founders ten men were chosen two each from Tegea, Mantincia, Kleitor, the Maenali and the Parrhasii. These, Diod. xv. 72 says,

 from the junction of the Helisson with the Alpheios, twenty miles from Tegea in the broad plaill which connects Lakonia with Elis; the new town was therefore splendidly placed for keeping up communication between Messenc on the one side and Tegea on the other, while preventing any movement from Sparta towards the North-West. The command to surrender their autonomy and to coalesce into a real political aggregate met, it is true, with great opposition from some of the
village communities, but the Confederate forces secured obedience from all, with one notable exception, the Trapezountii, who preferred to seek a new home by the shores of the Black Sea rather than submit. We may, with Curtius, distinguish three classes among the cities of Arkadia at this time :-
(1) Those who took no part in the movement: e.g. Heraia and Orchomenos whose power was seriously impaired by it: Paus. viii. 27. 5.
(2) Those who took part by sending settlers and representatives while retaining their separate existence : e.g. Tegea, Mantineia, etc.
(3) Those who were entirely absorbed to become demi of the new city.

For a detailed account of the town Pausanias must be consulted. It extended along both banks of the Helisson, and seems to have been divided into local Phylae: $\dot{\eta} \tau \hat{\omega} \boldsymbol{\nu}$ иuкaєıт $\hat{\omega} \nu \phi u \lambda \dot{\eta}$ is found in an inscription of the second century, Lebas ii. 331b, but this may have been a larger group similar to the Mainalii and Parrhasii. A word, must be said of the Confederate Assembly, the $\mu$ úpoo, who met, according to Pausanias, in the Thersilion near the Theatre. Schömann and others would accent $\mu \nu \rho_{i o s}$ and make the word mean therefore an indefinite number, not fixed at ten thousand. Diodoros however regards the assembly as consisting of a definite number. A fixed age qualification was probably a condition of membership, for Agesilaos
 'Aркабькóv, at Asea as already mentioned, Xen. Hell. vi. 5. 12. The кoıvóv was, as we should expect, established on a democratic basis, and the most correct view about it is perhaps to identify the кouvó $\nu$ with the $\mu \nu \rho i o u$, giving up the numerical restriction commonly insisted upon. It is indeed difficult to see how the definite number could have been maintained as the relations of the component states to the League varied continually. In Harpokration the $\mu \nu \rho \iota o \iota$ are defined as
 was a Boule by the side of the Assembly to prepare measures for discussion is not known. There was certainly one of fifty $\Delta a \mu \iota o \rho \gamma o i$ after the middle of the third century, and these may
 constitution. The highest official in the League was the General who commanded the PanArkadian Army. The kernel of this was composed of 5000 paid émápıtoı, explained by Hesychios



Such is in outline the history of the rise of the League and its capital. Hardly however had Epameinondas finished his work when dissensions broke out. The Theban connection became distasteful to those who had fostered it. Lykomedes, one of the Founders, came forward as the representative of the newly awakened Pan-Arkadian Idea. The Arkadians alone, he reminded them, were autochthonous in the Peloponnese; their numbers were greatest, their bravery indisputable, for did not every general draw his mercenaries by preference from the hills of Arkadia? In former days they had built up the power of Sparta, and now if they quietly sulmitted to the hegemony of Thebes they would find them Spartans under another name: Xen. Hell. vii. 1. 23. It needed the 'Tearless Victory' of Archidamos in 368 b.c. to convince the Confederacy of its powerlessness to stand alone against Sparta. But Lykomedes took advantage of the disgust of Athens with her Peloponnesian allies for having failed to help her to save Oropos to suggest to the Assembly an alliance with her. He was murdered by the opposing faction on his way home from Athens, but the schism between the Mantineian, or oligarchic, and the Theban, or democratic, parties increased. Then came the disgraceful war with Elis, which for the first time in history stained with blood the sacred Altis of Olympia and ended in scandalous approprintion of the treasures of the temples by the Pan-Arkadian army and their allies, the Pisatans. The League was too flimsy to withstand this special cause of dissension ; the sacrilegious appropriation of the treasure supplied a pretext for the resumption of ancient hostilities on the part of Mantincia, jealous alike of Tegea and Megalopolis. In 362 b.c. a large section of Arkadia, with Mantineia at its head, profited by the reaction to desert the League and join in treaty with Athens and Sparta. The battle of Mantineia therefore found Arkadians fighting on opposite sides, and many of the synoccized towns took advantage of a clause in the peace which followed to desert Megalopolis; but the Thebans under Pammenes compelled them to return : Diod. xv. 94.

The death of Epameinondas in that battle had deprived the Megalopolitans of their great protector, and while Sparta was gradually recovering her strength Thebes was before long engaged
in the ruinous Sacred War. The necessity for a powerful ally was evident in 353 в.c. So reduced did Thebes then appear that Archidamos thought the moment had come for avenging the disaster of Leuktra by destroying the Megalopolitans. Their appeal to Athens found a supporter in Demosthenes, who spoke the oration inè Meqaגomo入ıт $\bar{\nu}$. He urged the Atherians to take up the Theban policy with regard to Messene and Megalopolis, to prevent the resurrection of Spartan hegemony. Demosthenes scems to have failed in his pleading, for Diodoros says that next year the Spartans invaded the Megalopolitan territory. The hostile and pro-Spartan section of the Arkadiau name had in fact gained the sympathies of the Athenian Assembly to which Thebes was more hateful than Sparta had ever been; Thebes herself had fallen on evil days and could offer little more than companionship in misfortune to her fosterling city-nothing was left for the Megalopolitans but an approach to Philip son of Amyntas, who had ascended the Macedonian throne in 359 b.c. It does not appear that a formal alliance was made, but Demosthenes de Cor. 324 speaks of Eukampidas and Hieronymos, the prime movers in this Macedonian connection, as traitors. Polybios xvii. 14 has a more favourable verdict. Aischines therefore was too late by years in making his appeal to the Pan-Arkadian Assembly when in 347 b.c., after the capture of Olynthos, Athens appealed to the Peloponnese for that vigorous action against Philip which she had refused to display herself. Hicronymos.was the chief opponent of the Athenian propagandist whose mission, so far as Megalopolis was concerned, was a failure. The connection with the Macedonian royal house was ever afterwards maintained and bore fruit in 338 b.c. when the victory of Chaironeia left Philip master of Greece. He gave to Megalopolis the border fort and territory of Belemina which he took from Sparta, Livy xxxviii. 34. 8; hence the Stoa Philippeios in his honour in the Megalopolitan Agora, Paus. viii. 30. 3, and the house devoted to Alcxander near the Thersilion, id. 32. 1. Megalopolis thus became the stronghold of Macedonian influence in the Peloponnese, so that by a strange fate the city founded to ensure the liberty of Greece became one of the instruments of its complete enslavement. When therefore in 330 b.c. Agis III. rose against Antipater the city was besieged and came near falling; for it is to this occasion that we must refer Paus. viii. 27. 9, who says that the North wind destroyed the Spartan engines and was duly
 called, relieved the city and extinguished all hopes of Greek freedom at the same time.

It is probably to about this time- 324 B.o.-that we must put the dissolution of the Arkadian League by decree of Alexander: perhaps as a punishment, for the Arkadians had all, with the exception of Megalopolis, taken the side of Agis. The evidence for the decree is seen in




During the troublous times which followed Alexander's death Megalopolis took the side of Kassander, and in 318 b.c. the city had in consequence to stand a siege from Polysperchon. The Macedonians succeeded in breaching the walls, but Damis, who had served in Asia under Alexander, repelled them : Diod. xviii. 71. On this occasion the number of citizens, slaves, \&e., capable of bearing arms is put at 15,000 ; this would mean a population of perhaps 65,000 . Three years later Messene and Megalopolis were able to return to Thebes the service she had rendered them. Alexander had blotted that city from the map of Greece, but in 315 b.c. Kassander restored it with the aid of Greeks from all parts, even Italy and Sicily, and among them the people of Megalopolis were conspicuous. With the payment of this debt of gratitude they disappear from history for some time. They must however have espoused the cause of Demetrios Poliorketes, for Plut. Dem. 25 says that Mantineia was the only Arkadian city from which he experienced any resistance. When Megalopolis is heard of again Antigonos Gonatas is on the throne and the Great City is in the hands of her first tyrant, Aristodemos.

Aristodemos we are told by Paus. viii. 27. 8 was by birth a native of Phigaleia and had been adopted by Tritaios, a Megalopolitan of position. How the tyrant gained his power is not told us, but judging from the fact that he engaged in hostilities with the Spartans, who, along with the Actolians, were the only Greeks at this time who were in any sense free, it seems likely that Aristodemos owed his elevation to the tyrannis to Antigonos, probably to strengthen Macedonian influence when, after a temporary eclipse, Antigonos succeeded in regaining his crown in 277 b.c. Aristodemos was at any rate contemporary with the Spartan king Akrotatos, for he slew him in a battle lefore the walls of Megalopolis in 265 b.o.: Plut. Agis 3. From the proceeds of the booty taken from the Spartans the tyrant built a stoa
in the Agora-the stoa Myropolis: Paus. viii. 30. 3. He also dedicated a temple to Artemis Agrotera in the city, icl. 32. 3, as well as one at Skiadis, 13 stades distant, so that he seems to have deserved the epithet of 'the Good' which he got even during his lifetime. But his piety failed to save him from the Liberators' dagger. Ekdemos and Demophanes, called Ekdelos and Mcgalophanes in Paus. viii. 49. 1, struck the blow. They were pupils of the Akademic philosopher Arkesilaos, and as Plutarch says that they 'above all men of their time applied their philosophy to action and affairs of state' they must have been more interesting than many better known names in the history of Greek political philosophy. It. should not be forgotten that these assassins were the teachers of Philopoimen, the 'last of the Greeks': Plut. Phil. 1.

The city enjoyed its freedom for two generations according to Pausanias, but twenty years will be nearer the mark. It is probably in connection with the 'liberation' that we should put the revival of the кoıv̀̀ т $\hat{\omega} \boldsymbol{\nu}$ 'A $\kappa \kappa \alpha ́ \delta \omega \nu$, which was abolished, we remember, in 324 b.c. The exact date of the revival is not fixed. The terminus post quem is given by the inser. C.I.A. ii. 332, which reports the formation of a league by Athens, Sparta, Elis, the king of Egypt, Tegea, Mantineia, Orchomenos, \&c. The omission of Mcgalopolis and the separate enumeration of the Arkadian states plainly points, to a disruption of the 'Apcaiocór. The date of the inscription is $270-266$ b.c. : cf. Wachsmuth, Stadt Athen, p. $626^{2}$, though Foucart puts it to $265-242$ b.c. The terminus ante quem is given by the inscription. Lebas ii. 340a, assigned by Foucart to the year 224 b.c., but more rightly perhaps by Klatt, Forsch. i. p. 93, to the period between 251 and 238 e.c. This inscription gives a list of 50 Damiorgoi for the Pan-Arkadian Council. The number of cities sending representatives shows that the League cannot have been revived in its original extent. Of the later history of the 'Bund,' apart from that of the city, we know nothing.

If Pausanias is right in viii. 10. 4 it was during the period of freedom that Agis IV., the Reformef, attacked Megalopolis, but he seems to have confused him both with the Agis III. already mentioned and with Machanidas: cf. Paus. viii. 50. 2: Without attempting to reduce to order the jumble of history bequeathed to us by Pausanias, this is clear: that in some engagement with Spartan invaders Lydiadas, the second tyrant of Megalopolis, distinguished himself, and perhaps it was in part owing to this that he was enabled to scize the supreme power: Plut. Arat. 30. But he soon abandoned his position and made Megalopolis a member of the Achacan League. As in more famous cases, this voluntary abdication puzzled the historians. Polybios regards it as only a master-stroke of policy in Lydiadas, who foresaw the development of events in the Peloponnese and gained a great position in the League through his resignation. Plutarch, who calls him Lysiades, looking at everything from the moral stand-point, praises his magnanimity, and so Pausanias. Whatever his motive he lost nothing, for in 234 b.c. he was Strategos in the Achacan League. But Aratos and the ex-tyrant found it impossible to work together and the League lost trust in Lydiadas for his opposition to their farourite general. Lydiadas atoned for all by falling 'in the most glorious of all combats, that for his country' in the battle of Ladokeia almost before the walls of Megalopolis, 226 b.c.: Plut. Arot. 37. His body was returned to the city by Kleomenes with every mark of honour. Pausanias makes a mistake as to the time of his death, putting it four years later: viii. 27.10.

The destruction of the flower of the Megalopolitan forces in the battle of Ladokcia, following closely a previous defeat on Mount Lykaion, paved the way for the fall of the city itself. Polybios, ii. 55, says that the Spartan king was aided by exiles from Messene who had taken refuge in Megalopolis in effecting a night surprise, 222 b.c. When day dawned, the brave defence of the inhabitants under Philopoimen, then thirty years old, almost turned the scale again; but the Spartan force was too numerous and had effected too secure lodgment to be displaced. Ignominious disaster had indeed overtaken a similar attempt three months before, when Kleomenes tried to force an entrance at a quarter of the city called Pholeon or Kolaion. Philopoimen had on this second occasion to content himself with covering the retreat of about two-thirds of the inhalitants over the frontier to Messene, where they were safe. It was owing to him also that the escaped remnant resisted the temptation to ransom their city at the price of submission to Sparta. Kleomenes, enraged, despoiled it of its art treasures and, after destroying the greater part of the town, retreated for fear of Autigonos and the Achaeans: Plut. Kleo. 25. For by this time Aratos had felt himself compelled to
invoke Macedonian aid against Sparta. Two Megalopolitan friends, Nikophanes and Kerkidas, had undertaken for him the unpleasant task of proposing the alliance to the Achaean Assembly and had carried through the negotiations with the king: Polyb. ii. 48.

Megalopolis seems never to have recovered from the blow it sustained at the hands of Kleomenes, and the ruins seen by Pausanias might be in part memorials of its capture. It is during this war that there comes prominently forward the disproportion between the size of the city and the number of its inhabitants; and to this in fact was mainly due the fall
 was a common complaint in Greece at the time. The year after the capture the battle of Sellasia allowed the exiles to return, and the opportunity was taken to propose a thorough. reconstruction of the community. For this purpose Antigonos sent the peripatetic Prytanis, but a fierce dissension arose in connection with his suggested reforms: Polyb. v. 93. One party wished to reduce the circuit of the walls to correspond with the diminished population; additional settlers were to be enticed to the decaying city by the offer of land; for this purpose one-third of the land then in private possession was to be declared public. To this scheme the landowners objected. Finally, in 218 b.c., Aratos was called in and effected an arrangement, the terms of which were engraved on a stele set up by the altar of Hestia, at Aigion. In what way disputes were settled we do not know, but as Polybios gives the circumference of the city as fifty stades, Aratos seems to have made no change in that respect. Repairs to the town depended upon foreign contributions. In 183 b.c. Livy xxxviii. 34 tells us that Philopoimen, ' permissu Achaeorum,' applied part of the money gained from the capture of Sparta to rebuilding one of the colonnades which had suffered under Kleomenes; at the same time he restored to them the Ager Belbinates, on the Lakonian frontier, which had been declared Megalopolitan territory in the time of Philip: cf. Plut. Philop. 16. Some time later a grant was made for repair of the walls by Antiochos IV. Epiphanes, of Syria: Livy xli. 20. But patching up of walls could not increase the shrunken population, and we get a glimpse of the speedy decay of the city when it was besieged by Nabis. Plutarch Philop. 13 writes that then the inhabitants


 general ruin given by Pausanias. Still it is worth notice that the greatest names at the death of Greek independence are those of Megalopolitans-Philopoimen, Lykortas, and Polybios his son.

The city continued to exist under the later Roman Emperors; that as late as the end of the third or the beginning of the fourth century A.D. there were some buildings still standing, even if composed of the ruins of their predecessors, is shown by the partial excavations of Ross, Reisen im Pel. p. 81. But the town must have borne its share in the desolation spoken of by Dio Chrysostom De Tyr. Or. 6 fin. in the first century of our era: $\mathfrak{\epsilon}_{a} \nu \delta_{\bar{\epsilon}}^{\prime}$


 under the invasion of the Goths: ef. Zos. Hist. v. 6, and Claudian. in Rufin. ii. 189:-

Si tunc his animis acies collata fuisset,
Prodita non tantas vidisset Graecia caedes:
Oppida remoto Pelopeia marte vigerent:
Starent Arcadiae, starent Lacedaemonis arces.
The frightful plague of $746-7$ A.D., which raged over all Hellas, would thin the population still more, and to this succeeded occupation by the Sclavs. But long before this Megalopolis as a city has disappeared from history. When the curtain rises again the once busy Agora is green with corn, the mecting-place of the Ten Thousand a ploughed field. How much of the Great City has been spared to modern times must be left for the excavators to tell.

## CHAPTER II.

## NARRATIVE OF EXCAVATION.

## § 1.

I have been asked to give-by way of preface to a description of the Theatre and other buildings at Megalopolis, and of the epigraphical and topographical results of the exploration there-a short narrative account of the work itself, stating by what methods and with what varying success it was carried out. This narrative will also give me an opportunity of descrilling briefly such of our discoveries as have not been considered worthy of separate chapters.

Excavation
Proper.

The excavation proper occupied about six months, subsequent work four months.
The six months of excavation were made up of two spring seasons and one autumn season, as follows:-

First season, March 18-May 31, 1890 (work chiefly in the Theatre).
Second season, November 3-December 14, 1890 (work chiefly in the Agora).
Third season, March 21-May 30, 1891 (complete clearance of the Theatre).
§ 2.-Methods.
The tools and other appliances which we used in excavation were picks, shovels, crowbars and wooden levers, baskets, barrows, carts. The baskets, which were carried by women, were employed during the first season only, and were especially useful where the digging, being of an experimental nature, was confined to small pits and trenches. After the first season we were able to dispense with them altogether. Carts were employed only in the clearance of the Theatre. It was here too that crowbars and other levers were most required, the work of clearing the theatre-seats being rendered extremely difficult by the presence of large quantities of stone which had fallen down upon them from the upper part of the auditorium. number employed in any one day was 82 , viz. 38 men ( 4 of them with carts), 42 women, and 2 boys. This was during the first season's work, and the number was exceptional. In the second and third seasons, when large pieces of clearance were being done, and the baskets were dispensed with, about 60 men (no women or boys) were regarded as our normal staff.

The rate of pay was $2 \cdot 50$ drachmae (about 1 s .7 d .) a day for men, 1.20 drachmae (about 9d.) for women. The hire of a cart, horse, and man, varied from 5 drachmae ( $3 s .2 d$. ) to 7 drachmae (4s. 5 d.) a day, both carts and horses being extremely small.
§3.-First Season's Work.
(A). The Agora.

The site of Megalopolis is, as all students of Pausanias know, divided into two parts by the river Helisson; on the north side of which was the Agora, with most of the principal buildings; on the south side the Theatre, the 'Thersilion' or Parliament-house, and the Stadium, besides certain temples, altars, and other objects of interest.

The Theatre has always been well known to travellers. The great semicircular embankment against the side of a low hill, which supported the seats of its auditorium, is visible from a long distance, whether one approaches Megalopolis from the side of Dhimitzána and Karýtaena, or from that of Tripolitsa.

The position of the Agora was not known for certain previous to our excavation, but it was commonly supposed to lie almost immediately opposite the Theatre, where a number of column drums appearing above the soil some two hundred yards North of the river bank, and a long low wall half buried in a bank running approximately East and West, suggested to our minds the 'Stoa Philippeios,' which, according to Pausanias' account, bounded the Megalopolitan Agora on its Northern side. ${ }^{1}$ It was here, accordingly, that we first put in the spade.

In a couple of days we had cleared to their bases all the columns on the small stylobate adjoining the 'Stoa Philippeios,' and running North and South (v. Pl. XV. Fig. 2), and had also uncovered a small part of the main Stoa running East and West. Besides this, we had dug one or two experimental trenches in the enclosure close by the river bank ( $v$. Map, Pl. I.), some parts of the outer wall of which were visible above the soil. This enclosure we conjecturally identified with the Sanctuary ( $i \in \rho o o^{\prime}$ ) of Zeus Soter, an identification which, like that of the Stoa Philippeios, has since proved correct.

In the middle of the third day, owing to a difficulty which arose with regard to compensation for crops, we determined to transfer our workmen from the Agora to the Theatre, where the land was fallow; deferring our excavations in the Agora to the following season, when we knew that the Theatre would, in the ordinary course of affairs, be covered with corm, while the Agora would be lying fallow.

## (B). The Theatre.

On the fourth day we dug, therefore, by Mr . Gardner's direction, a long trench at right angles to the stage-buildings of the Theatre, designed to cut any part of those buildings which might still be standing. Almost immediately we hit upon the bottom drum of a large unfluted column (marked 'pillar' in Pl. VI.), which has since proved to belong to the Thersilion. Then we struck the late wall which separates the main body of the Thersilion from its portico; and shortly afterwards the stylobate of the portico itself. These clues being obtained, we proceeded to clear the surfaces of both wall and stylobate, the latter with considerable difficulty, owing to the fact that the upper courses had been pulled up, in comparatively ancient times, for the purpose of removing the iron clamps, and these courses were lying on the surface in great confusion. We also uncovered the outer wall of the Thersilion, and such bases as we were at that time able to find; the result being that what afterwards turned out to be a covered hall appeared at the end of our first season's work as a foursided Stoa, or cloister, such as Vitruvius (v. 9) describes as a desirable annex to a Theatre.

During the progress of this work in the Thersilion and Portico, we also employed a few men to dig trenches within the orchestra, at right angles to the seats; in order to discover what

Fiust Sunson's $f^{j y^{\prime}}$ Wonk.

The 'Stoa
Philippeios.'
The 'Sanctuary of Zeus Soter.'
(B) The Theatre.

Tentative Excavations.

[^0]was the diameter of the orchestra and to what extent the seats were preserved. Here we were successful beyond our hopes; for not only did we find several tiers of seats well preserved, but, following them down, we struck the backs of two of the seats of honour ( $\theta$ poonol) which formed the front row in the auditorium. Furthermore, the easternmost of these seats was found to bear a dedicatory inscription (Chap. VII. No. I. (1). (a)), clating, to judge by the form of the letters, from the fourth century B.c.

Almost simultaneously with the last-named discovery, excavation in front of the stylobate of the Portico brought to light two of the steps which connected it with the orchestra. Yet another point of interest was the wall of stuccoed conglomerate, ${ }^{2}$ which, when completely cleared, proved to be the North wall of a building peculiar to Megalopolis and designated by the name of $\Sigma_{\kappa а \nu о} \boldsymbol{\eta}^{\prime} \kappa а$ (' property-room '). Some of the inscribed tiles (Chap. VII. No. XXVIII. (1)), by means of which the building was afterwards identified, had already been discovered just outside this wall.

By this time it had become evident that the Megalopolitan Theatre afforded ample material for investigation ; so, adding to our staff of workmen, we proceeded to a more extensive clearance of the ground. I need hardly follow the steps of this excavation in detail; so I will merely say that, by the end of the first season, (1) a large clearance had been made, extending from the back of the Portico stylobate to the front of the 'Vitruvian' proscenium; (2) the wall immediately behind the Portico, and the other walls of the Thersilion, had been uncovered, but (with the exception of the West wall, along which we had dug a deep gutter to drain the Theatre) had not been cleared to their foundations; (3) a large trench of horse-shoe shape had been dug, revealing, in their full extent, the edge of the lowest row of ordinary seats, the gangway, the seats of honour, the gutter (ó ${ }^{\prime} \in \tau$ ds), and the kerb which bounds the orchestra; (4) a trench had been made through the centre of the orchestra, at right angles to the proscenium, designed to find the $\theta v \mu{ }_{\epsilon}^{\prime} \lambda \eta$ if this were extant; (5) the North and West
 had been laid bare; and (7) experimental trenches had been dug in various parts of the auditorium, mostly without result.

Such was, in brief, the position of affairs in the Theatre and Thersilion at the end of the first season's work; when, owing to the great interest which the Theatre had already aroused, a provisional plan and explanation were published in the Journal of Hellenic Studies. ${ }^{3}$ Facts which subsequent excavation has brought to light have made us regret this premature, and in many respects erroneous, publication.
C) Minor

Excavations
South of the River.
Triglyph altar.

Smaller altar.

Fxperimental excavations.

A more extensive clearance.

Premature publication.

## (C). Minor Excavations South of the River.

North-west of the Theatre, and a short distance from the North-west corner of the Thersilion, we unearthed, during our first season, a very curious structure, which can hardly be explained as anything but an altar. It is marked " 128 ' in the Map (Pl. I.), and a plan and elevation of it are given in Chap. III. (Fig. 44), where it has been sufficiently described by Mr. Schultz. Its most remarkable feature is the series of metopes and triglyphs with which the entire surface of its sides and ends is decorated.

The smaller altar (PI. I. ' 120 '), which we found during the same season, was very similar in structure to the other. Its foundations, and part of its sides, remain; the latter bear no signs of decoration. The filling which we found in it was of earth, cobbles, pottery, and broken stone.

The larger of the two altars may possibly be that of Ares, if, as we suppose, the Stadium was on the West, and not on the East, side of the Theatre. For the discussion of this and similar questions I must, however, refer to the separate chapter (Chap. VI.) on the topography of the site.

A long trench dug West of the larger altar, and at right angles to it, in the hope of discovering a temple there, produced no results.

Other experimental excavations were made at the points marked ' 109 ,' ' 111 ,' ' 112 ,' ' 113 ,'

[^1]' 119 ,' ' 125 ' in the Map. Our renson for selecting these places was gencrally the presence of large blocks of conglomerate, evidently in situ, projecting above the surface of the ground; in other cases (' 109 ' and ' 113 ') columns of white limestone were visible. There seemed to be some probability that we might find, in one of these places, the shrine of Artemis Agrotera mentioned by Pausanias (viii. 32. 4), or the sacred precinct ( $\left(\epsilon^{\prime} \mu \epsilon \operatorname{los}^{\prime}\right.$ ) beside it; and the remains by the river (' $125^{\prime}$ ) might, we thought, be those of the sanctuary of the Boy Asklepius ('A $\sigma \kappa \lambda \eta \pi$ ios Mais: viii. 32. 5). All these hopes were doomed to be disappointed. Isolated blocks of conglomerate, when in situ, proved in almost every case to form part of late and lad walls, generally built of cobbles, tiles, and mortar; being placed at intervals, especially at corners, in order to give additional strength. The wall marked ' 112 ,' though built in much the same way, has a larger proportion of conglomerate ; and ' 111 ,' close to it, is built entirely of conglomerate, and may possibly be of good date; but, if so, it has undergone alteration in Roman times, for it is covered in one part with Roman stucco. It is just possible therefore (but by no means likely) that further excaration of ' 111 ' might be profitable. The columns at ' 109 ' proved to belong to a late building, probably a house, but may perhaps themselves be of earlier date. Two of them are in situ. The column at ' 113 ' was not in situ; it proved, in fact, though perpendicular, to be standing wrong way up. At ' 125 ' we uncovered a number of walls, the plan of which is roughly indicated in the Map. They are the best example we have come across of the cobble, tile, and mortar style of building referred to above. Some of the walls still retain remnants of the coarse stucco with which they were covered on the inside. This stucco has been slashed across and across, so as to form a rude network pattern, which was apparently meant for ornament.

## (D). The Tumulus.

There is yet another part of our first season's work which calls for notice in the present chapter; for, while it is a matter of some interest, it has not been considered to be of sufficient importance to claim a chapter to itself. This is the Tumulus (v. Map, Pl. I.) situated near the North bank of the river, some little distance East of the modern bridge.

(D) The

Tumulus.

Fig. 1.

Though connected at the back with a long low ridge of hill, this mound presents on every other side a singularly conical appearance, and has therefore been generally regarded as artificial. Local tradition has commonly supposed it to be sepulchral, and various stories are current:-for instance it is called 'Apítov payoìa' ('Black man's mound'), a treasure (such is the story) having been buried there and being guarded by a mysterious black man. One story asserts that besides his son, whose remains are to be found in the Tumulus, the

Excavation in the Tumulus.
(1) Stone vessel with gold ornament.
black man buried there two barrels, one full of money, the other full of smakes, -the object of the latter being doubtless to increase the risk attending roljbery.

On the 8th of April, the ground being so sodden by heavy rain that excavation in the Theatre was impossible, taking a few workmen, we dug a small trench in the South-west side of this Tumulus; and in less than an hour we struck a curious cylindrical vessel (Fig. 1) of white limestone, $10 \frac{1}{4}$ inches high by $15 \frac{1}{2}$ inches in diameter (outside measurement), and covered with a separate lid. This vessel was found rather more than half-way up the side of the Tumulus, and within 6 inches of the surface. Opening it, we discovered in its interior, which was hollowed, like a mortar, to a depth of 6 inches, a number of charred bones and two pieces of gold ornament,--viz. (1) a small headband (Fig. 2)


Fig. 2.
$12 \frac{1}{4}$ inches long, $1_{1}^{1}$ inches broad in the middle, and tapering at either end; and (2) a small hollow disk (Fig. 3), just under 1 inch in diameter, made of two very thin pieces of gold folded together at their edges. At first we hoped that, in the gold ornament, we


Fig. 3.
had made a small 'Mycenae' discovery, though the vessel in which it was deposited was clearly of later date. But shortly afterwards, when M. Tsountas, the discoverer of the Vaphio cups, who was passing through Megalopolis, detected on one side of the disk a coin-type,-an eagle standing on a thunderbolt (?), ${ }^{4}$-it became clear that we were mistaken. The disk is, in fact, a specimen of what is called 'ghost-money,' i.e. an imitation of real money made solely for sepulchral purposes, and good enough to pass in the next world. The eagle on thunderbolt, as a type of gold coins, is characteristic of the two first Ptolemies, Soter and Philadelphus. It occurs also on some gold coins of later, but on none of earlier

Probable date of the gold ornament.
date. ${ }^{5}$ This gives as the probable date, and at any rate the superior limit of date, both for the gold disk and for the burial to which it belongs, the early Hellenistic age. The headband may well date from the same period. The design upon it may be compared with that upon a very similar, but somewhat smaller, headband, found at Tanagra in 1881. It is numbered ' 144 ' in the Polytechnic Museum at Athens. Both designs are of the simplest repousse work, and represent some kind of leaf. But while the leaves on the headband at Megalopolis are perhaps ivy or vine leaves, much conventionalized, those on the one from Tanagra are almost certainly oak. ${ }^{6}$

The stone vessel, with its bones and ornaments, was however by no means the only trace of burial which we found in the Tumulus. The very same trench by means of which the stone vessel was discovered, struck also the cdge of a circular enclosure lying at a lower level and rather farther South. This enclosure is built entirely of cobbles, such as may be picked up anywhere in the surrounding fields, fastened together by a very crumbly kind of mortar, altogether devoid of pounded pottery. It is from 11 feet 2 inches to 11 feet 5

[^2]
## to Prof. Percy Gardner.

© For the drawings of gold ornament I have to thank Mr. S. H. Barnsley, formerly a student of the British School at Athens.
inches in diameter (inside measurement), and its sides are about 5 feet in height. The roof was evidently domed; but, with the exception of the first course or two, which lean slightly iuwards so as to form the spring of the dome, it has entirely fallen in. The height of the sides of the enclosure and the extant courses of the dome together is about $\mathbf{c}$ feet. There was an entrance some 3 feet wide (its width cannot be determined more exactly) in the West side of the enclosure, roughly filled in with loose stones and earth-presumally after the insertion of the corpse. Digging this enclosure to the bottom, we found nothing but one or two small pots, without ornamentation, an earthenware lamp, and a strigil,-all of them perhaps dating from the Hellenistic age; a period with which the style of the building accords very well.

Besides the two burials represented by the stone vessel and the circular enclosure, it was evident, from the large quantity of bones which turned up in the course of excavation, that a number of minor interments had also taken place in the Tumulus. But nothing we had hitherto discovered seemed sufficient to account for the existence of the Tumulus itself; and therefore, though we did no more work in it during the first season, we determined to excavate it more thoroughly at a future clate. Accordingly in our second season we again put in the spade, digging three trenches, on the North, East, and South sides of the Tumulus respectively. To save the necessity of recurring to this sulbject in my next section, I give here the somewhat niggardly results of our second season's excavation in the Tumulus. The Northern and Southern trenches produced nothing except one or two fragments of pottery,--valuable only as proofs that the mound had been rightly regarded as artificial; but in the Eastern trench we reached, some 10 feet below the summit of the mound, and slightly East of the centre, a plain coarse earthenware sarcophagus, 5 feet 4 inches in length, 1 foot 9 inches in width, and 2 feet 1 inch in height (inside measurement). Its sides were very thick, and the whole sarcophagus was made in a single piece; but within it we found a number of slabs of thinner and rather finer earthenware, which had apparently been laid over the top so as to form a covering, but had given way under the pressure of the earth above. Nothing else was found inside the sarcophagus; nor could we suppose that it had been pillaged at an earlier period, for the Tumulus could hardly have been explored to so great a depth without bearing traces of the fact.

The question then arose,-Could this rudely-made sarcophagus, wholly destitute of vases and sepulchral ornaments of every kind, be the principal tomb for the sake of which so considerable a Tumulus had been raised? Since this appeared to us almost incredible, we determined to continue our excavation; and we had already reached the level of the high ground which terminates in the Tumulus, when the weather broke up completely, and several days of very heavy rain, followed by a slight shock of earthquake, brought down a mass of earth from the tops of our trenches, filling them more than half-way up. The opinion was very strongly expressed that we had already reached the virgin soil, and that therefore no more could be expected of our excavation here. Whether this is, or is not, the case,it will (I think) be admitted that, unless future excavation brings to light some more important tomb within the Tumulus than any we have yet discovered, the latter must be regarded rather as a kind of cemetery than as the place of burial of one great man. It can hardly therefore be the tomb of the tyrant Aristodemus. ${ }^{7}$ Whether it is, or is not, identical with the ' $\gamma \bar{n} s \chi^{\dot{\omega} \mu a}$ ' shown to Pausanias as the tomb of Aristodemus, is another $q$ uestion, and will be discussed in Chap. VI. My own belief is against the identification.
(3) Earthenware sarcophagus.

Was this the
principal tomb?

Further excava-
tion.
Fall of earth
in Tumulus.

Probably rot the
tomb of
Aristodemus.

## (E).-Inscriptions.

Most of the inseriptions published by Mr. Richards in Chap. VII. were discovered during our first season's work. So also was the new fragment of the Edict of Diocletian edited by me in Vol. xi. of the Journal of Hellenic Studies.

[^3]Second Season's Work.

## \$. 4.-Second Season's Work.

Our second season's work was less varied in character than the first, and may be dismissed more briefly. The methods employed were the same as in the previous season, the only difference being that, owing to the nature of the work, neither baskets nor carts were used, all the carrying being done by barrows. The chicf results of the excavation are given by Mr. Schultz in the latter part of Chap. III., and by Mr. Richards in Chap. V., while I have already described the results obtained at the Tumulus.

The period of excavation was a short one, extending (as already stated) only from the 3rd of November to the 14th of December, 1890 ; and it was marked by an exceptionally heavy rainfall, which seriously hindered our work. Fortunately we had already determined to excavate, not in the Theatre but in the Agora, where the accumulation of earth was much less deep.

The remains which we first selected for excavation were those where we had made our former experiments in the spring, and which we had provisionally (and, as it turned out, correctly) identified as the 'Stoa Philippeios' and the 'Sanctuary (ícoov) of Zeus Soter.' Of the former, owing to its great size and for other reasons, we contented ourselves with clearing the back wall, the bases, and the stylobate,-all in fact which was necessary for the construction of a plan,-but the 'Sanctuary of Zeus Soter' we cleared completely. This was rendered necessary by the complicated nature of the plan, which no amount of experimental digging would have served to unravel. The clearance of this building (which was rendered much easier by the neighbourhood of the river-bed) occupied by far the greater part of our second season. ${ }^{8}$

At the point marked ' 30 ' in the Map, the engineers of the modern road, in digging earth for its embankment, came upon a considerable quantity of ancient remains used up for some building of later date. These remains were lying in great confusion when first we visited the site, and the place looked most unpromising. During our second season, however, we were fortunate enough to discern, beneath this medley, traces of a continuous line of building, still apparently in situ; and, clearing away the earth and stone which covered it, we soon brought to view a stylobate of very promising appearance. Its exact extent northward cannot be determined without future excavation,-and that in dry weather, for the depth of soil north of the road is very great, and the road itself is an obstacle to drainage; but we traced so much of it as is shown in the Map (Pl. I.) and in the small plan of the Agora given in Chap. V. Mr. Richards is probably right in identifying it with the 'Stoa Myropolis,' which appears from the account of Pausanias to have formed the Eastern boundary of the Agora.

Since little notice will be taken of the Stoa Myropolis in succeeding chapters, it seems to me worth while to point out here the remarkable resemblance which exists between its. stylobate and that of the portico of the Thersilion. This resemblance lies (1) in the double draft on the front surface of the top course (2) in the square dowel holes, set diagonally, for adjusting the columns (3) in the raised panels on the stylobate between the columns; and it is the more remarkable because we know that the Stoa Myropolis was not built ${ }^{9}$ until after the defeat of Akrotatus of Sparta by Aristodemus, an event which is generally placed (cf. Chap. I.) in the year 265 b.c. There are, however, differences, as well as resemblances, in technique between this stylobate and that of the portico,-e.g. the use of $\square$ instead of $I$ clamps.

A number of column drums, of stuccoed tufa, ${ }^{10}$ now lying within the enclosure which surrounds the church at Sinanou, were, when we first worked at Megalopolis, among the remains built into the late structure which afterwards occupied this site. They are probably of late date; for, though from the nature of their aurises they appear to have been of the Ionic or Corinthian order, the number of their flutes is twenty instead of twenty-four. Some of the flutes,

## Drums possibly

 belonging to 'Stoa My. ropolis."ropolis.

Resemblance to portico of Thersilion.
(1) 'Ston Philippeios.*
(2) 'Sanctuary of Zeus Soter.'
(3) 'Stoa $\mathrm{My}^{-}$ ropolis.'

[^4]nothing in Pansanias which would lead one to suppose that the group stood inside the shrine; -indeed he does not mention the shrine at all, as distinguisherl from the Hieron. And, as Mr. Schultz points out (Chap. III.), the foundation is far more massive than we should expect for an altar.
${ }^{-}$Paus, viii. 30. 7.
${ }^{10}$ Cf, note 2.
too, are 'filled,' like those of the Ionic columns of the Stoa Pbilippeios. I mention these columns here for the sake of future excavators; for by their removal (during our absence) to Sinánou, all traces of their provenonce have disappeared; and, if the Stoa Myropolis should at any future date be completely excavated, the question whether these columns belong to it will have to be considered.

Besides our work in the Agora and at the Tumulus, experimental excavations were made, during this season, at the points marked ' 45 ' and ' 47 ' in the Map,-on the low hills lying North and North-east of the Agora. The points selected were those where the remains were of the most promising appearance ; and we had some hopes of finding there the temples of Athene Polias and Hera Teleia. But the remains in the former place proved to be those of some late walls, including a threshold of white limestone perhaps taken from an earlier building; and those at the latter place, though not necessarily of late date, are so badly preserved as to be wholly beyond the reach of identification. The probable position of the temples we were seeking will be discussed, among similar questions, in Chap. VI.

> §. 5.-Third Season's Work.

I now come to our third season,-the Spring of 1891,-in which our efforts were directed to one object only, the complete clearance of the Theatre. This was indeed the heaviest part of our undertaking at Megalopolis, the quantity of earth to be removed being very great. The depth of soil in the orchestra was about 10 ft ; the depth of that which covered the Portico and the seats being, naturally, less. All these portions have now been completely cleared. In the इкavooíra (cf. § 3 (B)) a considerable block of earth has been left-as a support to the retaining wall of the auditorium. The same is true, to a still larger degree, of the mifoobos on the Eastern side of the Theatre, where the retaining wall has bulged considerably; but the earth which remains here was cut by us into an inclined plane to facilitate the removal of earth from the orchestra, and now serves as the main approach to the Theatre. Of the earth removed, part was thrown into the river-bed; while the rest was spread, at the request of the proprietors, over the neighbouring fields. Carts and barrows were employed.

Our work this season was mainly of a practical kind, the problem being, not to discover sites or to identify remains, but to move a certain quantity of earth to a certain distance without exceeding the sum of money placed at our disposal. At the same time the undertaking was one which we would not have willingly given over to a contractor, since great care was required in some parts of the work, especially in the clearance of the seats, whence large masses of stone had to be moved down into the orchestra without damaging the $\theta_{\rho}$ ovor (seats of honour) below.

Much time was also spent in making fresh notes and measurements; for the complete clearance of the Theatre brought many facts to light which showed that its explanation was by no means so simple a matter as we had at first supposed. The necessity of thoroughly revising the views we had expressed about it in the Journal of Hellenic Studies was first pointed out to us by Dr. Dörpfeld, on the occasion of a visit which he paid to us on the 15th of April, accompanied by a large party of archaeologists.

In the first place, our new excavation had shown that the three lower steps of the portico, which we had supposed to run round the ends as well as the front of the structure, ran only along the front. Dr. Dörpfeld had no difficulty in demonstrating that these steps were an addition to the original plan.

Secondly, in clearing to its foundations the wall immediately behind the Portico, we had brought to light a number of bases built in beneath it. These bases, which Dr. Dörpfeld was the first to distinguish from the rest of the wall, being necessarily of earlier date than the wall above them, it was now clear that the wall could no longer be regarded as a part of the original plan, nor the thresholds in it taken as evidence for determining the original height of the structure which lay between it and the orchestra.

Thirdly-(and this involved by far the most important alteration of our published views)Dr. Dörpfeld suggested that a colonnade of stuccoed tufa (of which several drums, a capital, and some pieces of frieze and architrave, are still extant) had once stood upon the structure which in the present chapter I have described correctly as the stylobate of the Portico, but which we had hitherto interpreted as a raised stage.

Naturally nothing could be determined offhand with regard to the period to which the various parts of the building were to be assigned; but Dr. Dörpfeld had seen enough to confirm lim in the belicf, which he had previously expressed (Berl. Phil. Woch. 4 April 1891), that our supposed 'stage' was no stage at all but the frons scenae (Vitr. v. 8. 1)" before which the acting in the Theatre took place.

Communication
to Athenaerm and Berl. Phil. Wochensohrift.

Mr. Gardner and myself, not committing ourselves hastily to Dr. Dörpfeld's conclusions, but accepting the facts which I have summarized above, agreed to join him in a letter, to be published simultaneously in the Athenaeun ( $30 \mathrm{May}, 1891$ ) and the Berliner Philologische Wochenschrift (same date), in which the facts on which we were all agreed were briefly stated. Explanations followed, first on our part (Athen. 27 June), afterwards on Dr. Dörpfeld's (ibid. 25 July), and then. on ours again (ibid. 1 Aug.). Further statements of Dr. Dörpfeld's views have appeared in two successive volumes of the Mittheilungen (xvi. pp. 256 sqq., xvii. pp. 97 sqq.); both of which we have left unanswered pending the definitive publication of our results. This publication occupies the greater part of Chap. III. and the whole of Chap. IV. below.

Progress of excavation in the Theatre.

## The Thentre

drained.

Inscribed tiles in Agora.

Dr. Dörpfeld's visit was the only incident of great importance in connexion with the Theatre which occurred during our third season's work. The clearance progressed favourably to the end; but without any fresh discoveries being made, except the curious wall ( $v$. Pl. VII.) in the $\Sigma_{\kappa a \nu o} \theta_{\eta}$ кa. Our last task, before leaving off work at the end of May, was the construction, at considerable expense, of a covered drain extending from the Theatre to the river,-a work which our previous experience had taught us to be absolutely essential to the preservation of the Theatre in a tolerable condition.

It was during our third season that the tile [Chap. VII. No. XXVIII. (4)], which placed the identification of the 'Stoa Philippeios' beyond a doubt, was picked up by Mr. E. E. Sikes, who was paying us a few days' visit. A very similar tile was discovered by Mr. Walter Leaf a few weeks later.

## § 6.-Subsequent Work.

Of the remaining four months' work it is needless to speak here at length. It falls under two heads, viz. (1) one month spent by Mr. Schultz in an examination of the remains which we had brought to light, and in the construction of plans,-(2) three months spent by myself alone in mapping the site and in topographical research.

The results of my own work are given in Chap. VI., with the Map (Pl. I.). So far as regards the internal topography of the town, they are chiefly, though not entirely, of a negative character. On the other hand I was able to discover a number of pieces of the town wall, sufficient, when taken in conjunction with the contour of the ground, to determine the gencral position of the entire circuit and the extent of the ancient town. This extent was much greater than any of us had previously supposed, and fully justifies the statement of Polybius (ix. 21) that the walls had a circumference of fifty stades. Even apart from this, the position of the walls is a matter of considerable interest, as it proves that, contrary to the usual statement of travellers, the site was a strong site, chosen with due regard to its natural capabilities of defence.

William Loring.

[^5]
## CHAPTER III.

## ARCHITECTURAL DESCRIPTION AND ANALYSIS.

## § 1. INTRODUOTION.

This paper is based on the state of the excavations at Megalopolis at the end of October, 1891. At the request of the Committee of the School I made a special visit to Greece in the autumn of that year. My instructions were to make complete plans of all that had been excavated, to examine minutely into the nature of the architectural evidence-noting carefully the various points of detail-and to compare it with that of other theatre sites in Greece.

I received permission to arrange with the Director of the School to have any further digging done that seemed to me necessary in order to clear up obscure points in the evidence. My time was limited, but I was able to spend four weeks on the site. During this period I took the necessary measurements and notes and set out to scale on the spot the draft plans from which the drawings now published have since been prepared. At my request several of the walls were further cleared and additional pits were dug at various points. These additional excavations were done under my personal direction and superintendence, and with the concurrence of the Director and Mr. Loring. They were of great help to me in various ways and, in the case of the structure in front of the Theatre-the purpose of which up to that time had been doubtful-they enabled me to make out its plan and arrangement, which show that it was a Hall and not a Stoa as had at first been conjectured. Messrs. Gardner and Loring were thus able to identify it with the Thersilion or Assembly Hall of the Arcadians mentioned by Pausanias.

I regret that the comparatively short time I was able to give to my investigations on the spot made it impossible for me to study, so thoroughly 'as I should have liked, many points of detail where inspection and investigation many times repeated might have led to more definite conclusions. This can only be possible where an architect is attached to an excavation and follows it from day to day during its whole progress.

I afterwards paid hurried visits to the following theatre sites; Argos, Epidaurus, Athens, Zea (Piraeus), Eretria and Oropos. Altogether, I was in Greece for a period of five and a half weeks.

In the preparation, for publication, of my paper and plans I am indebted to the following gentlemen for much valuable help: to Mr. Penrose and Mr. A. H. Smith for general advice and assistance on many points and for reading through the proofs and going over the plans in detail, suggesting important alterations and amendments: to Mr. W. Stirling and Mr. P. N. Ginham for much assistance in completing the drawings ; and to Mr. S. H. Barnsley for preparing the drawing, Plate XIII.

## § 2. A Short Description of Various Bulding Materials which have been Used on the Site Generally. ${ }^{1}$

Materials.

- Limestone.

Tufa or Poros stone.

The principal stones which were used in the construction of the buildings at Megalopolis are (1) a hard, white, veined limestone, (2) a variety of tufa or poros stone, (3) a conglomerate, and (4) a white marble.
(1). The white limestone is the material which has been most generally used. We find it employed for the walls of the Thersilion, the steps of the portico, and the benches and seats of the Theatre; part of the west retaining wall of the Theatre was also built of it. It was, presumably, used also for the pillars inside the Thersilion, as the one portion of a pillar which remains in position is a piece of this same stone. The steps, pillars and entablature of the Stoa of Philip were also built of it.

The blocks of this stone are traversed by narrow veins, also calcareous, but apparently different in physical texture, so that upon the weathered surface they stand out in slight relief. This is essentially the local stone of the district.
(2). The next variety, the tufa or poros stone, has not been used so extensively. We find it employed for the foundations of the stylobate of the portico and for the foundation piers of the pillars in the interior of the Thersilion; the pillars and entablature of the portico itself were also constructed of this stone and coated with stucco.

It may be described as a species of calcareous tufa or sinter more or less cavernous in texture; it represents an impure deposit of carbonate of lime and resembles certain kinds of cellular travertine. The fact that it has been so little used on this site goes to show that it cannot be very common in the neighbourhood, and I have been unable to learn of any place near, where it is to be found. It is not used in modern buildings, where the white limestone is the usual material employed. The special object in using it at all, if it were not easily procurable, is difficult to determine. No doubt pillars of this material, coated with fine stucco, were capable of a higher finish than those made from the local limestone, and doubtless this stone, being softer, was more easily worked, but these advantages hardly seem to compensate for the labour of bringing the stone a long distance. ${ }^{2}$

Conglomerate.

Marble.

## Stuccoes

(3). The third variety is a natural conglomerate composed of rounded dark pebbles of limestone, loosely aggregated by a cement of impure carbonate of lime. This material is also found in the locality.

The retaining walls of the Theatre are mostly built of this, as are also the Greater and Lesser Altars. It is largely used both in the Temenos of Zeus Soter and in the Stoa of Philip where the foundations and what remains of the walls are constructed of it. Where used for exposed surfaces, like walls, it was generally coated with stucco.
(4). The marble was used for the pillars of the later proscenium and for the capitals of the Ionic pillars in the Stoa of Philip. It is a true marble of saccharoidal texture, and resembles some of the finely crystalline white statuary marble of Carrara.

Mention should also be made of the stuccoes which coated the tufa (poros stone) pillars and entablature and the conglomerate walling. These are of two varieties. The first, that which coated the tufa pillars and entablature of the Thersilion Portico, is composed of slaked lime and minute fragments of colourless crystalline calcspar. It appears to have been put on

[^6][^7]in two coats, having a combined thickness of about a quarter of an inch. The outer coat is the thinner of the two. It contains a larger proportion of lime than the other, and the calcspar found in it has been very finely ground, almost to the consistency of powder. In the inner coat, the calcspar is found in greater quantity and in more apparent pieces, but, even here, none of the pieces appear to be larger than an eighth of an inch across, and the greater proportion are smaller than this. It would be very difficult to determine the exact proportion of lime and calcspar. In the inner coat, and mixed with the calcspar, are some very small pieces of gravel but not in any great quantity.

The second variety, that which coated the conglomerate walling generally, is rougher than the other. It is composed of slaked lime and very small water-worn gravel (not of limestone). An analysis, which has been made of this, shows that the slaked lime and the gravel have been mixed in about equal quantities.

There is no question of the superiority of the first variety of stucco over the second, as the sharp angles of the calcspar bind more closely with the lime and form a more durable and adhesive mass than the rounded surfaces of the water-worn gravel.

At Argos, the upright rock-wall at the back of the diazoma is coated with a stucco, which measures in places over an inch in thickness. It is composed of lime and sand-the former in predominance.

The other materials, such as tiles, lead piping, \&c., do not call for special mention at this point.

## § 3. The Site of the Thersimon and the Theatre.

## (A). The Thersilion, or Assembly Hall of the Arcadians.

The Thersilion may be described generally as a large hall of oblong form enclosed by walls pierced with doorways, and having, in addition, on the south side a projecting portico of columns. ${ }^{3}$ Internally it had several rows of columns, presumably supporting a roof. Although the whole area of this hall had not been cleared, sufficient excavation had been done to allow of its extent externally being seen, and the supplemental pits which were dug in October 1891 have enabled us to get a good idea of its internal arrangement as well. The restored plan (Fig. 1) is based on the evidence before us at the above date, and while a complete excavation may bring to light further information which may modify it in some few details, it cannot much alter the general scheme as here shown. The plan of this hall strikingly resembles that of the ball at Eleusis in a general way-particularly in its latest form-although differing from it in many important particulars. As it may be interesting to compare the two, a plan of the latter is given to the same scale (Fig. 2) for this purpose.

In examining more in detail the plan of the Thersilion one may say generally that it looks as if it might have been planned square and then a slice afterwards cut off on one side (the south). Although it is curious to note the accidental way in which the various rows of columns, especially the outer ones, stop towards the south wall, still one would not like to suggest that a piece had ever actually been cut off the building. Further excavation may possibly throw additional light on these points, Meanwhile the evidence at present before us seems to indicate that the hall was all built at one period, although it may have been altered in places at later times. In fact, in the case of the portico, we have apparent proof that the original openings which connected it with the hall gave place later, as we shall see, to a wall with doorways.

The central point in the scheme of the internal arrangement is that where two circular drums have been found. It is approximately equidistant from three sides of the hall, the east, north and west. Between this point and these walls there were five rows of pillars, the foundations of which still remain (see Pl. VI.). These rows were practically equidistant the one from the other, the space between the outer row and the wall having been somewhat greater. The average distance apart of the rows from the centres of the pillars is 18 feet (the distances vary slightly but not more than a few inches) and from the centre of the outer row

[^8]Thersilion
(Plates V., VI., IX., X.)

General

Comparison with Eleusis.

A detailed examination of the plan.

Contral point.

Rows of pillars.

Variance in to the inside of the outer wall the distance is about 19 feet 6 inches. The distance apart spacing of pillars in rows. of the pillars comprising each row varies considerably from row to row. In the outer row they average 29 feet from centre to centre; in the second row, 23 feet; in the third row, 17 feet; in the fourth row, 22 feet; and the four pillars (fifth row) forming the angles of a square round the central point are 29 feet from centre to centre. As the pillars in the rows are


Fig. 1.-Restored Plan of the Thebsilion.

Pillars in lines converging towards centre.
somewhat irregularly spaced in their distances apart from one another, these figures are not exact to an inch but are a fair average. The spacing in many cases varies quite a foot.

The pillars of the hall were arranged behind one another in lines converging towards the central point, thus seeming to indicate that this was the place towards which the eyes of the assemblage would have been directed. This arrangement, which is shown clearly on Fig. 1, is the most rational one to follow in a hall full of pillars so as to allow of as many
people as possible seeing. It constitutes one of the most essential differences between our hall and the one at Eleusis. In the latter the pillars, which were arranged in parallel rows both ways, would have interfered to a very much greater extent with the view of an


Fig. 2.-Plan of the Hall at Eleubis.
assemblage looking towards a central point. The plan of the hall at Eleusis is one that would have lent itself more readily to a shifting spectacle. This arrangement of the pillars, however, applies to barely three sides of our hall. On the south side there is a considerable

Difference of pillaus on South side.

## Levels of bases and slope of

 floor:difference; the rows of pillars on the east and west sides are here prolonged towards the south wall. They are irregularly arranged as regards their spacing in their rows, but their positions have been fixed in such a way that we get a row of pillars parallel with the south wall but 26 feet from it.

It is possible that, when the site is thoroughly cleared, additional cvidence may be laid bare which may help to determine the reason for this variation in the plan.

The levels of the base stones of the pillars, which still remain on the top of the foundation blocks, show that the floor of the hall must have sloped downwards from the outer walls towards the central point in a regular line on the three sides, while on the south side, where the plan is different, the levels also vary, tending to suggest that there was probably a sudden drop down from a higher to a lower level beside the line of the pillars 26 fect inwards from the south wall. Further excavation may throw additional light on this point also. It may be noted, in this connection, that the floor of the hall at Eleusis appears to have been level and to have had rows of seats extending round the walls on each side between these walls and the outer range of pillars.
Nature of floor.


Nature of roof.

Fallen tiles.

Fallen pillars
broken up and carried off for building elsewhere.

Deposit covering site.

Remains of internal pillars.

With regard to the nature of the floor itself it is extremely probable that it was of wood. The natural ground level has sloped considerably downwards from the Theatre towards the river, and while at the south side of the hall it seems to have been only 18 inches below the level of the floor of the portico, beside the north wall it was from 6 to 7 feet below the same level. We can see this by the depth of the foundation piers \&c., and by the arrangement of the courses on the external face of the west wall (Pl. X., Fig. 5). It is extremely unlikely that this considerable divergence of level between the floor and the ground wats fllled up solid, and it is therefore more than probable that a wooden framework of beams was put in to carry the sloping floor which would naturally in this case have also been of wood.

Of the nature of the roof we have little evidence, but we can hardly doubt that it was constructed of wood and covered with tiles. The wide spacing apart of the pillars indicates that they must have supported wood beams or principals, which in their turn supported rafters on which the tile covering was laid. How the roof was arranged we have no means of accurately judging, and whether any part of the central portion of the hall was open to the air it would be impossible to determine with the evidence at present before us; but in any case it is likely that special support would have been required for such a large roof at certain places, and what place could have been more suitable than the line of the third row of pillars? These pillars are much closer together than the others and therefore would have formed a stronger line of support and at the same time they occupy a special structural position in the planning, as they carry on the line of the ends of the portico into the hall.

How the hall was lighted, we have no means of judging. It may have been lighted by windows in the enclosing walls, although these in themselves would not have given enough light, or it may have had a clerestory in addition, probably on the line of the third row of pillars with the central part of the roof standing up higher over it; but this must remain always more or less conjectural.

A general layer of, tiles, which seems to exist some distance below the present surface of the ground, suggests the probability that the wooden roof had fallen in-perhaps it was burnt-and it is likely that if it fell in it would have dragged down the stone pillars which were built in pieces and were not monoliths. A bed of broken limestone chips immediately above the tile fragments goes to show that these fallen columns had probably been gradually broken up on the spot into smaller pieces and carried off for other building purposes. It is also extremely probable that some specially heavy storms and floods had eventually covered the whole area to the depth of several feet with the main deposit of earth which now exists, as if this had been a gradual process of years it is little likely that anything would have existed to-day under it. If, during further excavations, a careful observation were to be made of the nature of the deposit over the whole area of the site, it might help to enlighten us further on this point.

Of the internal pillars which supported the roof only the foundation piers remain of of the outer row. In the inner rows many of the square base stones on which the pillars rested still exist and, in one case only, a piece of the actual pillar is in position. The
foundation piers, which vary from 4 feet 2 inches to 4 feet 6 inches square, are built of Foundation piers. squared blocks of tufa (poros) in courses, some of which measure 19 and 20 inches thick. Each course consists of two blocks which are joined together by $H$ cramps ledded in lead. These piers are only one course deep at the lack of the portico where the ground and the floor were nearly level, but in the outer range where the floor was higher and the ground lower, especially on the north side, their depth extends to at least 4 or 5 courses.

The dressed limestone bases on the top of these piers vary in size from 2 fect 4 Limestone bases. inches to 3 feet 3 inches square. The larger ones were found in the inner rows where the pillars were presumably higher and therefore probably of a wider diameter, but they do not seem to have followed any very regular order in their variation. These slabs are about 10 inches thick and are dressed on the top and about half-way down on the sides. Some have one, others two dowel holes on the top.

The piece of a pillar which remains in position is 4 feet high and 2 Piece of pillar in


Fig. 3. feet $10 \frac{1}{4}$ inches in diameter. It is unfinished, being roughly dabled on the face. It has three holes on the top, the central one $5 \frac{1}{2}$ inches square and set diagoually to the other two which are 3 inches square (Fig. 3). It has no moulded base under it, but only the square slab. No capital has yet been found.

Of the two circular drums which were found at the central point of Circular drums in the hall probably neither belonged to the original arrangement, but it is curious to note that they should both have been found exactly in this position, and the fact cannot be without significance. They were found one above the other but with some soil between them. They are both thin pieces of circular pillars; the lower one measures 2 feet 3 inches in diameter and 10 inches thick, the upper one is narrower in diameter and thicker.

The foundations and, in some places, the lower courses of the enclosing walls still exist. They are built entirely of limestone blocks. The foundation courses, which were completely hid, have level top beds but are otherwise unsquared. The courses which were exposed are built of beautifully squared stones of various lengths with rather irregular joints (see Pl. X., Fig. 5) and somewhat resemble the masonry of the town walls of Messene. The margins are dressed to an even line and the front face of the stones is rough and projecting, of the manner known to-day as 'bull-nosed' (Fig. 4).
Fig. 4.
The walls average about 2 feet 6 inches thick and are built of two stones in the thickness with bonding stones running through from front to back at intervals (see Plate VI.).

A dressed cillcourse has run all round the building, level with the top of the stylobate of the portico. This still exists in the east wall and on the eastern part of the south wall, and there are a few pieces still in position on the western part of the same wall (Plate X., Fig. 3). It consists of stones of uniform size, extending the full thickness of the wall and slightly projecting over the face of the rougher wall under. These stones are about 3 feet $7 \frac{1}{2}$ inches long by 2 feet 7 inches wide and are 10 inches thick. They are joined together on top by $\mapsto$ cramps. On the top of this cilleourse there was a deep course of upright stones of even size, two stones in the thickness of the wall. Some of these stones can be seen still in the east wall and in the eastern part of the north wall, but many of these latter have been somewhat shifted. They are also joined together at top ly


Fig. 5. $H^{-1}$ cramps, much in the manner'indicated in Fig. 5, and were fixed in their proper position on the top of the cillcourse by iron dowels. 'They have a draft margin round three sides of the face, on each stone, thus forming a series of pauels along the outside of the wall. On the top of this upright course again was a thin stringcourse, and above that came the ordinary courses of the walling. Although none of this stringcourse exists here we see it at the Stoa of Philip, where there are remains of a similar arrangement of walling, and also at the Temple at Lykosoura. In fact this deep course is part of the usual arrangement of the walls of Greek temples and from carly times we find it was in almost general use in various forms, and to-day the peasantry build their clay walls in the same manner.

It ought to be noted here that in the upright course in the eastern part of the south wall the face of the inner stones is dressed with a margin round the three sides of each stone exactly like those on the outside, thís indicating that they were intended to be seen;
whereas the inner stones of the cast wall (as far as one was able to see them) appeared to be unequal in size and without this finish. The inner face of the cillcourse under, in the south wall, is also dressed down several inches. Although most of these upright stones in the south wall are not actually in position, and some have been shifted considerably, still it is possible from the positions of the cross dowel holes etc. to see how they have been originally arranged. The end stone of the inner face seems certainly in its original place and it has this draft margin round it and we can also see clearly how it has stopped short where the stone bonds into the return wall at the east end and where that end is cut to suit the inner stone of the east wall abutting on to it at right angles (Fig. 6). A special point for attention is that a good part


Fig. 6.
S.E. and S.W. corners of hall perhaps used as additional 'Green Rooms.'

Doorways in external walls.

Widths.

Cills. Positions.

Extra doorways.

Doorway A.

Doorway B.

Doorway C. of this inner dressed face is under the line of the sloping floor of the hall, supposing that it continued on to the south wall. This leads one to suggest that the south-east and south-west corners of this hall may have perhaps been used as two additional 'Green Rooms' in connection with the Theatre, and, if so used, their floor would probably have been level with that of the portico for the sake of convenience and they would have been screened off from the rest of the hall perhaps by wooden partitions. Thus the inequality and irregularity in the spaces between the end columns of the various rows and the south wall of the hall would not have been so apparent actually as they seem on plan.

Traces of four doorways have been discovered giving access to the hall on three sides (see Pl. VI.). Two of these are in the east wall (A and B), one in the north wall (C), and one in the west wall (D). Remains of foundation walls exist running from three of these openings into the hall, at right angles to the main walls. These foundations have evidently supported stone steps.
Three of the doorways ( $B, C$, and $D$ ) seem to have been about the same width-from 9 feet to 9 feet 6 inches-the other one (A) has been about 2 feet narrower. Against the wall at each side they have had upright stone linings, the base stone of one of which still exists in doorway D. The levels of the cills or lowest steps are all different and were undoubtedly arranged to suit the sloping line of the ground outside. The positions of the doorways, which at first sight look unsymmetrical, seem to have been carefully arranged; by reference to the plan (Pl. VI.) it will be seen that they are placed about 31 feet from the axis lines of the hall in every case. Although traces of two doorways were only found on one side, the east, it is most probable that there were two on the north and west sides also,-the extra doors corresponding to the positions of the existing doorways, but on the other side of the axis lines (see Fig. 1), -and that the evidences of these have disappeared, as the remains of the walls are too low at these points to show anything.

The general cill line of the outer wall gives us the level of the first step of the doorway A in the east wall (see PI. X., Fig. 2). Four steps in all still exist, and the four cross foundation walls show supports for a fifth and sixth. Six steps would bring us up to the line of the sloping floor of the hall inside. The doors themselves must have been at the top of these steps, but how they were fixed and whether the stone linings continued inwards beyond the inside face of the wall as far as the doors or whether the inner linings were merely of wood we have no evidence to determine. The steps are made of two or more stones in the width of the doorway.

The doorway $B$, also in the east wall, has two steps complete and one small piece of a cross foundation wall which helped to support the other steps behind. The top of the cill of this doorway is level with the underside of the general cillcourse of the wall (see Pl. X., Fig. 1).

- The doorway $C$ in the north wall differs in some respects from the two already referred to. Its cill is much lower, being nearly 4 feet 6 inches below the top of the general cill level (see Pl. X., Fig. 1, also Pl. IX., Fig. 2) ; it has two steps remaining and, unlike the others, does not seem to have had more. On the steps are the marks of the stone linings at the sides and also of a central post dividing the doorway into two ; on the second step are the dowel holes into which were fixed the hinges of the doors themselves (see Fig. 7). We have thus sufficient evidence to show us that this doorway was in two parts with a post between, and that these two parts, which must each have been about 4 feet wide, had
doors opening in two halves. It is very probable that the other doorways, or at least $B$ and $D$, had their doors similarly arranged, but with this difference, that they were at the top of a flight of steps. This variety of arrangement leads us to consider


Fie. 7.-Doorway C. for a moment whether this doorway might not have provided access to the space under the floor of the hall only, as we find that there is a difference of over 8 feet between the level of its cill and the sloping line of the floor against the north wall. If the floor of the hall were of wood, as has been suggested, there must have been a considerable area under it at the north end which would have been available for use in the shape of storage room or for some similar purpose, but it is hardly likely that it would have needed an elaborate double doorway, like what this has been, for the purpose of access. The more probable reason is that the doors were put close to the wall to avoid an extra-long flight of steps up to them, that there was a level space inside and then an internal flight of either wooden or stone steps further in still. If the inner steps were of stone some traces of their foundation walls may probably yet be discovered.

The doorway $D$ occupies relatively the same position in the west wall that $B$ does in the east, but its cill is at a lower level (see Pl. X., Fig. 1), thus tending to show that the original level of the ground sloped slightly from east to west as well as very considerably from south to north. The remains of this door consist of the first step, part of the second step, and a base stone of the jamb linings. In addition there are a very complete set of cross foundation walls which supported the upper steps. In order to get up to the level of the sloping floor eight steps would have been necessary, and these walls go back far enough, from the inside of the wall of the hall, to support this number of steps, but in height they would have required two additional courses which no longer exist. It is however possible, although not probable, that there were not so many steps here and that there was a level piece of floor inside the doors which ran in till it cut the general sloping line of the floor. These cross walls are five in number, the two outer ones are 1 foot 6 inches thick and the three intermediate ones 10 inches thick. This seems to indicate that the outer ones supported side walls or linings in addition to the steps. They are built of blocks of tufa (poros stone) in courses of about 15 inches deep. These blocks are carefully squared and dressed and look as if they had been originally made for another purpose and used here afterwards. Some of their faces are curved.

In the restored plan (Fig. 1) I have shown two doorways on each of the three sides Two doorways on with, in the case of those in the east and west walls, the actual doors at the top of the steps haring a dividing post in the centre, and with side walls or linings running in from the main walls to the doorjambs. In the case of those in the south wall the doors are shown, as the remains of doorway $C$ (Fig. 7) indicate, on the second step and inside of this, a level space with a flight of steps beyond. It is interesting to notice how the internal space has been economized by placing the doorways central with the radiating lines of the pillars and not with the spaces between, and so minimizing the interference with the available area for seeing.

This Hall, which contains an area of over 35,000 superficial feet, could have accommodated sitting nearly 6,000 persons, reckoning an allowance of 6 square feet over all for each person. Standing room might have been found for about 10,000 .
each side originally.
(B). The Portico towards the Theatre, and the Back Wall which divided this Portico from the Thersilion.

The south façade of the chall, that towards the Theatre, had a portico in the centre, the foundations of the stylobate of which still exist; and, considering the Thersilion and the Theatre as parts of one complete scheme, we see that this portico fills the space which is usually occupied by the Scene-buildings in an ordinary Greck theatre. From the evidence which remains and which will be described in detail, we can restore with almost absolute certainty a Portico, with columns, entablature and pediment, of the Doric order and having

The Portico. (Plates VI., VII.,
X.-XIII.)

Condition.

Relation to Scene-

## Foundations ${ }^{\text {\&c }}$.

 of later Back Wall.Earlier founda. tion blocks in wall.

Foundations at angles.

Variety of
cramps.

Portico originally connected with hall by opening.

Columns not opposite columns of portico.

Foundations of Back Wall.

Later rough blocks.
fourteen columns along the front and a return on each side, two bays deep, with antac against the wall of the hall.

We find to-day between the portico and the hall, and dividing the two, the fommations and cillcourse of a wall in a line with the main wall of the hall on cither side. This cillcourse shows traces of three doors, a central one about 8 feet wide, and one on either side, about 5 feet 6 inches wide. At first sight this wall looks contemporary, but on further investigation we find, incorporated in the foundation course, blocks forming four piers exactly similar to those which supported the columns of the Thersilion, and we can also olserve that these blocks are exactly opposite a parallel line of piers in the hall, about 26 feet away from this south wall. Further, at the angles of the wall and the portico, there are other similar foundations. These had dressed blocks on the top, one towards the hall and opposite the third row of internal columns, and another finishing the line of the main wall towards the openings originally connecting the portico with the hall. These dressed blocks still remain on the east side and we can see from the arrangement of the dowel holes on them and from their position and size that they have supported square antae which formed an appropriate finish to the rows of the columns at the angles of the wall and portico (sec Fig. 15) and that when the wall with the three doorways was afterwards built it finished against the antae on each side. Another point to be observed is that the cramps connecting the stones of the cillcourse behind the portico are of $\square$ shape, whereas the cramps of the cill of the main wall on either side are of $H$ form; and while we find these $H$ cramps in general use in this hall and in the portico, the cramps are only found elsewhere, on this site of the Thersilion and Theatre, on those lower steps of the portico which, as we shall see further on, were also added later. We can therefore only come to one conclusion, viz. that the portico was originally connected with the hall by a series of five openings divided by four columns which were opposite to those adjoining in the hall and, from their wide spacing apart, it is reasonable to suppose that they supported wood beams. It may also be noted that these columns are not axially opposite either the columns or the spaces between the columns of the portico, and this may form a point from which to argue that the portico was not contemporary, as, if it had been, the spacing would have tallied better; but, on looking at the plan (Pl. VI.), we may observe the considerable depth of the portico from back to front and can see that it must have been more important to have got these pillars, which divided the connecting openings, opposite to those in the hall, from which probably wood beams were laid across to them, than to arrange them symmetrically with the pillars of the portico, which supported a stone architrave on which the wood beams of the portico roof itself could have rested securely at any point; and it may be further noted, in this connection, that even in temples where the peristyle is ceiled with stone beams and coffers the beams sometimes do not come axially over the pillars below nor are the pillars of the pronaos always axially opposite those of the peristyle (e.g. Parthenon; Penrose, Pl. 15: Temple of Victory; Le Bas Architecture, Pl. 4; Bassae; Cockerell, PI. IX., and others).

The foundations of this later Back Wall do not go down deep, thus showing that the original ground level must have been nearly the same as that of the finished floor of the portico. The foundation piers of the original pillars are only one block deep. These still remain, and, between them, is a row of limestone blocks dressed on the edges and on one bed and evidently old stones re-used. On these rest the blocks composing the present cillcourse, and under them is a bed of river pebbles about 7 inches deep, packed closely but not mixed with lime to form a concrete. This kind of foundation under walls has not been found elsewhere on the site. The positions of the doors are definitely marked out by the greater width of the cillcourse, by the larger stones used and by the dowel holes on either side to fix the base stones of the door linings. The cill level of the central door is 5 inches higher than the general cill level. ${ }^{4}$ It ought also to be noted that the centres of these three doorways are axially opposite the centres of spaces between columns in the restored Portico (Fig. 15). In front of this wall, on the side next the hall, are some later foundation blocks of rough conglomerate, the levels of the tops of which average from 6 inches to 1 foot above the general cill level. These are somewhat irregulanly spaced at intervals along the

[^9]wall between the antae projecting into the hall at each end of the portico. There have been six blocks dividing the space between the antac into seven bays and five of these blocks still exist. These on account of their roughness and general appearance seem to point to a much later repair or alteration and do not much concern us here. ${ }^{5}$ What seem to be also part of this or some other later repair or alteration are two cill stones, one lying on each of the original cills of the two side doors in this back wall. The one
 to the east is complete (Fig. 8), and shows, by its groovings on either side for the jamb linings, that it belonged to a door with a width of about 5 feet. The nature of these sinkings indicates perhaps bronze or wood linings, rather than marble. The holes for the hinges can also be seen. The other cill stone has been similar, but only a fragment remains. The complete east cill is roughly supported on two fragments of roofing tiles which, in their turn, rest on the original cill, the surface of the later cill being about 11 inches above the earlier one; and in order to get up to the higher level an extra rough block was placed in front of each cill on the side towards hall and acted as an additional step. We also find this later additional rough step in front of the central doorway (see Pl. XI.). These later cills seem to have belonged to some other building originally and to have been brought and put here at the time of a later repair as mentioned above.

We now come to examine the nature of the foundations of the stylobate of the Portico. These consist of several courses of dressed tufa (poros) blocks. The excavation has not been carried to the bottom of this foundation wall all round, but, where pits were dug, the wall was found to be three courses deep. The blocks of the top course are about 5 feet 6 inches long by 2 feet wide by 1 foot thick and are similar to those which have been used generally for the foundation piers of the pillars in the hall. They are joined together with $\vdash$ cramps. It is very probable that these stones may have belonged to an older building, as there are indications which seem to point to their having been put to a previous use. One instance may be cited where the ends of the two stones adjoining have sinkings


Fia. 9. cut in them as shown in Fig. 9. These sinkings are somewhat similar to those often found cut at the ends of blocks to allow of their being lifted by a rope, but in this instance they do not look deep enough to be suitable for this purpose. There are also the other blocks of this same material which have indications of a previous use, namely those, already referred to, which form the cross foundation walls inside the west doorway of the Thersilion.

This foundation wall is of an average width of 5 feet 6 inches. On the top of it we find a layer of limestone slabs; there are two rows of slabs in the width of the wall, the front slabs being narrower than the back ones. These slabs form the slightly projecting course, usually level with the ground, on which the steps of the stylobate rest. We shall see further on that there is cause for thinking that the ground level was lower in this case.

Nothing above this level is now in position, but the restoration of the two steps of the stylobate-for our original stylobate here consisted of two steps-is comparatively easy, as so many pieces remain scattered about which are not suitable for any other position. ${ }^{6}$ The course comprising the lower step consisted, like the foundation course under it, of two rows of slabs in the width of the wall, but in this case the wider slabs were in front and the narrower ones behind. The upper step was made up of single slabs of equal breadth-with some exceptions at either end which will be noticed later on-and on every alternate slab a column rested, the others forming the spaces between. Of this top step very few pieces have been found and it is necessary for us to examine these very carefully in detail, but it would be well, in the first instance, to look at the stylobate as it stands at present.

[^10]have shown them on the plans (Plates VI., VII., and PI. XI., Nos. 4 and 5 ) in the place which they now occupy, which cannot be far removed from that where they originally stood.

Foundations of stylobate.
Tufa wall.

Stones probably re-used here.

mestone found

ation course

Restoration of steps.

Lower step.

Upper step.

I have already mentioned the foundation wall of tufa blocks; by referring to the

Later steps.

Proof that these steps were later. drawing showing a section through this wall (Pl. XI., Fig. 1), it will be seen that three? steps of limestone, each deeper than the original steps, and with a thin foundation course under, also of limestone, have been placed at a later period in front of this. This is obvious for two reasons; first, the curious manner in which these steps have been constructed or built up in front without having been tied into the foundation wall; second, the fact that the limestone foundation course of the original stylobate and the tufa foundation blocks have been cut away on the front face in order to allow of the second and third of the later steps being got into position. This can be proved by comparing the tops of these slabs, which still remain in position on the east return, with those along the front. The side slabs are 2 inches wider and they show a distinct weather line about $2 \frac{1}{2}$ inches back. This indicates the projection of the face of this foundation course beyond the edge of the step over. Again, the -1 cramps which join these stones are just so much nearer the face of the front slabs as would allow of their having been originally in the same position all round before the projecting 2 inches was removed along the front (see PI. XI., Fig. 2). It is thus very evident that the projection on the foundation course, which once ran all round under the first step of the original stylobate, was cut off along the front in order to make the face of the lower slab line with the edge of the step over. This becomes still more clear when we observe that the step above has a little recessed fillet along the lower edge of its face (see Pl. XII.), and on looking carefully at the top of the front foundation slabs I noticed a line, about half an inch in from the face, corresponding to the line $2 \frac{1}{2}$ inches in on the top of the side slabs. The object in cutting this original foundation course was to increase the depth of the original first step in order to make it equal with the new steps which are $12 \frac{1}{2}$ inches deep as against 9 inches the depth of the two original steps of the stylobate.

Of the three steps which were added later the two lowest are complete in their whole length, as is also the thin foundation course under them; and of the third step several blocks are more or less in position: and it is important to notice here that the blocks of the two lower new steps are joined together with $\square$ cramps while the slabs of the two original steps were connected by $H^{-1}$ cramps. The blocks of the third step have been kept in position by iron pins which were fixed into holes cut in their under bed. When the blocks were set in their places, the projecting pins fitted into other holes made in the back of the top bed of the second step, and when these were properly adjusted they were run in with lead by means of narrow channels leading to these lower holes from the face of the step.
Finish at ends.
These three later steps return on themselves at each end, but there is nothing to indicate that they were ever continued along the ends of the portico; in fact the evidence goes to show that they were not, as for instance, to mention one point, the continued existence of the $2 \frac{1}{2}$ inch projection on the original foundation slabs along the east return, which has already been alluded to. It ought also to be mentioned that the return ends of the steps have been more carefully finished at the west end than at the east.
Curve on steps.

Levels. the ends.

The level of the Orchestra, at any rate after the addition of the three later steps, would naturally have been the line of the top of the foundation course under these steps, the edge of which is only dressed down an inch below the top surface; while the level of the ground at each side of the portico remained. that of the top of the original foundation course and sloped down at the end of the steps to the lower level of the orchestra. It has been contended that the floor of the orchestra was originally at this higher level also, and that it was afterwards lowered, but there are several considerations which might be held to prove the contrary. One of these is the depth of the tufa foundation wall under the stylobate of the portico, which seems somewhat heavy although perhaps not excessive considering the weight of the pillars and entallature which it had to support. This wall goes down about a foot under the lower level or over 4 feet below the original foundation course; whereas we find that the foundation piers, which supported the pillars between the openings originally connecting the portico with the hall, are only one block deep and the foundations of the south wall of the hall generally only go down about a foot below what must have been the natural level of the ground. Another point is that there is no indication,
on the side of the auditorium, of the orchestra having been lowered over 3 feet at a later time, and there is no reason for supposing that there were fewer rows of seats than we find at present, or that two rows besides the benches and the passage behind were an after-thought and an addition. Still another is that while the length of the portico just suits the present size of the orchestra or, to be more precise, the width of the orchestra plus the width of the benches-which, as we shall see further on, were added afterwards-it would have been too short for a wider orchestra. ${ }^{7}$ Although it seems unusual that we should have a stylobate of two steps and then a drop of over 3 feet to the ground level we have actually a parallel case in this same city, viz. at the west end of the colonnade of the Stoa of Philip in the Agora. There the foundation wall under the stylobate was probably exposed for several feet (see Pl. XV., Fig. 3), as we find to-day the remains of a later Roman Stoa, composed of old stones re-used, butting on, at a right angle, at the lower level which must have been the original ground level in front of the earlier stoa at this end, as it is hardly likely that, when the later building was constructed, the earth was cleared away to the depth of several feet in order to sink it into this position. The extra height of riser given to the later steps-too high for easy traffic-and the freshness of their dressed surface to-day seems to lend favour to the view that the front of the stylobate was never generally used as a means of access or egress. One can appreciate the reasonableness of sinking the orchestra several feet below the original ground level in order to avoid too much banking or building at the top of the auditorium. ${ }^{8}$

The above argument is based on the assumption that the Thersilion and the Theatre were contemporary structures, a point which has not been proved. Dr. Dörpfeld has quite recently expressed to me his conviction that the Thersilion was erected before the existing stone theatre; that there was originally a circular orchestra in front of the portico at the level of the foot of the earlier steps, and that when the present stone theatre was constructed the orchestra was lowered and the additional three steps added. It was probably also at this time that the back wall containing three doorways was erected to take the place of the openings separated by columns which originally connected the portico with the hall. If it can be shown that the stone structure of the Theatre was built after the Thersilion-and I admit that Dr. Dörpfeld has good grounds for this hypothesis-then the argument in favour of the drop in front of the portico falls to the ground.

Reference may be made here to the varieties of iron cramps and dowels which joined the stones together. As has already been mentioned, H shaped cramps were used generally in the original work. The sinkings cut in the stones to receive these cramps vary in depth from about . 1 inch to 2 inches. The cramps themselves were, on an average, from 8 to 10 inches long, although some as short as $6 \frac{3}{4}$ inches have also been found. The cross ends average about 2 inches across and the section of the metal is about half an inch square. They were let into the stones after these had been fitted into their position and were run in with lead, the lead covering the iron all round and so protecting it from the action of the weather. On the top of the lower slabs we also find holes for pins which were used to fix the upper slabs to the lower ones. Some of these pin holes are square, others are oblong. The square holes probably held pins with a section of about $\frac{3}{4}$ of an inch. Some oblong pins have been found which measure 2 inches by $\frac{1}{2}$ an inch and are from 6 to 8 inches long. There are no indications to show that these upright pins were all fixed in with lead to both upper and lower stones; in some cases this would


Fig. 10.-An Ibon Cbamp. have been almost impossible. We must not assume that all the oblong holes held iron pins, some were undoubtedly made for getting a grip of the stone with an iron tool in order to push the course above into its exact position.

The $\square$ cramps used in the later work were from 6 to 8 inches long, the ends having been turned down about 1 inch; and while some were of about the same section of metal as the others, namely half an inch square, others have been found measuring three-quarters of an inch by a quarter.

[^11]Comparison with
depth of back
wall and piers. 花:
No indication of
later lowering of Orchestra.
Width of portico suits width of Orchestra.

Parallel case of drop in front of stylobate.

No general thoroughfare by front steps.

Were Thersilion and Theatre contemporary structures?
Dr. Dörpfeld's view.

Result of this.

Varieties of iron cramps and dowels.

H Cramps.

Dowels.

Remains of two original steps.

Restoration of first step on east return.
Rough panels on face of this step.

Let us now look into the evidence of the remains of the original two steps of the stylobate which are not now in position. The various slabs scattered about, which we have been able to identify as belonging to the first original step which formed the upper part of the fourth step of the rearrangement along the front of the portico, have all $a$ sunk fillet on the lower part of the front edge and a weather line 13 inches in from the face on the top bed. There are also cuttings for $\vdash$ cramps on this top bed and these and the weather line show that there was another step over. Many of these slabs have, in addition to the sunk fillet, got a raised panel on the front face of the step on each stone. All these latter after careful measurement can be fitted together and with the aid of other slabs of similar thickness-also with holes for $H$ cramps - which were unquestionably the back slabs of this course, we can reconstruct the arrangement of the slabs of the first step along the east return of the portico (see Fig. 15). This also shows us that, on the returns along the sides, the face of the first step was not finished, but rough panels were left on each stone (Fig. 11) while along the front these were dressed off and only the sunk fillet left on the lower part of edge. We find these fillets cut in on the under part of the risers at the Stoa of Philip and also in the stylobate of the temple of Despoina


Fig. 11. at Lykosoura. The lengths ${ }^{9}$ of these slabs composing the first step are similar, and they correspond with those of the foundation slabs under, which are still in position, thus further showing that they belonged to the same scheme.

Remains of top
step.

Unfinished top bed.

Other instances of this.

The slabs between columns.

Slabs supporting columns.

Diagonal dowel holes.
Other instances. dowel holes.

Several pieces of another step of the same thickness as this first one, but with two fillets cut in on the lower part of the front edge or riser and with no sinkings for cramps on the top, have also been found. One of these, which is complete in its width from back to front, is broken the other way, and there remains only a little more than half of the length which it would require in order to make it correspond with the others. This slab has a draft margin round the edges of the top bed. This margin measures $3 \frac{1}{8}$ inches wide at the front, $2 \frac{3}{4}$ inches at the side and $4 \frac{1}{3}$ inches at the back. The centre is less smoothly dressed, and is raised about $\frac{1}{4}$ of an inch. This draft margin is the finished surface of the stylobate which has never been dressed fair all over but only round the sides. We find many instances of the top of the stylobate never having been finished all over, notably the Propylaea at Athens where not only the steps, stylobate and pavement have never been dressed down, but also the walls themselves. There is another similar slab with dressed margins on the top which has two sides at right angles to one another complete, thus giving us both the width and the length. Its length corresponds exactly with that of the stones of the step under.
These have of course been the slabs between the columns and not slabs on which the columns rested, as these latter would have been dressed fair all over in order to form the bed for the drum of the column and would probably have had dowel holes in the centre, which indeed we find on another fragment. The width of these slabs, which just fit on to the reconstructed first step allowing a margin of a few inches at the back, show that there was no room for a second intermediate step; and this is an additional proof that the original stylobate had only two steps.
-the back one. ${ }^{10}$ It has a dowel hole 5 inches square, placed diagonally, and the position of this is 1 foot $6 \frac{1}{2}$ inches in from the back edge, a dimension which indicates that a column had stood on the centre of the slab. We find dowel holes placed diagonally elsewhere on this site; one case is on the one piece of pillar still standing in the Thersilion (Fig. 3), another is on a piece of stylobate in the Temenos of Zeus Soter on the other side of the river; while a third example is the stylobate of the Stoa Myropolis in the Agora. the top of which has been treated in an exactly similar way, namely with dowel holes for the columns, cut diagonally to the line of the face, and raised panels between. There are one or two other small pieces of stone without any margin but with dowel holes of the same size. There is still another slab of the exact size of these others which has two smaller oblong

[^12]10 It can be easily seen that this is the back edge, as it is not dressed down fair for the whole of its thickness, which would of course have been essential on the other three sides of the blook.
dowel holes in it. This may have been either a slab on which a column stood, or, more likely, that on which stood the anta of the east return, as it was found lying to the east of the foundation of the stylobate. There have also been found several small fragments of the same thickness as these stones, having double fillets on the edge and with dressed margins on the top. All these undoulstedly belonged to this top step but the fragments are much too small to be of any practical use to us.

A slab was also found with a double draft on the edge, which had been prepared for a top step, but having been broken, probably during the working, it had been cut to the narrower width and used as a back slab for the first step, having had the double draft edge turned inwards, as can be seen by observing the position of the sinkings for the -1 cramps. This sort of economy was often practised; there is another similar example in the stylobate of the Stoa of Philip.

These limestone steps generally seem to have been dressed with a toothed chisel of Nature of tooling. about $\frac{7}{8}$ of an inch or 1 inch wide. The lines of the chisel run indiscriminately over the surface and not in parallel lines. ${ }^{11}$

The thin foundation course under the later bottom step is composed of stones of very irregular width and height, and the front face is only dressed fair for about an inch below the edge. The length of the blocks composing the first and second steps varies from 1 to 2 inches but not to a greater extent. Of the third step only two or threc blocks are in their original position. There is a distinct weather line on the lower steps showing the line of the riser of the step immediately over. The butt joint ends of these stones are dressed back fair from the top and face to about $2 \frac{1}{4}$ inches and then they are roughly cut Fig. 12. in hollow (see Fig. 12). The front of the original limestone foundation course of the stylobate is dressed down along the fiont for 5 inches from the top and then picked and dabbed, rougher than is usually found inside the dressed arrises of the other stones, as if it had been done with a heavier pick or hammer and less easily. This can be explained from the fact that it was done when the stones were in position-that is to say, when the later alteration took place.

Another point which shows this is the narrowness of the dressed margins towards the front, on the ends of the slabs where they were joined together. We find generally that the dressed margins of these ends, towards the front, were usually made wider than those at the top and back, whereas we see that this margin is narrower in these front stones than on those at the sides, by the width of the piece that has been cut away (see Fig. 13).

During the excavation inside the foundation wall of the stylobate three stones were met with at a depth of between 3 feet 6 inches and 4 feet below what was the level of the portico floor. These stones vary slightly in size but they measure on'an average about 2 feet 6 inches square by 10 inches deep, and they have $\square$ shaped sinkings, $3 \frac{1}{2}$ inches deep, cut in on their tops. It is curious that they should have been found at such a depth, as there is no reason for supposing that the portico had a hollow space under its floor, which was most likely an ordinary earthen floor, or perhaps made of tiles or mosaic rather than of wood. The slight depth of the foundations of the back wall of the portico seem to preclude the idea of an excavated space under the portico itself. The explanation may be that these stones have been foundation blocks for supporting posts connected with a wooden stage or scenery, which posts may have stood in pits specially sunk in the floor to receive them.

Of the Order which this stylolate carried, several pieces have been found in various The Order of the places in the vicinity of the foundations. These mostly consist of drums of the pillars, but in addition we have onc capital, an architrave beam, four pieces of the triglyph frieze, and the apex stone of the pediment.

The material is tufa (poros) which has been coated with stucco. This has been used

Portico.

Matcerial tufa coated with

11 These tool markings are more apparent in some places
than in others. On these later steps they are especially clear, as the surface is hardly at all worn. The method of
tooling varies slightly in different parts of the site but not to any very great extent.

General characteristics of the order.
Comparison with other examples.
Entabinture.

Capitals.

More refined than Lykosoura.

Cymatium.

Another variety of cymatium ornament.

The general characteristics of this Order are those of the early fourth century, and in form and proportion it bears a great resemblance to the order of the Temple at Nenea and also to that of the 'lemple of Asclepius at Epidaurus. As compared with the type of the fifth century, as exemplified in the Propylaca at Athens and the large Temple at Rhamnus, the frieze blocks have become deeper and the architrave shallower, whereas, in the earlier examples, they are practically equal. The heads of the triglyphs are still cut in upwards but they have no longer the graceful curved top. The capital (Fig. 18) has become shallower, measuring in depth nearly one-third of the diameter at the neck instead of a half as in earlier examples, and the line of the echinus has become flat instead of a gentle curve. ${ }^{\text {b }}$ These are only a few of the most striking differences. This order is much more refined than that of the temple at Lykosoura, which is decidedly rougher and looks later. In the restoration given on Plate XII. the cymatium of the pediment cornice is restored from the pieces which were found of a terra-cotta cymatium having coloured ormament on the face; the form of its outline, the relation of the lines of its bed to its front face, and the nature of the jointing, show that it was intended for such a position rather than for the eaves (see Pl. XIII.). In order to make this clear, an illustration is given of two sections of the cymatium of the Temple of Thescus at Athens (Fig. 19), for the purpose of showing the difference between that used for the pediment and the one used for the eaves. No doubt there was originally more colouring on our cymatium than is shown on Pl. XIII.; it represents all that was extant on the several pieces which I examined. My attention has however more recently been directed, by Mr. J. G. Milne, to another fragment which was dug up in his presence and of which he made a careful drawing in colour at the time. I did not see this fragment when I visited Megalopolis and, as it differs in some essential particulars from the form shown on Pl. XIII., I have thought it advisable to give a line reproduction of the drawing here (Fig. 19a).


Frg. 19a.-Anotrer Variety of zhe Cymatiear Ornament

Mr. Milue tells me that the pattern was very clearly defined and that the thin blue and red lines, marked respectively A and B on the illustration, were quite distinct. The detail was not so clear on the pieces from which Pl. XIII. was prepared.

In the restoration of the order (Pl. XII.) a different form of section has been adopted for the eaves gutter, a specimen of which was also found near the same place, and which, by its ${ }^{5}$ general arrangement, seems to have belonged to such a position. There is some justification for this restoration showing a difference between the cymatium of the pediment and that of the eaves, inasmuch as they had entirely different uses and there was no necessity for their being alike in form. Of course it is not at all certain that there was anything more than a drip tile along the eaves, but the fact that these fragments have been found near, leads

[^13]Justification for varieties of cymatia shown.
to the assumption that they may have been used in this position; and, moreover, if an eaves gutter did not exist round the whole of the walls of the hall, it is more than proballe that it extended, at any rate, along the return ends of the portico, over the openings at the sides.

In a drawing showing a restoration of the temple of Asclepius at Epidaurus-the example which most nearly tallies in general character with the order of our portico-which was published by Dörpfeld and Caverau in the Proktika for $1884,{ }^{16}$ we find a similar vasiety in the forms of the cymatia indicated.

Drawings are also given of two varicties of terra-cotta antefixac which have been found (Figs. 20 and 21), and either of which might have belonged to the portico roof, where they would have formed a decorative finish to the ends of the cover tiles, standing up above the top of the eaves gutter. Another illustration (Fig. 22) shows a terra-cotta apex tile, which was also dug up, and which would have capped the line of the cover tile at the ridge. The ornament on these specimens is in relief. They are now preserved in the Muscum at Megalopolis.


Figs. 20, 21, and 22.-Antefixae and Apex Tije, One-Folrti of Full Size.

There is just a slight probability that the pillars and entablature comprising this portico may have been worked elsewhere and sent as a contribution towards the building of the city, or that they may have been taken from some temple or other structure with this olject. The material used suggests this, especially as we find, in the foundations, blocks of the same material which have undoubtedly served some former purpose.

[^14]Pillars de. may perhups have been brought from elsewhere.

Orches'ra.
(PLates V., VIJ.,
VIII., IX., ancl
XI.)

Farthen floor.

## (C). The Orchestra.

In front of the portico is the orchestra of the Theatre. It, jresumably, had an morthen Hoor, as no traces have been diseovered of any other form of flooring; neither have any remains of a Thymale been found in the centre. It is bounded towards the anditorium by the stone kerb of a narrow gutter which runs round in front of the benches.
Pedestals.
Later Proscenium.
Opposite the ends of the auditorium on either side stand the remains of two pedestals (A and B). A later proscenium projected in front of the portico, and of this the stylobate still remains. It will be referred to further on.
Size of Orchesten.
The width of the orchestra, measured across from the edge of the kerb on either side and exclusive of the gutter, is 99 fect 1 inch. From the edge of the kerl, in the centre to the face of the later first step of the portico it measures 92 feet $2 \frac{1}{2}$ inches, and from the same point to the edge of the original first step of the portico 95 feet 4 inches. From these dimensions it will be seen that the orchestra as it stands could never have been a complete circle as at Epidaurus, and as it may possibly have been at Erctria. But it ought to be noted that at both of these places the orchestras have broad gutters, while in our example the gutter is only 1 foot 8 inches wide as against 6 feet $10 \frac{1}{2}$ inches at Epidaurus and 6 feet $4^{\frac{1}{2}}$ inches at Eretria. ${ }^{17}$
Slope of Orchestira.
The orchestra slopes from north to south about 15 inches from the top of the foundation course under the later steps of the portico to the outer kerb of the gutter opposite

Comparison of
levels with other thentres. circular rim of the orchestra is practically level; levels which were taken at as many as six places in the circumfcrence only showed a maximum difference of 3 inches, which difference may be accounted for by sulosidence or some such canse. The cill of the column front there is 3 or 4 inches above the average level of the kerb, and the cill of the back wall is about an inch higher. At Eretria there is a fall of from 10 inches to a foot between the top of the cill of the proscenium and the kerl) of the gutter, but, if 6 or 7 inches is taken off for a step down, at this cill, the slope is very much reduced. It is difficult at present to speak exactly about the back wall there. At Athens the orchestra is practically level, and the cill of the columm front is 7 inches higher than the kerl. In our example the kerb is very nearly level all round, the average difference of level being not more than 2 inches.
Reason of slope. I shall endeavour to show, further on, that the considerable amount of slope, from the foundation cousse under the later step to the kerb, has been caused by the later insertion of the row of benches and the gutter, which do not seem to have been part of the original scheme.
Gutter.

No outlets remaining.

Channels for spring.water.

The gutter, as we find it to day, averages 1 foot 8 inches wide and 12 inches deep. It is nearly level. The fall, which is hardly perceptible, is rather towards the centre than from the centre to either side, but the difference is not more than $1 \frac{1}{2}$ inches or 2 inches. The ends are open and no direct connection with any outlet drain has been found, although there is a drain trench, probably later, which runs across the Skanotheka and which was presumably connected with the gutter of the theatre at its west end. This trench will be discussed in detail further on.

At several places on the inner kerb there are little channels running out from under the benches to the gutter. These are marked ' $a$ ' on the plan (Plate VII.). They have evidently formed outlets for spring-water, from behind the benches, and in this connection the passage in Pausanias (viii. 32. 1) may be referred to, which alludes to a perpetual spring in this Theatre. These outlets are now dry. This gutter was not necessarily formed for drainage only, but was probably also of service in collecting the spring-water which was undoubtedly scarce commodity then as now and would have been thus made available for many useful purposes. The fact that the gutter is practically level lends itself to this

[^15][^16]view. In this ease the outfall would probably have been regulated by sluices, or in some such way that it acted as an overflow on ordinary oceasions, and, when there was a heavy rainfall, could have been opened 4 , in order to let the water run off quickly and so prevent flooding. ${ }^{18}$

On the outer and inner kerls of the gutter are some small holes, about $2 \frac{1}{4}$ inches
Regulations of ontfall.

- 宽

Holes in kerlos. supare. On the inner kerb they are to be found opposite the ends of the benches, and on the outer kerb next the orchestra they are cut at inegular intervals. They are marked on the plan (Plate VII.). These holes may have Purposes of holes.


Fia. 23.-Pedestal 1. been used for various puposes, such as for fitting in iron standards to support an awning-there is a hole on one of the steps as if to tie a rope through, and similar holes are found at Athens, Argos, \&e.-or some of them may have been cut for the purpose of fixing a thin temporary covering or passage-way over the gutter, opposite the steps.

The stones composing the gutter itself are not, apparently, Gutter stones not fixed together with cramps or -dowels.

Of the pedestals in the orchestra, it is only necessary to say here that they are obviously later additions, and are probably not even in their original positions as such. ${ }^{19}$ A drawing (Fig. 23) is given of the one on the west side, of which the base and drum are still in position. There is a pedestal of a similar design and of almost exactly the same size in front of the Temple at Lykosoura, and, from it, the capping, shown by dotted lines on the drawing, is restored.
Of the pedestal on the east side of the Orchestra (Pedestal A), only the base stone is left standing.

## (D). The Auditorium.

Auditorizom.
(Plates V., VII.,
VIII., IX., and XI.)

The curve of the duditorium, which is rather more than a semicircle, is a true are of a circle all round and does not widen out beyond the semicircle, between the cross axis line of the theatre and the retaining walls, as at other theatres such as those at Epidaurus, Athens, Eretria, \&c.

The auditorium is divided into nine wedges of seats ( $\kappa \epsilon \rho \kappa i \delta \epsilon s$ ) by eight sets of steps, Divided into nine and there is also a set at each end next the retaining walls. The centre lines of these sets of steps all radiate towards the centre of the orchestra.

Most of the stone seating has entirely disappeared. The present remains consist of the front row of benches ( $\theta$ póvot), the passage behind the same, and several tiers of seats behind that again. The first three tiers are practically complete all round, and in one place as many as nine consecutive tiers can be traced. The ordinary seats are made of stones of unequal length and are not in one piece with the footstones, as at Epidaurus, Athens, \&e., these latter being, in this case, separate flat slabs averaging 6 inches thick. Some of these slabs are of limestone and others of conglomerate, and the two varieties seem to have been used indiscriminately. Neither the blocks of the seats themselves nor those of the footstones have been joined together with iron cramps.

A diagram is given (Fig. 24) showing, in detail, a section through the seats and, for the sake of comparison, those at Athens and Epidaurus are likewise drawn alongside to the same scale.

A curious although slight difference is found between the seats in the wedges on either: side next the retaining walls, and those in the other wedges. While in the majority of the seats there is a small sinking in the lock of the seat block of about $1 \frac{1}{4}$ inch deep (sec Fig. 24) -the level of the sinking having evidently been that of the fontstone

[^17]purpose of letting the water escape.
${ }^{11}$ As they at present staud they are not symmetrically placed with regurd to one another and to the cross axis of the theatre.

Remains of seating.

Variety in the seats.
behind-in the case of the seats in the end wedges the blocks are narrower by the widtls of this sinking, vi\%. $1 \frac{1}{2}$ inch, and the footstones broader (see Fig. 32). There is no apparent reason for this difference, nor does there seem to have been any particular necessity for cutting this sinking in the back of the seat block unless it were that, after the main portion of the seats had been made, it was found that enough room had not been allowed for the feet, in the space provided, and so it was increased by making this cutting on those which


Fig. -4.--Details of Benches and Seats ín Acdiforite at Megalopglis, Epidaurus, and athens.
had been already made, and those which were still to be made were worked differently in order to suit the alteration. It will be observed how the riser of the seat is cut well back under, also for the purpose of giving plenty of room for the feet, and how the fillet on the edge is retumed down at each end next the steps as is done in the benches above the diazoma at Epidaurus, but not at Athens.

The sets of steps between the wedges of the seats are arranged regularly with two steps to each tier of seats (Pl. VII., Fig. 1). The width of these steps is 2 feet $7 \frac{1}{2}$ inches. This is nearly the same width as the steps below the diazoma at Epidaurus, which are 2 feet 7 inches; above that level they are 2 feet 5 inches wide; at Argos they measure 3 fect. Those at each end, in our Theatre, next the retaining walls, are about 3 feet wide (see Fig. 32).

Behind the benches, and in front of the first tier of ordinary seats, is a passage 3 feet in width, which runs all round the auditorium at this level. It is probable that this was originally the front of the auditorium itself, for, as we shall see further on, the benches and the present gutter were, almost certainly, added later. We have many instances of such a passage without any seats in front between it and the orchestra. The best known is that in the theatre at Athens, which is widened out towards each side in order to afford additional facility of egress. On this passage, at Athens, the thrones rest, and behind the thrones another narrower passage has been formed by cutting away the first ordinary seat (see Fig. 24, No. 3). ${ }^{20}$ In the later theatre at Zea (Piracus), where the Athenian model has been followed, there is a similar arrangement, but in this instance the second passage is clearly defined and contemporary with the rest of the structure ${ }^{21}$ (see the plan of this theatre in the Prakitilia for 1880-81). In these two theatres, we have the narrow deep gutter with bridges across opposite to each flight of steps. At Oropos also there scems to lave been a broad passage next the orchestra, while detached thrones stand on the orchestra itself.

At Epidaurus and Eretria we find the front benches set close up to the gutter, and with no passage immediately behind, and it ought to be mentioned that these are the two examples which have the wide gutters in front. ${ }^{32}$

It is unlikely that the passage in our Theatre was ever wider than it is at present, but it is of course not impossible that it may have had a double row of slabs, ${ }^{23}$ and that the front ones were removed when the benches were set in where they are at present. It ought to be noted that, while generally the floor of this passage is formed of stones of a single width, opposite the sets of steps we find that it has two stones in the width, the front one of which is deeper and forms a step (see Pl. VII., Fig. 1). It is not impossible that at these places there were originally thin single stones as elsewhere, and that this rearrangement was effected when the benches were added.

It is unlikely that the benches originally stood on the higher level and were shifted down afterwards, so as to interfere less with the view of the people immediately behind. Two reasons may be adduced against this. First, the dedicatory inscription on the benches themselves distinctly points to their having been additions, and the fact of the gutter being mentioned along with them seems to show that the present position was the one for which they were originally intended. Second, in other cases where benches come in front of ordinary seats there is always a drop down from the level of the footstone of the seats behind to that of the benches.

The benches thoroughly fit their present position in every way. They are just the size required, and the space between each is practically the same width as that of the steps behind; their curve also is exactly that of the orchestra at this point. In form the benches very strongly resemble those in the theatre at Epidaurus. They are the same type-namely, one long bench to each wedge of seats-and they have arms at each end, $4 \frac{1}{4}$ inches thick, the lines of which are continued down to the cill, forming a general finish to the seats at the ends; at Epidaurus, however, the arms are thinner than the continuation below (see Figs. 24 and 29). They are made of limestone in blocks of unerpual length, and there are four blocks in each bench. In some cases where the blocks have been damaged-probably in the

[^18][^19]Steps.
Comparison with other steps.

Passage

Comparison with other passages.

Passage presumably not been wider than at present.

Penches never stood on a higher level.

Reasons for stating this.

Nature of
benches.

Repairs to same. fixing-the broken parts have been cut out and other pieces neatly inserted and doweller in, the dowels having been run in with lead from behind.


Fig. 25.-The Central Bench.

End benches.
These have been lengthened.

Mistake in rearrangement of blocks.

Pavement behind was not continued.

## Gntter was

 lengthened.Rough sinking in passage.

Workmanship of benches.

Level of passage.

Explanation of unusual slope in Orchestra.

No evidence of earlier gutter.

The benches at each end are now about 5 feet longer than the others, and they have five blocks in their length. They were originally the same size, and were afterwards lengthened so that their ends came into a line with the outer face of the retaining walls of the Theatre. This was done by taking down the benches and refixing the old blocks, but with a new intermediate block inserted to give the greater length necessary. This inserted block can easily be distinguished by its rougher workmanship. It is curious to observe also that, in the vefitting of these blocks, they were not arranged consecutively as they had been before, for we find that the original inscription of the bench on the west side begins on the inner stone, passes over the second one-also an old one refixed-and continues on the third one which must have been originally the second block and have got transposed in the refixing. In this bench the fourth block is the new one. The inscription on the east bench is correct. This mistake seems to indicate that the time when this alteration was effected was sufficiently remote from that at which the benches were made to make the correct rearangement of the inscription a matter of indifference to those who were concerned in the alteration; otherwise, surely it would have been put right when it was discovered. line where the pavement of the passage behind abutted on. When the bench was lengthened, this block was moved further out, but the stone paving of the passage was evidently not continued, and the level of the ground must have sloped down from the end of the old stones-after the benches were lengthened-to meet the lower level of the orchestra. The gutter in front however was lengthened as well as the beaches, and on the upright face of the additional cill stones under the extension of the benches, which cill stones form the inner kerb of the gutter, the projecting rough knobs which were generally left on for convenience of canying and fixing have never been dressed dorn and remain to this day. immediately behind the benches, was done, after the benches had been added, for the purpose of rumning the rain-water off at the sides by the steps and so preventing it from collecting against the back of the benches and oozing through the joints. The workmanship of this cutting is much rougher than that of the other work generally.
The surface of the limestone composing these benches and seats is a good deal weathered and the harder veins stand up prominently; it is therefore not easy to gauge accurately the original appearance of the tooling, but enough can be seen to enable us to conclude that it was of similar nature to that on the same material elsewhere.
The level of the passage is almost exactly that of the foundation slab of the later steps of the portico (see Pl. XI. Fig. 1). A drop of a.few inches from the edge of the passage down to the orchestra would have given the latter just enough slope to have allowed the water to run off. The extra and unusual slope which we, find to-day can best be explained by the theory of the later insertion of the benches and the fact that they were sunk down about 18 inches below the level of the passsage, so as not to obstruct the riew from the seats immediately behind.

We have no evidence as to whether there was an earlier gutter in front of the passage, luat it is not by any means improbable that there may have been one in order to hold the sping-water as well as to drain both the orchestra and the auditorium ; perhaps it may have heen a broad and shallow one. We shall see, on referring further on to the drain in the Skanotheka, that the levels lend themselves to such a supposition.

Above the remains of the lower tiers of seats, still in position, the curved form of the auditorium is still distinctly to be discerned rising up behind (see Pl. II., Fig. 2 and PI. VIII.) and at a considerable height above the level of the orchestra (from 50 to 53 feet above the foundation course of the later steps of the portico) a flattening in the slope, which runs right round the curve, suggests the line of a wide passage way or diazoma. No

Curved form of Auditorium remains above present stats.
Indication of line of diazoma. structural remains of this, however, have been found.

A pit dug across the present ridge at its highest point also failed to yield any traces of a back wall or blocks of any description. It is possible that the auditorium may have extended a little higher than this point, but it seems unlikely that it could have reached much ligher on account of the rapid slope downwards behind at the sides.


Fig. 26.-Section through Passage or Lower Diazoma at Argos.

Presumably in a theatre of this size there were two diazomata. The lower one Presumably there would probably have been comparatively narrow, more in the form of a slightly wider footway as at Argos (Fig. 26), and its position would hardly be observable by any perceptible lreak in the line of the sloping bank to-day. The traces of an entrance in the east retaining wall, which will be alluded to further on, seem to point to some through connection at a point about half-way up between the level of the orchestra and that of the main diazoma.

I give here (Fig. 27) a restored plan of the auditorium showing the presumed arrangement of the seating and the diazomata, and also, to a larger scale, a section through the same (Fig. 28) showing the present line of the ground both at the centre and through the middle of the second wedge of seats on the west side; and on this is also drawn a restoration of the seats and the diazomata, based on the evidence just alluded to. Twenty tiers of seats are restored between the passage behind the benches and the lower diazoma, and twenty more between this and the main diazoma; or, in each case, 21 including a row of benches in front of each diazoma, making in all 42 clear tiers from the level of the passage to that of the main diazoma. These tiers are calculated on the average measurement of those still in position and have a rise of 1 foot 2 inches and a width of 2 feet 4 inches. After a very careful examination I concluded that the figures which I quote here were as nearly correct as it was possible to arrive at in the present condition of the seats and footstones, which are all more or less loose and few if any of which are absolutely unmoved.

A table is here given, showing how these contrast with similar measurements in other theatres:


The lower diazoma is drawn 5 feet 6 inches wide over all, on the calculation that the

Restored plan of Auditorium.

Restored section.

Sizes of tiers of seats.

Table of sizes of seats in other theatres. front of it would have been used as a seat, thus giving a net width, for the actual passage way, of from 3 feet 6 inches to 4 feet,

Main diazoma.

Upper sents.

The main diazoma is restored with a maximum width of 9 feet 0 inches arross, the front part, say 2 feet 0 inches, having been available for a seat or lench, thus leaving 7 feet elear for the passage proper. A section is given of the diazoma at Epidaurus (Fig. 29), to which our example probably bore a close resemblance, ant, for the sake of comparison, the rock-cut diazoma at Argos is also drawn (Fig. 30).
At the back of this diazoma a perpendicular wall about 5 feet high is shown, the top another bench as at Epidaurus. The upper seats are drawn slightly steeper, namely with a rise of 1 foot 4 inches and a width of 2 feet 3 inches, and the steeper slope of the ground on the west side above the diazoma level justifies this change of dimensions. The upper seats at


Fig. 27.-Restored Plan of the Auditoriuy.

Epidaurus average 2 fect 7 inches by 1 foot 4 inches, and at Argos 2 feet 1 inch by 1 foot Number of upper 2 inches. Fifteen tiers of seats are restored above the level of the diazoma, calculated on seats restored. the above sizes, or, including the bench in front, 16, and behind them, a passage 4 feet ?assage and wall 6 inches wide, and a wall or fence behind that again. At Argos there is no passage at the behind, at top. lyack, the seats having been cut ont of the solid rock which goes sheer up bohind. The same is found at Athens. At Epidaurus where, as in our theatre, there was reasonable facility of access from the top, we find a passage with a clear width of 4 feet 6 inches and a wall behind it. At Epidaurus, the necessity for a wall is more apparent than here. There, the theatre is constructed on the side of a hill and the ground continues to rise behind it. Here, the upper part of the anditorium seems to have been mostly artificial and banked up for the purpose, and it slopes rapidly down behind, especially at each side.

In our theatre, as at Epidaurus, the wedges of the seats were, presumably, divided into two above the level of the diazoma; and perhaps here, on account of the width of the lower wedges at top, for some distance below it also.

Wedges divided above diazoma.
e th


Fig. 28.-Rustored Section throuah the auditorium.

A calculation of the number of people which this auditorium was capable of seating, based on the restoration of seats as shown on the restored plan and section (Figs. 27 and 28)


Fig. 29.-Section througe tere Diazoma at Epidaurus.
and worked out on an allowance, in the ordinary seats, of 13 inches for each personthe allowance indicated by the marks cut on the risers of the seats at Athens-and of 16 inches in the benches, gives us a total of 19,700 persons.
liop

This can be subdivided as follows:-


This theatre has thus been capable of accommodating about 20,000 people.


Fig. 30.-Section throvgh the Diazona at Argos.

As this allowance of 13 inches per person seems at first sight so absurdly small, I have made enquiries with regard to the minimum space usually calculated for each person in a modern London Theatre. I am informed that although the minimum space per person, recognized by the County Council, is 18 inches, as a matter of practice, theatre managers find that in the pit and gallery, where the seats have no dividing arms, people can be got to occupy as small a space as 14 inches per person, and that 16 inches is a good allowance.

Retaining JFalls.
(Plates V., VII.,
VIII., IX., X.)

Extent of existing remains.

## Difference

between east and west walls.

Cause of this difference.

East Retaining Wall.

Nature of the wall.

## (E). The Retaining Walls.

Remains of the retaining walls on cach side of the auditorium still exist, on the east side rising to 40 feet above the level of the foundation course of the later steps of the portico, and on the west side to 36 feet above the same level. These walls have originally extended to at least the height of the main diazoma.

The east and west walls differ considerably. The difference has been caused to a slight degree on account of the nature of the site, but mainly by reason of the unusual treatment of the space generally occupied by the scene-buildings in a theatre, which in this case is taken up by the portico, necessitating the placing of the storage and retiring rooms on one side in front of the west retaining walls. Although, as has already been observed, the portico and portions of the Thersilion may have been used in connection with dramatic performances in the theatre, still the main building for the use of performers or at any rate for the storage of the scenery occupied the position just mentioned, and this space has been positively identified as having been constructed for this purpose.

The east retaining wall, which is parallel with the outer row of steps in the auditorium, is built of squared blocks of conglomerate in regular courses of an average height of 15 inches and of an average thickness of 2 feet 2 inches. These blocks have 'swallow-tail' dowel holes (Fig. 31) at ends,


Fro. 31.
thus showing that they have been bonded together; these dowels may have been probably cither of bronze or of hard wood, but, as nonc have been recovered, we cannot say definitely what material they were made of.

The fall of earth from the upper part of the bank has pushed the wall out considerably, especially at its highest -point, but it has originally been a straight wall from its beginning, beside the orchestra, outwards to its furthest point.


Fig. 32.-End of East Retaining Wall, and Pedestal C.

This wall abuts next the orchestra against a limestone pedestal (C), the capping of which has disappeared on this side; and the face of the base block of the pedestal practically lines with the edge of the first row of seats behind the passage, thus leaving a clear


Fic. 33. outlet from the end of the passage into the parodos (see Fig. 32). The pedestal block has a narrow draft margin worked on each face of its angles; this margin is $1 \frac{1}{4}$ inch wide, and the rest of the surface is slightly rougher. As the pedestal is thinner than the wall behind, the two angles of the wall, where it abuts against it, are splayed away to fit the thickness of the pedestal. The wall was covered on the top with a projecting limestone coping (Fig. 33). About 71 feet along the wall from the face of this pedestal, a cross wall projects outwards nearly at right angles. Another cross wall, 25 feet further on, runs inwards and abuts on another wall parallel with, and 9 feet in from the face of the main wall. This arrangement suggests an opening and an access to the Theatre from the outside at a higher level, the wall projecting outwards being a retaining wall banking up the approach at the higher level and separating it from the Parodos below; and on the main wall itself, at the outer angle of the wall projecting inwards, there is, actually in position, a piece of a cill of white limestone (Fig. 34). This cill is about $23 \frac{1}{2}$ feet above the level of the foundation course of the later steps of the portico, or within a foot of the level at which we have assumed the lower diazoma to have been situated; and by this way access must have

Pedestal at end.

Coping of wall.
Projecting cross wall.

Inner cross wall. Access to theatre through retaining wall.
Piece of cill.
Level of sume.

Access led to lower diazoma.

## Buttrerses in

 wall.Inner wall.
Approach to main diazoma between walls.

Finish of wall at top.

Slope of bank behind.

West retaining wall.

Pedestal at end.
Capping on same.
Single wall for 55 feet.

Double wall after this.

Front wall.

Nature of front wall.

Height of front wall.

Back wall.

## Cross wall

at end.

Spurs of the Auditorium.

Difference of construction between east d wext walls.
asons for this.
been obtained to the diazoma from without, on the cast side. The remarkable correspondence of this point with another on the opposite side of tho theatre, both in position and level, seems to afford considerable proof of some definite structural line in the auditorium at this particular part. Beyond this distance the main retaining wall has both external and internal buttresses at several points. These were rendered necessary on account of the depth of bank to be supported. There are also traces, behind the highest part of the wall, of another and inner wall parallel with this outer one. This suggests an approach to the main diazoma from behind, up the end of the embankment, as at Mantinea (Bull. Corr. Hellén. XIV. Pl. 17) ; or it may have been merely an additional support to relieve the front wall, where the bank was highest. We cannot however come to any very definite conclusion on this point as so much of the wall has disappeared.

-elivation

As our object is primarily to ascertain tangible data, it would be uscless, for the same reason, to go into any theories regarding the finish of this retaining wall on the top, nor need we consider what happened beyond the ridge of the theatre, further than to suggest that most probably the bank merely sloped down till it reached the general level of the surrounding ground, much as it does to-day, only from a greater height. A trench was dug to see if there were any traces of a wall at what might have been the line at the foot of this bank, but nothing was found.

The west retaining wall, like the other, abuts on a limestone pedestal (D) next the orchestra. This pedestal is very similar to the one on the other side and its capping, which was not in position, was found lying beside it: An examination of this capping shows that it has no fixing marks on its top surface; so, presumably, there was nothing further in the way of finish above the capping-no figure or other decorative adjunct. The wall runs off at an angle to the axis of the theatre similar to that of the east wall, for a distance of 55 feet from the pedestal. Here it finishes against a short wall at right angles to, and connecting the ends of two retaining walls beyond, which do not run at an angle with the axis of the theatre but are parallel to it. These walls are about 14 feet apart from face to face; they are built of double rows of blocks and have an average thickness of 4 feet.

The front wall rises straight up from about the level of the foundation course of the later steps of the portico and the topmost course at present existing is 24 feet above that. It is built of square blocks of conglomerate of an average size of 4 feet 6 inches long 'by 1 foot 3 inches high and in alternate courses of headers and stretchers. This seems to have been the usual method of building supporting walls with double thickness of blocks, at this period. We sec the same arrangement in the blocks of the retaining walls of the Theatre at Athens, and in the wall supporting the Temple of Victory there. This front wall was probably never more than a course or two higher than its present level. In excavating in the space on the top of this wall, and between it and the second wall, traces of two small internal buttresses were found.

The foundations of the back wall commence 22 feet above the foundation course of the later steps of the portico, and its present greatest height is 11 courses or about $13 \frac{1}{2}$ feet. Except the two lower foundation courses, which are of conglomerate, this wall is built of beautiful square blocks of limestone with 'bull-nosed' faces somewhat similar to those in the west wall of the Thersilion. The blocks both of this wall and of the outer wall have been joined together with 'swallow-tail' dowels, like those in the east wall. Abutting on this wall, at its west end, is a short cross wall projecting out to the line of the front wall, which latter appears to continue along to join it under the present surface of the ground. About $13 \frac{1}{2}$ feet east of this cross wall, the west wall of the Skanotheka joins, at right angles, the front retaining wall.

Of the two spurs of hill forming the sides of the auditorium, judging from their appearance to-day, that on the cast side seems more artificial than the one on the west; and while the lines of the former must to a considerable extent have been made up by embanking, those of the latter were probably largely formed by cutting out the hill-slope, at least for a considerable height. Hence we find that a difference of construction has been followed in building the two walls; for while in the former case it was probably more convenient to build a thinner wall with iuternal cross stay walls at intervals and external buttresses, in the latter, cross walls of any considerable length could not so easily have been formed, especially low down, and so a greater
general thickness was resorted to. Of course in the case of the Skanotheka it would presumably have been very inconvenient to have had external buttresses at all on its south side, and this also formed an additional reason for making the wall thicker; and the same reason would have applied to the upper wall, if, as we shall endeavour to show, the space between the two walls was used as a way of access to the theatre.

It seems not at all improbable that there was an access to the theatre on this west side as well as on the east, at what we have supposed may have been the level of the lower diazoma. This access would have started from the higher level of the ground at the west end of the Skanotheka and, passing along the inside of the top of the outer wall which was possibly finished with a parapet, it must have entered the theatre at the east end of the inner wall. The third course of the inner wall is of limestone and projects slightly so as to form a basecourse, which would have been seen, over the two lower courses which are of conglomerate and purely foundations. The bottom of the projecting course gives us the probable level of the terrace between the two walls, a level which almost exactly tallies with that of the cill in the east wall. This terrace was probably level and there must have been either a sloping way or a flight of steps up to it at its west end, in the space between the end wall of the Skanotheka and the cross wall projecting outwards at the west end of our inner retaining wall. An access to the main diazoma on the west side was probably obtained round the back of the west spur of the auditorium, above the level of the top of this inner retaining wall.

## (F). The Parodos and the Skanotheka.

In this theatre there is only one regular parodos, as at Taormina, and it occupies the space in front of that part of the east retaining wall, extending from the pedestal next the orchestra to the first cross wall outwards 71 feet east of it.

It is quite possible that there may have been gates of some description about this position, as at Epidaurus, etc., but, so far, nothing has come to light. ${ }^{24}$ If gates existed it is likely that there would have been a wall or fence of some description connecting the south-east corner of the Thersilion with the gate pier nearest to it. It is difficult to fix accurately the relative levels of the ground outside at this point, but it must have been at least 3 feet 6 inches or 4 feet higher than the orchestra. This would give a slope downwards to the Orchestra of from 1 in 15 to 1 in $13 .{ }^{25}$

On the west side of the theatre, in the place which would naturally have been occupied by the other parodos, we find a deep space enclosed by walls on three sides and open on the side towards the orchestra. Inscribed roof tiles, ${ }^{26}$ found on this spot during the excavations, have enabled it to be identified as the 'Skanotheka,' the storage place for the scenery, the 'scene dock' of a modern theatre. This arrangement appears to be contemporary with the building of the theatre, as the whole scheme of planning of the west retaining walls seems to be based on the necessity for providing such a space, and it would have been almost impossible to have satisfactorily arranged it afterwards in its present form. The north and west walls are of similar construction to the south wall-the front west retaining wall of the theatre-and they are all bonded into one another, the lines of the courses corresponding. The west wall is a retaining wall formed, when the space was cut out of hill-side, to support the higher ground behind. The north wall has a row of buttresses, alternately of single and double width, spaced at regular intervals all along the outside, and was an external wall. How these buttresses were finished at the top outside need not concern us here, as we have no evidence on which to restore them; neither need we enter into the period and probable use of the very rough late wall along the outside of this and joined to it at each end.

[^20]steeper than $I$ have assumed. There was therefore, probably, a level piece inside the gates, if such existed, before the downward slope commenced or else the ground was higher outside than I have reckoned on.
${ }^{26}$ These tiles, judging from their shape, seem to have been the ordinary small tiles used to cover the joints of the broad flat tiles of the roofing.

Parados and
Skanotheka. (Plates V., Vil., VIII., IX., and X.) Parodos. On one side only. Question of gates.

Terrace between
front and back walls.

Access to main diazoma.

Slope of Parodos.

Skanothera. Position of this.

Identification.
Contemporary.

Walls.

West wall.
North wall.

South wall.

Finish at ond.

No attention to be paid to holes and grooves in south wall.

Construction of walls.
Stucco coating.

Levels of floors.

Subdivision.

Row of slabs.

Never a wall.

Position of this row.

Scenery along front of Portico.

Length of row of slabs.

Correspondence with length of Portico.

Levels of slabs.
Levels of stones marked E .

## Slabs connected

 with storage of scenery.The front west retaining wall of the theatre is carried along eastwards towards the orchestra as a south enclosing wall to the Skanotheka beyond the point where the cross wall connects this front wall with the back retaining wall, and it finishes opposite the line of the end of the north enclosing wall of this space and is joined to the lower single west retaining wall of the theatre, by a short return at right angles, which abuts on it at a point about $7 \frac{1}{2}$ feet from the pedestal at its end. This piece of wall appears to have been constructed of one thickness of blocks and to have had buttresses on its outside - the face towards the theatre-much in the manner of the north enclosing wall.

No attention need be paid to the long hole, eight courses down from the top, near the west end of this south wall, as this has probably been caused by the roots of a large tree misplacing some of the stones here-this spot having been the level of the ground before the excavations were commenced-nor need the vertical groovings, which are to be found in various places, be considered, as they have been formed by the stems of climbing shrubs which have pressed into the wall during the course of their growth.

The walls of the Skanotheka are built of the squared blocks of rough conglomerate and, as this is not capable of being worked to a sharp arris at the angle, cach stone has been coated with stucco to give it a flat surface and each joint has been defined with a splayed arris (see Fig. 35). The surface of the conglomerate just shows in the centre of many of the blocks, although originally it was probably completely covered and has weathered to this extent. The blocks of conglomerate in the east retaining wall were probably coated in a similar way. This stucco coating stops on the north wall at a line level with the top of the slabs of the low foundation wall in the Skanotheka, which seems to indicate that there has been a floor of some sort at this level. On the opposite wall-the south wall-there are indica-

Fig. 35. tions of a similar finishing to this coating at a line about 18 inches higher than that on the north wall; and about a foot below this line is the foundation course of the south wall, consisting of a row of rougher stones. This would lead us to suppose that there were two levels of flooring in the Skanotheka.

How this place was divided up, if it was subdivided at all, it is almost impossible to say. There may have been a series of dressing-rooms against the south wall at the higher level, divided by thin partitions or screens and occupying about half the width, and these might have opened down into a kind of general 'Green Room' at the lower level, but this must remain pure conjecture. Even the low foundation of slabs which runs along the length of the Skanotheka does not help us much, as it does not seem to have been ever anything more than it is at present. There are no traces of bonding into the end wall, above it, and this, combined with the nature of its top surface which is not carefully dressed level, seems to preclude the idea that it ever carried a wall at all. A reference to the plan (Plate VII.) shows us that the axial line of this wall is just outside the line of the Portico, that is to say, about 10 inches beyond the face of the first later step, or 4 feet beyond that of the original step. It is quite possible that, when the theatre was used for dramatic representations, a line of scenery was placed along the front of the portico at about this position. This was probably supported behind by a series of temporary wooden stays and rested perhaps on a wooden cill. A further reference to the plan shows us that our row of slabs in the Skanotheka, which stops, at the orchestra end, about 21 inches within the line at which the north and south walls finish, has a length of 113 feet 10 inches. The exact length of the lowest step of the portico is 113 feet. Further, for about one-third of its length-that nearest the orchestrathe level of the top of these slabs is not more than 2 or 3 inches above that of the bottom of the first later step of the portico, and the level of the remaining two-thirds is about 10 inches higher. ${ }^{27}$ We ought also to observe, in this relation, that the level of the top of the curious group of three stones, marked $E$ on plan, which lie just outside the line of the end of the Skanotheka walls, is exactly that of the top of the slabs at this end. This evidence seems to lend itself very strongly to the idea that this row of slabs had a very direct connection with the scenery or, in other words, that it probably formed a foundation for supporting and storing it when the theatre was not in use for dramatic representations.

[^21]It is unlikely that the scene would have been in one piece in its entire length; it may have been in at least three pieces, and it was probably not considered necessary to keep the whole of it, when stored in the Skanotheka, at the level at which it would have stood in the orchestra, and so one-third was kept down, in order to be able to run it out easily, and the remainder was lifted up a step higher inside, hence the drop in the wall. This probably applied also to the floor of the Skanotheka, which would not have been excavated to a greater depth than was actually necessary and might have been of different levels in its length.

The three stones behind the stylobate wall, with the holes in them (see Plate XI.), probably had their use in connection with the shifting of the scenery. Three pits, of which these formed the foundations, may have been sunk in the floor of the portico and in them may have been fixed, when required, the posts for supporting the tackle for moving the scene.

It is of course quite possible that the foundation of slabs in the Skanotheka may have belonged to the scene arrangements of a temporary stage or of the later proscenium as well, or may even have been constructed in connection with this latter, although that is hardly likely. The opening or break in the foundation of the west return wall of the later proscenium, opposite the end of this row of slabs, is not without significance in this connection, although of course it may be purely accidental-the stone having perhaps only been displaced. If it was left intentionally open, it would have enabled the scenery to have been run along and then raised up to the level of the top of the stage or proscenium, to which it may have formed a background in front of the pillars of the portico. I, however, merely mention this as a possible idea, and must leave the burden of arguing out the points for or against its probability to those who have more acquaintance with the arrangements of the scene in a Greek Theatre than I can pretend to have.

Of the curious arrangement of stones, marked E on plan (Pl. VII.), and which lies just outside the line of the ends of the Skanotheka wall, it is necessary to say a few words. These may probably also have had something to do with supporting a part of the mechanism of the scene, but whether they did this or not it is likely from their positions that they played some part in the arrangements for closing in the end of the Skanotheka towards the orchestra. Similar foundations are found at Eretria on each side of the scene buildings, and there they appear to have had a very distinct connection with the scene.

The track, which runs in a diagonal line across under the floor of the Skanotheka, possibly held a tile drain similar to the one found in the Temenos of Zeus Soter or like the one used to carry off the water from the gutter of the Theatre at Eretria. In its present form it is quite late, perhaps of the Roman period, as a branch of it comes from the inside of the later proscenium, and as the stones composing its sides show traces of mortar. It is probably a repair to the earlier drain which carried away the water from the gutter round the orchestra. There is however no direct connection now remaining between the two. ${ }^{28}$ A curious point to notice about this drain is the fact that, unless it has been deeper than we have been able to conclude from the remains now existing, the average level of its cill, where it passes through the Skanotheka, has been slightly above that of the cill of the gutter round the orchestra, and it has no definitely apparent slope either way. The only possible explanation of this, until further evidence is forthcoming, is that the drain was made to carry off the water of an original and perhaps shallow gutter in the theatre, which may have existed before the present benches and gutter were added; and that as the drain had been constructed in its whole length with a fall to suit this earlier gutter, which might easily have been from 1 foot to 18 inches above the level of the present one, it was simply altered by being run out at the lower level, without any fall, from the end of the later gutter till it met its old line of slope-perhaps at the north wall of the Skanotheka beyond which point it has not been traced.

The Skanotheka was undoubtedly covered in, as we know from the inscribed tiles which have been found, but no traces remain, on the south wall, of corbels or holes for beams. Doubtless these were quite near the top of the wall, where the courses are now incomplete. Without more evidence it is useless to discuss the arrangement of the roofing.

[^22]Arrangement of scenery.

Difference of
levels accounted for.

Stones behind stylobate used in connection with scenery.

Slabs may have
belonged to arrangement of scenery for stage,
or to later
proscenium.
Break in end wall of proscenium.

Scenery raised to higher level.

Arrangement of stones marked $\mathbf{E}$.

Part of mechanism of scene. Use in closing end of
Skanotheka.
Similar stones at Eretria.
Drain track.
Probably of
Roman times.
Repair to earlier drain.

Difficulty of level.

Explanation of this.

Skanotheka was
covered in.
fop

Access from outside.

Between the north wall of the Skanotheka and the portico is a space measuring 7 feet 6 inches to the end of the first later step. This must have served as a way of access to the Skanotheka. The space between the western part of the south wall of the Thersilion and the north wall of the Skanotheka-a distance of about 15 feet across from the face of the former wall to the buttresses of the latter-forms the means of communication between this point and the outside. There may perhaps have been gates across this passage way opposite the south-west angle of the Thersilion, but no traces of such have been discovered. It seems hardly likely that this way was used as a general means of access to the Theatre, although it may have been used for that purpose also.

Later Proscenium. (Fiates V., VII., SX., and XI.) Projection of this.
Of column fronted type.

Stylobate.

## (G). The Later Proscenium.

Projecting a considerable distance into the orchestra from the face of the portico was a Later Proscenium, the stylobate of which still exists. ${ }^{20}$ It has been of the column fronted type and was somewhat similar to those found in other Greek theatres, such as at Epidaurus, Athens, Zea, Eretria, and Oropos, but its position in relation to the curve of the auditorium is much further forward than those at any of these places.
The stylobate consists of two courses of slabs, one above the other, of limestone similar to that in use elsewhere, but with less white and more of a purple tone in it. These stones, as far as can be judged from the nature of their detail, have, presumably, belonged to a small building of about the same period as our portico, and have been re-used here.
Old slabs re-used. They consist principally of stylobate slabs, and have fillets on their edges somewhat similar to those on the original steps of our portico. We are able to make out that they came from a stylobate of at least two steps, the lower one with a $6 \frac{3}{4}$ inch riser and a $10 \frac{1}{4}$ inch tread, and the upper one with a $7 \frac{1}{4}$ inch riser and measuring about 2 feet 7 inches across on the top, and in their original position they had been joined together with $F$ cramps, much in the same manner as those of our portico have been. On the east return of this proscenium foundation there is also an architrave block of the Doric order, with remains of guttae, \&c., and evidently from the same building. This measures 3 feet $5 \frac{1}{4}$ inches across the face-the size from centre to centre of one triglyph-and is 1 foot $10 \frac{3}{4}$ inches deep.

These stones, when re-used for the stylobate of this proscenium, were not cramped together together. in any way nor were they ranged in any particular order, care having been taken merely to have a continuous straight line along the front edge of the upper row.
Cill at west return.

Probably also at east. level. This is the position in which a door would naturally have been placed in order to get direct communication between the back of the proscenium and the Skanotheka; and in the corresponding position to this on the east return, where the top foundation course has disappeared, there may have been another door giving access from the parodos.
Drain. . The drain gulley, on the inside of the south-west corner of the wall, shows that provision had been made for draining this enclosure.


Fig. 36.-Restored Plan of the Colum Front.

Front of proscenium.

Level of stylobate.

The front of this proscenium consisted of a row of fourteen columns (see Fig. 36) standing between antae at either end, and with a short piece of plain wall between these and each corner, and in this respect it especially resembled the one at Eretria, as distinct from those at Epidaurus, Athens, and Zea, which had projecting wings, also with columns, at each end. The level of the top of the stylobate is slightly lower than the underside of the
first step of the portico, by about 2 inches, and the level of the orchestra in front must have been several inches below this again as this stylobate seems to show an apparent step towards
the orchestra side. The columns were all fixed into the stylobate by iron dowels, having a


Fig. 37.-Details of Pillars. section of $\frac{3}{4}$ inch by $\frac{1}{2}$ inch, run in with lead; and they

Columns fixed with dowels. were spaced equally along the front at a distance of 5 feet $10 \frac{1}{2}$ inches from centre to centre. ${ }^{30}$ The marks of this spacing are still visible in the shape of a nick cut into the edge of the stylobate opposite the spot where each column has been fixed. The columns, which were of marble, were built up in pieces of various lengths and had the usual fillets on each side for adjusting the 'pinakes,' and, while the columns taper slightly towards the top, these fillets slope slightly outwards, so that the openings must have been about $1 \frac{1}{2}$ inches narrower at top than at bottom (see Fig. 37). The longest piece of a pillar remaining measures 7 feet $8_{4}^{\frac{1}{4}}$ inches, and it has two dowel holes on the top. Probably this was a monolith and a capital rested immediately on the top of it, but no remains either of this or of the entablature have been found.

These proscenia must have been all more or less alike, so it is very probable that this one resembled to a considerable degree that of Oropos-the most perfect example left-only, judging by what remains, it must have been somewhat rougher and coarser in detail. Five portions of columns were found, practically in position, on the stylobate, thus tending to show that this proscenium must have been in use till quite late. I am informed that these must however have been lifted, as in every case the dowels had been removed. The pillars were intended to have been fluted, but this has never been carried out and only about $2 \frac{1}{2}$ inches of a start round the bottom is so cut, and, above this, the surface is roughly dressed (see Fig. 37). I carefully examined all the stones on the front of the stylobate of this proscenium to see if there were any marks of cuttings or pin holes for door hinges, but I could discover no signs of such sinkings.

## ( $G^{1}$ ). Appendix.-Note on the Lower Foundation Course of the Later Proscenium.

During the spring of 1892 a rather remarkable discovery has been made on the line of this proscenium, particulars of which have been handed to me by Mr. Ernest Gardner, and which will be referred to more in detail in another chapter, but, as it has a more or less direct structural bearing, a few comments may be made on it here. The discovery relates to the stones forming the lower course of the stylobate of this later proscenium. Some of the upper stones on being turned over revealed, on the top of the course below, traces of an incised line parallel with the front face, and behind this line, at intervals, oblong sinkings as if for posts. This discovery put a special significance on the stone with a groove in it which was lying to the west of the proscenium and to which no particular importance had originally been attached, and on excavating on the other side, to the east of the proscenium, a stretch of similar grooved stones was found about 21 feet long and sloping up the parodos at an inclination of about 1 in 10. These stones have been drawn in on the plans of the Theatre (Plates V. and VII.). It was, I understand, considered inadvisable to turn over all the stones of the stylobate, but a careful plan was made of what had been discovered and this is reproduced (Pl. VII., Fig. 2). It is not claimed that this row of slabs is contemporary with the Theatre, but it is at any rate earlier than the later proscenium which was constructed over it, and it undoubtedly shows an arrangement, either for a continuous scene at this point, or for a temporary wooden stage supported on posts and boarded in front. Judging from what has been exposed, the posts seem to have been spaced at intervals of about $10 \frac{1}{2}$ feet apart, but not altogether regularly. The capping stone, which had been re-used for the stone at the west end, shows a contour apparently of later Greek or even Roman times. As the edges of the slabs are all dressed to a fair line along the front, it is evident that this front line must have been at least exposed if it did not stand up an inch or two above the ground

Appendix.
(Plate Vil.,
Fig 2.)
Further foundations
discovered.
before it. As the whole foundation is cvidently of a somewhat late time, its discovery need not perceptibly affect any argument in favour of cither a contemporary scene, or a stage further back against the portico.

Miscellaneous
Fragments, etc.
Probable Roman stage.

Alteration in positions of pedestals.

## (H). Miscellaneous Frayments, etc.

In front of the west end of the later proscenium are a few slabs which may indicate the corner of a still later erection, perhaps a regular Roman stage, which would have occupied an analogous position to the one in the Theatre at Athens; but, although these slabs are sufficiently regularly laid to warrant such an assumption, they are too fragmentary to be relied on as conclusive evidence of the existence of such a structure. The positions of the two pedestals just in front of this line, the rough irregular way in which they have been set down and the fact that their base stones, especially in the case of the one on the west side, do not correspond in level with the kerb of the gutter adjoining them, all point to the likelihood of their having been set there in quite late times, in fact to their having been shifted from other positions in order to make room for such a stage.

Scattered fragments

Voussoir stones.

Cornice stones.

Coping stone rith inscription,

Small circular pedestal.
nfinished drum of column.

Scattered about in the orchestra and its vicinity are a number of stones of vanious descriptions, the original positions and uses of which are more or less a matter of conjecture. It is well that these should be recorded here, so that in case of further evidence turning up in the future, or by reason of finds of a similar nature in other theatre excavations, their definite place in the fabric may yet be discovered.

At the east end of the proscenium lies a large slab which has a semicircular piece cut out of it (Fig. 38). This slab, which is of marble, seems to have been originally used for some other purpose-perhaps as part of a pavement or stylobate-and to have had the semicircle cut into it later, probably to serve as the lintel of a circular headed opening. In front of the proscenium are lying three voussoir stones of an arch, with fascias and mouldings worked on both faces (Fig. 39). They are of limestone, have been dowelled to-


Fig. 38. gether, and are of careful workmanship and refined detail. They have belonged to an arch with a radius of about 4 feet 6 inches-perhaps the entrance to the parodos. Several pieces of small cornices are also lying about. Two varieties are shown on Fig. 40. It is difficult to ascribe an approximately exact date to either of these. One or other of them may have belonged to the cornice of the proscenium. There are also two pieces of moulded coping stone (Fig. 41), one of which has the inscription IEnIEKA Xalpe cut on its face. These have evidently formed part of a continuous basis and have been joined together by cramps. They are of marble and the contour of the moulding and the quality of the workmanship suggest that they have belonged


Fig. 39. to an example of a good Roman period. On the stylobate of the later proscenium a piece was found standing of a late small circular pedestal of the form shown in Fig. 42.

Lying close up to and nearly in the centre of the face of the proscenium, is a piece of an unfinished circular drum of a column, which has been dressed fair for about $2 \frac{1}{2}$ inches down from its top bed, and, below that, roughly cut. It has two dowel holes, each 2 inches square, cut in on the top bed and it is broken away on its underside. Its present depth is 1 foot rhaps belonged
to Thersilion.
$10 \frac{1}{4}$ inches. There are other stones lying about, notably some long plain blocks, one 9 feet long, and another 6 feet long, but the above are the only ones which have sufficiently

Other stones. $\cdots$ 隐


Fig. 40.


Fig. 41.


Fig. 42.


Fig. 43.
marked characteristics to warrant our noticing them in detail. A drawing is also given (Fig. 43) of one of the red terra-cotta roofing tiles, which is now preserved in the Museum.

## § 4. The Greater and Lesser Altars.

About 127 feet west of the Thersilion, and parallel with its west wall, are the remains of a large oblong basis which seems undoubtedly to have beeu an altar (Fig. 44). It measures 36 feet 3 inches long by 6 feet 5 inches broad, and its north end is about 4 feet south of the line of the north wall of the Thersilion (see Pl. V.). The level of the top of the cill is $11 \frac{1}{4}$ inches below the top of the foundation course of the later steps of the Portico, or 5 feet $8 \frac{1}{4}$ inches under the level of the stylobate of the same.


These remains consist of a projecting cillcourse of squared stones, and on the top of this a course of upright slabs consisting of triglyphs and metopes. Over this there was probably a cornice or coping which has entirely disappeared. The material is conglomerate and the exposed surfaces, both of the cillcourse and of the upright stones, have been covered over with a coating of stucco about $\frac{1}{4}$ inch thick, traces of which are still to be seen. As far as I was able to observe, none of the stones were cramped together.

The cill stones are in comparatively regular lengths, a joint coming under about the centre of each metope. The upright stones also are of equal size, each stone consisting of a metope and a triglyph, and their average thickness is about 1 foot. The inside of the altar, behind these stones, seems to have been filled in with large river pebbles. There seem to

Remains.

Material.

Description of details.
Inside filling.

No cross walls. have been no cross walls inside, and this goes to show that the basis could not have been used to support sculpture or other such heavy weight and must therefore have been an altar.

Triglyphs mado
for this.

Reasons. of triglyphs.

Coping.
retope and tri;lyph treatment not unusual.

Lesser Altar.
c

It seems almost certain that the triglyphs and metopes were made for this position and were not removed from some other structure. Many things point to this conclusion. First, the materials; for if they had been used structurally elsewhere they would have been made of better material, such as tufa, if coated with stucco, or limestone: second, their construction and especially the thinness of the stones; for if they had originally belonged to an entablature they would have been much thicker. Then again we find that the metopes are equal in width along each side, while at each end they are 5 inches wider. This also, I think, shows that they were made for this position, and that the end ones were made wider on purpose. The triglyphs are of the later form. They are long and thin, being in the proportion of 7 in height to 4 in width. This is the same proportion as those of the Stoa of Philip, while those of the Portico are 6 to 4. The tops of the sinkings are no longer cut up behind but are splayed down, and here again they re-


2-20
elevation.


Fig. 45.-Derail of tee Greater Altar. semble those of the Stoa of Philip. The line of the upper fascia is at the same level on the triglyph as on the metope-also a later characteristic. The metope is $1 \frac{1}{2}$ inches higher than its width. The detail (Fig. 45) shows the slabs as they exist without the stucco, and due allowance must be made for this, on comparing it with other examples, as, with the stucco coating, the sinkings would not appear of the exaggerated width that the drawing indicates. It is likely that the cornice or coping was of limestone, but, whether this took the form of a complete Doric cornice, or was merely a simple moulding, it is impossible to say without evidence.

This metope and triglyph treatment was not unusual on altars. Many altars are so represented on vases (see J. H. S., vol. xi., pl. VI., and p. 226), and there is at Olympia a circular drum about 4 feet in diameter which is so treated and which was perbaps part of an altar.

About 190 feet east of the Thersilion, and very nearly in a line with the centre of its east wall (see Pl. V.), is another but smaller basis, also evidently that of an altar (Fig. 46). It measures 11 feet long and 6 feet broad. The level of the top of its cill is 7 feet 7 inches under that


Fig. 46.-The Lesger Altar. of the stylobate of the Portico of the Thersilion, or 2 feet 10 inches below the top of the foundation course of its later steps. This basis has been built of plain conglomerate blocks resting on a cill of the same material. The cill and some of the blocks remain in position, but the coping has disappeared. These stones have also bad a coating of stucco. consist principally of foundation walls; it is possible however from an examination of these to get a good general idea of the extent and arrangement of the buildings, although, on account of the
paucity of architectural fragments, the nature of the superstructure must be left almost entirely conjectural.

The material employed has been mostly conglomerate. ${ }^{31}$ It has been used for the foundations generally, and also for the upright walling, the surface of which has had a stucco coating.

The site lies nearly east and west. The main entrance was on the east side, and was approached from the lower level of the ground outside by an inclined planc. This led up to an outer porch or propylaeum projecting from the main face of the eastern wall. In this wall was the entrance, consisting presumably of three gateways and


Frg. 4t.-N.E. Corner of Temenos Wall. opening into a double stoa which went round a square open court. Cutting through this stoa in the centre of the west side, opposite the entrance, was the temple itself, the portico of which projected into the court. In the middle of the court, in front of the temple, stood a large oblong basis. Round the sides of the court ran an open gutter for holding water, which was brought to it, from a lead pipe outside the Temenos on the north, by a tile drain which ran underneath the floor of the stoa. 'To the outside of the north wall are the remains of a piece of paving in which the lead pipe was emborlded, and in the north wall, beside this, a dressed cill nearly level with the pavement.

The remains of the main enclosing walls of the Temenos (see Fig. 47) consist of a level cillcourse running all round, the top of which has been about level with the floor of the stoa. It is built of blocks averaging 3 feet 8 inches wide by 10 iuches deep. These blocks have been joined together by swallow-tailed dowels, two in the width of the block. The wall over this is from 3 feet to 3 feet 3 inches thick, ${ }^{32}$ and all that remains to-day is the course of upright blocks which is 3 feet 2 inches high. The blocks average 4 feet 2 inches in length, and there are two in the thickness of the wall. These blocks have also been connected with one another by swallow-tailed dowels. Their backs do not seem in all cases to have abutted close to each other, and there is frequently a space of several inches between them. These upright stones show a sunk margin round three sides of their face. This margin measures on the rough 3 inches in width, and the panel in the centre projects about half an inch beyond their face. On the finished face of the stucco the margin has been from $2 \frac{1}{4}$ inches to $2 \frac{1}{2}$ inches wide.

The foundations only of the inclined plane and the propylaeum, forming part of the main entrance in the centre of the east enclosing wall, now remain. This sloping way must have been very similar to the one belonging to the Propylaeum of the Hieron at



Fig. 48.-Cappixg. Epidaurus. The level of the foot of the sloping part of its foundation is 6 feet below that of the floor of the stoa, and its inclination upwards is 1 in $5 \frac{1}{2}$. At the foot of its north foundation wall, the only one which has been completely excavated, was found a piece of white limestone capping. This is not in position ; it may have belonged to a pedestal or an anta. The mouldings go round three sides of it, the fourth side is quite plain (Fig. 48).

The east wall of the Temenos below the level of the stoa floor, especially in its southmost portion, is carefully built of squared blocks in regular courses, and looks as if it had always been inteuded to be exposed. There are at least three courses under the general cillcourse level built, in this careful and regular manner, and the bottom of the lowest of these is about level with the foot

[^23]material used here-conglomerate-although the walls of the Stoa of Pbilip, which are built of the same material, are thinner than this. The treacherous nature of the foundation must also have been an important factor in determining the extra thickness.

Material.
$\because \quad$ -
Description of arrangement of site.

Enclosing walls.

Upright blocks.
Dowels.

Face of blocks.

Propylaeum and Inclined Plane.

Limestone Capping at foot of sloping way.

East Wall of Temenos.

Front Wall of Pronaos. East wall of Naos

Entrance Doorsway.

Side walls of Temple.

Back wall.

Piers inside
Temple.
juperstructure of Temple wall.
beyond the face of the first step is clearly defined. This line is $3 \frac{7}{8}$ inches in from the edge which is dressed down fair on its vertical face for $4 \frac{1}{2}$ inches and below that point is roughly bull-nosed. The vertical face of the butt joint at the end has the usual dressed margin. This margin measures $3 \frac{1}{2}$ inches wide at the back and front, and $1 \frac{3}{4}$ inches at the top. The limestone course projects 5 inches beyond the conglomerate foundation under, both at the back and front.

In a line with the west face of the court is the foundation of the front wall of the pronaos. This measures 3 fect 10 inches in width and is several courses deep. Further in is the foundation, 3 feet 9 inches wide, of the east wall of the naos proper; and extending between the two were several narrow foundation walls, 1 foot 9 inches wide, for the purpose of supporting the pavement of the pronaos. Portions of four of these are still remaining, and they are built of roughly squared limestone blocks.

Distinct indications of the entrance doorway are seen on the foundation of the east wall; in front are two small projections 1 foot 6 inches broad, one on either side, and these look as if they had been intended to support the projecting blocks of a moulded architrave running round the door. On the inside of the wall, in the centre, there is a piece of foundation projecting about 1 foot. This seems to be of the full width of the doorway and was evidently used to carry the wide door-cill. It is 6 feet 6 inches long.

The foundations of the side walls of the naos also exist, and they measure about 3 feet 3 inches broad. On the south side, the foundation wall is at least 8 courses deep. Jt is, like the others, a well-built wall of squared blocks in regular courses, each course averaging about 1 foot 6 inches deep.

The back wall of the temple has disappeared; there is, however, one stone plying on the inside of the north wall and in a line with the west enclosing wall of the Temenos, but it is extremely doubtful if this is in its original position. It is, howerer, very likely that the temple did not extend further west than this line.

Inside the naos on either side are foundation piers averaging 2 feet 9 inches square, and these are situated in lines about 2 feet 3 inches away from the side walls. Four of them remain on the north side and two on the south. They probably supported internal pillars. On the south side, in the position which a third pier would have occupied, are the remains of a strong foundation runuing in at right angles to the south wall. This may have been merely the foundation for the pier over, and was probably built thus strongly on account of the untrustworthy nature of the ground by its proximity to the deep river bed; or it may have formed, in addition, part of the foundation of a large basis inside the temple, which probably existed as a pedestal for a great figure of Zeus.

A portion of the superstructure of the north temple wall still remains. This consists, on the outside, of upright blocks similar to those on the stoa wall; inside there is a lower course 1 foot 4 inches high, the top of which was probably about level with the temple floor.

Projecting from the west enclosing wall of the Temenos at right angles are two walls 9 feet 9 inches long. One of these is in a line with the north wall, and the other is 14 feet 8 inches south of it; and running northwards, at right angles to the northmost of these two walls, is another wall 9 feet long. There are no traces of an entrance into the Temenos at this corner, and it is almost impossible to say what the purpose of these walls could have been. They may have had some connection with the Stoa Aristandreios, which, according to the description of Pausanias, must have abutted on to our Temenos at about this point. The encroachments of the river bed have however made it impossible to verify this.

In the triple stoa to the north of the temple and, abutting against the temple wall on the line of the inner row of pillars, is a piece of limestone stylobate three stones in length (Fig. 51). It is -2 feet $9 \frac{1}{2}$ inches broad and has dowel holes on top. The two oblong holes on the slab next the wall, look as if they had been used for fixing a square block over-part of an anta, perhaps; while those on the outer block-a square one in the centre, placed diagonally, and an oblong one on each side-suggest that a circular base or pillar had stood here. Between these two sets of dowel holes is the usual raised panel with the rougher top surface and the smoothly dressed margin on either side, which in this case is 4 inches broad. The stylobate blocks are 10 inches
thick and their vertical face is dressed down fair on each side for $3 \frac{1}{2}$ inches. Under the stylobate is a rough foundation course of conglomerate. This stylobate evidently was a continuous one between the temple and the north wall of the stoa, as we find further remains of the foundation still existing. The pillars may have been close together on this line and may have supported a stone architrave, but with the scanty remains to hand it is impossible to come to a definite conclusion regarding this.

At the point marked $V$ on plan, was found a square limestone base 3 feet $0 \frac{3}{4}$ inches square and 1 foot 1 inch thick. This has three holes on the top, one in the centre 3 inches square, and one on either side $\frac{1}{4}$ inch by 2 inches. This block evidently stood on the top of the adjoining foundation pier. At the point marked $W$ on plan, several architectural fragments were found. These consist of a Doric capital (Fig. 52), a fragment of an Ionic base (Fig. 53), and a piece of an attached Ionic semi-column (Fig. 54). They are all of tufa (poros) and have been coated with stucco. To the north of the portico of the temple, at the point marked $T$ on plan, a large slab of limestone was discovered. It measures 4 feet 6 inches long by 3 feet 5 inches broad, and is 11 inches deep. The top has a 2 inch dressed margin going all round and inside this is a raised panel with a rougher surface. The vertical face on every side is dressed down fair for $4 \frac{1}{2}$ inches and the remainder is bull-nosed. There are no holes of any kind on the top. It is very doubtful whether it is in its original position. Adjoining this is another larger stone which is 4 feet 6 inches wide by about 9 feet 6 inches long.

Extent of Stylo-
bate.
Nature of pillars on it.

Architectural fragments.

Limestone slab.

## Restoration must

 is almost impossible to attempt more than a very conjectural restoration of the whole structure.Although the encroachments of the river bed have washed away the south side of the stoa, one is justified in assuming that it existed, as there still remains at the east end a small corner of the inner foundation wall and of the gutter, and on the west side, adjoining the portico of the temple on the south, there is another fragment of the gutter in position. The stoa had a double row of columns, and the inner row, on account of the wide spacing of the pillars apart, must have supported wooden beams which, in their turn, no doubt carried a wooden roof. These columns, it is reasonable to suppose, were, like those in the Stoa of Philip, of the Ionic order, and one of our few architectural fragments-the piece of an Ionic base (Fig. 53)-may have belonged to one of the pillars. The plain square base stone found at V, which, as has been already mentioned, has holes on the top, shows slight traces of a circular line indicating a diameter of about 2 feet $9 \frac{1}{2}$ inches. This is probably the line of the moulded Ionic base belonging to a column which would have measured about 2 feet 2 inches diameter, or somewhat less than those in the Stoa of Philip, and, as the spacing of the columns apart is here slightly less than in that stoa, it is quite natural to assume that the pillars were of a smaller diameter. The small fragment of base found would suit a pillar of about the diameter mentioned. The columns round the court may have been either the same distance apart as the inner ones and like them have supported wooden beams, or, more probably, they were closer together -three bays to every one in the inner row-and supported a stone architrave. This outer order may have been Doric, and the capital found at W (Fig. 52) possibly belonged to one of the columns. It is slightly smaller than those of the Stoa of Philip would have been, and has belonged to a column having a diameter at its base of from 2 feet 3 inches to 2 feet 4 inches.

The outer wall of the Temenos was probably unpierced by windows, and in the centre of the east side were the three dobrways of entrance, the middle one about 6 feet wide and those on either side about 4 feet. The porch beyond was probably closed at sides and may have had a triple opening in front divided by columns, to which access was obtained by the stone-paved sloping approach beyond.

South Stoa.

Stoa generally.

Nature of inner columns.

Nature of outer columas.

Outer mall.
Entrance doorways.
Porch.

Portico of Temple.
The portico of the temple was probably hexastyle and may have been also of the Doric order, but of this we bave no proof. It has had a stylobate of three steps giving a width of
Pronaos.

Doorway. Piers inside. about 3 feet on the top for the pillars to rest on. ${ }^{33}$ Four columus in antis probably separated this portico from the pronaos. The pavement may have been level through to the door, where there was possibly a low step, or this step may have rum along the front of the pillars of the pronaos, but on this point we have no direct evidence. The door into the temple has been about 6 feet 6 inches wide. ${ }^{30}$ The piers in the naos on either side suggest rows of pillars, or they may have merely supported pedestals, but here again we have no direct evidence to help us.


Fig. 55.-Conjectural Restoration of the Temenos.

[^24]The continuous stylobate to the inner row of columus in the triple stoa at the west end of the Temenos suggests the probability that here the pillars may have been closer together, like those round the court, and that this part of the stoa may have been enclosed with doors or grilles Attached column, and used for some special purpose. The piece of attached Ionic semi-column, found at W (Fig. 54),

[^25]the pillars are about 2 feet 6 inches diameter between the flutes at their hase.
${ }^{36}$ This is the width of the doorway at Lycosoura.
might have been part of this arrangement, although it is hardly likely, as it is so very small, unless, what is not improbable, this end was two stories in height. It is much more likely that it belonged to the exedra on the north side where the cill is-if exedra it has been-and was used there much in the same manner in which we find columns of similar detail employed in the Exedrae of the Stoa of Philip. Moreover the diagonal dowel hole in the centre of the stylobate of the inner row suggests circular pillars there, although there are no traces of a circular weather line as is the case on the detached base stone at $V$.

It is practically impossible, with the scanty evidence before us, to give an idea of the date of this structure. The general construction and the materials are much the same as what we find elsewhere on the site of Megalopolis. On the small portion of the limestone foundation of the portico stylobate we sec that the $\square$ cramp has been employed as in the later work in the Thersilion Portico. In the conglomerate the swallow-tailed dowel appears to have been generally used, as in the retaining walls of the Theatre. The scanty architectural details, from the Nature of arehinature of their lines, point to a later rather than an earlier period in the history of Megalopolis. How late, it would be rash to say. The character of the detail of the Ionic base is similar to that of the one in the Stoa of Philip. The contour and proportion of the Doric capital indicate a later type than that of the Thersilion Portico. The only clue to an approximate date is obtained from the description in Pausanias, by the names there given of the sculptors of the statue group. And while this might fix the period of the erection of the statues, it need not necessarily include the whole structure, which may have been in existence before that time. I will, however, leave this to be discussed elsewhere.

## §6. The Stoa of Philip.

Although the whole area of this stoa has not been completely excavated, enough has been cleared to enable its extent to be seen, and the nature of its plan to be worked out. The remains comprise principally, the foundations of the stylobate, a portion of the stylobate and pillars at the extreme south-east corner of the front, the lower part of the side and back walls, and the foundations of the internal rows of pillars, with, in a few instances, the bases of the columns still in position on their top. The stoa has consisted of a long colonnade of Doric pillars in front, having a projecting wing at each end; inside these, were two rows of pillars of the Ionic order, and at the sides and back were walls. Attached to the back wall were two exedrae, which were connected with the stoa by openings through this wall. Conglomerate is the material which has been used for the foundations generally, and for the walls mainly, and white limestone has been employed for the stylobates, bases, and pillars. The capitals of the Ionic pillars have been made of marble.
'The stoa lies almost east and west, and faces south.
The enclosing walls have been built in the usual way. Resting on the foundations is a cillcourse, the top of which has, practically, been the floor level. It is about 2 feet 9 inches wide and 9 inches deep. Immediately above it is the course of upright blocks, two in the thickness of the wall. This course measures 2 feet 4 inches across, and is 2 feet 8 inches high. The blocks, which average 3 feet $11 \frac{1}{2}$ inches long, are made of conglomerate, and have been panelled on the face and coated with stucco. They have been joined together at top by H cramps. Above this is a limestone course $6 \frac{1}{4}$ inches thick and 2 feet $6 \frac{1}{2}$ inches wide. The blocks composing this are also panelled on face. Nothing exists to-day of the walls above this level. There are certain slight but apparent variations in the construction of these walls which may indicate later repairs.

The foundation of the stylobate of the external pillars is built of conglomerate slabs. This foundation has an average width of 5 feet, and both $\longmapsto$ and $\longmapsto$ cramps have been used in its construction. In the west wing it has a depth of at least five courses below the level of the first limestone slab of the stylobate (see Pl. XV. Fig. 3, O). It is extremely probable that the level of the ground in front has always been, as we find it to-day, considerably lower at the west end of the stoa than at the east, and that the face of this foundation was intended to be seen. The upper course is built of single stones in the thickness of the wall. These are about 3 feet long and 1 foot 2 inches deep, and have been joined together by $\longmapsto$ cramps. The next

Stoa of Philite.
(Plates XV. and
XVI.)

Site not complete-
ly excavated.
Nature of remains.

## Description of

Stoa.

Materials.

Direction.
Enclosing Walls.

## Variations.

Foundations of Stylobate.
course has two stones in the thickness of the wall. It is 11 inches deep, and the front stones are 3 feet 6 inches long, and 1 foot 7 inches wide. There have been no cramps. The course helow this again is 12 inches deep. The lowest courses have not been completely cleared. The face of each course is set in slightly from the one under it. In the case of the two topmost courses, this setting in is an inch wide, while at the third course, it is as much as 4 inches. It is very likely that thesc courses may have been faced with stucco, although we have no evidence on the point.
tylobate of Enst
Wing.

First step.

Indiscriminate se of two varieties of cramps.

First step continued.

Second or top stop.

Broken stone Itered and used up.
'avels on top of Stylobate.
itt ends of slab. The butt ends of the stylobate slabs have the usual dressed margin round the edges and the inner surface is very rough and sunk in. This margin measures 4 inches in width at the sides and 2 inches along the top. The top of the stylobate is level with that of the continuous cillcourse of the walls.

The intermediate pillars are 4 feet $1 \frac{1}{2}$ inches apart-measured to the inside of the flutes-but the space between the angle pillar and the second one is only 3 feet $5 \frac{1}{2}$ inches. They have a diameter at the base of 2 feet $s$ inches between the flutes, and there are twenty flutes in the circumference. The portions of these pillars still in position on the stylobate, five in all, vary in height and they have all got level beds on top. The longest,
Anta. the angle one, is 5 feet $2 \frac{3}{4}$ inches high and the shortest is 3 feet 10 inches. A portion of the anta on the east return is also in position. It consists of a plain oblong block of white limestone 4 feet $10 \frac{1}{2}$ inches long, 2 feet 11 inches wide, and 1 foot $5 \frac{1}{2}$ inches thick. Its inner edge is flush with that of the stylobate. The east wall finishes against it at the back, and it is curious to observe that on the upper part of this back face there is a roughly dressed and slightly projecting panel. The surface of the columns is not dressed quite smooth but shors tool marks as if left from a toothed chisel. This dressed face is quite clear and fresh and it is similar to that so clearly seen on the later steps of the Thersilion Portico. The top step of the stylobate has the same surface, while that on the panel of the lower step is somewhat rougher. The horizontal beds of these columns are dressed smooth for about 8 inches in from the face and beyond this the circular part in the centre is slightly sunk and roughly dabbed. Two dowel holes are cut in each bed opposite to each other. They measure about
$2 \frac{1}{2}$ inches square by $1 \frac{1}{4}$ inches deep and are 3 inches in from the face of the tlute (see Plan in Fig. 57).

The foundation piers of the internal columns have an average size of 4 feet 6 inches square. They are built of oblong conglomerate blocks, two to each course, and these blocks are connected by $\longmapsto$ cramps. On the top of these piers stood square limestone slabs, some of which still exist and measure 3 feet 1 inch square and 8 to 9 inches deep. Their vertical faces are dressed down fair for about 4 inches and the remainder is bull-nosed. Their top surface has been about level with the floor of the stoa. The circular moulded bases of the Ionic pillars (Pl. XVI.) rested on these slabs. Five, at least, of these bases still remain in position and several portions of the columns lie contiguous to them. The lower diameter of these columns measures 2 feet $3 \frac{3}{4}$ inches over the flutes of which there are 20 in the circumference. The horizontal beds at the joints, like those of the columns in front, have a smoothly dressed surface round the outer part and are rougher inside. They have also got two dowel holes cut into each and the dowels have been run in with lead, the channels for pouring in the lead, which were cut from the holes to the face of the columns, still existing. The fluting for a certain height up from the base takes the form of convex reeding very little cut in; above, it has the usual Ionic form. The height of this reeding has been ascertained from a length of pillar which was found lying where it had fallen beside a base still in position. It measures about 5 feet 7 inches long from the top of the moulded base.

The openings which connected the exedrae with the stoa have limestone cills, the tops of which appear to be about 7 inches higher than the general floor lerel. On each side of these openings there have been plain antae, the base stones of which still remain in position in the east exedra. They measure 2 feet 11 inches broad by 1 foot


Fig. 56.-Pillars of Exediat. 3 inches thick by $9 \frac{1}{4}$ inches deep. They have each got two dowel holes on the top with channels cut from them to the face for running in the lead. The intermediate piers have taken the form of attached semi-columns (Fig. 56). In the east exedra the bases of these also are in position. They measure 2 feet $11 \frac{3}{4}$ inches by 1 foot $11 \frac{5}{9}$ inches, and are 11 inches deep. The front part under the half column has a base moulding; the back portion is plain. There are also, on the top of these, two dowel holes with channels for running in the lead. One piece of a pier lies near them. It measures 2 feet 5 inches by 1 foot $5 \frac{1}{2}$ inches, and is about 4 feet 2 inches long. The top end is somewhat broken, but shows the bed; the bottom end is much more broken and does not indicate the bed at all. The semi-column shows, in section, nine complete flutes and two halves. These flutes are, like the ones on the lower part of the Ionic columns, of the convex filled-in reed form. The reedings in this case measure about 3 feet 4 inches long. Under the fluting a piece of the plain fillet over the base moulding exists, but the underside of this is broken away, and there probably was a moulding under it forming the upper part of the base, the lower portion of which is worked on the base stone already alluded to. 'l'he two back angles of the plain section behind the half columns are splayed. On the top are two dowel holes.

The architectural fragments which have been found consist of the portions of the Doric front columns in position at the south-east angle, a piece of a Doric architrave block and a length of a triglyph frieze, several of the plain limestone foundation slabs and moulded bases of the Ionic order, numerous pieces of Ionic columns of various lengths, and two marble Ionic capitals, also a number of beams, some moulded and others plain, which have been used up to form a stylobate in the later erection to the south of the stoa at the west end, and which no doubt originally formed part of the entablature of the portico. In addition there are the bases and a piece of a pier belonging to the east exedra. A very large number of pieces of Doric columns belonging to the front of the stoa, in lengths varying from 2 to 6 fect, have been discovered scattered about all over the Agora as well as on the stoa itself, and a number were also brought to light in the Temenos of Zeus Soter.

Foundation piers of internal columns.
Limestone slabs.

Moulded bases.

Horizontal beds.

Fluting.
Length of reeding.

Exedrae.
Openings.
Antae

Intermediate
piers.

Bases.

Columns.

Fluting.

Reeding.

Architectural fragments found.

Somplete Restorntion impossible but general scheme clenr. Dimensions.

While it is impossible to make a complete and final restoration of this Stoa from the remnins which have been discovered, the plan of it is fairly clear, and we are able to form a very good idea of the nature and proportions of its superstructure.

Taking the plan first (Pl. XV. Fig. 1), we find that the building has had a total length externally of 510 fect over the walls, and an extreme width of 78 feet 6 inches from the outer corner of the back wall to the edge of the top of the stylobate in front. In the centre the width has been about 65 feet. At the back two exedrae, having a length externally of about 52 feet, projected about 10 feet out behind from the back wall. At each end of the front there were two wings


Fig. 57.-Restoration of tae Doric Order.
which projected 13 feet 6 inches from the main face, and measured 55 feet 6 inches across. These ternel pillars. hàd each a row of nine pillars or eight bays on their face; this odd number of columns is very curious. The returns at the sides, towards the main line of the front, consisted of two bays, and on the ends there were similar returns, also of two bays, finishing against the side walls with antae. Between these wings there have been 60 bays on the main line of the front or, including those at each end, 61 columns. Here again a pillar comes in the centre and not a space. In all there must have been a total number of 83 pillars of the Doric order, 9 for
each wing, 61 on the main line of face, and 4 for the returns. The two internal rows consisted of 23 pillars in each row or 24 bays. Of these, we can gather, from the positions of the foundations, that 20 bays were of equal width, measuring a fraction over 20 feet from the centre to centre of each pillar, whereas the two bays at each end were unequal, the end one in each case measuring ahout 18 feet from the centre of the pillar to the inside of the wall, while the second from the end has been about 33 feet from centre to centre of the pillars. These bays of extra width are very curious and interesting. It seems evident that they formed part of the original scheme of the design of the stoa, and it is a fine bold conception, this long stoa of three aisles opening at each end into a wide transept or hall leading outwards towards the front--a general meeting place at each end of the long walk to and fro-and having a single aisle of about the normal width of the others adjoining it on its farther side. Without taking this aisle into account, the front of the transept formed in itself a hexastyle portico. The transept would, however, have been lacking considerably in internal dignity if its one side had been a bare plain wall. The aisle beyond must have added immensely to the effect inside, and the fact that it was slightly narrower than the long aisles is accounted for by the use of the Doric order in the front having necessitated the smaller intercolumniation in the last bay in order to get the triglyph on the angle and not over the centre of the column. The nine column porticos are thus to a certain extent explained by the internal arrangement of the plan.

It is possible to make a restoration of the Doric order of the front from the details which have been found. This restoration must of necessity be to a certain extent conjectural, as we have no fragments either of capital or cornice to guide us. These, however, have been filled in on our restoration (Fig. 57) from analogous examples of the same character as the other remains. As the shafts of the columns were built of blocks of varying lengths, and as no complete columns have been found, it is impossible to fix the exact height of the pillars, but it is more than probable that they were about $6 \frac{1}{2}$ diameters high, a usual proportion in the later examples of this Order. The pillars of the Temple of Zeus, at Nemea (Antiquities of Ionia, Vol. ii., Pl. XVII.), are of this proportion, as are also those belonging to the Stoa erected at Delos in honour of Philip, son of Demetrius II. (Stuart and Revett, Vol. iii. Ch. x.) ; while the pillars of the Doric Portico at Athens known as the 'Gate of the Agora' (Stuart and Revett, Vol. i., Ch. i.) are $6 \frac{3}{4}$ diameters high. The exact date of the Temple at Nemea is not known, but it has all the characteristics of Greek architecture of the fourth or carly third centuries. (Mr. Penrose is disposed to place it in the fourth century rather than the third.) The Stoa at Delos, as the inscription on it indicates (Boeckh, C.I.G., No. 2274), must have been erected towards the end of the third century or the beginning of the second; the inscription on the architrave of the Athenian example fixes its date between the years 12 b.c. and 1 A.d. (C.I.A., Vol. iii., No. 65). The columns of our stoa which are still in position are slightly less than $1 \frac{1}{2}$ diameters apart at foot, while those of the Thersilion Portico would have been almost exactly $1 \frac{1}{2}$ diameters. We now come to consider the remains of the entablature. The length of the architrave block is 6 feet 9 inches, and this is practically the space, from centre to centre, of the columns still in position. Its height over the taenia or band at top is 2 feet $1 \frac{1}{4}$ inches. The height of the frieze is 2 feet $3 \frac{1}{2}$ inches, and the widths of its triglyphs and metopes correspond exactly with the analogous dimensions, on the architrave block, of the bands of guttae and the spaces between the same. The details of the triglyphs show later characteristics. The heads of the sinkings are not cut in upwards, but slope down inwards from the face, and they do not finish so close up to the projecting fascia or broad band over as in earlier examples. This brond band runs along both triglyphs and metopes with the same depth, and is not slightly shallower over the metopes, which is the more usual arrangement. As compared with the order of the Thersilion Portico the triglyph is higher in proportion to its width, being as 7 to 4 , as against 6 to 4 in the other case. The metope also is higher, being as 7 to 6 , while in our other example it is about square. The guttae are thinner and consequently wider apart, and they are also longer in proportion to their width. The frieze, as is usually the case, is slightly deeper than the architrave, being in this instance in the ratio of 8 to 7. The combined beight of the architrave and frieze is 1.623 of the lower diameter of the column, while in the case of the Thersilion Portico it is $1 \cdot 442$. It may be interesting to compare these proportions with those of the other orders already referred to.

Restoration of the Doric order.

Comparison with other examples of Doric order.

Nemea.

Delos.

## Athens.

Distance of columns apart.
Entablature.

Details show later
characteristics.

Comparison with order of Thersilion Portico.

Order of the byeosom'remple.

Jomparison with Greater Altar.
dess refined than
Order of
Thersilion.
Inner blocks of architrave.

Plain beams.

Ioulded blocks.

Formed course ver architrave inside.

Arrangement :ompared with at at Propylaea, Athens.

Also with Propylaea,

Eleusis.

It will be thus seen that in our example the combined depth of fricze and architrave is relatively greater than in the other cascs. In each case the relative width of the metopes to the diameter of the column is about the same, and the proportion of the metope itself is influenced by the depth of the fricze to which it belongs. The same remark applies to the triglyphs, which in each case measure nearly half a diameter in width. In the order of the Temple at Lycosoura, the frieze and architrave combined are 1.70 of the lower diameter, but in this example the frieze is deeper than usual, being as 7 to 5 , while in our case it is as 8 to 7 , hence, at Lycosouraj both triglyphs and metopes are wider, in proportion to the diameter of the column, than in many of the other cases. The details and proportions of our architrave and frieze are very similar to those used in the Greater Altar, but perhaps it is hardly fair to compare the entablature of an order, which was intended to be seen at a height, with the walls of an Altar, which were on the cye-level. As compared with the order of the Thersilion Portico generally, our cxample is much less refined, both in proportion and detail, and evidently belongs to a later period.

We have still to discuss the inner blocks of the entablature. The stylobate of the Later Colonnade running south from this stoa at its west end, is entirely composed of a number of beams, which have undoubtedly belonged to the cntablature of our Order. There are several plain beams, about 6 feet 9 inches long by 2 feet 1 inch decp. Some of these are 1 foot $3 \frac{1}{2}$ inches thick, others are 1 foot $8 \frac{1}{2}$ inches. Corresponding as they do so closely to the architrave beams, both in length and depth, it is not unreasonable to assume that they formed the inner beams over the columns, or at least, that the thinner ones did, while the thicker ones probably stood on the solid walls at the sides where the front blocks were very possibly much thinner than over the pillars. One block, which it was possible to examine more carefully than the others, showed on one upright face a finely dressed margin $\frac{3}{4}$ inch wide, going round the four e ges, with the panel inside slightly raised and somewhat rougher. This would have been the side of the stone which faced towards the interior of the stoa. The opposite face was dressed round its margin, and the inside was slightly sunk and rougher, and it would consequently have been that which abutted against the outer beam. Built into this stylobate, along with these plain beams, are a number of other blocks, which measure 1 foot $6 \frac{3}{4}$ inches deep by 1 foot $3 \frac{1}{4}$ inches thick on their lower bed, and these have, on the one side, three projecting fascias, and what has been a moulding over, but which is now roughly broken away in order to get a comparatively level surface,-this side facing upwards in the present position. This detail is of the nature of that usually found on an architrave of the Ionic order, and doubtless these blocks formed the inner course of the entablature over the architrare level.

In the Athenian Propylaea, which, like our stoa, have an outer portico of the Doric order, and Ionic pillars inside, the cross beams coming from the inner pillars do not rest directly on the top of the architrave beam, but on a moulded stringcourse placed over it. An examination of a section through this building (Pemrose, Athenian Architecture, 2nd ed. Plate 30) will show that this additional course was required in order to get the requisite height and finish over the lintels of the doorways, the cills of which are about $4 \frac{1}{2}$ feet above the level of the portico stylobate. In the Propylaea at Eleusis, which are a very close copy, both in arrangement and detail, of the carlier structure at Athens, but which, on the other hand, stand on a comparatively level situation, this course was not found necessary, and there the cross beams rested directly on the top of the architrave. I have taken the restoration given in the Unedited Antiquities of Attica, Chap. ii., Plate 11, as trustworthy. This architrave beam has a moulding on its top edge, which embellishment has been dispensed with in our example.
The inner beams over the Ionic pillars and between them and the front Order must, on account of the wide span, have been of wood. These wood beams may have been made up in two or three sections in their thickness, which could not have exceeded 2 feet and was probably a few inches less, and it is very likely that they were moulded on their outer faces like the stone blocks, and were mitred with them at the angle where they rested on the stone beams of the front architrave. These stone blocks are roughly of two lengths, viz. from 6 feet 9 inches to 7 feet, and from 5 feet to 5 feet 3 inches. Some of the longer ones have square faces at both ends, while all the shorter ones have one end of the moulded face splayed back for about 6 inches so as to form a mitred joint. This is not uncommon even in an entirely stone construction. It can be seen on similar beams in the Athenian Propylaea. These wood beams and stone blocks would have been arranged somewhat in the manner shown in the
illustration (Fig. 58). We need not enter here further into the construction of the wooden ceiling of the stoa, as we have no evidence to guide us, and there were many possible ways in which it could have been done.


Flg. 58.-Presumed Arrangement of Inner Beams of Entiblature.

Taking the proportions suggested above for the pillars of the Doric order, and adding the depth of the architrave, we get for the internal Ionic columns a length of about 19 feet 8 inches, or exactly $8 \frac{1}{2}$ diameters. The Ionic columns of the Athenian Propylaea are 10.35 diameters high, while those of the Eleusis one are drawn slightly over $9 \frac{1}{2}$ diameters high in the Dilettanti Society's restoration. Those belonging to the North Porch of the Erechtheum are 9.315 diameters high. The pillars of the Temple of the Wingless Victory at Athenstaking the measurements of Le Bas as correct-work out at $7 \cdot 65$ diameters high, while on his drawings they divide out at over 8 diameters. Those of the Temple on the Ilissus (Stuart, Vol. i., Chap. ii.) work out at 8.363 diameters, while in an Ionic Colonnade near the Monument of Lysicrates at Athens (Stuart, Vol. iii., Chap. xi.), where the pillars are entirely unfluted, they measure 8.534 diameters high. ${ }^{37}$ From these examples it will be seen that, except in the case of the earliest examples, $8 \frac{1}{2}$ diameters is a good average height for an Ionic pillar.

The next question to consider is that of the flutings, filled in in their lower part with convex reedings. As has been already stated, the exact beight of these reedings above the base can be fixed at 5 feet 7 inches. There was probably no arbitrary rule fixing this height exactly, but they are generally found to extend up about one-third of the total height of the column. In our example, and taking the height of the column at $8 \frac{1}{2}$ diameters, the reeding extends up the flutes exactly one-third of the height from the underside of the circular moulded base to the underside of the echinus of the capital. It may be argued that this detail points to a late date, as the earlier examples have not got these filled-in reedings. The pillars of the Doric Stoa of Philip at Delos have their flutes filled in flat for more than one third of their height (Stuart, Vol. iii., Ch. x., Pl. 3), and if this was done in Doric pillars it is more than likely that it was employed for Ionic pillars also. ${ }^{38}$

The following table of comparisons between the proportions of the Ionic pillars of the Athenian Propylaea, of the Temple on the Ilissus, and of our stoa may be found useful. The diameter of the column above the base is taken as the unit.

${ }^{37}$ It may be worth while to mention that the height of the Corinthian pillar of the temple of Olympian Zeus at Athens is about $8 \frac{1}{2}$ diameters high, above the top of the square plinth.

38 At Aphrodisias (Antiquities of Ionia, Vol، iii., Plate 5) the Ionic pillars round the Agora, which are about 8 diameters high, are unfluted for about one-third of their height.

Height of Ionic pillars.
Comparison with other examples of Ionic Order, Athens, Eleusis, etc.

Flutings.

Height of reedings.

Table of proportions of different examples.

While the rest of the pillar was constructed of limestone the capital was cut out of marble, probally on account of the delicate sinkings and the high relief required in the volutes, which could not have been satisfactorily executed in the limestone on account of the harder veins of quartz rumning through it. The form of this capital is particularly interesting. It is of the angle volute type. The volutes themselves are comparatively small both in depth and projection, and the form of the abacus, with its curved face nearly following the line of the volutes and its cut-in angles, is curious. It may be urged that these points show that the capital is very late, but I would rather argue that they are the outcome of the practical necessities of the case. It is quite likely that the wood beams over these pillars not only extended from pillar to pillar in the same row, but also connected the rows with one another at the same level, the former carrying the beams of the ceiling, the latter the rafters of the roof. Hence the necessity for having the four sides alike, as they had the same duty to perform, and the mere fact that the volutes performed their part in helping to take the weight made it necessary to keep their projection comparatively slight. In the ordinary type of capital the projection of the volutes and abacus at each side helped to give the beams a longer bed on which to rest. It has been already mentioned that the wood beams over might have been 2 feet wide, but this is the width of the abacus on each face, and, while the beans could have entirely covered this space, it is more likely than an inch was left at either side, or, in other words, the projection of the abacus moulding was left clear. The beams would then have been about 1 foot 10 inches wide. It ought to be remarked that on one side of

Inner face of apital plainer. llarsof Exedrae.

Flutings and reedings
tached columns at Bassae.

Height.
ate of erection.
ference in Livy.

Reference in inscription.
Conclusion.
(Plate XV. Fig. 2).
rouble row of columns.

East pillars.

West pillars.
the capital the lines of the volutes have been left more simple and have not got the double sinking cut in on them. This side was probably the inner face.

The two Exedrae were presumably not so high as the stoa itself. The attached semi-columns which divided the openings between the exedrae and the stoa into three parts were probably, like the inner columus of the stoa, of the Ionic order; the flutings are certainly of the Ionic type and they have convex reedings similar to the ones on these columns, but no traces of Ionic capitals belonging to them have been found. We find attached columns of the Ionic order employed in the fifth century in the interior of the temple of Apollo at Bassae. These measure $9 \cdot 16$ diameters high. In our example a proportion of 9 diameters would have made the openings about 13 feet high and the reeding on the columns would have extended to nearly one third of this height.

Having thus examined very fully the arrangement and details of this structure, it only remains for us to consider the probable period of its erection. To come to some conclusion on this point we must be chiefly guided by the forms and proportions of the architectural remains. The reference in Livy (quoted in Chapter I.), however, may also be of some service to us. From this we learn that Pbilopoemen in the year 183 b.c. applied part of the money gained from the capture of Sparta to rebuilding one of the colonnades which suffered under Kleomenes. There is however also an inscription (see Ch. VII.), which says that Domitian restored from the foundation a Stoa for the people of Megalopolis. I am strongly inclined to think, judging from the architectural forms, that this may have been the Stoa rebuilt by Philopoemen rather than the one restored by Domitian.

## 6A. Appendix.-Remains of Later Structures south-vest of the Stoa of Philip.

At the western extremity of the Stoa, and running out at right angles to its face, the remains of a double row of pillars have been found. Everything goes to show that these form part of a later construction, which must have been put up after our stoa was more or less in a state of ruin and dilapidation, as we find that this structure is composed entirely of fragments which belonged to the stoa. It may have been erected to form an Entrance to the Agora at this point. The eastmost pillars, of which there are portions of four remaining, rest on a continuous stylobate formed entirely of old blocks from the entablature of the stoa (these blocks have been already alluded to in detail). This stylobate, which seems to stand on what must have been about the original ground level, is 6 feet 6 inches below the level of the top of the stylobate of the stoa. The westmost pillars have no continuous stylobate, but each one rests on a detached foundation. The portions of pillars in position are of the

Doric order, end undoubtedly belonged originally to the front row of the stoa. The northmost ones are only a few inches away from the front foundation wall of the west wing; the others are fairly regularly placed and average about 13 feet from centre to centre.

South of these pillars, and extending westwards beyond the line of the west wall of the Stoa, are considerable remains of walling belonging to a structure of oblong form; sufficient data, however, do not exist to enable us to determine what its nature has been. Its north wall measures about 92 feet 6 inches in length, while the west wall can be traced for $\overline{51}$ feet, and the east for 65 feet. There are scanty indications of what may have been a south wall at a point which would give the building a width of about 70 feet. There are a few scraps of what may have been foundations of internal walls, and a short wall runs inwards at right angles to the north wall 13 feet 6 inches in from its east end. A short distance beyond this point, on the north wall, are the remains of an opening 5 feet 6 inches wide. This structure may have had a continuous portico along its eastern face. A piece of foundation on that line, close to where the stylobate of the east row of pillars already alluded to stops, looks as if it had been a portion of a stylobate of such a portico. It measures 3 feet 9 inches across, has two stones in the width, and the front stone is a good squarely dressed stone 3 feet 1 inch long and 7 inches thick, and with holes for -1 cramps at each side near its inner edge. This foundation looks, however, as if it has been made up of old fragments re-used, as the back stones are not joined in any way to the front one. The west wall is largely made up of old fragments somewhat roughly put together. It has a course of limestone blocks to its outside face; these measure on an average 3 feet 6 inches long, 2 feet deep, and 1 foot 3 inches wide; behind these the back of the wall is made up of rough unshapen stones, and on the top is a broad course of conglomerate 9 or 10 inches deep, and the whole width of the wall. The north wall has a foundation course of conglomerate blocks 2 feet 6 inches wide and 9 or 10 inches deep, above this is a course of blocks of limestone 2 feet 6 inches high, and this wall, generally, is built much like the west wall. The short cross wall is built of rough stones. The doorway has a piece of upright stone lining on each side.

Altogether the whole structure seems quite late, but whether it was entirely built fresh from the foundation or on the lines of an earlier building, we are unable to determine.

## §7. Concluding Remarks.

I have confined my attention in the foregoing chapter to the sections of this site of Megalopolis where systematic excavations have been undertaken with definite results, leaving other spots where only digging of a tentative nature had been attempted previous to and during the period of my visit, till such a time as they have been more fully cleared. I have therefore omitted reference, amongst others, to the building adjoining the Stoa of Philip on the east and supposed to have been the Storehouse of the Archives, and to the long Stoa running north and south along the east side of Agora, which seems to have been the Stoa Myropolis of Pausanias, and I have also refrained from discussing the presumed arrangement of the Agora itself, as this has been fully treated in Chapter V.

It has been my endeavour, in the course of this somewhat lengthy and detailed analysis of the structural and architectural arrangement and composition of the various buildings, to group all the evidences which have been brought to light in such a clear and, as far as possible, complete manner, as will enable the whole to be grasped and studied by those who may not happen to have a personal acquaintance with the site; and in preparing the various drawings which accompany this, both as plates and dispersed throughout the text as illustrations, the same motive has been my guide.

My chief object has been to get at the facts, and if, in the course of my attempts to do so, I have been led into propounding theories of my own from time to time, they are only those which, after a careful study of the actual remains, have suggested themselves to
me as likely explanations of doubtful points, and I have endeavoured, as far as possible, to keep them distinct from the facts themselves.

It may be objected that I have not thrown much direct light on the question of definite dates, where such information would have been of great value. One can do little more, in cases of this kind, than draw attention, by comparison or otherwise, to analogous examples, of which the period is more or less known, since a difficulty arises from the fact that the traditions of the working methods varied in different places at the same period, or lingered longer in one place than another.

Robert Weir Schultz.


## CHAPTER IV

## THETHEATRE.

## § 1. Introduction.

The Theatre must always have been the most impressive of the public buildings of Megalopolis. Pausanias ${ }^{1}$ describes it as the largest theatre in Greece; and more recent travellers, struck by the imposing dimensions of the auditorium-which, before our excavations, was alone visible-have seen no reason to doubt the truth of this statement. Though our own calculations, worked out subsequently to the excavation, make the capacity of the auditorium nearly the same as at Epidaurus, which probably accommodated about 17,000 spectators, ${ }^{2}$ while the Theatre of Dionysus at Athens may have held as many as 20,000 , it remains true that the diameter of the orchestra at Megalopolis is greater than that of any other orchestra in Greece, and that the embankment of the auditorium is of such massive proportions as to be visible from a distance of several miles, north, east and west of the site.

Immediately in front of the Theatre (from the point of view of the spectators) was a vast covered hall, measuring about 218 feet by 172 feet, which we have identified as the 'Thersilion' mentioned by Pausanias, ${ }^{3}$ the meeting-house of the 'Múpıo,' or general assembly, of the Arcadian league. The Thersilion is so intimately connected with the Theatre that it is impossible to discuss the one without some reference to the other. Indeed several features of the Theatre are only explicable when viewed in the light of this connexion.

In the construction of this, as of most other Greek theatres, advantage was taken of some rising ground. But since the slope which separates the valley of the Helisson from the plateau on which lies the modern village of Sinanou provided insufficient support for the seats of the auditorium, it was supplemented by a bank of earth, retained at either extremity by massive supporting walls.

The Theatre and Thersilion are situated on the south side of the Helisson, nearly opposite the Agora. The Theatre faces (approximately) $18^{\circ}$ east of the Magnetic North; an orientation which accords almost exactly, not only with that of the Thersilion, but also with those of the principal buildings of the Agora. ${ }^{4}$ This general agreement adds some support to the opinion, otherwise probable, that the Theatre, and at least the gencral plan of the Agora, were parts of one original scheme. It should also be observed that there is no period in the history of the town with which the construction of a colossal theatre accords so well as the period of its foundation

[^26]that their arrangement and extent are more or less conjectural.

 àrò тô̂ áva日́évтos ©écoílıv.
${ }^{4}$ The greatest divergence from this orientation, or from that at right angles to it, does not exceed one degree. The orientation adopted was probably determined by a conical peak, some seven miles distant, in the hills lying north of the Megalopolitan plain. This peak lies (practically) in the axis of the Theatre. It is visible in photograph A, Plate II.

INTRODUCTION.

Size of the Theatre.

Its connexion with the 'Ther silion.'

Orientation.
by Epaminondas; for this was the only time when there was any reasonable prospect of the 'Great City' containing a population sufficiently large to justify its name and the scale on which it was laid out. ${ }^{5}$

Referenoe to Plates.

Photographs,

Plans.

Before discussing the Theatre in detail, we would refer our readers to the photographs (Plates II., III., IV.) and plans (Plates V.-XIII.).

The first photograph (A) gives a general view of the Theatre looking down into it from the centre of the ridge of the auditorium. Immediately beyond the Theatre is seen the square outline of the Thersilion, intersected by the trenches of our excavation. Beyond the river appear the Agora ${ }^{6}$ (to the left) and the Tumulus ${ }^{7}$ (to the right). The completely excavated building upon the river bank, almost exactly opposite the Theatre, is that which we identify with some approach to certainty as the Hieron of Zeus Soter, ${ }^{8}$ and marks the south-east corner of the Agora. Photograph B was taken from a point within the Thersilion. It shows clearly the orchestra and auditorium of the Theatre, with the extant seats, the portico connecting Theatre and Thersilion, the Vitruvian proscenium, etc. Photograph $C$ is a view of the same from a point about half-way up the embankment of the auditorium, at its western extremity; and photograph $D$, taken from the east, shows the western end of the auditorium, with the $\Sigma_{\kappa \alpha \nu o} \theta_{\eta} \kappa a$ (or 'property-room'), which at this side of the Theatre occupied the position usually held by a mápodos. $\mathbf{E}$ shows in detail the remains of the Portico, and F is a view of the eastern extremity of the seats.

A few words must be said here about the Thersilion, the final publication of which is reserved for a future occasion, since the building itself is at present only partially excavated, and its plan consequently incomplete. The bases represented in the plan are those which had been brought to light by the end of October, 1891. Their number and position prove that they supported a great covered hall, and their manner of distribution indicates that the arrangement of this hall somewhat resembled that of a theatre, adapted to a quadrangular building. The columns which stood upon the four inmost bases, somewhat south of the centre of the hall, formed a sort of nucleus from which the other columns radiated outwards towards the sides of the building, the bases in the outer rows lying at a somewhat higher level than those in the inner. The restoration given in Fig. 1 (Chap. III.) is doubtless, in its main outlines, correct, though it may require some modification when the excavation, which has already been taken in hand, is complete. Possible differences of period in its construction will also have to be considered on a future occasion.

The great Portico, to which we have already several times referred, formed a façade and entrance to the Thersilion, much as the so-called 'Portico of Philo' formed the tront of the covered 'Hall of the Mysteries' at Eleusis, ${ }^{9}$ a building which in many respects offers a nearer analogy to the Thersilion than any other building which we know. The Portico at Megalopolis, however, performed a double function; for, as the Thersilion occupies the position which belongs to the 'scena' ( $\sigma \kappa \eta \nu \eta$ '), i.e. the property and dressing-rooms, in other Greek theatres, so the Portico must be regarded, in its relation to the Theatre, as the 'frons scenae,' ${ }^{10}$-i.. the background before which

[^27]See Chap. V.
${ }^{0}$ See Fig. 2 (Chap. III.), and Iрактıкá, 1887, Pl. I.
${ }^{10}$ Vitruvius v. 7, 1. This view, here merely stated, is discussed in $\S 4$.
the acting took place. The original base of this 'frons scenae' lies 4 feet 6 inches above the present level of the orchestra.

No traces of any 'proscenium' contemporary with the Theatre have been discovered; but we have, in front of the Portico, the remains of a later proscenium much resembling those at Epidaurus, Oropus, Piraeus (Zea), etc., only of far more careless structure and probably of later date; and we have evidence that a somewhat earlier proscenium, contemporary with the structure which carries on the same line eastward and formed the north side of the mápodos, occupied the same position as the later one.

An account of the materials employed in the Theatre is given by Mr. Schultz in
' Proscenia.'

Materials. Chapter III.

We now proceed to a discussion of the different parts of the Theatre in detail.

## § 3. The Auditorium and Orchestra.

(a) The Embankment and Retaining Walls.—It has already been stated that the auditorium at Megalopolis consists partly of an artificial embankment. In the centre, indeed, the hill in which it is hollowed was almost high enough, and the embankment there appears to have been very slight; but the two extremities are far more artificial than natural. This is not an uncommon arrangement in Greek theatres, occurring at Athens, Argos, Delos, and elsewhere; while at Mantinea ${ }^{11}$ and Eretria ${ }^{12}$ the auditorium was entirely artificial.

Retaining walls were commonly employed, even where, as at Epidaurus, ${ }^{13}$ the auditorium was entirely hollowed out of the hill. The plan of the retaining walls at Megalopolis is best seen

Auditorium and Orchestra.
(a) Embankment and retaining walls. on Plates V. and VII. There are two walls at either extremity, an inner and an outer; the latter reaching up to a certain height only, while the former supports the upper part of the embankment. Thus a sort of terrace is formed between the two walls, on a level with the top of the outer. The outer wall on the east side of the Theatre follows throughout its length a line determined by a radius of the circle of which the seats, gutter, and kerb of the orchestra are arcs, and the inner wall is parallel to it; but the corresponding wall on the west side of the Theatre follows a similar line for a certain distance only, and is then replaced by a double wall parallel
 difference of plan, and is also probably accountable for the great thickness of the western, as compared with the eastern retaining walls. The fact that the upper part of the inner retaining wall on the west side is built of a different material (limestone in place of conglomerate) and in the 'rusticated' style may possibly be due to the same cause, especially if the Eкavoөjкa in its present form is a modification of the original scheme of the Theatre; but in no case can the $\sum_{k}{ }^{2} \nu_{0} \theta_{i} \kappa a$ and retaining walls be placed at a late date, since their structure contrasts very strongly with all the undoubtedly late work in the Theatre.

At Mantinea the embankment which forms the auditorium is supported not only by No retaining wall retaining walls at its two extremities, but also by a massive semi-circular wall at the back. ${ }^{14}$ This arrangement reduced the amount of earth required for the embankment, for, with a strong wall at the back, it was unnecessary to slope the earth away gradually from the top of the auditorium behind as well as before. At Athens, where the main part of the auditorium was cut in the rock, while the two extremities were embanked, these extremities were supported, as at Mantinea, by a curved wall along the outermost arc. ${ }^{15}$ A very similar arrangement occurs at Delos. ${ }^{16}$ Even where the auditorium was entirely cut out of the hill, so that no support was required, it was not unusual to mark its limit at the back by a semi-circular boundary-wall. This was the case for instance at Epidaurus. ${ }^{17}$ At Megalopolis, on the other hand, no traces have been found either of curved retaining walls, or of a boundary-wall, at the

[^28]${ }^{16}$ Baumeister, Denkmäler des Klassischen Altertums, p. 1737 (plan).
${ }^{16}$ Wieseler, Theatergebaïde, p. 5, No. 17 ; Leake, Travels in Northern Greece, iii. p. 100.

17 Практькá, 1881, Appendix, p. 17, and Plates I. and II. ; 1883, Pl. I.
back of the auditorium. The central part was supported by the hill behind, supplemented by a very slight embankment, while the massive embankments at the two ends, where the hill provided insufficient support, were sloped gradually away on the outer side, the need of a curved retaining wall being thus dispensed with.

The summit of the auditorium in its present state is about 76 feet above the orchestra. Probably it was never very much higher than this; though it must have been somewhat higher, for a quantity of earth has been washed down from the top of the embankment upon the seats below. In calculating the number of spectators which the Theatre would originally accommodate, ${ }^{18}$ we have supposed the horizontal distance of the ridge of the auditorium from the front row of seats to have been 150 feet, viz. aloout the same as at present; for since there is no reason why the earth should have washed down more on one side of this ridge than on the other, it may be presumed that the original summit was vertically above the present one. Now the lower part of the auditorium had (as we know from the extant seats) a slope of one in two. Supposing this slope to have been continuous to the top, we should obtain a total original beight of only 75 feet, which is actually less than the present height, and we must (as pointed out above) allow something for denudation. We must therefore suppose that the upper part of the auditorium, starting either from the lower or from the upper diazoma, had a steeper slope; an arrangement which (though opposed to Vitruvius' directions ${ }^{19}$ ) is not uncommon in Greek theatres. At Epidaurus the increase of slope above the diazoma makes a difference of a little over 5 feet in 60 feet horizontal. ${ }^{20}$ A similar increase at Megalopolis would give, if starting from the lower diazoma, a total original height of 83 feet; or, if starting from the upper diazoma, a total height of 79 feet. The former of these alternatives seems the more probable; for 7 feet does not seem an excessive allowance to make for denudation ${ }^{21}$
(b) $\Delta \iota a \zeta \omega \mu a \tau a$.-The position of oue $\delta \iota \dot{\zeta} \zeta \omega \mu a$ is certainly indicated by a broad grassy ledge which runs round the inside of the embankment, near the top. The ledge is marked in the plan (Pl. V.), and is clearly visible in the pictorial elevation and section (Pl. VIII. and IX.). Its distance bebind the orchestra is about 100 feet and its height above the orchestra about 55 feet-a proportion of height to horizontal distance which agrees remarkably well with our suggestion that the slope of the auditorium was increased above the lower diazoma, whose existence we hope we shall be able to establish.

Our reasons for assuming that there was a lower diazoma are, in the first place, the great height ( 50 to 55 feet) of this broad ledge above the orchestra, and secondly, a difinculty with regard to the staircases, which is best explained by such an assumption. It will be observed that the extreme end staircases ( $\kappa \lambda i \mu a \kappa \epsilon s$ ) in the auditorium, both at its eastern and at its western extremity, lie close along the inside of the outer retaining walls. Now had they continued in this straight line beyond the point at which the inner retaining walls begin, they would have fallen outside the inner retaining walls, which would thus have been completely embedded in the embankment. But this is out of the question; for the inner retaining walls-at any rate the 'rusticated' wall at the west end-were undeniably meant to be seen; nor is there any sign of roofed passages outside them on which the upper seats, with their staircases, could have rested. It follows that the outermost staircase at each end of the auditorium must have broken off before reaching the point at which the inner retaining wall began; and such a breaking off of the line of steps can hardly have occurred except at a $\delta$ áácoua. Besides the oprission of the staircase, the extent of the seats must also have been somewhat curtailed in the upper portions of the auditorium in order to fall within the inner retaining walls. (See Fig. 27.)

[^29]Strubing's edition (Leipzig, 1867).
${ }^{20}$ Практıќ́, 1881, Pl. III. section.
${ }^{21}$ In the restored section of the anditorium given by Mr. Scluultz in Fig. 28 the other alternative has been adopted. But the dotted lines in that very figure, indicating the present slope of the earth, appear to us decidedly to favour our own view.
We many also point out that there is no monumental evidence for the boundary-wall represented in Fig. 28 at the top of the auditorium.

The exact position of the lower $\delta \dot{\operatorname{co}} \mathrm{\zeta}_{\boldsymbol{\omega}} \mu a$ cannot be determined with certainty, but we have an indication which is too valuable to be disregarded. In the outer retaining wall at the east side of the auditorium, at the height of 23 feet 6 inches above the orchestra level, we have discovered a white limestonc slab, in situ, bearing marks of a doorway. It is indicated in the plan by the word 'cill.' This doorway must have given access to the upper tiers of seats by way of the lower diazoma. The doorway must have been reached from outside either by a staircase or by an inclinc, and have been connected with the end of the $\delta \dot{a} \dot{\beta} \omega \mu \mu a$ by a passage in the space between the two retaining walls. In the corresponding position at the west side, though we have found no doorway, the change of materials in the inner retaining wall (see Chap. III.), occurring at a height of 25 feet above the orchestra, implies the existence of a terrace or passage at this level. This passage was probably connected, like the doorway at the east side, with the lower diazoma; the trifling difference in level between the two being accounted for by a slight incline, or a couple of steps, at some point between the doorway on the east side and the diazoma. If we are right in inferring the height of this diazoma above the orchestra to have been 25 feet, its distance from the orchestra must have been 50 feet, since the slope of the lower seats is known to have been one in two. And the result of this calculation is eminently satisfactory; for, supposing it to be correct, it follows that the auditorium was divided into three sections of almost exactly equal width; the first diazoma occurring at a distance of 50 feet from the outer edge of the orchestra, the second diazoma at a distance of 100 feet, and the top of the auditorium at a distance of 150 feet. But it must be remembered that all these figures are approximate; for in the case of the summit of the auditorium and in that of the upper diazoma, the entire structure having perished, we have only the configuration of the ground to judge by, while in the case of the lower $\delta \alpha^{\prime} \zeta \omega \mu a$, we are dependent on the evidence supplied by the scanty traces which remain of the approaches leading to it on either side. Nevertheless, in none of the three cases can the figures given err by more than a few feet; and the general symmetry with which both the Theatre and the other buildings at Megalopolis have been laid out, adds to the probability of horizontally equal divisions in the auditorium. This probability will appear still greater when we mention that the radius of the orchestra measures approximately 50 feet-the very measurement which we have assigned to each of the three sections of the auditorium. ${ }^{22}$

For examples of separate entrances to the upper tiers of seats in Greek theatres we may compare the 'Theatre of Dionysus at Athens, where it is thought that an entrance opened on the west end of the $\delta a^{\prime} \zeta \omega \mu a ;{ }^{23}$ and the Theatre at Epidaurus, where separate entrances existed at both ends. ${ }^{24}$ At Mantinea the upper tiers of seats were reached by a separate staircase at each end of the auditorium, and also by two staircases in the semi-circular retaining wall at the back. ${ }^{25}$ In Roman theatres, separate entrances were the general rule; only they were approached by staircases, not placed outside, but taken through the wings of the stage-buildings, which abutted immediately on the auditorium, or through the substructure of the auditorium itself.
(c) Ordinary Seats.-A good idea of the ordinary seats may be obtained from the illustrations given in Fig. 24. Their general form is similar to that of the corresponding seats at Athens, Piraeus, Epidaurus; but their structure is different. Each seat at Megalopolis consists of two parts, viz. (1) the limestone bench on which the spectator sat; (2) a plain slab of limestone or conglomerate supporting this bench and projecting beyond it so as to form a footboard. In the other theatres mentioned each seat, with the footboard of the one behind it, is cut out of a single block.

The average height of the seats is from 15 inches to 16 inches; but, since the top of each seat projects slightly above the footboard of the seat behind, the rise from seat to seat is only about $14 \frac{1}{2}$ inches. The breadth of seat and footboard combined is about 29 inches. ${ }^{268}$

Position of the lower determined by traces of the approaches to it.




[^30]


[^31]






[^32]




[^33]


[^34]Comparison with other theatres.
(c) Ordinary Seats.-Their form

[^35]published, Hрактька 1881, PI. II., this is not shown. The upper part of the auditorium is there restored, conjecturally, exactly like the lower.)
${ }^{25}$ Bulletin de Corr. Hellén., xiv. p. 250, and Pl. XVII.
${ }^{254}$ See Fig. 24, Chap. III., where the net height is given as 14 inches, and the net width as 28 inches.

Thus the rise of the seats is just half of the amount which they recede, and the slope of the auditorium, in its lower section, is (as previously stated) one in two. We have already given our reasons for believing that the slope was steeper in the upper sections of the theatre.
(e) Passage.

The кєркiסєs ('blocks') in the lowest section are nine in number, and the клiцакея ('staircases') ten. In the upper sections the number was probably greater; as at Epidaurus, Aspendus, and other theatres, in which the batch of scats corresponding to each block below a $\delta \iota a ́ \zeta \omega \mu a$ is divided into two blocks above. ${ }^{26}$ This arrangement, though very common, was by no means universal; but in a theatre so large as that of Megalopolis it would almost certainly be adopted. Further, this assumption fits in extremely well with the fact already noted, that the radii which determine the position of the two extremities of the anditorium in its lowest section would, if extended to its upper sections, have fallen outside the inner retaining wall, and that therefore we must suppose the outermost staircase at either end, with its adjoining seats, to have terminated at the lower $\delta \iota a \zeta \omega \mu a$. In all probability the two outermost blocks above the lower $\delta \omega \dot{a} \xi \omega \mu a$, with the staircases beyond them, were omitted, thus making the blocks above this $\delta i a ́ \xi \omega \mu a 16$ in number instead of 18, and the staircases 17 instead of $19 .{ }^{27}$ The arrangement at Epidaurus is precisely similar.

Above the second $\delta \iota \alpha \zeta \omega \mu a$ the blocks may have been again sub-divided, as Vitruvius directs; but we have no evidence by which to decide this point.
(d) Staircuses.-The number and distribution of the staircases have been discussed in the preceding section. It should be added that for every tier of seats in the auditorium there are two steps (see Pl. VII. Fig. 1), the average height of the steps being about ( $\frac{1}{2}$ of $14 \frac{1}{2}$ inches $=$ ) $7 \frac{1}{4}$ inches, and their depth ( $\frac{1}{2}$ of 29 inches $=$ ) $14 \frac{1}{2}$ inches. Two steps to a tier was the usual arrangement. At Athens, ${ }^{28}$ however, and at Piraeus, ${ }^{29}$ one sloping step took the place of two flat ones. ${ }^{30}$
(e) Passage.-The passage requires but little comment. At Epidaurus there is nopassage in this position; the passage there is in front of the $\theta$ oforoc and serves also as a gutter. At Athens there is a narrow passage behind the opóvo, like ours at Megalopolis, and a broad one, as well as a gutter, in front. At Megalopolis we have the passage behind and the gutter in front, no passage in front. Our passage, which does not widen at the ends. like those at Epidaurus ${ }^{31}$ and Athens, ${ }^{32}$ must have been somewhat narrow as an exit. The audience, however, were no doubt allowed to leave the theatre by way of the orchestra.
$(f)$ ©póvoc or Seats of Honour.-Between the passage and the gutter which drains the orchestra stands a special row of seats, designated by an inscription on one of them as $\theta$ póvoo. A cut of the central one is given in Fig. 25; and Photograph F gives a good idea of them, as well as of the staircases and the ordinary seats.

These benches, which doubtless served as seats of honour, are nine in number, one bench corresponding to each block in the auditorium above. They are made in lengths of stone, four (or, in the case of the two end ones, five) to each bench. They are comfortable to sit in, thus offering a great contrast to the tiers behind. The seats are conveniently bollowed and the backs slightly curved, and each bench terminates at either end in an ornamental arm. The space for the feet is curiously cramped; and it has therefore been suggested that the gutter in front of them was grated over; but such sinkings as have been discovered in the footboard of the $\theta$ ofor and in the kerb of the orchestra are insufficient at any rate for a continuous grating.

Seats of honour were the rule in Greek Theatres. In some cases they were long benches, as at Epidaurus and Megalopolis ; in others they were single chairs or thrones, as at Athens and Oropus. ${ }^{33}$ It is well known that those at Athens are inscribed with the names of priests and others for whom they were reserved. Similarly the seats of honour at Megalopolis bear the names of
${ }^{20}$ See also Vitruvius v. 7, 2 ad fin.
${ }^{27}$ In Mr . Schultz's restoration (Fig. 27) the number of blocks is doubled in the uppermost section of the auditorium only, while in the middle section the two outermost blocks are somewhat curtailed so as to obviate the difficulty we have mentioned.
${ }^{28}$ Haigh, Attic Theatre, p. 120. Oh. III. Fig. 24, 3.
${ }^{23}$ Мрактєка́, 1880, p. 52.
${ }^{30}$ For further details in connexion with the steps, see Chap. III.
${ }^{31}$ Практıка́, 1883, Pl. I.
${ }^{82}$ Baumeister, Denkmäler, p. 1737.
${ }^{83}$ ПІрактька́, 1886, Pl. III.
different Arcadian tribes. These names fall into two classes. All alike are inscribed on the backs of the seats, but some before and some behind. The latter form the earlier of the two classes, and date probably from the second, but possibly from the third century b.c. They are on seats Nos. 2, 3, $4,5,6,7$, counting from east to west. At a later period, probably not before the Christian era, a re-allotment took place; for we have on the five central seats-viz. Nos. 3, 4, 5, 6, 7-a fresh list of names in later characters. These inscriptions are given in Chap. VII. No. I., where they are fully discussed. Here we merely remark that only two of the tribal names ('Amond $\omega \boldsymbol{\nu i}$ ia and Mavia) occur in both classes of inscriptions, and only one (Havia) on the same seat in both.

But the seats of honour bear also another set of inscriptions; and these last are of the highest importance for determining both the date of the Theatre and the original level of the orchestra. They are on the central and two end seats. That on the easternmost contains the full dedication :-

Those on the central and westernmost seats are repetitions of the first three words of this :-

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These inscriptions, like the others, are given in facsimile and fully discussed in Chap. VII. No. I.; but it is necessary to say here that the writers of the present chapter fully agree with Mr. Richards in considering the identity of the 'Avrloxos of this inscription with Antiochus the famous pancratiast, representative of the Arcadian league in the embassy to the court of Persia in 367 b.c., to be extremely probable. If this identification be correct, the seats of honour-and $a$ fortiori the rest of the auditorium-cannot be assigned to a period much later than the middle of the fourth century. But if the identification be regarded as too problematic, the purely epigraphical evidence, drawn from the forms and use of letters, is quite decisive in favour of a fourth century (probably an early fourth century) origin.

Whether, then, the seats of honour are contemporary with the rest of the auditorium or slightly later than it, both may be confidently assigned to the fourth century b.c., and probably date from some period between the foundation of the town ( 370 B.c.) and the middle of that century.

In the above paragraph we have hinted at a possible difference of date between the seats of honour and the auditorium. For the determination of the date of the latter this possible difference is of small moment; for, since neither these seats nor the auditorium can be older than 370 b.c., the interval can in no case have been very great. But for determining the original level of the orchestra the question has great importance, since the footboard of the lowest row of ordinary seats, which would mark approximately the highest possible level of the orchestra ${ }^{34}$ if the seats of honour were not there, is from 16 to 17 inches higher than the footbourd of these seats, and some 15 inches higher than the present orchestra level. Now it is our decided opinion that the seats of honour are not part of the original plan, but a slightly later addition, and that the level of the orchestra according to the original scheme was somewhat higher than at present, possibly as much as 15 inches higher. Our reasons are three in number: (1) the separate dedication of the seats of honour and the gutter distinctly point to such a theory; (2) the seats of honour at Megalopolis occupy a position different from that which they occupy in other Theatres. At Epidaurus, for instance, where these seats most closely resemble our own, and at Athens, they are situated upon the lowest are which is included within the retaining wall of the auditorium, i.e. precisely in the position of our lowest row of ordinary seats. This seems to us a strong reason for supposing that the lowest ordinary row at Megalopolis was intended to be the lowest row of all, and that the seats of honour-which, for convenience, we shall sometimes speak of as the 'inscribed benches'-

Inscriptions on tribes,
(2) Dedicatory inseriptions.

Importance of the latter as criterion for date of auditorium.

[^36]be restored (as in Curtius and Kaupert, Karten von Altika, Text i. p. 67, section) without any seats of honour on the lowest step, the difference of level is about twice as great. On the other hand at Epidaurus and Eretria footboard and orchestra are nearly at the same level. See also Mr. Schultz's comments on this matter (Chap. III.) and Fig. 24.
were an addition to the plan; (3) the top of the conglomerate foundations of the pedestals $C$ and $D$, in which the retaining walls terminate toward the orchestra, are on a level with the passage, which served also as the footboard of the lowest tier of ordinary seats (see Fig. 32, Chap. III.). This makes it almost certain that this passage or footboard formed the boundary of the orchestra, according to the original scheme. Had it been originally intended to continue the slope of the mapooos beyond these pedestals to a level as low as that of the footboard of the inscribed benches, the foundations of the pedestals would undoubtedly have been sunk to a greater depth. We regard the inscribed benches, therefore, as an addition, though not a much later addition, to the original plan of the Theatre; and we suppose the original level of the orehestra to have been somewhat higher,-perhaps as much as 15 inches higher,-than it is now. For the evidence that the two end benches have been disturbed at a later time, probably when they were lengthened by the insertion of an extra block, we would refer our readers to Chap. III. ${ }^{55}$
(h) Shape of the Auditorium.-Whe ideal shape of the auditorium in Greek Theatres was an are of a circle. In practice this was often modified. Thus at Atbens and Piraeus the shape is a semicircle prolonged by two parallel tangents; ${ }^{38}$ while at Epidaurus the two ends of the curve are arcs of somewhat larger circles described from centres on either side of the centre of the orchestra. The object of this arrangement was to enable spectators at the extreme ends of the auditorium to obtain a better view. At Megalopolis no such adjustment was made. All the curves of the auditorium and orchestra are arcs of concentric circles, whose common centre is marked by the intersection of the axes in Plates V. and VII. The are of the auditorium is so

[^37].blocks of which they are composed, and have found it to bo in every case greater than that of the corresponding blocks in the row of seats behind. Mr. Schultz (chap. III.) on other grounds agrees with us in believing the inscribed benches to occupy the position for which they were originally intended.
${ }^{36}$ But not absolutely impossible. The groove at the west end may have been intended only to facilitate the process of cleaning out the gutter on occasion. We could quote at least one parallel case in modern times.

${ }^{38}$ Baumeister, Denkmäler, p. 1740, and plan, p. 1737; Мрактєка́, 1880, plan.
very little greater than a semicircle that very few of the spectators would be turned away from the actors, and those only slightly. The adjustment was therefore considered unnecessary.
(i) Orchestra. With the kerb, which forms at once the inner side of the gutter and the border of the orchestra, we reach the last of the concentric bands which have occupied our attention in the preceding paragraphs. It is of the same white limestone as the rest, is $14 \frac{1}{2}$ inches in width, and forms, like the rest, an arc somewhat greater than a semicircle. The orchestra, like those at Epidaurus and Oropus, is wholly unpaved. This was probably usual in Greek Theatres.

The orchestra, so far as it falls within the kerb, was practically level; ${ }^{39}$ but between this level and the present ground level in front of the Portico (taking as the ground level the upper surface of the thin course ${ }^{40}$ on which the lowest of the five steps rests) there is a difference of about 15 inches. ${ }^{41}$ This difference may easily be acoừnted for by supposing a slight slope (of about 1 in 30) from the front of the portico to the orchestra. It will appear, however, in a subsequent section, that the level before the Portico itself underwent a change, and that the difference between the original level at this point and that of the orchestra is far too great to admit of such an explanation.

One of the chief beauties of the Theatre at Epidaurus is the kerb-stone, which there, as at Megalopolis, divides the gutter before the $\theta$ oóvoc from the orchestra. The kerb-stone at Epidaurus forms, it will be remembered, a perfect circle, for which there is just room without trenching upon the proscenium. At Megalopolis there was no room for such a circle; had the circle been completed, as at Epidaurus, it would have trenched not only upon the Vitruvian proscenium, but even upon the Great Portico in front of the Thersilion. If this should cause any surprise, it must be remembered that we have no evidence to justify us in attributing to the Greeks any superstition with regard to the shape of the orchestra. The Theatre at Epidaurus is the only one in existence in which the kerb actually forms a circle; and even at Epidaurus such a circle would have been impossible but for the unusual width of the gutter (nearly 7 feet). With a gutter 1 foot 8 inches wide, like that at Megalopolis, the completion of the circle at Epidaurus would have been impossible. And though there are many Theatres in which such a circle might have been described, the rule is by no means unirersal. At Oropus, where the seats of honour are simply five isolated chairs standing forward in the orchestra, the smallest circle one can select for measurement, viz. that on which lie the ends of the retaining walls, would trench considerably upon the proscenium; ${ }^{42}$ and at Mantinea, where there was no gutter, the same is the case. ${ }^{43}$ In fact the possibility of completing the circle depends quite as much on such accidents as the position of the seats of honour and the width of the gutter as on the position of the proscenium. And it should be remembered that in a theatre constructed according to Vitruvius' rule, the imaginary circle would trench on the proscenium to the extent of about $\frac{1}{7}$ part of its diameter. ${ }^{44}$ But as a matter of fact it does not appear that the Greeks, in setting out their Theatres, were guided so much by any rule dependent on ratio, or on imaginary circles, as by practical considerations of sight and sound, and the necessity of leaving sufficient room for entrance and exit by the $\pi a \rho o \delta o{ }^{45}$ Thus at Megalopolis, where the diameter of the orchestra is greater than in any other known Greek Theatre, we ought not to be surprised if the proscenium stands relatively farther forward than in other Theatres. A comparison of the distances between the proscenium and (1) the central front seats, (2) the wings of the auditorium, at Megalopolis, Athens, and Epidaurus, will show that the actucal distances are not so very different in these three cases.

[^38](i) Orchestra.

Unpaved.

No room for a circular kerb.

Comments.

The architects guided by practical considerations.

## Actual measure

 ments from ' proscenium ' to auditorium much as at Athens and Epidaurus.In the following measurements the 'front seats' referred to are in every case the seats of honour ; since even at Megalopolis, where those seats are probably an addition to the original scheme of the Theatre, they were certainly in position before the erection of the 'proscenium' from which the mensurements are taken.

We find then :-

|  | Megalopolis | Athens | Epidaurus |
| :--- | :---: | :---: | :---: |
| (1) proscenium to central front seat | 77 feet | $82 \frac{1}{2}$ feet | 76 feet |
| (2) proscenium to wings of auditorium | $14 \frac{1}{2}$, | 16, | $13 \frac{1}{2}$, |

so that in actual distance of spectators from actors, and in width of mapodoc, the Theatre at Megalopolis occupies an intermediate position between those at Athens and Epidaurus, though the diameter of the orchestra at Megalopolis is a great deal larger than at either, viz. 104 feet, ${ }^{46}$ as against 88 feet at Athens, and 83 feet at Epidaurus. ${ }^{47}$ At the same time we must remember that we have no trace of any proscenium at Megalopolis contemporary with the Theatre, and that such a proscenium, if there was one-(a question which will be considered in a latter section)-may have stood back somewhat farther than that now in existence, though not far enough back, by a long way, to allow of the completion of the circle of the existing kerb.

No subterranean passage beneath orchestra.

Pedestals within the orchestra.

The Portrico in its Refation to the Theatre
served as a background,

No trace has been found at Megalopolis of any subterranean passage beneath the orchestra, such as those which have been discovered at Eretria, ${ }^{48}$ Sicyon, ${ }^{48}$ and Magnesia. ${ }^{50}$ Nor have we found any remains of the $\theta \nu \mu_{\epsilon} \lambda \eta$, or altar, which doubtless stood in the centre of the orchestra.

The pedestals $A$ and $B$, situated just within the orchestra and at the extremitien of the auditorium, supported statues. On one of them (B) a dedicatory inscription has been found, in characters which are probably not earlier than the second century b.c. These bases will be again referred to in $\$ 5$. III. The inscription will be found in Chap. VII. No. IX.

## §. 4. The Portico in front of the Thersilion, in its relation to the Theatre.

The Great Portico, which formed the façade and main entrance of the Thersilion, served also as a background for the performances in the Theatre; for any other background, erected in front of this, would have concealed the façacle, which was meant to be seen, and probably would have blocked the entrance, which was meant to be used. ${ }^{51}$ This argument would lose none of its force if the Theatre should be proved to be of somewhat later date than the Thersilion or vice versa; for if they were not contemporary, the later building must still have been built as a complement to the other, and not in total disregard of it; this alone can explain their juxtaposition.

The fact that a proscenium was erected in later times in such a position and of such a height as to partially conceal the colonnade of the Portico, is no argument in favour of such an arrangement as part of the original plan; for an alteration is one thing, and an original design another.
or 'frons scenae.'
Those who suppose that the word 'proscenium,' when applied to the Greek Theatre, desiguated not (as Vitruvius tells us ${ }^{62}$ ) a structure upon which the actors stood, but the background before which they acted, may possibly choose to call the Portico, in its relation to the Theatre, by the name of 'proscenium,' while we, who follow Vitruvius, would call it

[^39][^40]rather the 'frons scenae.' ${ }^{\text {bs }}$ To avoid any confusion which might arise from this possible difference of nomenclature, where the facts are agreed on, let us drop technical terms for the present, and talk of it simply as the 'Portico' or 'background'; designations to which no one is likely to take exception.

This Portico, or background, ${ }^{54}$ consisted of 14 columns in the front, and probably one more in the return at each end. The order of the columns was Doric, the material calcareous tufa, ${ }^{55}$ stuccoed; and the columns rested on a limestone stylobate, projecting forward some 20 feet from the south wall of the Thersilion. This south wall was not originally continuous; but gave place, in the part immediately behind the Portico, to another row of columns, having a wider intercolumniation than those of the Portico, but corresponding exactly in position (and probably also in material) with the nearest columns of the Thersilion behind. Subsequently these columns were removed, and the wall was continued right across, but pierced with three doorways (so named in the plans) giving access from Thersilion to Portico and vice versa. The date of this alteration is uncertain; but that it is an alteration is evident first from the presence of the foundation-bases (marked 'pier' in Plate VII.) of the displaced columns built into the wall, and secondly, from the comparatively careless structure of the portion of the wall in question, and the use of $\Gamma$ instead of $\longmapsto$ clamps.

Of the columns not ia single drum remains in situ, but the scattered remains which have been found are sufficient to justify the restoration given on Plate XIL., the only conjectural elements in which are the details of the cornice and the assignment of the terra-cotta ornaments which have been discovered to their respective places. The height of the columns was probably about 20 feet, and that of the columns and entablature together a little over 25 feet.

Of the stylobate neither top nor second course was found actually in situ, but on the top of the third course are many slabs belonging to them, now lying in great confusion. These slabs have been wrenched up in comparatively ancient times, apparently for the purpose of extracting the iron clamps. They supply ample materials for a certain restoration (see Pl. XII, and Figs. 15 and 16, Ch. III.), to illustrate which we have actually replaced a few stones of the upper courses, as may be seen in Photograph E, Plate IV. ${ }^{56}$ Of the top course every alternate block supported a column, the intermediate blocks having, each of them, a slightly raised panel on the upper side, an arrangement not uncommon between the columns of a portico. ${ }^{57}$ This course, which was 9 inches thick, rested upon another course of the same thickness, but projecting forward $12 \frac{1}{2}$ inches beyond it, so as to form a step. The third course of the original stylobate-the last of which any part was visible above ground-is $9 \frac{1}{2}$ inches in depth, and must have originally projected about 2 inches in front of the second course. Though of the same material as the steps, it was not a step, but belonged rather to the foundation, its upper surface alone being visible, and marking (like the surface of the corresponding course in all similar structures) the level of the earth, pavement, or platform adjoining. The level thus indicated is just 4 feet 8 inches above that of the footboard of the inscribed benches, $\pm$ feet 6 inches above the level of the orchestra, and 3 feet 3 inches above the footboard of the ordinary seats, which represents, as shown in $\S 3$, the highest level ${ }^{58}$ which can be assigned to the orchestra before the addition of the inscribed seats.

The three limestone courses of the original stylobate were continued round the returns till they met the south wall of the Thersilion. Beneath them was a foundation, which is still in situ, consisting of three courses of tufa, with an average depth of about 3 feet 6 inches in all.

[^41]numbered ' 4 ' and ' 5 ' in these plans were placed by us in their present position, and that, though they are without doubt rightly assigned to their respective courses, their original position in those courses cannot be exactly ascertained. The same should be said of the group of stones mar'ked ' 3 ,' which belong, as we shall presently see, to a later addition.

57 See, e.g., Pl. XV. Figs. 4 and 5, showing the same arrangement in the Stoa of Philip. The surface of the stylobate of the Stoa Myropolis (?) is somewhat similar.
$: 88$ 'The highest level.' See note 34 to the present chapter. If the level of the orchestra was (as there suggested) somewhat lower than this, the difference of level to be accounted for is even more than that given above,-perhaps as much as 4 ft . instead of 3 ft . Bin.

Addition of three steps to its stylobate.

To the original stylobate, as above described, three additional steps (marked ' 1;' ' 2 ,' ' 3 ' in Plates VI., VII., and XI.) and a thin course beneath them (performing the same function as the lowest limestone course in the original stylobate) were added, along the front only, at a later time. The new ground level before the portico, as indicated by the thin course just referred to, was 3 feet 3 inches lower than the old; it was therefore 1 foot 3 inches above the present level of the orchestra and exactly level with the footboard of the ordinary seats. The section given on Plate XII. shows in strong lines the original, and in dotted lines the later, steps and illustrates the adjustment of the latter to the former.

The proofs that the three lowest steps are later than the others may be summarized as follows:-
(1) They have no solid foundation of their own.
(2) The foundation of the original stylobate, and the projecting two inches of its lowest limestone course, have been cut away for the sake of adjusting them.
(3) The jointing of the blocks is inferior to the jointing in the upper steps; $\Gamma$ clamps are used instead of 1 clamps; dowel-holes with channels for running with lead occur; and the tooling of the surface of the lower steps is entirely different from that of the upper.

For more detailed evidence on all these points with the exception of the tooling we must refer to Chap. III.; while the tooling will be discussed in the later pages of the present section.

## Three questions

 raised.The above facts, which cannot (we think) be disputed, give rise to three questions which are of the first importance for a correct understanding of this Theatre :-
(i) When were the lower steps of the portico added?
(ii) If the Theatre was in existence before the lower steps were added, what was the relation of portico to Theatre before that addition?
(iii) Why were the lower steps added?

Cbronological order of parts.

The most obvious arrangement.

These questions will be best answered if we begin by considering the question of date. Though the absolute date of the addition cannot be fixed with any great precision, we may be able to determine it relatively to that of the other portions of the Theatre and Thersilion; and our interpretation of the scenic arrangements of the Theatre will depend entirely on the manner in which we do so.

Four portions of the Theatre and Thersilion have to be taken into account, viz. :-
(1) The auditorium.
(2) The inscribed benches, which we have shown to be a slightly later addition to the auditorium.
(3) The portico of the Thersilion.
(4) The additional steps of this portico.

The most obvious arrangement of these four is one which, if it were established, would exactly meet the requirements of those who deny the existence of a raised stage in the Greek Theatre. It is, in fact, the arrangement implied in Dr. Dörpfeld's view ${ }^{59}$ that the present

[^42]orchestra ('erst später sind bei einer Tieferlegung der Orchestra noch drei weitere Stufen hinzugekommen'). This theory is open to the same objections as the other, and to the further objection that there is no evidence for any change of level beyond that implied by the addition of the $\theta$ póvo, - a change amounting at most to 15 inches.
stone Theatre is of later date than the Thersilion, and that the lower steps of the Portico are contemporary with the former. We give this arrangement in tabular form:-
: 1st Period:- The Thersilion, with Portico. .

2nd Period :- $\left\{\begin{array}{l}\text { The auditorium of the Theatre, without the inscribed } \\ \text { lenches. } \\ \text { The additional steps of the Portico. }\end{array}\right\}$ Contemporary.
3rd Period:- The inscribed benches.
The development of Theatre and Thersilion according to this scheme would be as follows:-In the first period the Theatre in its present form did not exist, and the level before the portico was the same as the general ground level. In the second period the Theatre was constructed; and the orchestra was sunk below the natural ground level, in order to gain support, without embankment, for a larger number of seats than would otherwise have been possible. At the same time the lower steps of the portico were added, so as to give the necessary connexion between the Portico, which served as a background, and the orchestra. In fact, as we have pointed out already, the thin course marking the ground level beneath tine lower steps is just on a level with the footboard of the lowest tier of ordinary seats, a level which may very possibly have been that of the orchestra before the addition of the inscribed benches. Thirdly, the addition of those benches made it necessary to sink the orchestra somewhat lower than before, the difference of level between this lower orchestra and the bottom of the Portico steps being provided for by an inconsiderable slope.

It would indeed be absurd to suppose that the Thersilion was built, without reference to any Theatre, in a position exactly adapted to the addition of a Theatre, by the side of a hill, and with the Portico, its main entrance, turned away from the Agora and facing the hill :-so absurd that a theory which involved this as its corollary might perhaps be regarded as scarcely worth discussion. But to this it might be replied-(and the suggestion comes from Dr. Dörpfeld himself)-that an earlier Theatre, without stone seats, and with an orchestra on the natural ground level, may have formerly occupied the position of the present one, and that it may have been as a background to this earlier Theatre that the Portico of the
 appears at first sight so plausible in itself, and it accounts so well for the various differences of level with which we have to reckon, that we have felt bound to give it our most careful consideration.

Now there are two objections to this theory:-
Objections :
(1) It puts the inscribed benches in the latest period of all, though these benches bear inseriptions which are certainly of the fourth, and probably of the first half of the fourth century b.c.; while it crowds into the narrow interval between the foundation of Megalopolis ( 370 b.c.) and the dedication of the benches :-
(a) An original Theatre, without .stone seats, and the Thersilion with its Portico.
(b) The stone Theatre now in existence.
(c) The lower steps of the Portico.
(2) In the lower steps $\sqcap$ clamps take the place of $H$ clamps, channels for running with lead occur, the fitting of the joints is markedly inferior to that of the upper steps, and the appearance of the surface is entirely different.

But since the period of time which must have elapsed between the technique of the upper and lower steps is a matter on which there is room for some dffierence of opinion, it is fortunate that we have, other evidence also to depend upon, viz. the technique, not of the lower steps relatively to the upper (for it is admitted that the lower are the later of the two), but of both relatively to the seats of the auditorium and the inscribed benches. This evidence makes the theory formulated above altogether untenable. That theory
supposed the lower steps of the Portico to be contemporary with the ordinary seats of the Theatre, while the upper steps were earlier, and the inscribed benches later. A study of the technique of the different parts shows the upper steps, the ordinary seats, and the inscribed
benches to belong to one class, while the lower steps, which are necessarily of later date than the upper, belong to another.

The point of technique in which comparison between these different parts of the Theatre can be made is the tooling of surfaces. The front surface of the upper steps of the portico, with that both of the ordinary seats in the Theatre and of the inscribed benches, has a generally smooth, though not everywhere an even surface; while the front surface of the lower steps has been worked across and across with a toothed chisel, so that the whole surface, when viewed in a favourable light, gives the impression of a network of fine toothed lines, while at the bottom of the face of each block is a border, varying from $\frac{1}{2}$ inch to 1 inch in width, worked perfectly smooth. The difference between the two kinds of tooling, when once pointed out, is unmistakable. ${ }^{60}$

Fortunately we possess in the Theatre itself specimens of both styles of tooling, bearing inscriptions which we can approximately date. On the seats of honour, which have the earlier tooling, there is the dedicatory inscription (Chap. VII., No. I. (1)), which we assign confidently to the fourth, probably to the early fourth century; while the pedestal B, bearing a dedicatory inscription (Chap. VII., No. IX.) which can hardly be assigned to a period earlier than the second century, is tooled in a manner corresponding in every detail to that of the lower steps. ${ }^{61}$

To sum up the evidence derived from the treatment of the surface: the upper steps of the Portico, the ordinary seats of the Theatre, and the inscribed benches, are characterized by a tooling which we know to have been in use at Megalopolis in the fourth centary b.c.; while the lower steps of the Portico are characterized by a tooling which we know to have been in use at Megalopolis in the second century b.c. or thereabouts. Combining this with the fact, which we established in $\S 3$, that the inscribed benches are an addition to the original plan of the Theatre, we are compelled to substitute for our previous table of periods the following :-
1st Period :-
(After 370 b.c., but before
the inscribed benches.) \(\left\{\begin{array}{l}The Portico of the Thersilion, without the lower <br>
steps.{ }^{62} <br>
The auditorium, without the inscribed benches <br>
(orchestra somewhat higher, perhaps as much as <br>

15 inches higher, than at present).\end{array}\right\}\)| Earlier |
| :--- |
| tooling. |
| 2nd Period :- |
| $\left.\begin{array}{l}\text { (Fourth century ; probably } \\ \text { before } 350 \text { b.c.) }\end{array}\right\}$ The inscribed benches (orehestra at present level). |

3rd Period :-
(Perhaps second century
B.c.) $\quad\left\{\begin{array}{c}\text { Later } \\ \text { tooling. }\end{array}\right.$

In the first period the base of the steps of the Portico was at least 3 feet 3 inches
riginal difference f level between 'ortico and Orchestra.
above the level of the orchestra; in the second period the difference of level was 4 feet 6 inches; in the third period 1 foot 3 inches.
know whether any general rule can be formulated with regard to the periods at which these two kinds of tooling respectively prevailed in Greece. In cases like this it is an acknowledged rule that a comparison of dated examples occurring if possible in the same place and under the same conditions is the only satisfactory evidence.

62 Our explanation of the Theatre and Thersilion would not be affected if it should be proved that the portico ought to be assigned to the second period rather than the first ; but there is no evidence to justify such a view.

Now in considering the relation of Portico to orchestra at different periods, these differences of level have to be reckoned with. The last-mentioned difference ( 1 foot 3 inches) may indeed be explained by a slight slope from the Portico to an imaginary line joining the ends of the auditorium, beyond which point we know (from the kerb) that the orchestra was practically level. But the larger figures, 3 feet 3 inches and 4 feet 6 inches, do not admit of so simple an explanation. A slope of 1 in 12 (before the addition of the inscribed seats), or of 1 in 9 (after that addition), is not likely to commend itself to any one as suitable ground for the performances of dancers, much less of buskined actors, and is therefore not worth serious discussion. ${ }^{63}$ Nor can an original flight of steps have occupied the position of the later ones; for we have seen that it was found necessary for the adjustment of the later steps to cut away a portion of the original founclation and of the limestone course above it. We are therefore forced to the conclusion that there was either-
(1) A direct drop from the Portico to the orchestra level, or
(2) A platform (either of earth or wood) before the Portico, with a drop, a slope, or steps, in front of it.

Let us consider these two alternatives in detail.
(1) The arguments in favour of a direct drop before the stylobate are:
(a) That such an arrangement would leave an orchestra nearly large enough to allow the circle of the present kerb to be completed, and quite large enough to allow of such a circle as that at Epidaurus, where a gutter nearly 7 feet wide intervenes between the oporvou and the kerb;
(b) That the foundation-wall of the portico goes deep enough to allow the orchestra, nearly level, ${ }^{64}$ to continue right up to it without uncovering its base; ${ }^{65}$
(c) That in the Stoa Philippeios at Megalopolis we have an analogy for a colonnade resting on a wall of considerable height and so inaccessible from the outside. ${ }^{66}$

On the other hand:
(a) We have already pointed out that the Greeks had no superstition about an 'imaginary circle.' Further, the arrangement suggested would leave mápoooc upwards of 36 feet wide, a width which is more than double that usually assigned to the mápofou in Greek Theatres.
(b) The depth of the foundation is as easily explained on the supposition of a terrace or platform in front of the stylobate as on that of a direct drop. If there were a terrace it would be natural, and if there were a platform it would be necessary, to carry the foundation down to the orchestra level, in order to obtain a firm support for the superstructure. Further it should be observed that the foundation is as deep beneath the returns of this very portico, where it was admittedly below ground-level, as beneath the front.

[^43]below that of the bottom of the foundation of the portico; but the hypothesis we are now considering is theoretically tenable if we suppose a slight slope in the portion of the orchestra which adjoins the portico.

65 The depth of the foundation of this portico is by no means without parallel in buildings of a similar date; but wherever the foundation is deep there is always, as at Megalopolis, some special reason for it. Thus the Netroum at Olympia (Olympia, Tafelband i. Pl. XXV.) and the Tholos at Epidaurus (IIpaктıкá, 1883, Pl. III.) have deep foundations, but these are necessitated by the surrounding levels. Most of the porticos at Olympia have far shallower foundations.
${ }^{60}$ See Chap. III. and Pl. XV. Fig. 3 ' $O$ '.
(1) Arguments in
favour of a direct drop before Portico.

Arguments against it
(c) The wall supporting the colonnade of the Stoa Philippeios is of conglomerate, a material used elsewbere at Megalopolis for solid and exposed walls, while the foundations of the Portico are of tufa, which, so far as we know, was never used at Megalopolis for this purpose, nor, unless stuccoed, in any position where it would be seen. Of stucco, the foundation, where we have been able to examine it (viz. at the west end), shows no trace; and it is moreover so rough that it cannot have been meant to show.
intal to theory of a drop.
(2) There was therefore a platorm of some kind efore the Portico.

This last consideration alone is a sufficient answer to the theory of a drop and an exposed foundation; but we may add-
(d) That a wall 4 feet high, surmounted by a colonnade, would form a most unsuitable background for dramatic performances; and that, even supposing that there were steps added at intervals, it would be exceedingly incouvenient for the purposes of dramatic representation, since the actors, at every entry, would be obliged to descend a flight of steps before beginning to speak; and to descend a flight of steps with dignity, in Greek tragic dress and buskins, would have been no casy task. ${ }^{67}$
(2) We are obliged therefore to fall back upon the second alternative, which supposes a level platform, either of earth or wood, before the portico. A wooden platform perhaps accounts most satisfactorily for the clepth of the foundation of the portico, for it makes a deep foundation as necessary as if there had been a direct drop from portico to orchestra. However this may be, the platform in question must have been at least 3 feet 3 inches in height (perhaps a few inches higher ${ }^{68}$ ) before the addition of the inscribed benches, and 4 feet 6 inches in height subsequently to that addition; and it must have served for the actors to perform upon, for its height is not sufficient to enable us to explain it as a background,--the explanation now frequently given of the higher ('Vitruvian') 'proscenia' at Epidaurus, Oropus, and similar theatres. What was its width, whether it was permanent or temporary, and what means of communication were provided between it and the orchestra,-are questions which it is impossible to answer with confidence. No remains of the original platform have been found; for the extant proscenium, and even the older (wooden) structure of which traces have been found beneath it, are clearly of late date. We would, however, make the following suggestions, without insisting upon them unduly:-
(1) That the platform was originally intended to be permanent, but was afterwards replaced by a temporary structure, erected only when the Theatre was required for dramatic performances. Thus we can best explain the addition of the lower steps of the portico. They would have been entirely useless so long as there was a permanent platform or terrace before the portico; whereas at a period when the platform was only temporary they would be required in order to give access, in the intervals when the platform was not there, to the Thersilion.
(2) That whether the permanent structure was of earth or of wood (we incline to the latter), the temporary platform was doubtless wooden.
(3) That the wooden structure, of which clear traces (described in §. 5. I.) have been found beneath the stylobate of the 'Vitruvian' proscenium, may not improbably represent the platform we are supposing in its later (temporary) form. It is, of course, impossible to determine whether it more resembled the original low platform or the high 'Vitruvian' proscenium.
(4) That if there was, as we have supposed, a period at which the platform was a permanent structure, whether of earth or of wood, at that period at least it must have been faced with steps (continuous or at intervals), if not to form a connexion between stage and orchestra, at any rate to serve as an approach to the Thersilion.

Hee questions answered.

We have now answered, to the best of our ability, the three questions which we put before ourselves a few pages back, as follows:-
(i) The lower steps of the Portico are not only later in date than the ordinary seats of the auditorium, but also later than the inscribed benches. There was therefore a difference of level

[^44]arise on exceptional occasions, where the actors and chorus came into contact. It would not be one of the regular conditions of performance in the Theatre.
${ }^{68}$ See Note ${ }^{34}$ to the present chapter.
between the base of the Portico stylobate and the orchestra amounting at one time to at least $\mathbf{3}$ feet 3 inches and at another to 4 feet 6 inches.
(ii) Before the addition of the lower steps to the Portico there must have stood between it and the orchestra either an earthen terrace or (more probably) a wooden platform.
(iii) The lower steps were added probably in order to give access to the Thersilion at some period when a temporary platform took the place of a permanent one before the Portico.

## § 5. Proscenia.

In the preceding section we have shown that, before the addition of the lower steps, a platform of some kind must have stood in front of the Great Portico ; and that, since the height of this platform was insufficient to form a background for dramatic performances, the actors must have stood not in front of it but upon it. The existence of this platform is a necessary inference from the facts, unless we are prepared to suppose either that there was a direct drop from the Portico to the orchestra, exposing the whole of the foundations of the former, or that the acting took place upon a slope of 1 in 9 . Such a platform would probably have been described by Vitruvius, had any such been extant in his time, as a 'proscenium' or $\lambda$ oreiov, the terms by which he designates the higher platforms which existed in the Greek Theatres of his own day; and he would have explained it rightly as a raised stage upon which the actors stood. Whether he was equally right in interpreting the high proscenia extant in his own day as doyeia, or stages, is a question which we may waive pending our description of the later proscenium, which is just such a structure as he describes, and which afterwards took the place of the platform whose existence we have found it necessary to infer before the Portico.

But in order to preserve chronological order we must begin by mentioning-
I. Remains of an earlier, probably wooden, structure (already referred to in §. 4) beneath the stylobate of the 'Vitruvian' proscenium.

The stylobate of the 'Vitruvian ' proscenium consists of two courses, of which the lower is, structurally, somewhat better than the upper. This superiority of the lower course, slight as it is, was sufficient to suggest to Dr. Dörpfeld, during a recent visit to Megalopolis (April 1892), the possibility of a difference of date between the two courses in question. On the remoral of some blocks of the upper course this suspicion was found to be amply justified, for on the blocks composing the lower course was discovered a series of rectangular sinkings and of grooves clearly intended for the reception of wooden posts and planks. Before replacing the upper blocks accurate measurements of the sinkings on the lower course, so far as we uncovered it, were made, and the results are given on Plate VIl. (Fig. 2). The rectangular sinkings were doubtless intended for the tenons of the wooden posts, the long sinkings or grooves for the facing to these posts, whether continuous or otherwise.

It is to be noticed that, though the grooves themselves are not continuous, a line may generally be traced between them, in some cases, but by no means always, marked by a very slight sinking of the whole surface of the slab behind; and also that the axis of the Theatre cuts neither the centre (lengthwise) of any of the grooves or sinkings, nor the centre of any of the ungrooved spaces between them. Both these facts tend to show that the facing, whatever it consisted of, was continuous, so that the exact position of the grooves and sinkings was a matter of indifference.

The structure above described,-later used as a fuundation for the stylobate of the Vitruvian proscenium,-would serve excellently, as hinted in $\S 4$ ( $\alpha d$ fin.), to support the low platform or stage,
poreibly a low platform, as in\$4, which we suppose to have existed before the Portico, in its temporary form. But it must be conceded that it may equally well have supported a proscenium of the same height as the one which succeeded it, but of inferior construction. In any case it cannot have belonged to the original plan of the theatre ; this is clear both from the carelessness of its structure and from the close resemblance which exists between its grooves and sinkings and those of the rough foundation which prolongs its line eastward along the mifoosos.
but certainly not the original one.
$\cdots$

1. Remains of ac wooden structure,


This line of foundation must be described here owing to its intimate connexion with the one we have just been considering, as to the date of which it affords important evidence. It consists of a number of blocks of tufa, rudely put together, without clamps of any kind, and distinguished by a series of grooves aud other sinkings similar to those already described on the lower course of the stylobate of the proscenium. It is practically in line with the latter; at its extreme east end iudeed it projects 3 inches in front of that line, but this is probably due to shifting, the linc of the foundation throughout its length being, in fact, slightly irregular. The west end of the tufa foundation, where it is separated from the stylobate by a small block of limestone only 5 inches in width and at a lower level, is 5 inches below the level of the stylobate; and from this point to its east end, a distance of 21 feet 1 inch, it rises about 2 fect, so that its slope is approximately 1 in 10.

At the opposite cud of the Vitruvian proscenium, between it and the $\Sigma_{\kappa \alpha \nu o \theta \dot{\eta} \kappa a, \text { we have }}$ found two blocks of tufa with grooves and sinkings precisely similar to those of the foundation last mentioned, with which these blocks, though slightly shifted, correspond approximately both in position and in inclination. Now on the face of one of these blocks is a moulding (shown in section, Plate VII. Fig. 2), showing that the blocks were taken from an earlier structure. The block, in order to be used for the foundation, was inverted, and the moulding, which was probably below ground level, was allowed to remain. One of the blocks composing the founclation at the east end of the proscenium has a moulding which is probably similar, but, having one specimen of the moulding, we have not thought it necessary to remove this block in order to examine it in detail.

The moulding on the block at the west end is assigned by competent authorities to a base or podium of comparatively late times, certainly not before the third century b.c., and probably later. If this opinion be correct, the foundations at each end, -which are of course later than the structure to which the moulding originally belonged,-and with them the lower course of the stylobate of the 'Vitruvian' proscenium, and the wooden structure which once stood upon itcan hardly belong to a period earlier than the second century b.c.; while the 'Vitruvian' proscenium, since it took the place of the wooden structure, is necessarily of still later date.

## II. The 'Vitruvian' proscenium. ${ }^{70}$

The lower course of the stylobate which supported this proscenium has already been discussed in connexion with the earlier wooden structure. Upon this lower course were placed, in order to support the later proscenium, a number of blocks, of regular thickness, but of irregular length and breadth, badly fitted, and without clamps; many, if not all, of them having obviously been taken from some earlier building. The stylobate thus completed is almost exactly on a level with the top of the thin course beneath the later steps of the Portico behind.

The columns which stood upon this stylobate have been described in Chap. III. by Mr. Schultz, who has also discussed the manner in which the proscenium should be restored (cf. Fig. 36). But a few words here will not be out of place. The columns, which were 14 in number and stood between two antae, are of extremely rude work. They are unfinished; for round the front half of each column the bottoms, but only the bottoms, of flutes have been cut. At either side of each column is a projecting fillet, doubtless intended to hold panels (mivanes) ${ }^{71}$ which formerly filled the intercolumniations.

No traces of an entrance in the middle of the proscenium have been discovered; there is neither a wider intercolumniation, as at Athens and Piraeus, nor pivot-holes for doors, as at Eretria, nor traces of any wearing of the stone by feet, the very tooling of the surface being clearly visible. And a wooden threshold is out of the question, for a wooden threshold without wooden jambs and lintel would be an absurdity; and of such a door frame as this would imply there is no sign whatever, the sinkings for the columns on either side of the central intercolumniation being precisely similar to those for all the other columns in the row. That there was no doorway here may therefore be regarded as a certainty. And since

[^45][^46]the stone of the stylobate has not been worn, an entrance without a doorway is equally out of the question, unless we are to make the unwarantable assumption that the proscenium was never used.

Portions of five columns were found actually in situ; but further investigation proved that in every case the dowels which formerly joined them to the stylobate had been removed, thus making it clear that, though in situ, they had not been always undisturbed. ${ }^{72}$

The longest column drum which we have found ${ }^{73}$ measures 7 feet $8 \frac{1}{4}$ inches. Very probably this was the original height of the shafts, this particular column being a monolith. If so, the entire structure, entablature included, must have been about 10 feet high, a measurement which accords very well with the directions of Vitruvius, who gives 10 to 12 feet as the proper height of a Greek proscenium, ${ }^{74}$ and falls just half-way between the height of the corresponding proscenia at Epidaurus ( 12 feet) ${ }^{75}$ and Oropus (about 8 feet). ${ }^{76}$ It must be rememberen, however, that 10 feet is not the precise height of the proscenium, but the minimum height. There is no proof that the longest drum discovered represents the entire shaft of a column. And the diameter of the columns at Megalopolis is half as great again as at Oropus; so that, if any conclusion could be drawn from proportions where the work is so bad, we should expect the proscenium at Megalopolis to be nearer 12 feet than 10 feet high. "i

For the panels (тivancs) which we suppose to have filled the intercolumniations we have analogies in other Vitruvian 'proseenia.' Either (1) a solid wall with engaged columns, or (2) columns with wooden panels in the intercolumniations, appears to have been the usual arrangement of such proseenia. An example of the first is the proscenium at Epidaurus; ${ }^{78}$ of the second those at Oropus, ${ }^{79}$ where rebates take the place of our fillets; at Eretria, ${ }^{80}$ where the columns have similar rebates; and at Assos. ${ }^{81}$ At Piraeus, ${ }^{82}$ the roughness of the stylobate in the intercolumniations, neither prepared for fitting panels, nor worn smooth by the feet (as would be the case had they been left open), makes it probable that they were closed by curtains or hangings of some sort.

The depth of the proscenium at Megalopolis is a matter of some doubt. The distance from the front of it to the front of the columns of the Great Portico behind is about 24 feet, a measurement which is very much greater than the depth of any known proscenium of the Vitruvian type, or of a proscenium constructed according to Vitruvius' directions. The depths of the Vitruvian proscenia of different theatres are, at Epidaurus about 10 feet, ${ }^{83}$ at Oropus 6 feet 4 inches, ${ }^{84}$ at Piraeus about $9 \frac{1}{2}$ feet, ${ }^{85}$ at Eretria about 7 feet; ${ }^{36}$ and Vitruvius' directions would give us, for a Theatre as large as Megalopolis, a proscenium some 15 feet in depth. ${ }^{87}$ We have, however, no reason for supposing that the Vitruvian proscenium at Megalopolis extended back by any means so far as the Great Portico. It is far more probable that a light $\sigma k \eta \nu \eta^{\prime}$ (stage building) or at any rate some movable scenery, was erected behind and above the proscenium, at a suitable distance in front of the Portico. The $\sigma \kappa \eta \nu \eta^{\prime}$, if there was one, may well have been constructed of wood, so that its disappearance is easily accounted for. That such an arrangement would conceal the lower part of the columns of the Portico is no argument against it; for the Vitruvian proscenium, even without a oкø $\quad \eta^{\prime}$, must have done the same. This partial concealment of the Portico must have been extremely ugly; but the facts hardly admit of any other explanation; for the positions in which some of the Portico columns have heen found make it improbable that the Portico itself was dispensed with at any period before the final destruction of Theatre and

[^47]so American Journal of drchaeology, vol. vii. p. 264.
si Miiller, die G'riechischen Bühhemalterthüner, p. 23, note 2, and Практєка́, 1886, p. 55.

82 Iрактєкá, 1880, Plate.
${ }^{83}$ Практєкá, 1883, Pl. I.; where $2.41 \mathrm{~m} .(=\mathrm{c} .8 \mathrm{ft}$.) is given as the breadth of the chamber beneath the stage, to which must be added 0.60 m . (=c. 2 ft .), the breadth of the front wall.
${ }^{84}$ Ірактєки́, 1886, Pl. III. (1•93m. $=6 \mathrm{ft}$. 4in.).
${ }^{95}$ IIpaктько́, 1880, Plate.
${ }^{50}$ American Jourval of Archatology, vol. vii. Pl. X1.
87 Viz . one-seventh of 104 ft ., the diameter of the orchestra after the addition of the seats of honour.

Height of proscenium.

Wooden panels.

Depth of proscenium.

Thersilion. It will appear bye and bye that we do not leliere the proseenium to be older than the first century b.c.; a period at which, and after which, bad work is by no means the exception in Greece.

The question of depth being thus disposed of, the only important difference to be noted hetween the Vitruvian proscenium at Megalopolis and similar proscenia elsewhere is the difference of position; a larger proportion of the circle of the orchestra being cut off by the proscenium at Mcgalopolis than in any other extant Greek theatre, and (though to a less degree) a larger proportion than Vitruvius prescribes. This peculiarity, however, has been already discussed in our section dealing with the auditorium and orchestra ( $\$ 3$ ), where it was pointed out that actual, rather than proportionate, measurements guided the architect, and that the actual measurements at Megalopolis, both from the centre of the front row of seats, and from the extremities of the auditorium, to the front of the proscenium, agree very nearly with the corresponding measurements at Epidaurus and at Athens. for certain is that it is of later date than the wooden structure which once occupied the same position, and which we saw reason to assign at earliest to the second century b.c. We. would therefore suggest the first century b.c. as a possible date for the stone structure, but it may well be later. That such prosecnia still continued to be erected in Vitruvius' own day is generally admitted, ${ }^{88}$ not only because his own expressions imply it, but because the proscenium at Oropus bears a dedicatory inseription ${ }^{89}$ which is not earlier than the second, and more probably dates from the first century b.c. The proscenium at Megalopolis is one of the roughest which have hitherto been found, and may well be of later date than even the one at Oropus.

It will have appeared from our suggestion of movable scenery erected at the back of the proscenium, that we are far from deserting Vitruvius, who describes the proscenium in the Greek Theatre of his day as a stage, in order to accept the new views promulgated by Drs. Dörpfeld and Kawerau, who, in defiance of Vitruvius, regard the proseenium as a background before which the actors played. A criticism of these views will be found in Appendix A, at the end of the present chapter; :and we need only say here that, while the arguments hitherto adduced for the new theory appear to us to weigh extremely light in the balance against the direct evidence of a contemporary writer, the Theatre at Megalopolis seems to us, so far as it bears upon the question, distinctly to confirm Vitruvius as opposed to Dr. Dörpfeld;-first, because (as we have already stated) the Vitruvian proscenium there presents no trace whatever of any entrance in the middle, like those which have been found at Epidaurus, Eretria, and elsewhere;-and secondly, because (as we have endearoured to show) it occupies the position of an earlier platform which was demonstrably a stage.

The first of these arguments carries more weight than may appear at first sight. Dr. Dörpfeld himself would hardly maintain that a colonnade closed by panels, without a single entrance through it for the actors, could possibly serve as a background for dramatic performances. Accordingly he has taken pains to point out that, in every proscenium hitherto discovered, traces of such an entrance have been found. ${ }^{90}$ Now at Megalopolis there is, as we have already seen, no trace of such an entrance.

Our second argument, that the later proscenium, itself a platform, occupies the position of an earlier stage, makes it bighly probable that this proscenium was intended to be used as a stage likewise. At the same time an argument of this kind cau never, of course, amount to demonstration.

## III. Possible Roman stage.

Besides the Vitruvian proscenium, and the earlier wooden structure which formerly occupied' the same position, we have possible traces of a Roman stage, actually closing in the orchestra and.

[^48][^49]auditorium (the usual arrangement in Roman Theatres), its front line coinciding exactly with the chord which joins the two extremities of the retaining walls. The evidence for such a stage may appear, at first sight, somewhat scanty, but is sufficient at any rate to render its existence extremely probable.

In the first place, in front of the west end of the Vitruvian proscenium is a line of blocks (best shown in Plate VII.) running forward to a point close by the extremity of the oxecos or gutter, and then turning eastward across the orchestra. Though these blocks are not absolutely in line with each other, yet if we suppose them to have been but very slightly shifted they may originally have occupied a position which would serve very well for the foundations of the end of a Roman stage ; and it is very difficult to explain their presence in any other way.

Secondly, the position of the pedestals $A$ and $B$ is much easier to understand if we suppose them to have stood immediately in front of a Roman stage; on any other supposition it is quite anomalous. But in that case they must have originally stood farther back, and been moved to their present position after the Roman stage was erected; for the inscription on pedestal B (Chap. VII. No. IX.) dates from a period earlier than even that to which we assign the Vitruvian proscenium, which preceded the Roman stage.

Thirdly, in front of the Vitruvian proscenium lie some architectural fragments (see Chap. III. $\$ 3, H$ ), which may possibly have belonged to such a stage as we are supposing.

At the same time the evidence is far from being decisive; at most we can only say that there was probably a Roman stage.

For its height, if the stage existed, we have no evidence. Vitruvius' rule for a Roman stage is not more than five feet; ${ }^{91}$ and extant stages confirm Vitruvius. The depth of a Roman stage should, according to the directions of the same writer, ${ }^{92}$ be one-fourth of the diameter of the orchestra; but we have already seen that the architects were guided less by rules of ratio, such as those laid down by. Vitruvius, than by practical considerations.

## §6. Mápoóos AND ミкаvoӨ ${ }^{\prime} \kappa a$.

The Theatre at Megalopolis is perhaps the only one in existence which has only one tápodos. Only one $\pi$ ápodos. This peculiarity is due to another unique feature, the $\Sigma_{\kappa \alpha \nu o} \theta \eta^{\prime} \kappa a$, which occupies the position in which we should expect a western mápooos. Whether the $\Sigma_{\kappa}{ }^{2} \nu o \theta_{\eta}^{\prime} \kappa a$ in its present form was or was not a part of the original plan of the Theatre, it is not likely that its position was ever occupied by a $\pi^{\prime} \rho o \delta o s$; for the embankment of the auditorium on this side projects too far nortbward to allow of one.

In the tápodos the only extant remains of building are the line of foundation which has already been sufficiently described ( $\S 5$. I.). It undoubtedly supported a wooden structure forming the north wall of the $\pi a \rho o \delta o s$ at the period represented by the lower course of the 'Vitruvian' proscenium; the southern boundary of the mápoosos being the retaining wall of the auditorium. This gives us a $\pi a \dot{\rho} \rho_{0} \delta o s$ with a width of $14 \frac{1}{2}$ feet at the point nearest the orchestra, but narrowing slightly towards its outer end; a curious arrangement certainly, but one which bas an analogy in the Theatre at Epidaurus, where the outer ends of the two mápodoc are narrower than the inner.

The slope of the foundation, which is about 1 in 10 ( $\mathbf{v}$. supra), gives us also the slope of the mápooos. Beyond (i.e. north of) the wall which it supported, there was probably an upward slope from the outside, forming a means of access to the top of the proscenium, exactly as at Epidaurus ${ }^{\circ 0}$ and Sicyon. ${ }^{94}$ If we are right in supposing that a low platform originally occupied nearly the same position as the 'Vitruvian' proscenium, it was probably reached from the outside by a similar passage.

We have found no trace of any doorway at the outer end of the mapodos, like those at Epidaurus. Such doorways were by no means universal. At the same time it is not impossible that some traces of one might be found beneath the incline which we have left as

No trace of a doorway in та́podos. an approach to the Theatre.

[^50]${ }^{93}$. 11 ракткќ́, 1883, pp. 47, 48; and Pl. II.
${ }^{94}$ American Journal of Archaeology, v. PI. IX. and p. 290.

$\boldsymbol{\Sigma}_{\text {кауоөйка. }}$
之каVö $\eta$ one $\pi a ́ \rho o d o s . ~$

Corresponding foundation west of proscenium．

The Skavo日 ${ }^{\prime}$ ка ：－ Its name．

Its state of preservation．

Foundation in


Miscellaneous remains．

It will be remembered that heyond the west end of the Vitruvian proscenium there are two blocks（cf．§5．1．）similar to those composing the rough foundation at the east end，and that one of these blocks has the late moulding figured PI．VII．Fig．2．Even supposing the $\mathrm{\Sigma}_{\mathrm{k}}$ avooinka to be an addition to the original plan of the Theatre，it is of course impossible to put it at a later date than these blocks；and thercfore the two blocks cannot be regarded as remains of a $\pi a^{\prime}{ }^{\prime} \rho \delta o s$ existing here previously to the erection of the $\Sigma \kappa a v o \theta \eta^{\prime} \kappa a$ ．If，as we suppose， they are approximately in situ，it is probable that the foundation to which they belong supported a wall forming the northern boundary of a passage giving access from the orchestra to the $\Sigma^{x}$ avo日inca，but we know so little of the arrangements of the latter that we can hardly venture to dogmatize on this point．

We must next say a few words about the $\sum_{k a v o} \eta_{i} k a$ itself．First，with regard to the name which we have assigned to it．Our authority for this name is an inscription which occurs upon a number of tiles found，in the course of excavation，in and near it．The tiles are of plain red earthenware，c．$\frac{3}{4}$ inch in thickness．They are $\mathbf{U}$－shaped，the hollow of the $U$ having a depth of c． $4 \frac{1}{4}$ inches．Each tile bore upon it，in a sunk panel，the word Exavolícas，in characters of late Greek，or Roman period（see Chap．VII．No．XXVIII． （1））．Since most of these tiles were found high up，and some of them just outside the ミкavoinca，it has been suggested that they come from the roof of the building；but their shape appears to us to preclude this explanation，and we rather suppose them to have belonged to a gutter，perhaps draining the part of the embankment which overhung the Ekavo该кa，so as to prevent it from being flooded in time of rain．

Inscribed tiles are very common at Megalopolis．A number of iuscriptions（postly fragmentary）are given by Mr．Richards in Chap．VII．（No．XXVIII．）．Those found in the Eravolika are not the only ones which have helped us to an identification．The Stoa Philippeios has been identified in a similar manner，${ }^{25}$ and a tile with an inseription which is probably，but not certainly，＇$\Theta \in \omega \hat{\nu}$ ，＇has tended to confirm our identification of the Sacred Enclosure of the Great Goddesses．${ }^{96}$

Of the building itself little remains except its south wall，which is，for the most part， identical with the retaining wall of the auditorium，and its west and north walls．The only possible trace of a boundary to the $\Sigma$ кavoorika eastward is a block of tufa（PI．VII．E）； and the purpose of this block itself is extremely problematie．If the इ̌avo日j’кa was，as we must suppose，separated from the Theatre proper by a wall，the wall was probably of wond，since it has entirely disappeared．

The limestone foundation within the $\Sigma_{\text {ravo日íxa，and running parallel to its north wall，}}^{\text {a }}$ appears to have supported a wooden partition，since certain projections upon its upper surface，which have not been removed，seem to us to preclude the possibility that the wall which stood upon it was of stone．${ }^{37}$ It may be suggested that the narrow space between it and the north wall rejresents a passage，and that the remainder of the Enavoońxa was divided up into chambers to which the passage gave access；but it must be remembered that we really know nothing of the arrangements of this building and are therefore obliged to confine ourselves to conjecture．

We end our description of the Theatre at Megalopolis by drawing attention to the very late wall behind the north wall of the Eкavo日íxa，noticed in Chap．III．§ 3 （ $F$ ），and to the limestone blocks with curious sinkings，which lie immediately behind the colonnade of the Great Portico．The position of these blocks（best shown in Pl．XI．Fig．2），whether they are or are not in situ，is hard to explain．They lie at a level of from 3 feet 6 inches to 3 feet 9 inches below the surface of the stylobate of the portico，in apparently irregular positions． If they are in situ，they may have served to support some part of the stage scenery at the period when the Great Portico was used as a background for performances in the Theatre． If they are not in situ they may have performed the same function in connexion with one of the later proscenia，and have been thrown down in the position which they now occupy at a later period；but it is dificult to see at what period the ground level behind the colonnade can have been so low．

[^51]97 Cp．Chap．III．，Section 3，F，where Mr．Schultz suggests a different use for this foundation．

## § 7. Conoluding Remarks.

The Theatre at Megalopolis is undoubtedly one of the most interesting Greek Theatres hitherto excavated. The auditorium as a whole is, indeed, far less perfectly preserved than the corresponding part of the Theatre at the Hieron of Asclepius near Epidaurus, and the general beauty of the design is less striking. But the seats of honour at Megalopolis are in better condition than those at Epidaurus, and the stage buildings have undergone less alteration in later times.

Again the Megalopolitan Theatre has several features which are altogether without parallel elsewhere. The connexiou of the Theatre with a great covered hall (the Thersilion), the portico of which served as a background for theatrical representations, is an altogether new feature. And the same is true of the $\Sigma_{k} \boldsymbol{\nu}_{0} \boldsymbol{\eta}_{\eta}^{\prime} \kappa a$, which was the corollary of the Thersilion, since the latter occupied the place usually assigned to property and dressing rooms.

But for many scholars the chief interest of this Theatre will lie in the evidence which it offers for or against the existence of a raised stage. In considering this evidence different periods in the history of the Theatre must be carefully distinguished. (1) Though no actual remains of a raised stage have been found as part of the original plan at Megalopolis, we have shown that such a stage is a necessary inference from the differeuce of level which existed, before the addition of the lower steps, between the bottom of the Portico stylobate and the orchestra. And (2) the later or 'Vitruvian' proscenium, though in many respects similar to those which have been found in other Theatres, has one feature-viz. the absence of any traces of an entrance through it to the orchestra-which almost excludes the possibility of explaining it otherwise than as a stage.

Perhaps, however, those who on general grounds dispute the existence of a stage in Greek Theatres may be willing to admit that there was such a stage at Megalopolis, but may argue that the Megalopolitan Theatre is in several ways abnormal. That it is abnormal we admit, the Thersilion and its corollary the EкavoA'кa being peculiar to it. But on the other band we do not think any one will contend that the close connexion between the Theatre and the Thersilion could necessitate a stage at Megalopolis, supposing a stage to be unusual in Greek Theatres.

At the same time we do not say that what is true of one Greek Theatre must necessarily be true of all. In the present chapter we have endeavoured to interpret the remains of Megalopolis on their own merits, and have, so far as possible, avoided controversial matter. Such contributions as we wish to make to the general question, without special reference to Megalopolis, have accordingly been reserved for Appendices $A, B$, and $C$.

E. A. Gardner, William Loring.

[We understand from Mr. Loring that since passing a proof of Chap. IV. he has changed his opinion as to some of the views contained in it. He writes: 'The evidence on which I most relied-that supplied by the tooling of the stone in different parts of the structure-has proved, on a final examination, to be (in my opinion) less strong than I formerly supposed; and without it I do not feel that the evidence for a fourth century stage is conclusive.' Mr. Ernest Gardner, on the other hand, maintains the ground taken up in Chap. IV. It being obviously impossible to recast the chapter while it is passing through the press, we must leave Mr. Loring to explain his modified views more fully in some other place.-EDD.]

## APPENDIX A.

## A PLEA FOR VITRUVIUS.

1. General nature of
the arguments ent-
ployed in support of
Dr. Dürpfelt viens.

The arguraent (1) from the beight and
narrowness of the Greek 'proscenium.'

Ir is of course impossible to say, pending the publication of Dr. Dörpfeld's long-promised work ${ }^{1}$ on the Greek Theatre, what arguments he may yet have in store to support his well-known view that the Greek Theatre had no stage. The controversy therefore must still be regarded as an open one. But those who are interested in it cannot be too strongly or too frequently reminded that, at any rate in discussing the 'proscenium' in the Greek Theatre of Vitruvius' day, the burden of proof rests with those who set aside Vitruvius' evidence, not with those who rely on that evidence. Vitruvius, whatever may have been his failings as an archaeologist, was a thoroughly practical man,-this is generally admitted. The Greek Theatre which he professes to describe was the Greek Theatre of his own time,-this is generally admitted also. ${ }^{2}$ Nothing therefore but a general and wellestablished disagreement between his account and the evidence supplied by extant remains can justify us in setting his statements aside.

1
Now it is the peculiarity of this controversy that those who, with Dr. Dörpfeld, reject Vitruvius statement that the structure which he calls 'proscenium' was a stage, base this rejection, not on any disagreement of the extant remains with Vitruvius' description, but on their very remarkable agreement. 'Seine Beschreibung des griechischen Theatergebäudes,' says Dr. Dörpfeld, 'ist vollkommen korrekt; denn die aufgefundenen Theater in Epidauros, Athen, Oropos, Assos, etc., stimmen in allen wesentlichen Punkten mit ihr uberein.' Had the extant examples of the disputed structure (the 'proscenium') been, contrary to Vitruvius' statement, low and broad, no one would have doubted that he was right in describing that structure as a stage. It is because recent excavations have proved it to be, precisely as he had told us, much higher and arrower than the Roman stage, that his accuracy in describing it as a stage is called in question. Vitruvius says, in effect, that the structure under discussion
(1) was high and narrow,
(2) was a stage;
to which Dr. Dörpfeld answers that it
(1) was high and narrow,
(2) therefore cannot have been a stage.

The conflict is one, not of arguments, but of authorities. If a stage so high and narrow as the 'proscenium ' described by Vitruvius and discovered at Epidaurus, Oropus, etc., was really, as Dr. Dörpfeld would have us believe, an absurdity,-how is it that it did not strike the contemporary architect, Vitruvius, as an absurdity also?

Another argument used to prove that the Vitruvian 'proscenium' was not really, as that writer tells
(2) From the absence of communication between 'proscenitum' and orchestra, us, a stage, has been drawn from the absence of any means of communication, in the extant examples, between it and the orchestra. To this I would reply-
(1) That such means of communication are in no way implied or suggested in Vitruvius' account.
(2) That, in the period over which the Vitruvian 'proscenia' extend, communication between actors and chorus was exceptional; but even granting that such communication was occasionally required, it rests with those who on this ground impugn Vitruvius' statement to prove that no means existed for establishing temporary communication between his 'proscenium ' and the orchestra; while it is in no way incumbent on those who follow Vitruvius to prove that means of establishing temporary communication did exist. That is to say, the burden of proof rests with those who reject, not with those who accept, Vitruvius' statement; and that statement would be entitled to our credit, even if there were not, as there is in the opinion of high authorities, direct evidence for the existence of such temporary means. ${ }^{4}$
${ }^{1}$ V. Berliner Philologische Wochenschrift, 12 April, 1890, p. 465, note.

2 V. Chap. IV. note 88 of the present publication.
${ }^{3}$ Berl. Phil. Wroch., 12 April, 1890, p. 406.

4 V. Appendix B.
The arguments from the height and narrowness of the 'proscenium; and from the absence of commanication with the orchestra, are most fully set forth in a review by Dr. Dörpfeld

A third argument ${ }^{5}$ is based on the use of the word 'proscenium.' This third argument is precisely on a par with the first; that is to say, the fact of its application to the disputed structure is not a new discovery tending to cast discredit on Vitruvius' account, but a fact stated by Vitruvius himself, and confirmed by a recent discovery (the inscription ${ }^{6}$ in the theatre at Oropus). So that here again the opposition is not one of arguments but of authorities. Vitruvius says the structure he is describing
(1) was called ' proscenium,'

Dr. Kawerau says it
(2) was a stage;
(1) was called 'proscenium,'
(2) therefore was not a stage.

As before, we bave only to ask-Who is the better authority on such a point? 'Proscenium' ( $\pi \rho 0 \sigma \kappa \dot{\eta} \nu \nu L$ ) -so far as its etymology is concerned-is an entirely colourless word, 'the structure before the $\sigma \kappa \eta v \eta$ ', and is therefore as applicable to a stage as to a decorated background. But even if this were otherwise, the contemporary evidence of Vitruvius, telling us what the word meant in his day, ${ }^{7}$ would altogether outweigh any a priori considerations, at this distance of time, as to what it ought to mean.

On the above three arguments-every one of them derived from the agrecment of the extant remains with Vitruvius' description, and unfairly (as I think) turned to his discredit-Dr. Dörpfeld and his allies propose to base a theory of the development of the Roman Theatre from the Greek, which altogether excludes the existence of a stage in the Greek Theatre. ${ }^{8}$

I do not of course deny that, besides the chief arguments, summarized above, subsidiary arguments have been drawn from certain facts which have come to light in the course of recent excavations. But they are generally facts which, far from showing that the 'proscenium' in the theatre of Vitruvius' time was, as Dr. Dörpfeld says, a background instead of a stage, show at most that, had we no evidence to the contrary, it might have been so interpreted.

Such, for example, is the constantly-repeated argument from the presence of an entrance through most of the extant Vitruvian 'proscenia.' This discovery would perhaps have made the Dörpfeldian theory tenable in the absence of Vitruvius' direct statement; but even if the entrance in question were universal, it could not upset or even discredit that statement; for there is not the smallest reason why there should have been no way out from under a stage, or why the space beneath a stage should not have been utilized. And let it be observed that at Megalopolis no traces of such an entrance have been found.
of Haigh's 'Attic Theatre,' Berl. Phil. Woch., 12 April, 1890, pp. 461-471. This and Dr. Kawerau's article 'Theatergebäude,' in Baumeister's Denknäler (accepted by Dr. Dörpfeld, Berl. Phil. Woch., loc. cit.) are the most authoritative expositions of the new views yet published. The arguments in the Berl. Phil. Woch. are based entirely on the height, narrowness, and absence of communication with the orchestra.
${ }^{6}$ For this third argument I do not know that Dr. Dörpfeld is primarily responsible; but it comes out strongly in Dr. Kawerau's article 'Theatergebäude' in Baumeister's Denhmüler-an article which Dr. Dörpfeld expressly accepts (see preceding note) as representing lis views. Dr. Kawerau puts the argument in a way which appears to me particularly bard on Vitruvius; for he makes it appear as if the word $\pi \rho o \sigma \kappa$ invon were a new discovery tending to discredit that writer's statement. 'Vitruv,' he says on p. 1733, . . . 'den Raum zwischen $g h$ and $c d$ [the reference is to Fig, 1813 in Baumeister] für eine erhöhte Bühne und $g^{h} h$ fur die Vorderwand derselben ansieht, während $g h$ faktisch die vor das Bilhnengebäude vorgesetzte Dekorationswand, das "Proskenion" ist'; ignoring the fact that Vitruvius himself applies the word 'proscenium' to this very wall. And again (p. 1739), 'Diese Wand ist eben nicht die Vorderwand der Biohne, sondern das Proskenion' [the italics are mine], 'der dekorierte Hintergrund für das Spiel, das sich vor ihm in der Orchestra bewegt. Die Richtigkeit dieser Auffassung wird aber auch noch durch die kürzlich anfgefundene Bauinschrift vom Theater zu Oropos bestätigt. . . . Auf dem Architrav befindet sich die Inschrift . . . 「ONO日ETHEAE TO מPOEKHNION KAI TOYE min(AKAz), womit diese Wand selbst hinreichend deutlich als das Proskenion bezeichnet wird.' Why, the structure bearing this inscription is the very one which is expressly called 'procenium' by Vitruvius. The inscription is a oonfirmation of Vitruvius. That we have here an error in the mode of statement, and not a misinterpretation of Vitruvius, is clear from Fig. 1813 (p. 1733) and accompanying text.

6 Quoted in preceding note.
7 'In his day'; for the word 'proscenium,' like several other words in the nomenclature of the ancient Theatre, appears to have undergone some changes of meaning. It would be untrue to say that 'proscenium' clways meant 'stage,'
${ }^{8}$ Dr. Dörpfeld tells us (Berl. Phil. Woch., 12 April, 1890, p. 470) that the explanation which his views afford of the development of the Roman Theatre [with its low stage extending to the centre of the orchestra] from the Greek, is the strongest evidence for their correctness. On the value of this evidence judgment must, to a certain extent, be suspended, since it appears, from the passage above referred to, that it has not yet been fully published. But it is quite safe to say (1) that, if (as I have tried to show) Dr. Dörpfeld's conception of the 'Vitruvian' Theatre, from which the supposed development begins, is erroneous, the theory of development based upon that conception must be erroneous also ; (2) that any attempt to treat the theory of development as independent evidence, and to draw conclusions from it, is inadmissible.
To these general remarke I will only add: (1) that the change from a high and narrow stage to a low and broad one, for which Dr. Dürpfeld wishes to account by his new theory, is perfectly well explained already (see Vitr. v. 6, 2) by the fact that in the Roman Theatre (a) all the performers stood on the stage, and (b) spectators sat in the orchestra; (2) that Dr. Dörpfeld's idea (Berl. Phil. Woch., loc. cit., pp. 469, 470) that the low Roman stage resulted from a sinking of the half of the orchestra which was nearest to the spectators is altogether unproved. Dr. Dürpfeld supports this theory by the statement that, in many Greek theatres altered in Roman times, the lowest row of seats is on a level with the top of the Roman stage ; but it is admitted by his ally Dr. Kawerau (Baum. Denton. p. 1742 ) that this rule is by no means universal ; so that no evidence one way or the other can be fairly deduced from the position of the lowest row of seate.
denotes a stage in Vitruvius' account of Roman Theatre as well as of Greek

This fact disputed by Dr. Kawerau,
who thus gains colour for the Dörpfeldian theory.

Mr. Lonis Dyer, on the contrary, admits the meaning 'stage" in account of Romas Theatre, but disputes it in account of Greel;
thence drawing a different conclusion with regard to stage.

Other examples are the arguments drawn from the underground passages which have been discovered in several theatres, ${ }^{9}$ beneath the orchestra, and from the vaulted staircase ${ }^{10}$ beneath the dressing-rooms in the theatre at Eretria. The explantions given of these discoveries are possible, but wholly conjectural, explanations ; and, with regard to the staircase at Eretria, one has only to glance at the plan of the theatre ${ }^{11}$ to see that the top of it lies altogether outside the dressing-rooms, so that it is more natural to suppose that it gave access to the orchestra and auditorium from the open country behind than from them.

There is thus, to my mind, a radical weakness in the arguments which have hitherto been put forward by Dr. Dörpfeld and his followers in order to prove that Vitruvius was wrong in describing the 'proscenium' in the Greek theatre of his own day as a stage. All of them nlike are based on facts which either confirm or supplement, but never contradict, Vitruvius. But there is one of their arguments which I wish to examine more in detail, because, though, like the others, it is based (in my opinion) on a preconception, it has derived some colour from a translation which is, I think, certajnly erroneous. This is the argument from the use of the word 'proscenium.'

I have already observed that Vitruvius' statement what the word 'proscenium' meant altogether outweighs any preconceptions of our own as to what it ought to mean.

But this position, strong as it is, may be made still stronger. Even those who deny that Vitruvius understood the nomenclature of the Greek Theatre will admit that he nuderstood that of the Roman, or at least that the burden of proof rests with those who maintain that he did not. Now the word 'proscenium,' no less in Titrurius deseription of the Roman Theatre than in his descriytion of the Greck, denotes a stagc. Is not this a very solid confirmation of the correctness of Vitruvius' use of the word in relation to the Grecl: Theatre?

Unfortunately the truth of the statement italicized in the preceding paragraph is disputed, if not by Dr. Dörpfeld himself, at any rate by some of his leading exponents. For I observe that Dr. Kawerau, in his exposition of the new theory, takes the word 'proscenium' (Proskenion), in Vitruvius' account of the Roman Theatre, to denote, not the stage, but the ornamental background behind it. ${ }^{12}$ This interpretation can only be based on an untenable translation of the words 'proscenii pulpitum,' ${ }^{13} \mathrm{Dr}$. Kawerau rendering them not (as I believe they should be rendered) 'the pulpitum (platform) which is (or 'is part of') the prosceniun. but 'the pulpitum which stands in front of the proscenium'; a meaning which it is hard to get from the words, but which, if correct, would doubtless introduce some inconsisteacy between Vitruvius' account of the Greek Theatre and his account of the Roman, and would thus lend some colour to the theory that his explanation of the 'proscenium' in the Greek Theatre as a stage is erroneous. This seems to me a sufficient reason for examining in some detail Vitruvius' use of the words 'proscenium' and 'pulpitum'in both accounts.

But I have also another reason for doing so. Mr. Louis Dyer has recently contributed to the Journal of Hellenic Studies ${ }^{14}$ a paper written in support of an explanation of Vitruvius put forward by one Fra Giocondo in the early sixteenth century. The chief feature of this interpretation,--a feature which separates it toto caclo from the whole class of interpretations now in vogue,-is that, while agreeing with me as to the identity of the 'proscenium' and the 'pulpitum' in Vitruvius' account of the Roman Theatre, ${ }^{15}$ it distinguishes between them in his account of the Greck,-making the latter (a stage) project forward from the former (a columned background standing forward from the 'scena'). This projecting stage (pulpitum) was, according to Fra Giocondo's pupil Scaliger, 'always of wood and removable.' Fra Giocondo's interpretation would, if accepted, lead to a sort of compromise between Dr. Dörpfeld's view and that of his opponents,-allowing, with the former, that the 'proscenium' was a background,--but asserting, with the latter, the existence of a stage. Unfortunately the distinction made by Fra Giocondo between the 'proscenium' and 'pulpitum' in the Greek Theatre is, I cannot but think, a false distinction.

Both these views erroneous.
'Proscenium' means 'stage'
(1) in Vitruvius' account of the Greek Theatre,

It appears then that, while Dr. Kawerau admits the identity of the 'proscenium' and 'pulpitum' in Vitruvius' account of the Greek Theatre, but distinguishes between them in the account of the Roman,-Fra Giocondo, followed by Mr. Louis Dyer, admits the identity in the case of the Roman, but denies it in the case of the Greek. The object of the paragraphs which follow is to show that the words 'proscenium' and 'pulpitum' in the accounts of both theatres denote one and the same structure. ${ }^{26}$
I. In Vitruvius' account of the Greer Theatre, the identity of the structure which he calls 'proscenium' with that which he calls‘ pulpitum' (a stage),-admitted as well by Dr. Dörpfeld's followers as by ourselves,-is evident ( $a$ ) from Vitruvius himself, (b) from the extant remains. Thus:-

[^52]proscenium, not the proscenii pulpitum, of the Roman Theatre.' I have quoted the passage more fully below.
${ }^{36}$ There is of course a shade of difference in meaning between the two words. Otherwise the combination 'proscenii pulpitum' in the account of the Roman Theatre would be superfluous. What I insist on, and hope to establish, is that they cannot possibly be separate structures. If the 'proscenium' is not the 'pulpitum,' it includes the pulpitum.' Probably 'proscenium' $=$ 'stage' exactly in our sense of the word-viz. the platform with all its adjunets,-while 'pulpitum' $=$ 'platform'simply.
（a）Vitruvius，－after giving directions for determining the position of the front edge of the＇proscenium， （＇finitio proscenii＇），and that of the＇frons scenae＇，relatively to the orchestra（no mention whatever of the ＇pulpitum＇），－sums up by saying＇Ita ．．．ampliorem habent ovchestram Graeci et scenam．recessiorem minoreque latitudine pulpitum＇etc．（no mention whatever of the＇proscenium＇）．${ }^{17}$
（b）The extant remains of the disputed structure at Epidaurus，Oropus，and similar theatres，answer in height and breadth to the＇pulpitum＇of Vitruvius，and in position to his＇proscenium．＇The evidence is so strong that their identification with the＇pulpitum＇is admitted by both Vitruvians and Dörpfeldians；while their identification with the＇proscenium＇is not only admitted by both the contending parties，but placed beyond the reach of doubt by the inscription at Oropus，containing the very word mporky⿱⿲㇒丨丶㇒⿴囗⿱一一儿丶iov，upon the sliructure in question．

These two considerations＇$(a)$＇and＇（ $b$ ）＇seem to me to render Fra．Giocondo＇s view，which distinguishes the＇pulpitum＇from the＇proscenium＇in the account of the Greek Theatre，altogether untenable．

II．In Vitruvius＇account of the Roman Theatre，the word＇proscenium＇alone does not occur；but the expression＇proscenii pulpitum＇is applied to the same structure which is elsewhere called simply＇pulpitum＇ （a stage）．

Now the expression＇proscenii pulpitum＇is susceptible of two different interpretations，－viz．，（1）＇the pulpitum which belongs to（or＇is part of＇）the proscenium，＇（2）＇the pulpitum which is the proscenium．＇So that the＇proscenium＇either is，or includes，${ }^{1 s}$ the＇pulpitum．＇The interpretation which makes the＇pro－ scenium＇merely the background to the＇pulpitum＇is a loose extension of＇（1）＇；and，even apart from the difficulty of obtaining such a meaning from the words，it is（ $I$ think）demonstrably incorrect．

For if the＇proscenium＇be not the same as the＇pulpitum＇either it must be the same as the＇scenae frons＇or it must be some third structure between the＇scenae frons＇and the＇pulpitum．＇Let us consider these two alternatives．
（a）If the＇proscenium＇be identical with the＇scenae frons，＇we have the following curious anomaly ：－ In Vitruvius＇account of the Roman Theatre we find precisely the same terms applied to the principal parts of the stage buildings as in his account of the Greek Theatre．They are in each case three in number，－viz． ＇pulpitum，＇＇proscenium，＇and＇frons scenae＇（or＇scenae frons＇）；and in each case two of these terms are con－ vertible．But，while in the account of the Greek Theatre the convertible terms are＇pulpitum＇and ＇proscenium，＇in the account of the Roman Theatre the convertible terms are＇proscenium＇and＇scenae frons＇！ Is not this a reductio ad absurdum of the hypothesis＇（a）＇which stands at the head of this paragraph ？
（b）That the second alternative－that which supposes the＇proscenium＇to have been a third structure， situated somewhere between the＇pulpitum＇and the＇scenae frons＇－is no better than the other，is clear from the following facts：－
（1）While the positions of the＇pulpitum＇and of the＇scenae frons，＇relatively to the orchestra，are fixed by Vitruvius，no directions whatever are given for fixing the position of any third structure between them．
（2）In extant Roman Theatres（which are very numerous and complete）a＇pulpitum＇and a＇scenae frons＇are regularly found，bat no trace of the third structure which my hypothesis implies has ever been discovered．

Hypothesis＇（b）＇is indeed so impossible that I doubt whether it would ever be seriously maintained．The objections to it are so strong that even Mr．Louis Dyer，who，following Fra Giocondo，supposes the two words to have designated two different structures in Vitruvius＇description of the Greek Theatre，is obliged to admit that such a distinction is impossible in the case of the Roman．＇Vitruvius，＇he says，${ }^{19}$＇insists upon a feature in the Roman stage which he really borrows from the Greek，namely the pulpitum proseenii．This is apparently an invention of Vitruvius，one of those＂refinements in practice not observed by his predecessors nor followed by his successors．＂

The comparison required by Vitruvius is between the pulpitum of the Greek and the pulpitum－ proscenium，not the proscenii pulpitum，of the Roman Theatre．＇

So that eren those who maintain，in opposition both to Dr．Dörpfeld and to his antagonists，that in his account of the Goreck Theatre Vitruvius means one thing by＇proscenium＇and another by＇pulpitum，＇are obliged to admit that in his account of the Roman Theatre one structure alone is designated．

Apparently Dr．Kawerau，the advocate of the distinction which I am combating between the＇pulpitum＇ and＇proscenium＇in the Roman Theatre，is aware of the difficulties involved both in identifying the latter with

[^53]as been mentioned；and（2）that the word＇latitudine＇refers to the length of the supposed＇pulpitum＇instead of to its breaclth－in spite of the fact that in the passage complementary to this in the account of the Roman Theatre－＂ita Jatius factum fuerit pul－ pitum quam Graecorum＇－the word＇latius＇demonstrably refers to the breadth（or，as we sometimes say，＇depth＇）of the stage． aud not to its length．＇Demonstrably，＇since rules have been given for determining the position of the front and back of the stage，while nothing has been said about the position of its ends． ${ }_{18}$＇Either is，or includes．＇See note 16.
${ }^{19}$ J．F．S．Vol．xii．p． 361.
the 'scenae frons' and in supposing it to be a third structure between the 'scenae frons' and the 'pulpitum.' He attempts to avoid both difficulties by steering a middle course between them. He says, ${ }^{20}$; Die Vorderwand des Bühnengebäudes [ = scenae frons ${ }^{21}$ ] und die Dekorationswand [ $=$ proscenium] nicht vollig eins sind, sondern das letztere nur an jene angelehnt ist.' That is, the 'proscenium' is neither identical with the 'scenae frons' nor separate from it; the latter is the wall, the former the decorated face of the wall. I appeal to my readers whether this subtle distinction perceptibly reduces the difficulty involved by an actual identification of 'proscenium' and 'scenae frons' (see under ' $\alpha$ '). Certainly it strains the genitive in the expression ' proscenii pulpitum' (which admittedly describes the Roman stage) beyond endurance.
rejected.

Vitruvius is therefore quite consistent.

Every alternative to the identification of the 'proscenium' with the 'pulpitum' in the Roman Theatre having thus fallen through, it is clear that we must accept that identification, translating the words 'proscenii pulpitum' as 'the pulpitum which is (or 'is part of') the proscenium,'-' the platform which is (or 'is part of') the stage,'- 'the stage-platform.' Vitruvius' use of the word 'proscenium' in his account of the Greek Theatre is therefore perfectly consistent with his use of it in that of the Roman; and a comparison of the two accounts provides in reality a strong confirmation of the former account, since no one disputes that he understood the nomenclature of the Roman Theatre.
III.-Summary of results.

The question whether there was or was not a stage in the Greek Theatre must, as I admitted at the outset, remain undecided at least until the appearance of Dr. Dörpfeld's book. This short paper, I need hardly say, is not offered as a solution of the controversy, even so far as that controversy concerns the late (Vitruvian) Theatre. But it will not be an entirely useless contribution if it serves-
(1) To draw attention to the fact that the arguments which have as yet been brought forward by Dr. Dörpfeld and his followers to prove that Vitruvius was wrong in calling the Greek 'proscenium' a stage ('pulpitum') are based, either on the agrcemont of the extant remains with Vitruvius' description, or on facts which supplement, but in no way contradict, Vitruvius.
(2) To prove that, while Dr. Kaweran supposes Vitruvius' use of the word 'proscenium' in his ackount of the Roman Theatre to be inconsistent with his use of it in that of the Greek, and derives from this supposed inconsistency some colour for the Dörpfeldian theory that his description of the Greek 'proscenium' as a stage is erroneous,-in reality the word 'proscenium' has precisely the same meaning in both accounts, and any argument drawn from a comparison of the two accounts tells as strongly against those who follow Dr. Dörpfeld as, if Dr. Kawerau's view were correct, it would tell in their favour.
(3) To show that Fra Giocondo's interpretation of Vitruvius, advocated by Mr. Louis Dyer, is untenable, and that the compromise it carries with it,-the compromise, namely, of supposing that Vitruvian 'proscenia' are really backgrounds, but that a raised stage (probably temporary) stood before them,-is inadmissible.

I have dwelt at this length on the relation of Dr. Dörpfeld's views to Vitruvius, because a correct understanding of the 'Vitruvian' Greek Theatre, of which so many specimens are extant, is not ouly in itself a matter of some interest, but is also-irrelevant as it may at first sight appear to the Theatres of the fourth and fifth centuries B.C.-in reality one of the keys to the whole controversy. Should Dr. Dörpfeld succeed in convincing archaeologists that there was no stage in the 'Vitruvian' Theatre, they will doubtless be much shaken in their belief in the existence of a stage in the Theatre of earlier times; since our knowledge of the earlier Theatre, both from literary and monumental sources, is comparatively slender, and the abolition of a previously existing stage in Hellenistic times would be a fact requiring explanation, $O n$ the other hand, should Dr. Dörpfeld's views, so far as they concern the 'Vitruvian' Theatre, prove to be erroneous, his whole theory of the development of the Roman Theatre from the Greek-a theory which (he tells us ${ }^{32}$ ) will prove, when his book is published, to be the strongest weapon in his armoury-will have to be abandoned. For this theory of development can have no value whatever unless it be based on facts, and the facts on which it must be based are those which concern the later, or 'Vitruvian,' Theatre.
W. L.

## APPENDIX B.

## THE GREEK STAGE AS REPRESENTED ON VASE-PAINTINGS.

This note is intended merely as a summary of the evidence for the existence of a raised stage afforded by vase-paintings, and of the relation of this evidence to the extant remains. It is true that all the evidence here considered has already been published; but its significauce for our present purpose bas been obscured by the introduction of discussions which can to a great extent be dispensed with. It therefore seems desirable to collect and make accessible to English readers the facts in their simplest form, and to allow them to speak for themselves, after only so much comment as is necessary for their proper comprehension.

20 Baumeister, p. 1742.
${ }^{31}$ I8id. p. 1732.

Representations of actors standing upon a raised stage have hitherto been found only upon a certain class of Greek vases, which were made in Southern Italy in the third and second century before our era. These vases have been fully discussed by Heydemann in the Jahrbuch des deutsch. arch. Instituts for 1886, to which I must refer for all details. It has been discussed both before and since by high authorities to what class of representations the scenes represented belong; they almost invariably represent a burlesque treatment of mythological subjects, and in consequence of the resemblance of some of the subjects to scenes found in Aristophanes, it has been suggested that all belong to the Old Attic Comedy. When however we remember that the Old Comedy was never, so far as we know, represented in late revivals, ${ }^{1}$ it appears highly improbable that scenes from it would appear upon vases of this period; and on the other hand it has been suggested with great probability that the form of drama represented is the Phlyax, a kind of burlesque tragedy, common in the South of Italy, where these vases were made. ${ }^{2}$ This view however does not seriously affect the value of the evidence of vases as to a raised stage in the Greek drama. We have no reason for supposing that the South Italian Greeks differed in their dramatic customs from their kinsfolk in Greece itself; all the evidence we possess points in a contrary direction, and the remains of Greek theatres in Italy and Sicily differ in no essential point from those in Greece. It is true that we do not find similar representations of dramatic scenes upon vases made in Greece itself; but this is because nearly all these vases belong to an earlier period; in the fifth or even the fourth century no one would expect an artist, however much he may have been influenced by dramatic representations, to give a realistic picture of the stage and other accessories of the performance.


Fig. A.


Fig. $B$.


Fig. C.

The stage which we see represented upon these vases raries from a rough wooden table of the most primitive construction to an elaborate prossenium, decorated with columns on its front, just like those discovered at Epidaurus, Oropus, and elsewhere. It would of course be absurd to say that we may see in these vases, which all belong to a late period, contemporary records of all the phases of a continuous development of the stage; but on the other hand the primitive table or platform may have continued to be used in the simple country festivals, while all intermediate varieties, up to the more elaborate stage of the regularly built theatres, may already have been in existence ; and thus, even in a record which lasts over but a short period, we may see varying representations which really reflect the custom of many different ages-not because the painter reproduced after archaeological research the model of an earlier time, ${ }^{3}$ but simply because that model persisted locally, even after it had been superseded by more elaborate forms. We may see a complete analogy in the way in which the primitive form of a myth often persists in folk-lore, side by side with its literary version, an analogy that is peculiarly applicable in the case of religious ritual, to which we must never forget that dramatic representations belong.

After thus justifying our quotation of these vases as evidence for the development of the Greek stage, we may examine the various examples more in detail. In every case the stage only has been given in our reproduction, without the actors who stand upon it; it need only be added that they in every case stand upon the platform, not in front of it, even when, as in C, its front is formed by a colonnade resembling that of the Vitruvian proscenium at Epidaurus and elsewhere. The only exception-and that one which 'proves the rule'-

[^54][^55] has been said, such subjects were not represented earlier.
is offered by $D$, which must be considered in its proper place. In some cases there are also doors represented, leading on to the top of the platform through the scene behind $i t$, for the use of the actors.

In A we see a simple platform or table of the roughest description, just like what we may suppose the primitive è és's to have been, the 'table upon which one man used to mount,' and enter into dialogue with the chorus' in the first days of the drama. From this the development through B, a rather more regularly built wooden platform, to the architectural proscenium we see in C, is easy and obvious. The only thing that at first may seem puzzling is the height. Though this is proportionately greater in C , the scale of the figures shows that it does not, as represented, approach the prescribed height of 10 to $\mathbf{1 2}$ feet. But it is clear that the architecture is a mere adjunct to the scene, and that it is so much abridged in the representation that no inferences as to relative size can be drawn from the picture; nor indeed would any inference upon this matter occur to one accustomed to the conventions of Greek vase-painting, in which, for example, the columns of a house or temple are not usually represented as higher than a man. Still, with this reservation, we may perbaps see an increase of height in the platform even upon these vases, as it advances from the simplest to the most complicated form : even in the height of the platform relative to that of the actors there is a perceptible increase, and the architectural decoration seems to imply a still greater increase; viewed in this way, the column front in C may very well be intended to represent one of these proscenia, 10 to 12 feet in height, with which we are familiar both from the description of Vitruvius and from extant examples.

An interesting feature in some of these platforms is offered by the flight of steps serving to connect stage and orchestra, as in B, D, E. That in E is of peculiar importance, when we notice that it is furnished at the top with hooks, like a scaling-ladder ; this at once suggests the passage in Athenaeus Mechanicus (? 210 b.c., acc. to


Fig. D.


Fig. E.

 is not of course to be imagined that the great Attic dramatists devised situations in which actors and chorus would have to approach one another by means of scaling-ladders, but, as has been repeatedly pointed out, we have no evidence for the very high stage in the fifth century; a lower platform is more probable upon every ground; and in a revival of a well-known old play in later times exceptional devices might well be tolerated that would have brought ridicule on a contemporary play-wright.

Besides the doors already referred to, we have in some instances a representation of the decoration of the scena, above and behind the proscenium; in $\mathbf{E}$ it is decorated with Ionic columns. In $\mathbf{E}$ the platform itself has a continuous facing, and it seems to be a wooden structure, with a stone frons scenae behind it. If so, it may best serve to give us a notion of the probable appearance of our wooden platform in front of the great portico at. Megalopolis.

In D we see a frons scenac which is of wood, as well as the proscenium, which is decorated with hangings of drapery. We see it here in side view, and the peculiar feature of this picture is that the actors are in the act of mounting the steps from the orchestra on to the stage. It is a comic scene, and shows how advantage could be taken of this device for comic purposes.

To sum up, these South Italian vase-paintings, owing doubtless to their reproduction of usages which survived locally in various stages of development, afford us most valuable illustrations of the use of a raised platform or stage for dramatic purposes in Greek theatres, and thus supplement the evidence on the same subject which we derive from literary sources and from architectural remains.
E. A. G.

## APPENDIX C.

SUMMARY OF EVIDENCE FOR A STAGE AT VARIOUS PERIODS.
In order to make clear our views with regard to the existence of a stage in the Greek Theatre of various periods, and in particular the position which we assign to Megalopolis in the chain of evidence, I give here the briefest possible summary of that evidence, as I understand it:-
(1) For the stage in the period of the pre-Aeschylean drama.--The tradition preserved by Pollux ${ }^{1}$ and in the Etymologicum Magnum ${ }^{2}$, that in the most primitive drama (before Thespis) an actor mounted upon a table and held a dialogue with the chorus. The rude table illustrated on some South Italian vases ${ }^{3}$ may possibly represent a local retention of this primitive custom.
(2) For the stage in the fifth century.-No direct evidence; but a low stage, intermediate between (1) and (3), seems the most probable arrangement; first because the tendency, as we see by (1), (3), and (4), was towards a gradual heightening of the stage in the Greek Theatre, and secondly because many of the extant 5th century dramas seem to imply an easy communication between actors and chorus.
(3) For the stage in the fourth century.-This is the earliest period for which we have monumental evidence. At Megalopolis a platform, probably of wood, from 3 feet 3 inches to 4 feet 6 inches in height, with a stone colonnade of considerable height behind it, appears to us a necessary inference from the extant remains.
(4) For the stage of the Greek Theatre of Hellenistic and Roman times. - The direct statement of Vitruvius. (just before the Cbristian Era), borne out by the theatres at Epidaurus, Oropus, Megalopolis, and indeed by most. Greek theatres, where 'proscenia' have been discovered which are admitted to correspond in all essentials to that which Vitruvius describes as a stage. The date of these proscenia ranges probably from the second century downward. They are generally from 10 to 12 feet in height, just the measurements given by Vitruvius. This height, implying a separation of actors and chorus so complete that it would have been inconsistent with the general conditions of fifth century drama, is perfectly intelligible in the theatre of later times, when direct contact between actors and chorus in the contemporary drama was a rare, if not an absolutely unknown, occurrence. When, for the revival of old plays, communication between actors and chorus was necessary, ladders were doubtless provided, as is expressly stated by Athenaeus Mechanicus ${ }^{4}$ (probably c. 210 в. c.). Such a clumsy expedient, which would have been intolerable in a new play, might well be allowed as a makeshift in a favourite old play; and probably plays in which it would have been particularly awkward were either adapted to the new conditions, or avoided altogether. Aristophanes, in whose plays the contact between actors and chorus is very common, was never, so far as we know, revived in later times. ${ }^{5}$

The principal new feature to be noted in the Vitruvian proscenium at Megalopolis is the absence of any trace of an entrance in the middle. Without such an entrance the anti-Vitruvian explanation of these proscenia as, backgrounds is of course untenable.
(5) The Roman theatre, with its broad low stage, is not a direct continuation of the Greek, but an adaptation to quite new conditions, such as the greater number of actors, and the placing of seats for distinguished spectators in the orchestra. ${ }^{6}$ Hence there is no need to qualify the statement that the tendency of the Greek stage to become higher and narrower was regular and continuous.
E. A. G.




${ }^{3}$ See Appendix B, Fig. A.
${ }^{4}$ P. 29, Wesch., quoted in Appendix B. A scaling-ladder,
and also ordinary steps, are represented on the vases discassed in the same Appendix. We do not quote Pollux iv. 127 as evidence, because it may be disputed whether he refers to theGreek Theatre.
${ }^{5}$ Haigh, Attic Theatre, pp. 33, 98.
${ }^{6}$ As explained by Vitruvius, v. 6, 2.

## APPENDIX D.

## METROLOGICAL NOTE.

Ir has already been remarked that the general measurements of the Theatre fall remarkably near to round numbers of English feet. We have seen that the original diameter of the orchestra was probably just over 100 feet, that the two diazomata and the top of the auditorium were probably at distances of about 50 feet from one another, thus giving radii of 100,150 , and 200 feet for the three curves; and the original length of the portico of the Thersilion, which served as a background to the dramatic representations, was, reckoning from centre to centre of extreme columns, 101 feet. Now when we remember that the measurements in the case of orchestra and diazomata are only approximate, and may very well have been a few inches more in each case, it seems probable that the general proportions of the Theatre may have been set out upon the basis of some measure a very little greater than our English foot. Such a measure is known
to have been used in setting out the Feraeum and some other of the earliest buildings at Olympia; ${ }^{1}$ it was later used in various places and was practically identical with the Roman foot (also, according to former authorities, with the Attic foot, though this last view has been for good reasons rejected by Dörpfeld and others ${ }^{2}$ ). This measure had a value of about 308 m ., while the English foot is equivalent to 3048 m ., or, to put it roughly, 101 English feet are equivalent to 100 of these Greek feet. It would therefore fit excellently the dimensions of the Theatre; and when we notice that in the Stoa of Philip, on the other side of the river, the total length (internal measurement) is 505 English feet, or almost exactly 500 of these Greek feet, and the intercolumniations are a little over 20 English feet or just 20 of these feet, the conclusion is obvious that the same measure was used in that building also. I cannot enter now upon any metrological discussion as to the origin or distribution of the measure we see there. But its existence was not unknown before, though it is not identical with any of the best-known official Greek feet; and its use in the fourth century for setting out the buildings of Megalopolis is a distinct addition to the history of Greek measures of length. ${ }^{8}$
E. A. G.

[^56]
## OHAPTERV

## THE AGORA.

When the excavations of the British School at Megalopolis were begun in 1890, it was expected that the work for the most part would be confined to the investigation of the remains of the ancient town, and more particularly to finding and clearing the site of the Agora. It was natural that it should be so; for in the first place Pausanias has left us a fuller description of the Agora of Megalopolis than in the case of any other Greek city except Athens and Elis, and secondly the column drums and architectural fragments scattered over a considerable area to the north of the river Helisson, which here runs in a sinuous and constantly changing course through a deep, wide and stony bed, seemed to point to a field with considerable possibilities for the excavator. Thus it was that on Tuesday, March 20th, digging began at the only visible point where the remains showed any order, viz. west of the new high-road from Megalopolis to Karytaina, and about 270 paces north of the river-bed. It seemed probable that here or hereabouts was the spot in which Leake detected rows of columns 'in situ.' During two and a half days' work the western end of the Stoa of Philip was unearthed, and the double row of columns, which had at first attracted our attention, was found to belong to what Mr. Schultz has here separately described as 'Remains of later structures south-west of the Stoa of Philip.' But though the land here belongs to Government, having been in Leake's time a Turkish spahilik and probably confiscated to the new Hellenic state, it was found impossible to pursue our excavations further, as we were destroying a springing crop of corn, and the tenants, finding that Government was not likely to compensate them, naturally objected to the continuance of our work. Fortunately however for us the small occupiers in that neighbourhood do not crop the soil continuously but leave it fallow every other season; and the greater part of the land on the south bank of the river being at the time unsown, our operations were transferred to the Theatre with the very satisfactory and valuable results elsewhere recorded. Work was resumed at the beginning of November, 1890, on the Agora site and lasted till the middle of December. It was however an unwise choice of seasons, and the autumn rains not only altogether prevented the work for at least a third of the whole time but rendered it very difficult and expensive for the rest. The land slopes down gradually to the river-bed and is very wet, at that season of the year especially, as the water is steadily draining through the soil from the low hills that lie behind the northern extremity of the Agora. Though it was left for subsequent work to establish some of the results here recorded, the main part of the excavation was done in the autumn of 1890. That work consisted mainly of the partial clearing of the great Stoa, which the lucky discovery of an inscribed tile has proved to be, as we had supposed from the first, the Stoa of Philip, and of the entire clearing of the foundations of a building which is beyoud doubt the Temenos of Zeus Soter. These two buildings are the subject of papers by Mr. R. W. Schultz, and into the details of their construction I shall therefore not enter.

The judgment of Ludwig Ross, that excavation on this site would be interesting for the history of architecture but would fail to find many works of art, has been justified; for our excavations were singularly unsuccessful as regards 'plunder.' It appears that the successive inhabitants of the spot have long since destroyed most of the objects of art and
the great buildings have been used up for other constructions or converted into lime, so that foundations alone in most cases remain. The best indication of the utter confusion to which the existing remnins are reduced is to be seen in the fact that the drums of the Stoa of Philip have been rolled and scattered all over the site, and several of them are now to be found lying in the Temenos of Zeus Soter. The small village of Kassidochori, N.W. of the site, on a hill, is full of architectural remnins, ${ }^{1}$ and as the natives of Sináno, the modern Megalopolis, have been busy carrying away building materials from the ancient city for a very long period, we may be quite sure that they have not spared the north any more than the south bank of the river. Even more distant villages have shared in the booty. The femed torso seen by Ross outside the village church of Kassimi (which is about three miles from ${ }^{*} \%$ no) and conveyed inside by him was destroyed by superstitious priests and ignorant peasants, when the church was rebuilt. The digging necessary to form the embankment of the high road, between the modern stone bridge and the higher ground, uncovered on the river bank to the east a Roman house, which will soon disappear unless the new Governthent oversee be more successful, than we were in restraining the natives from obtaining building material Dftie excavations of Ross, which are still remembered though they only lasted two or three days, we hayefoun no et and yobably the late building that he laid bare was soon removed all bitutrefoundation it is probable however that this stylobate with the smooth and fluted drums placed at irregular intervals was somewhere near where we suppose the Stoa Myropolis to have been, perhaps upon the foundation line marked in the plan, or in the gap between that and the Temenos towards the river.

Alongside of Mr. Loring's sketch-plan (Fig. 1), which shows exactly what has been uncovered up to the present date, the restoration published in Prof. E. Curtius' Peloponnesos (Fig. 2), and based on the account of Pausanias (viii. 30. 2-31.. 9), is here reproducen. I It

the stele of Polybius would change places. The temple of Hermes, already ruined in the time of Pausanias, must have been in the position assigned by Curtius; and though the Bouleuterion would be shifted to the west by the above-mentioned change, there is some reason to suppose that the position given by Curtius is right. There can be even less doubt as to Pausanias' meaning with respect to the buildings that surrounded the Agora. The southern side on the river bank must have been occupied by the Peribolos of the Great Goddesses to the west, the Stoa Aristandreios in the centre and the Temenos of Zeus Soter to the east. The northern limit was set by the Stoa Philippeios and the Archeia in a continuous line (viii. 30. 3), the position being fixed by the mention of the two hills behind, which were crowned by the ruins of temples to Athena Polias and Hera Teleia; the Bathyllos is obviously the stream that runs down into the Helisson a couple of hundred yards or so to the west of the spot where we began excavating. It is not absolutely certain that the Stoa Myropolis occupied the eastern side of the Agora: but this is the only natural inference from the mention of it after the Archeia. To the west, the Gymnasium, mentioned as it is between the Peribolos of the Great Goddesses and the Stoa of Philip, must have occupied much such a position as is assigned to it by Curtius.

Turning to the sketch-plan of our results we are able to confirm this reconstruction, wherever we have data to go upon. Four buildings of the Agora may be said to be identified with certainty, two alone being as yet fully excavated. As to the rest of the site, it is not likely that further excavations will produce much result, as the face of the soil is more denuded west of the Temenos of Zeus Soter than it is on that site, and even there only foundations remain. It is not however beyond the bounds of possibility that digging in the region where the Peribolos and the Gymuasium are supposed to have lain might find something left of those structures. The difficulty of the site has been caused by the great extent of the ground covered with numbers of misleading architectural fragments strewn about everywhere and often half buried, which have been simply dragged from their places and then abandoned. The tile found by Mr. Loring at a spot marked on his general plan, not far from the stream called above the Bathyllos, probably indicates the site of the Peribolos. It may be taken as certain that the Stor of Aristandros has entirely disappeared, as the river bank has been eaten away altogether to the west of the Temenos of Zeus Soter and now curves northwards for a considerable distance to the west of that edifice. The strong supporting walls of the stoa and temple have partially preserved them from the same fate, and the fact that their foundations were laid so deep and strong shows that even in antiquity it was difficult to confine the mountain torrent of the Helisson within bounds, running down as it does very rapidly at all times from Mount Mainalos and constantly swollen by rains or melting snow. It was small wonder that Leake thonght these weather-beaten foundation walls were the remains of a bridge joining the two divisions of the city. There must have been such a means of communication in antiquity, but it does not seem to have been at this point. Mr. Schultz has given a very full description of the Temenos of Zeus Soter itself as entirely cleared. Unfortunately the traces at the north-west corner, which seem to indicate further building, are too small to allow of any conclusions being drawn, as here the river has encroached too far, carrying away the whole western end of the naos itself. It may be regarded however as probable that the temple was only surrounded on three sides by the stoa, and was not amphiprostyle but just such a structure as the apparently contemporary shrine of Despoina at Lykosoura in this neighbourhood. The chief problem of the building is the large foundation basis- 37 feet 3 inches by 17 feet 7 inches-in the middle of the court, in front of the east entrance of the temple. Here one would expect an altar, but the deep foundations of this basis seem to suggest something else. It may however be held that, as the piers supporting the internal columns of the naos are very deep as well as the outer walls of naos and court, it was found necessary on the side of the river to make the whole structure very solid in order to obviate all danger of collapse, Anyhow one may fairly refuse to suppose that the group of Zeus Artemis and Megalopolis stood anywhere but in the interior of the temple, and it seems unlikely that another large group of statuary should have been set up outside, or that if it had been so Pausanias should have omitted to mention it. One is therefore inclined to fall back on the other hypothesis, that this is a large altar, unless it can be shown that it served some architectural purpose as yet unexplained. The expression of Pausanias, that 'the Hieron is decked around with pillars,' fits the building surrounded as it is by a stoa on three sides, even though the west side was not uniform
with the others. Inscription No. IV. was found against the outer wall of the stoa but affords no evidence to show that our identification is wrong.-With reference to the date of the temple, Mr. Schultz has left the question more or less open, as was to be expected from the paucity of the architectural remains. The only literary evidence is the mention of Kephisodotos and Xenophon as the sculptors of the temple-statues. This would seem to imply the earliest date possible for Megalopolis, as the activity of the father of Praxiteles cannot be supposed to extend to a much later date than the foundation of the city, though Pliny, it is true, sets his 'floruit' at that time, Ol.cII. There is apparently no sign of rebuilding, and it is quite likely that these are remains of a fourth century temple. The inscriptions C.I.G. 1536 and Inscriptions VIII. B seem to show that the building existed in the second century, and it is quite likely that it dates from the fourth. It is unfortunate that we were unable, owing to the same difficulty about the crops, to follow up excavation through the entrance (or exedra?) in the north wall of the stoa, and thereby ascertain whether any further construction begins where the gutter runs into the Temenos; but the accumulation of earth is very great here, so that satisfactory results could hardly be obtained without great and possibly unremunerative expense. East of the Temenos the ground begins to slope away to the river and the bank is less steep. Trial digging here showed remains of houses, of Roman period probably, but nothing to repay much labour. At a considerable distance N.N.E. of the Temenos is a cormer, at which a long foundation wall running north and south makes a return. This foundation was easily cleared as far as the high-road, which cuts across it ; and just at that point a bewildering mass of architectural fragments is collected together and cemented into rough walls by mortar, and tile tombs were plentiful here, as in most parts of the site. An isolated limestone basis was here discovered in front of the wall, but nothing else that certainly belonged to the building of classical times. North of the road the foundations lie very deep and could not be cleared. It remains for further excavation to elucidate the plan of this building, but it seems, as far as one can at present tell, to have been a long stoa approximately 300 feet in length facing the Agora on the east side. In this case it can only have been the Stoa Myropolis, erected out of the spoils gained in the victory over Akrotatos in 265 b.c., when Aristodemos was tyrant of Megalopolis. ${ }^{2}$ Its northernmost end seems to have been in the same straight line with the back wall of the Stoa of Philip. Between this point and the end of that stoa, after a small interval, excavations in October 1891 have shown remains of the Archeia mentioned by Pausanias. It is inter. sected by the road and not much of it seems to be left. It seems clear that there was a small open space giving access to the Agora on either side, separating it off from the Stoa Myropolis and the Stoa of Philip. The latter building is the chief remaining one to be dealt with in the Agora and the best preserved. Its identification has been confirmed by the discovery of inscribed tiles, though unless doubt were cast on,Pausanias there was little reasou to question the view before. Though the area has not been completely cleared, enough has been done to show the plan in all the detail possible. Only it is difficult to reconcile the style of its architecture with the date given by Pausanias. It is hardly to be supposed that the extant remains are those of the building erected and named in honour of Philip of Macedon; and, as elsewhere stated, it is perhaps the best view that this is the stoa restored under Philopoemen, which is adopted by Mr. Schultz as the one that fits the architectural evidence best, since it seems impossible to date the building cither as early as the fourth century b.c. or as late as the first century A.D., when Domitian restored a stoa at Megalopolis. Some will perhaps hold that, as Pausanias apparently made a mistake over the date of the Pbilippeion at Olympia, so here he substituted the name of the great Philip for that of perhaps Philip V. through confusion or misinformation ; but this is an expedient one is loath to adopt.

The double row of columns and the stylobate built up out of the remains of the Stoa of Philip at a lower level in the south-west corner need not detain us; but the rectangular building adjoining, though obviously in its present form of late date, may be on the lines of an earlier building, which, if this be so, probably formed part of the Gymnasium.

Repeated trenching on the ground south of the Stoa of Philip failed to produce anything but tile-tombs and detached architectural fragments. Few remains of buildings

[^57]Akrotatos, who died in the lifetime of his father Kleomenes II. Probably this is a mere slip on the part of Pausanias, and no evidence for dating this battle earlier in the century.
could however be expected here, as the Mctroon and Temple of Hermes had practically disappeared in the time of Pausanias, Zeus Lykaios never had a temple proper, and one could hardly hope to find anything left of the Phigaleian statue of Apollo or the stele of Polybios. There are however remains of two structures in the interior of the Agora. One of these is a much ruined altar of conglomerate uprights on a flat course, 13 feet 10 inches square, not oblong as was the triglyph altar to the south of the river. One may hazard the opinion that this was part of the Hieron of Zeus, though no proof can be adduced beyond the fact that the position is suitable. The other is a fragmentary foundation a little to the south-west of the above, perhaps the north end of a building, of which even the foundations have disappeared in the direction of the river. Now divided by about 10 yards are two pieces of foundation, 8 feet 2 inches by 16 feet and 7 feet 6 inches by 8 feet 10 inches. From the latter a foundation wall runs eastwards in the shape of an arc, but breaks off without reaching the easternmost foundation. There can be little doubt that this segment was completed, and it remains to inquire what this semicircular foundation was. One would naturally at first suggest a semicircular exedra such as that erected by Herodes Atticus at Olympia, and the fact that the exedrae in the Stoa of Philip are oblong is of course no argument against this. In this case the purpose of the structure was probably the same-viz. to serve as an ornamental front and head of the subterranean water-courses from the hills. This would then have been the source of supply of water to the Temenos of Zeus Soter by the tile gutter. There must anyhow have been some means always of carrying off the water on such a site and protecting the foundations of the building from being undermined. One other possibility is worth mentioning. The only remaining building of the Agora mentioned by Pausanias which could have stood here is the Bouleuterion. This Curtius represented on his plan as a simple rectangle, writing long before the excavation of Olympia. Now may this foundation be all that is left of the apsidal termination of a council-hall, such as we find in the complex structure at Olympia? In this case the building would have lain north and south, while at Olympia the council-halls lie east and west: but there is no reason to suppose that this was as essential for a councilchamber as a temple. Even the later of the two parallel halls at Olympia must have been considerably earlier than this; but our knowledge of Greek secular buildings is not sufficient to say that this style of building was impossible at a date which would suit Megalopolis. Both these theories however have little to support them.

It will be seen from this brief account that the site is only important from an architectural and historical point of view, the works of art having all perished. But it is no small gain to have had an opportunity of testing the value of Pausanias' descriptions in a new and important field: and the result of what has been done is to establish the substantial accuracy of that author in one more instance. His historical knowledge may be sometimes faulty: but his merits from the point of view of topography and excavation are such that they are ever more appreciated by those whose privilege it is to carry on researches on classic soil, while his defects are sometimes exaggerated by those who sit and write essays about him at home.

## G, C. Richards.



## CHAPTER VI.

## TOWN WALLS AND INTERNAL TOPOGRAPHY.

## INTRODUCTION.

Previous explorers.

Leake.

The ' Expedition Scientifique de Morée.'

Rose.

Curtius.

Extent and nature of site.

The site of Megalopolis has always been well known. Had other indications been wanting, its 'mountain of a theatre' (as Leake calls it)' is, and always must have been, an object too prominent to escape observation. Megalopolis therefore has never been 'discovered,' and a complete enumeration of travellers who have recognized the site would be superfluous.

Leake, to whom one naturally turns for information and suggestion, slept but a single night (May 9, 1805) at Sinánou,-the neighbouring village which has, since his timel inherited the name of the ancient town. He made neither map nor sketch of the site; and, as he appears to have seen almost unthing which has not remained to the present day, we have derived but little benefit from his information.

Of Megalopolis, as of so many other sites in the Peloponnese, the first real explorers were the members of the French Expédition Scientifique de Morée (A.d. 1829), a commission. whose labours are above all praise. The results of their investigations at Megalopolis appear in five beautiful plates, ${ }^{2}$ and some thirteen pages of letterpress. ${ }^{3}$ The map, ${ }^{4}$ which chiefly concerns us here, has been of considerable service to us. Though it is far from covering what has since proved to be the extent of the site, it includes the central part of it, where all of the objects mentioned by Pausanias are to be sought. And, though incorrect in some details, in the main it gives a clear and faithful outline of the country, and the position of such remains as were visible at the time of the expedition. The French map has been reproduced on a small scale by Curtius in his Peloponnesos, ${ }^{5}$ and also by the editors of Smith's Dictionary of Greek and Roman Geography ${ }^{6}$ and the Guide Joanne for Greece; conjectural identifications, for which the original authors of the map are not responsible, being added in each case. The French map has thus become almost classical.

Ross, who visited the site in 1834, made a small excavation, ${ }^{7}$ unearthing some late remains which it is at present not easy to identify. He also made suggestions (independent of excavation) with regard to the positions of some of the ancient buildings; but these, owing to the unsatisfactory nature of Pausanias's description of those parts of the town which lay outside the Agora, could hardly be more than guesswork, and we have generally been obliged to differ from them.

Curtius, in his remarks on the topography of the site, ${ }^{8}$ generally follows Ross, but the French map has suggested to him some modifications of, and additions to, Ross's views. The chief value of his account of Megalopolis lies in his collection of literary evidence, and in his conjectural restoration of the Agora from Pausanias's description,-a restoration which has proved to be in the main correct.

But none of these writers and explorers appears to have recognized the enormous extent of the Great City. It has not been sufficiently realized that the 'fifty stades' given by

[^58]Polybius ${ }^{\circ}$ as the circumference of the walls are on historical fact. ${ }^{10}$ Had this been sufficiently realized, explorers would have been saved from another error which has become traditional,-1 mean the error of supposing that Megalopolis was built in the centre of a level plain, regardlessly of the advantages or disadvantages of the ground, and therefore destitute of natural defences. Leake's great name has lent authority to the idea that 'the difference of level in every part of the site of Megalopolis is very slight,' ${ }^{\prime 1}$ and that it is comparable in this respect to Mantineia. ${ }^{12}$ But in truth the impression he received was precisely that which is commonly made on passing travellers, and even on many of those who have resided some time at Sinanou; and it arises partly from confining the site of the ancient town to a narrow strip of land on either side of the river, and partly also from an unconscious contrast of 'the plain' with the great hills which bound it on every side. The merest glance at the contours of the map (Pl. I.) which accompanies this publication is sufficient to show that what, looked at as a whole and contrasted with the mountains, is naturally called a 'plain,' when looked at in detail is really an accumulation of hills and valleys for the most part very well defined.

The following section contains the results of some investigations which I made during the winter 1891-2, relative to the position of the city walls. It will be seen that Polybius's statement with regard to the extent of the circuit is fully justified; and that, so far as natural capabilities for defence are concerned, the choice of this site for a fortified town is justifiable also.

> § 2.-The City Walls.
the city walls.
Polybits's reference to the walls of Megalopolis tells us two things,-first that they Previous evidence had a circumference of 50 stades; and secondly that, though this circumference was two stades for their position. greater than that of the walls of Sparta, the area of the city was only half as large. ${ }^{13}$ Hence, besides the extent of the walls, we learn something with regard to the shape of the town; namely, that it must either have been very long and narrow, or very irregular, or both.

Leake mentions some vestiges of the walls, as well as of a ditch, 'among the pasture land and bushes not far from Sinanu, ${ }^{14}$-an expression so vague as to be useless for purposes of identification.

In the French map two bits of wall appearing above ground are marked as belonging to the ancient circuit. They are those indicated by the letters ' $R$ ' and ' $Q$ ' in the French map, ' $F$ ' and ' $G$ ' in my own.

Ross, in his Reisen im Peloponnes, ${ }^{\text {, }}$ noted the existence of foundations of the wall (perhaps identical with my remains ' $A$ ') near Kasidochori.

Conze and Michaelis observed, in the Annali for 1861, ${ }^{16}$ that they had seen what they took for remains of the town wall close to the path from Megalopolis to Ibrahim (now commonly called 'Braïmi'), near a place called '‘'бrais moptiťacs.' The region to which this name is applied is that immediately west of the remains ' K ' (Pl. I.), at and near the point where the path to Braïmi cuts my restoration of the circuit. The name (with its equivalent "'stais róopacs') is still in common use, and doubtless indicates the tradition of a gateway.

To the pieces of town-wall thus indicated, or referred to, by previous explorers I have succeeded in adding a number more, thus bringing the total number to twelve. These twelve, all of which have now been excavated, are indicated in my map by the letters ' $A$ ' to ' $M$ '; and plans of them on a larger scale are given below (Fig. 1). They are so closely related to one another by a general resemblance (1) in plan (2) in position, that their identification is in almost every, case a certainty. Besides them, I have marked in the map by the small letters ' $n$ ' to ' $t$ ' a number of fragmentary or unexcavated remains of the town-wall.

[^59]
## (A) The Extant Remains.

Before describing the remains marked ' $A$ ' to ' $M$ ' in detail, I must premise that they fall into two groups, which, in spite of their general resemblance, show also a certain wellmarked difference in structure which clearly implies a distinction in date. The walls ' $A$ ' to ' $G$ ' belong to what I regard as the earlier group, ${ }^{17}$ those marked ' $H$ ' to ' $M$ ' to the later.
A.-Remains of the wall occupying a corner of high ground close to the village of Kasidochori. From the point where they are situated the ground falls away both to west and south. These remains are the most complete example extant of the kind of structure which 1 assign to the earlier period; and therefore, besides the small plan on which forms part of Fig. 1, a detailed plan, showing the position of the stones and the appearance which they present in their present dilapidated condition, is given below (Fig. 2).


Fig. 1.-Plans of the twelve principal portions of the town wall. ('A' to ' $G$ '-portions assigned to the earlier period; 'H' to ' $M$ '-portions assigned to the later period. The outer side of the wall is in every case placed uppermost in the plans. Dotted lines indicate missing or unexcavated portions of the wall.)

The two parallel walls $a$ and $\beta$ are each about 2 feet 2 inches thick; this thickness being made up of a double row of large stones, not squared, but roughly hewn into the required shape, the inside being left much rougher than the outside. Thus each of the walls a and $\beta$ presents two comparatively smooth exterior surfaces, while the interior, which was doubtless filled with natural earth and cobbles, was left quite rough. ${ }^{18}$ The two walls are separated by an interval of about 3 feet. No bond between them is extant, but a comparison with other parts of the town-wall makes it probable that bonds formerly existed at intervals.

[^60]in which large and partially hewn stones are employed, is the earlier.
18 Cf. Curtius and Kaupert, Karten von detika, Text, Fig. 14 (p. 20), representing a part of the walls of Piraeus.

Outside the walls a and $\beta$, and parallel with them, is a third wall ( $\delta$ ) ; consisting of a single row of stones, much larger than those which compose the other two, but roughly hewn in a very similar manner. The walls $\beta$ and $\delta$ are connceted by a bond ( $\epsilon$ ); the interval separating them is, roughly, 6 feet 6 inches, and the total thickness of the fortification is nearly 16 feet.

The walls marked $a$ and $\beta$ have their analogies in ' $B$,' ' $C$,' and ' $D$;' while the single row of large stones composing the wall $\delta$ is precisely similar to the remains marked ' E .'

The relation of the three parallel walls to each other cannot perhaps be determined with absolute certainty. My own opinion is that they composed one solid wall, the interval between them, like the intervals between the two sides of each of the component walls $a$ and $\beta$, being filled with earth and cobbles. The walls $a$ and $\beta$, which (taken together) have a thickness of 7 feet 4 inches, probably represent the normal thickness of the fortification, the third wall, of which I have discovered but two examples, being added only in places where for any reasou additional strength was required. Two other theories, which have been suggested to me by friends, may be mentioned here ; viz. (1) that $\beta$ and $\delta$ compose the wall proper, a being merely the support for a staircase or an inclined plane giving access to the top of the wall; and (2) that $a$ and $\beta$ compose the wall proper, and that $\delta$, which was perhaps only a single course in height, was intended to support the bottom of a sloping bank of earth which served at once as a support to the wall and as a protection


Fig. 2.-Bird's-eye view of the remains ' $A$ ' in their present condition (to show earlier style of structure).
against the battering-ram. I am inclined however to reject both these theories;-the first because most of the extant remains consist of two double walls, while staircases would only be wanted here and there;-the second because, had the wall $\delta$ been only one course high, the bond $\epsilon$ would, I think, have been unnecessary.

Town walls commonly consisted, as at Megalopolis, of two walls with a filling of earth between them. At Mantineia, where the large and well-fitted polygonal masonry contrasts most strongly with the rude Megalopolitan work, a second wall may be seen inside the other, forming with it a fortification varying from 14 feet to nearly 16 feet in thickness. The beautiful walls of Gortys, too, are better described as two single walls than as one double one'; for the inner and outer faces of the fortification, both alike built of large polygonal blocks, and a single course in thickness, have a very considerable space left between them, and are connected at intervals of a few feet by bonds. At one point, near a corner, I noted a third wall parallel with the other two, and forming with them a fortification having a total thickness of rather more than 21 feet. This third wall, like the wall $\delta$ at Megalopolis, appears to have existed only in special parts of the circuit.

Returning to the remains ' $A$ ' at Megalopolis, I must draw attention to the wall $\zeta$, which is built not of roughly hewn limestone but of squared blocks of conglomerate, and forms an acute angle with the other walls. This wall is not easily explained as part of the fortification, and I think it

Relation of component walls to each other.
possible (taking both its structure and its position into consideration) that it may have scrved some different purpose and be of later date; but on this and similar points it is of no use to dogmatize.
'B.' B.-Remains of a wall similar in plan to ' $A$,' but without the third wall $\delta$. The walls $a$ and $\beta$ appear to be slightly thicker than the corresponding walls in ' $A$; 'but it must be remembered that the thickness of these rough walls, in their prosent dilapidated state, can never be measured witb absolute precision, and therefore the figures whicb I give must be regarded as approximate. Approximately, then, the walls $a$ and $\beta$ in the remains under consideration are, each of them, 2 feet 6 inches thick; and the total width of the two walls, with the interval between them, is about 8 feet. The bond $\gamma$ should be noticed. It will be remembered that ' A,' probably owing to the small extent of the wall $a$ which is extant, furnished us with no example of a bond between $a$ and $\beta$.

Limestone and conglomerate are here used indifferently. This mixture of materials has its parallel in two other portions of the fortification wall of the earlier period, viz. those indicated by the letters F and G .

The remains ' $B$ ' are situated on a well-defined ridge which runs down from the high ground occupied by ' $A$ ' to the river,-a position altogether unsuitable for any but a boundary-wall. Besides the portion shown in Fig. 1, it will be seen from the map that numerous, but very fragmentary, remains are scattered along the ridge, both above and below ' B .'
C.-Remains of $a$ wall built entirely of limestone, on a ridge about equally far west with ' $B$,' but on the opposite side of the river. This ridge connects the high ground traversed by the path to Kasimi with the valley of a small stream south of it. The remains are precisely similar in structure to either of the walls $a$ and $\beta$ in the remains previously described; but the stones employed are considerably larger, so that the wall attains a thickness of about 4 ft . instead of 2 ft . 6 in . This difference in thickness was probably intended to compensate for the absence of a second wall parallel with it ; for no trace of a second wall has been found, and the nature of the ground makes it improbable that there ever was one.
' $D$.' D.-A wall exactly like $a$ or $\beta$ in the remains ' $A$ ' and ' $B$,' and about 2 ft .6 in . in thickness, situated not on a ridge, but on the extreme edge of a plateau from which the ground falls away almost precipitously towards the south. Whether a similar wall, parallel with it, has disappeared, or whether the position, at the top of an almost precipitous slope, was considered so strong as to render a second wall unnecessary, it is at present impossible to say.

Four large stones (marked ' $t$ ' in the map), a little eastward of ' $D$ ' and nearly in line with it, evidently belong to the fortification wall; and the same may probably be said of some large stones, not in situ, which lie scattered in the low ground between ' $D$ ' and ' $E$.'
E.-A single row of very large blocks of limestone, in a bank, roughly but not exactly in line with ' D.' 'The outside of these stones, which alone was visible when I first saw them, is so rough that I doubted their being in situ; but a small trench dug in the bank in which they were buried revealed that the north side (that facing the town) had been hewn to an approximately even surface. Hitherto I have failed to find any parallel walls inside (i.e. north of) them. If, as I suppose, such walls once existed, it is not impossible that remains of them still lie buried in the unexcavated parts of the bank; but it is equally likely that they have entirely disappeared. In any case the wall ' $E$ ' must, I think, be regarded as corresponding to $\delta$ in ' $A$,' to which it is precisely similar.
'F.'
Altered position of river bank.
F.-Remains situated on a small eminence near the north bank of the Helisson. Though the eminence in question does not at the present day form part of the actual river bank, it was probably otherwise in ancient times; for the low ground, which separates the high bank of which it forms a part from the present river-bed, has every appearance of having been reclaimed. Some parts of these remains are in a very dilapidated state, a few stones alone remaining to indicate their former position. These parts are distinguished in the plan (Fig. 1) by dotted lines.

The walls $a$ and $\beta$ are of the same structure as those similarly marked in the plans of ' $A$ ' and ' $B$ '; but they are thicker-about 3 feet and 4 feet in thickness respectively, with an interval of 4 feet 6 inches between them. The total thickness of the fortification at this point is therefore 11 feet 6 inches. The material is, for the most part, conglomerate; but some blocks of limestone are also used. One bond is clearly visible at $\gamma$. A single stone probably marks the position of another bond, which I have accordingly indicated in dotted lines.
Possible tower at 'F.'

The wall $\eta$ forms a right angle with the other walls, thus showing that there was either a change of direction at this point, or a tower. The latter would be quite in place on the river bank; but the question whether it existed or not must remain unsettled, since $\eta$ is on the
very edge of the high ground, and the remaining walls of the tower, if there was one, have fallen away.
G.-Remains in the path to Braïmi,-a path which here follows the ridge scparating the valleys of two small streams. The walls of which these remains consist are of similar structure to those elsewhere marked $a$ and $\beta$. Those distinguished by the letters ' $x$ ' and ' $y$ ' are about 3 feet in thickness, ' $z$ ' being rather thinner, about 2 feet 6 inches. Both limestone and conglomerate are used ; but, while in ' $x$ ' conglomerate largely predominates, ' $y$ ' and ' $z$ ' are built almost entirely of limestone. This fact, combined with another-namely that ' $y$ ' is not bonded into ' $x$ '-may possibly indicate that ' $y$ ' and ' $z$ ' are of later date than ' $x$,' ' $x$ ' having perhaps been the inner of two parallel walls, and ' $w$ ' the bond which connected it with the outer wall, now perished. This hypothesis would also help to explain the curious angle formed between the walls ' $x$ ' and ' $z$.'
' $G$ ' is the last of the extant pieces of town wall which I assign to the earlier period. Though I classify them together, I do not mean to assert that they were all built simultaneously. I have already suggested two different dates for the component parts of ' $G$.' ' $C$,' which is thicker than most of the walls of similar structure and appears never to have had another wall parallel with it, may perhaps be somewhat earlier or later than the rest. And in other cases the mixture of materials may not impossibly be a sign of restoration. But in spite of minor differences, the seven bits of city wall hitherto enumerated are connected by a general resemblance in structure which contrasts them most strongly with the five which I am about to describe.

In the five pieces of wall which I assign to the later period, conglomerate and the large blocks Wralls of the later of limestone used in the preceding style disappear altogether. The walls are built entirely of period, ' $H^{\prime}$ ' ' $M$.' unhewn stones, large and small, doubtless picked up in the neighbouring fields; comparatively large stones being used for the two faces of each wall, while the interior is filled with a mass of smaller ones. Fig. 3 is a sketch of the upper surface of a part of the remains marked ' $K$,' which form


Fig. 3.
a good example of this kind of work. It should be compared with Fig. 2, which (it will be remembered) represents one of the best pieces of wall of the earlier style. The two figures are diawn to the same scale, so as to show the relative sizes of the stones employed.

The later fortifications consisted, like the earlier, generally, if not always, of two parallel walls, connected by bonds; the interval between them being no doubt filled with cobbles and earth. The component walls are generally thicker than those of the earlier period, the usual thickness being from 3 feet to 3 feet 6 inches. The total thickness of the walls ' J,' which form a good example,-including the interval between them,-is from 11 feet 6 inches to 11 feet 10 inches.

The structure of all the walls composing the remains ' $H$ ' to ' $M$ ' is so uniform. in character that I need not describe them separately. The differences in their arrangement will be seen at a glance from the plans (Fig. 1). But I must draw special attention (1) to the small entrance (' t '), wide enough only for one man to pass at a time, in the wall ' K ', ${ }^{19}$ and (2) to the semicircular towers of which $I$ have found remains at ' $J$,' and the rectangular towers at ' $L$ ' and ' $M$.' 'Though no certain traces of towers have been discovered in the earlier walls, there is no reason for supposing that they were first introduced in the later period. On the contrary, we have in Diodorus Siculus (xviii. 70) definite evidence for the existence of towers in the fourth century B.c., since it is there stated that three of them, with

Entrance in 'K.'
Towers in ' $J$,'
' L,' ' M.'

Tvidence for towers in earlier walls.

[^61]many of the remains which we unearth, so soon as our backs are turned, is most disheartening. The фúdaкes appointed to look after excavated remains have generally been chosen on political grounds, and have not unnaturally regarded their position as a sinecure.
the intervening portions of wall, were destroyed during the siege of the town by Polysperchon. The total number and extent of the extant remains are so small that the absence of towers in the older portion of them is not surprising.
Comparison with walls of other towns.

Position of remains.
' 'бтаîs тортíţals.'
a meed only mention the walls of Messene ${ }^{20}$, of Mantineia ${ }^{21}$, and of Gortys. ${ }^{22}$ At Mantineia, while the ordinary towers are rectangular, semicircular towers occur by several of the entrances. At Gortys also, and at Messene, both shapes are found; so that the combination at Megalopolis is by no means an unusual one.

Of the five excavated pieces of town wall belonging to the second period, ' $H$ ' and ' $J$ ' are situated on the continuation of the ridge occupied by ' $G$,' while ' $L$ ' and ' $M$ ' are at the top of the steep slope which separates the high tableland north of the Helisson from the valley of the little river Aminius ${ }^{23}$ and its tributary streams. The remains ' $K$ ' occupy a high point exactly at the corner formed by the ridge on which ' $G$,' ' $H$, and ' J,' are situated, with the slope I have just described. Their position at a corner probably accounts in part for their peculiar shape, the exact meaning of which must, however, remain uncertain. It is not unlikely that the thin wall ' $v$ ', which forms part of ' $K$,' belongs to some later building abutting on the wall.
D 1 is the region immediately west of ' $K$, at and about the point where the path to Braïmi cuts my restoration of the town walls, which goes by the name "'orais móprals" or ' 'aтаis портiтఢals.'

This ends my account of the extant remains of town wall. $y$ next duty is $M$ to phow what conclusions may be drawn from them with regard to the position of the entire circuit of which they formed a part.

## (B) The ancient circuit.

A provisional assumption.

In discussing this problem I shall proceed, provisionally, on the lypothesis that the extant remains, thongh dating from different periods, represent one and the same circuit; in other words, that the more ancient remains are portions of an earlier wall which were still in use at a time when, in other parts, the wall had been rebuilt. This hypothesis is suggested by the fact that in no single instance have late remains been found in positions parallel, or nearly so, with the earlier ones; all the remains, of whatever date they may be, fall naturally, not into two lines, but into one. The hypothesis must, however, be tested by its results, and must be abandoned if it implies a circuit which, either from its position or from its extent, is inadmissible. I think, however, that the results of the assumption are such as amply to confirm its correctness.

Assuming then, provisionally, that we have but one circuit to deal with, let us consider how the gaps which separate the extant remains are to be supplied.
(1) North of the
river.

In the part of the town which lay north of the river, the eastern limit is clearly enough marked by the remains 'F, G, H, J, K,' all of which are situated on the high ground overhanging the valley of the small stream which runs just west of the Tumulus. This high ground has, in its southern portions,-where it is bounded by a stream on its western, as well as on its eastern side,-the form of a steep and narrow ridge, while in its northern portions it should rather be described as the eastern verge of a plateau. But in every part it is so well defined, and so manifestly adapted for purposes of defence, that I was induced to search for remains along the northern part of it solely on these grounds, in spite of a prevailing impression that the extent of the town in a northward direction was less great.

The northern limit is as clearly defined as the eastern, both by the nature of the ground and by the cxtant remains (excavated and unexcavated) in the interval between ' $K$ ' and the path to Zonáti. The slope which separates the high plateau north of the Helisson from the valley of the Aminius and its tributary streams, is a very steep one, and has in parts a fall

[^62] additional proof, if such were needed, that this slope marked the northern limit of the town.

The western boundary is partly indicated by the remains marked ' $B$ ' and ' $A$.' But north of ' $A$ ' the direction of the wall is open to some, though not (I think) to any very serious doubt. It might, that is to say, be maintained, in the absence of any traces of the northern wall west of the point where the path to Zonáti descends to the valley of the Aminius, that the line of wall left the edge of the hills somewhere near that point, and proceeded to join the remains ' $A$ ' by a more direct route than that indicated in my map. But I have rejected this idea for three reasons, viz:-(1) it seems improbable that the designers of the fortification, having obtained so good a line of defence as the top of an almost precipitous slope, would abandon it for the sake of a comparatively small saving in the extent of the wall; (2) by carrying the wall westward as far as the chapel of St. George (' 1 ' in the map), a marked fall of the ground towards the west as well as towards the north could be obtained; (3) the direction (v. Map) of the wall ' $A$ ' points to its having originally crossed the hollow ground and stream which lie north and north-east of Kasidochori : and the necessity for this would have been avoided if the wall harl cut across more directly to join the northern part of the fortification near the path to Zonati.

The river-bed raises a question of some difficulty in connexion with the fortification of the ancient town. Had it been as wide, or even half or a quarter as wide, as it is now, it would (one would think) have been as prejudicial to any adequate defence as two great breaches in the wall,-one on the eastern and one on the western side of the city. For even after heavy rain it is in many places never full of water; and when dry it is a shingly waste, presenting rather the appearance of a bad road than of a river. But it must be remembered that the river, which is continually changing its course, encroaches yearly,-indeed, in wet weather, almost daily,-on one or other of its banks; and the cases in which land, once stolen by the stream, has been reclaimed (as it has been, in my opinion, ${ }^{24}$ between ' $F$ ' and the modern bridge) are comparatively few. We may therefore suppose the river-bed to have been in ancient times very much narrower than at present; and, supposing the rainfall to have been more regular then than now, it is not impossible that it was always full of water.

South of the river I have supposed the town wall to have ascended the ridge just opposite the village of Kasidochori, crossed the path to Kasimi near its highest point, and thence joined the remains ' C ,' which occupy a little promontory or ridge overhanging the low ground and stream indicated in the map. So far I cannot be seriously wrong. Again the restoration of the wall between the remains ' $D$ ' and ' $E$ ' which are almost in line, cannot, owing to the nature of the ground, be erroneous except in very minor details. But the positions of that part of the wall which connected ' $C$ ' and ' $D$,' where it was impossible for it to keep entirely to the high ground, and of the part between ' $E$ ' and the river, where a considerable extent of level country had to be crossed, are, I admit, to some extent conjectural. In each case two alternatives are given in my map; but considerable variations on these might easily be suggested. My chief reasons for preferring the positions which I have marked in double lines, to those marked by a single line, in the map, are in the first case (i.e. between ' $C$ ' and ' $D$ ') the improbability that so good a vantage-ground as that crossed by the double lines would be left outside the walls, and in the second (i.e. between ' E ' and the river) the steepness of the hill which is cut by my single line, a steepness so great as to render the building of a wall upon it extremely difficult. The general extent of the city eastward is, of course, determined by the fact that the eastern wall must have terminated by the river at a point opposite, or nearly opposite, the remains marked ' $F$ ' on the northern bank.

This completes my restoration of the ancient circuit. It may be regarded as certain for nearly the whole of the walls north of the Helisson; while south of the Helisson, though some of its details are conjectural, there can be little doubt of its general correctness. It will be remembered, however, that in discussing this restoration I assumed, on somewhat slender evidence, that the circuit indicated by the extant remains was one and the same circuit, in spite of differences of date among the remains themselves; and I remarked at the time that
(3) South of the river.

Summary.
${ }^{24}$ Cf. §. 2. (1).

Agreement with Polybius.

The restored circuit identical with that which obtained in Poly. bius's time.
the correctness of this assumption must be tested by results. Now, alike in identifying remains and in supplying the gaps between them, I purposely disregarded, for fear of being biased by it, the statement of Polybius that the walls had in his time a circumference of 50 stades. My identifications are therefore based solely on the nature of the remains, and my restoration solely on their position taken in conjunction with the configuration of the ground. This being the case, it will, I think, be admitted that the correctness both of the restoration and of the hypothesis on which it is based is strikingly confirmed by the undesigned agreement of the length of the restored walls with that given by Polybius. The length of the circuit, as indicated in the map by double lines, is about 46 stades; or, including (as we are doubtless entitled to do) twice the present breadth of the river-bed, about $47 \frac{1}{2}$ stades ( $=$ c. $5 \frac{1}{2}$ miles). The agreement with Polybius is too close to be a chance coincidence. There can be little doubt then that I am right in including all the extant remains in one and the same circuit, this circuit being one which prevailed at any rate in the time of Polybius.

But it does not follow either that the limits of the town always occupied the same position, or that Polybius saw the very walls of which remains are extant. Thus we have still two questions to answer, viz. :-(1) Was the original extent of the town identical with that which obtained in Polybius's time? and ( $\because$ ) What is the date of the extant remains? Let us take these two questions in order.

If the original extent of the town was not identical with its extent in the time of
$\because$ The question
original circuit ? Polybius, it must have been larger, not smaller ; for not only do we know that Megalopolis was always but thinly inhabited, and that there was no period when it flourished in such a manper as to justify an extension of the original plan, ${ }^{25}$ but we have direct evidence that, so far from any idea of extending the circuit of the walls being entertained, a contraction of that circuit was actually proposed by a party of the citizens after the destruction of the town and its fortifications by Kleomenes in 222 B.c. ${ }^{26}$ The question we have to settle is, therefore, whether this proposition was carried into effect or not. In other words, whether the original circuit was or was not larger than that seen by Polybius and indicated in my map. I think we shall see that the original circuit was no larger than the later one.

Nurth of the river, the region enclosed within the walls, as shown in my restoration, is bounded by limits so well adapted by nature for purposes of defence, that, though the founders of the city might well have hesitated to adopt these limits, owing to their great distance from the centre of the town, it would have been sheer madness to carry the walls beyond them.

Now the limits of the town north of the river being determined, its eastern and western limits south of the river follow almost as a matter of course; for the walls must have terminated, on the southern bank of the river, opposite, or nearly so, to the corresponding walls on the northern bank; and, this being granted, I have already shown that there is not room for much doubt with regard to the ridges by which they took to the high ground. It follows that the only part of the circuit which may possibly have been situated farther afield than in Polybius's time is its southern wall. Now an extension of the circuit southwards, unless confined to the eastern portion of the south wall, would have implied the abandonment of the high ground near, and west of, the remains marked ' $D$ '; while an extension confined to the portions east of ' $D$,'-even if it reached only so far as the small stream which runs through the village of Sinanou,-would have involved an irregularity in the shape of the town accompanied by no material gain.

It has been previously shown that any theory which supposes the town to have been
answered in the affirmative. originally smoller than it was in the time of Polybius is out of the question. I hope I have now made it clear that the theory which would make it larger is almost equally untenable. The general position of the walls was, therefore, one and the same throughout.

Date of the extant remains.

The date of the extant remains has next to be considered. The preceding paragraphs have shown that, so far as position is concerned, they may be assigned with equal probability to the fourth, third, or second centuries B.c.-that is, any time between Epaminondas and

[^63]

 which way the dispute was settled.

Polybius. But it may be suggested that one or both styles of building date from still later (i.c. Roman) times. Let us consider this possibility.

That we have no evidence for a rebuilding of the walls in Roman times is only a negative argument against the suggestion. But we have, I think, positive, though not absolutely conclusive, evidence in the structure, which, both in the earlier and in the later style, is wholly of stoneno trace of mortar or tile ${ }^{27}$ having been found in any of the extant remains, though these are so widely scattered and amount in all to several hundred feet. This seems to me to be a strong argument against Roman date.

Supposing then, provisionally, that both styles are of Greek period, let us consider to what epochs they probably belong. The only two distinct buildings of which we have evidence are, first, the original building, about the year 370 b.c., and secondly the rebuilding after the battle of Sellasia ( 221 b.c.) of the walls destroyed by Kleomenes in the preceding year. Livy tells us indeed ${ }^{28}$ that Antiochus Epiphanes made a grant of money to the Megalopolitans (c. 175 B.c.) to build their town walls; but it is most improbable that a complete rebuilding from their foundations is here referred to, since (so far as we know) no destruction on a large scale hard taken place between the time of Kleomenes and that of Antiochus; and, though lapse of time might account for the decay of the upper portions, which were probably (see below) of sun-dried bricks, the solid foundations could not fall into decay in a similar manner. ${ }^{29}$

Provisionally, therefore, and subject to the discovery of further evidence, we may assign the two styles of building with some probability to the first half of the fourth, and the second half of the third, centuries respectively.

It must be admitted that even the earlier and better style of building adopted for these walls is rudeness itself compared with that of the other fourth century town walls with which archaeologists are more familiar,-such walls, for instance, as those of Mantineia and Messene. But their great extent (c. $5 \frac{1}{2}$ miles) goes far to account for the bad style, in which they are built; and, even apart from their extent, it is generally agreed that difference of place is as often accountable for variations in the style of building as difference of period.

Some idea of the extent of the ancient site, as compared with that of Mantineia, may be obtained from the fact that the map which accompanies this publication has been printed on a somewhat smaller scale than that of Mantineia in the Bulletin de Correspondance Hellénique for $1890 .^{30}$

It is probable, though it would be difficult to prove the fact, that the upper part of the walls was built, not of stone, but of sun-dried bricks. I say this for four reasons :-(1) because the extent of the site is so great that the bringing together of a sufficient quantity of material to build them entirely of stone would have involved an amount of time and expense altogether disproportionate to the care spent on the lower, and now extant, courses; ${ }^{31}$ (2) because, if the walls were built entirely of stone, their almost complete disappearance is hard to explain; (3) because we have evidence that they were constantly falling into disrepair; (4) because town walls of very various periods are known to have been built of stone at the bottom and of sun-dried bricks above. At Troy portions of the upper brick structure have actually been discovered. ${ }^{32}$ Vitruvius tells us ${ }^{33}$ that parts of the Athenian town walls extant in his time were built of brick; and at Mantineia the older walls were built entirely, ${ }^{34}$ and the later walls probably in their upper portions, ${ }^{35}$ of sun-dried bricks.

[^64][^65]Probable structure of upper part of walls.

Nevertheless, in the absence of direct evidence, the structure of the upper part of the walls of Megalopolis must be regarded as conjectural.

Summary of results.

My researches in connexion with the town walls of Megalopolis have, I hope, established the following facts:-(1) that the 50 stades given by Polybius as the length of the walls are an historical fact; (2) that the original extent of the town was identical with its extent in Polybius's time, i.e. the circuit of the walls was not contracted, as proposed, after their destruction by Kleomenes in 222 b.c.; (3) that the position of the walls was by no means settled at haphazard, but depended on the nature of the ground, which was utterly unlike the site of Mantineia, and anything but a level plain.

If the town was easily captured by Kleomenes, it was not for want either of natural or of artificial defences, but, as Polybius rightly says, because it was much too big for its inhabitants,


## §3.-Internal Topography of the Town.

I Now pass to a branch of my work which has led rather to negative than positive results. I have been obliged, that is to say, to abandon several of the identifications made without excavation by previous travellers and hitherto regarder as fixed points in the topography of Megalopolis; and it has not always been possible to put truer identifications in their place. The subject of the present section is the topography of Megalopolis outside the Agora, the Agora having already been discussed by Mr. Richards in Cbapter V. Now, while Pausanias's description of the Agora is, owing to the symmetrical manner in which it was laid out, unusually precise, the indications of place in the other parts of his account are characterized by his usual vagueness. This fact, combined with the fiagmentary nature of the remains, most of which are of comparatively late date, has made it impossible to identify more than a very few sites with certainty. The following account of the results, positive and negative, which I have obtained, will take the form of short comments on the successive portions of Pausanias's description.

## (A) North of the River.

Paus. viii. 31. 1. 'At the other, that is the western, end of the Stoa (Aristandreios),' says Pansanias, 'one finds an enclosure ( $\pi \in \rho^{\prime} \beta_{0} \lambda o s$ ) sacred to the Great Goddesses. These Great Goddesses are, as I have already pointed out in my account of Messenia, Demeter and Kore. The Arcadian name for Kore is Soteira.'

The sacred enclosureiof the Great Goddesses.

The Stoa Aristandreios undoubtedly occupied (see Chap. V.) the south side of the Agora. Now the sacred enclosure of the Great Goddesses, containing as it did a great variety of shrines and statues, a large hall for the performance of the mysteries, and a sacred grove, was doubtless much too extensive to be included within the limits of the Agora. We must therefore suppose the entire south side of the Agora to have been occupied by the Stoa Aristandreios, and the sacred enclosure to have been situated beyond it, either on the east side, or on both sides, of the stream shown in the map.

At the point marked ' 23 ,' I picked up, in October 1891, a fragment of a tile with an inscription which is perhaps to be read ©e $\omega \nu$ ( $v$. Chapter VII. No. XXVIII. 5). It will be remembered that, apart from the enclosure now under discussion, two other buildings at Megalopolis (the окауоөэंка, or property room, of the theatre, and the Stoa Philippeios) have been identified with certainty by means of inscribed tiles. If we could be sure of our reading $\Theta \epsilon \hat{\omega} \nu$, we should have a strong confirmation of our view with regard to the position of the enclosure of the Great Goddesses.

My reasous for suggesting that this enclosure may have extended across the stream are first its necessarily great size, and secondly the fact that numerous large blocks of hewn stone are to be seen in the field west of the stream, and some blocks (cleanly in situ) in the stream bed itself.



Of the remains in the stream bed, those marked ' 17 ' and ' 18 ' may very possibly date from a good period.

## ' There is a gymnasium built contiguous to the Agora on its western side.'

Since the enclosure of the great goddesses lay west of the Agora and contiguous at any The gymnasium. rate to its southern portions, the gymnasium was doubtless placed north of the sacred enclosure. Like the latter, it may well have extended across the stream. If so, some of the fragmentary remains west of the stream may possibly belong to it.

If, as I have suggested, the sacred enclosure and the gymnasium extended right across the stream, it is hardly possible that the stream was there in Pausanias's time; since, had it been there, he could hardly have failed to have included it in his enumeration of the contents of the former. The idea that the stream was not there in ancient times is strongly confirmed by the presence of remains in its bed; and its absence is much more easily explained on the hypothesis that some building or buildings extended across it than without that hypothesis; for while it is hard to believe that the regions now drained by this stream were formerly drained in any other direction, the amount of water flowing in it can never have been very great, and may well have been either diverted or used up for the purposes of the gymnasium. ${ }^{\text {364 }}$

[^66]The identification of these two hills presents some difficulties. All the ground behind the Stoa Philippeios is rising ground, and there are no two parts of it which stand out unmistakably from the rest. On first glancing at the site one naturally identifies with Pausanias's $\lambda o{ }^{\prime} \phi o \iota$ (1) the crown of hill immediately bebind the Stoa Philippeios, and just west of the public road; (2) a small plateau opposite this, and east of the road, separated from the former by a slight dip through which (in a cutting) the road runs. But both these identifications are almost certainly crroneous. At the first-named place I have been able to discover no remains in situ with the exception of those marked ' 7 ' and ' 8 .' The former of these belongs probably to a hut of quite recent date, and certainly has nothing to do with any building of good period; while the latter is a very rough foundation, not on the crown but on the shoulder of the hill, and on that part of it which is turned away from the Agora. The summit of the hill has been thoroughly trenched, but without result;-indeed the soil turned up has every appearance of being virgin. The other point selected (i.e. east of the road) contains the remains marked ' 45 ' in my map, which are probably identical with those indicated by the letters $B B$ in the map published by the members of the Expédition Scientifique de Morée, ${ }^{39}$ remains which they supposed to belong to one of the two buildings mentioned by Pausanias upon the $\lambda o{ }^{\prime} \phi o t$, and which Curtius ${ }^{40}$ identified more particularly with the sanctuary of Athena Polias. They were excavated by Mr. Richards and myself sufficiently to prove that they belonged to a late building constructed of tiles, cobbles, and the like, the only good work in it being a threshold of white limestone, probably transferred from some earlier structure. ${ }^{41}$

Since the two points which answer best to Pausanias's description have alike disappointed us, we can only suppose that by two $\lambda$ ó $\phi o c$ he intended to designate two portions of the rising ground somewhat farther east : though it is difficult to find any portions sufficiently prominent

Paus. viii. 31. 8.

Probable absence of stream on west of Agora.
Nou- -


Hills ( $\lambda$ ó $\phi o \imath$ ) described as ' behind Stoa Philippeios'

[^67][^68]are probably only
two portions of two portions of generally rising ground.
to justify the expression, or in positions which one would naturally describe as 'behind the Stoa Philippeios.' Curtius ${ }^{\text {s2 }}$ supposed the remains marked ' 47 ' in my map and ' $X$ ' in that of the French Expedition to belong to the shrine of Hera Teleia. These remains have proved on examination to consist of better materials (conglomerate and limestone) than those at ' 45 '; but they are mere foundations, and in so fragmentary a condition that it is impossible to say to what sort of building they belonged. To associate them with the shrine of Hera Teleia is mere guesswork. Curtius's reason for doing so was probably the existence of a small stream, not far beyond it, which he called the 'Bathyllus'; but it will appear later that his identification of this stream was probably wrong; nor, even had it been right, could the stream be correctly described as flowing beneath the hill on which the remains in question are situated.

Shattered condition of extant remains.

The spring
' Bathyllu.s'
has probably disappeared.

There is indeed, to judge from the shattered condition of nearly everything which has hitherto been excavated upon these hills, little chance of determining the position of the two sites of which we are in search. By far the best piece of wall yet discovered in this region is that marked ' 44,' by a large and conspicuous oak-tree which crowns the slope. The position was first suggested by Mr. Penrose, in 1891, as a likely one for a temple, though no remains were then visible above ground. I have since found there some very good conglomerate foundations, aud have traced them for a distance of some 60 feet. This site appears to me the least unpromising upon these hills: but even here I shall be surprised if good results are obtained by excavation. At best only foundations can be expected, and it will probably be impossible to identify them,

The mention of the spring 'Bathyllus,' which should help us to the identification of the shrine of Hera Teleia, is only an additional element of difficulty. Pausanias says that it was 'beneath' the hill on which the shrine was situated, and that it contributed its waters to the Helisson. Now the hills to north and east of the Stoa Philippeios are bounded on either side by streams which flow into the Helisson, but do not contain a single spring which is worthy of the name. The eastern stream, marked by Curtius as the Bathyllus, consists mainly of surface-water, and in dry weather runs almost (if not entirely) dry; and even apart from this it is situated too far east to be described as running 'beneath' any hill 'behind the Stoa Philippeios.' And its branch (not marked by Curtius), which runs close to the remains ' 47 ,' is a mere torrent, baving its origin in the middle of the footpath, and running only after heavy rain. The western stream, already mentioned in connexion with the gymnasium and the enclosure of the Great Goddesses, and identified by Ross ${ }^{43}$ with the Bathyllus, contains (it is true) a small spring which renders it perennial; but this spring is in its northern branch, which lies so far away that any temple built upon the ground which overhangs it (as, for example, near the remains '41') would be invisible from the Agora, and this seems inconsistent with Pausanias's expressions.

On the whole we must, I think, conclude that the spring Bathyllus has entirely disappeared; and I, for my own part, should not be at all surprised if every trace of the two buildings seen (both, be it remembered, in ruins) by Pausanias, has disappeared likewise.

The Tumulus.
Before passing to the other side of the river, I must say a few words about the Tumulus (cf. Chap. II. §.3. D), though, as it lies outside the city walls, I am obliged to desert Pausanias's order for the sake of doing so.

This Tumulus has been commonly identified with the $\gamma \hat{\eta} s \chi^{\hat{\omega} \mu} \mu$, 'A $\rho \sigma \sigma \tau o \delta \eta \eta_{\mu \nu}$ táqos mentioned by Pausanias ${ }^{44}$ as being passed on the route from Megaiopolis to Maenalus. Though this identification is very tempting, and though I cannot at present point to any other mound as corresponding more exactly to Pausanias's description, I think it must be admitted that the probabilities are rather against than for its correctness. In the first place, our excavation of the Tumulus brought to light no traces of any tomb appropriate to a tyrant's burial. The gold ornament discovered was of the slenderest kind, and was found in a small stone vessel quite close to the surface, and obviously not belonging to the principal burial. And the only trace of a burial in the centre of the Tumulus was a plain sarcophagus of the coarsest earthenware and absolutely empty. Secondly, while the Tumulus is situated on the right bank of the river, Pausanias's route, in the course of which he passed the tomb of Aristodemus, followed the left bank. This is evident, both from the list of places through which he went without crossing

42 Pelop. i. 288, and Pl. V.
43 Reisen im Peloponncs, p. 76.
the river, and from his mention of a torrent, the 'Elaphus,' up the course of which he walked without crossing it, and keeping it on his left. This sccond objection is fatal to the identification of our Tumulus with that shown to Pausanias, unless we suppose that he forgot to mention the river (doubtless much narrower then than now) which intervened.

I shall next discuss the topography of that part of the town which lay south of the Helisson; following Pausanias's account as before.

## (B) South of the River.

Paus. viii. 32. 1.
'In the part of the town beyond (i.e. south of) the river, the first object worth recording was a theatre, the largest in Greece. In this theatre there is a perennial spring of water.
"Not far from the theatre there still remain foundations of the Parliament house, built for the Arcadian "Ten Thousand." 45 It was called the "Thersilion" after its dedicator.'

The Theatre has been sufficiently described in Chapters III. and IV. It will be remembered that beneath some of the seats were discovered runnels, which may possibly havc been connected with Pausanias'a 'perennial spring.'

The identification of the building immediately in front of the Theatre,-and connected The Thersilion. with it by means of the portico which formed its façade,-with the 'Thersilion,' is undoubtedly correct. So large and so peculiar a building could hardly have been passed over by Pausanias; and, of the buildings which he enumerates, the Thersilion is the only one to which the remains (those of a vast covered hall) are suitable. If his expression 'not far from the theatre' should be held to imply a less intimate connexion between the two buildings than we actually find, I would remark that, since the greater part of the building had perished before Pausanias's time, the closeness of the connexion may not then have been obvious. When Mr. Gardner and I first visited the site in December 1889, no part of the Thersilion was visible except a portion of the north wall, and this appeared to belong to some building entirely unconnected with the theatre.

[^69]To identify any of the remains in the neighbourhood of the Thersilion with either of these buildings would be the merest guesswork. Such remains as are visible are marked in the map, to which the reader is referred.

[^70]I take these four items together because the indications of place given by Pausanias connect them in such a way that any attempted identifications of them must be interdependent. The altar of Ares is ' not far' from the sanctuary of Aphrodite; the Stadium is 'above the Aphrodite'; and the altar of Herakles and Hermes is.' by the Stadium.'

Ross, ${ }^{16}$ who is followed by Curtius, ${ }^{47}$ supposed the Stadium to extend eastward from a spring situated, as be says, some 100 yards east of the theatre; and he further identified certain round and

[^71]
## The Stadium

square foundations, between its supposed position and the river, with the altar of Ares and the sanctuary of Aphrodite respectively.

The spring referred to by Ross and Curtius is probably that marked in my map just above the remains ' 121 '; for there is no other spring in the region east of the theatre which even rernotely corresponds with their description.
probably not east
(as Ross and Curtius),
but west of the thentre.

In any case the spring in question was, by their own admission, 100 yards from the theatre, and therefore can hardly be the same which Pausanias describes as occupying that end of the Stadium which abutted on the theatre. Again, I am wholly unable to confirm Ross's remark that the shape of the ground in the region indicated is specially suitable for a Stadium. Lastly, experience has taught me, and those who have laboured with me at Megalopolis, that identifications of foundations, unexcavated, with particular buildings, in order to support previously formed theories, are quite valueless.

Thus the view adopted by Ross and Curtius has, in my opinion, nothing to recommend it, and much which renders it improbable.
an of the theatre, immediately behind the embankment of the anditorium, there is an excellent and perennial spring. It is indeed the only spring now in existence which satisfies the requirements of Pausanias's description, and its identification with it, first suggested by the French explorers, ${ }^{48}$ is inevitable-subject, of course, to the discovery of remains of the Stadium, or of the buildings adjacent to it, in some other part of the site. If, as my colleagues and I suppose, the spring in question occupied one end of the Stadium, the latter may have extended from it either northward, towards the river, or westward, in the direction of the ruined chapel near the remains marked ' 82. . The latter is perhaps the more probable alternative; first, because the ground here is alinost level, while that between the spring and the river sloped very considerably; and secondly, because the low hills immediately south of the line connecting the spring with the chapel would serve as an excellent vantage ground for spectators of the races in the Stadium.

No remains of it discovered.

Stadium at all - the ground at the foot of the low bills being simply levelled, and the spectators using the hills themselves as a sort of natural 'grand stand'? Pausanias's word $\pi \epsilon \pi<i \eta t a \iota ~ c e r t a i n l y ~$ admits of such an hypothesis. A similar suggestion might be made with regard to the stadium at Mantineia, which lay at the foot of the hill Alesium (Paus. viii. 10, 1).
The sanctuary of Aphrodite. , 128 ' . 1 . ible 1 the altar ' 128 ,' and since the remains visible above ground are very scanty, it would be impertinent to attempt any identification of the sanctuary of Aphrodite. But it would be in entire accord with my theory about the position of the Stadium if the altar just The altar of Ares. mentioned ( $v$. Chap. III. Fig. 44) were that of Ares, which is said by Pausanias to bave been 'not far' from the sanctuary of Aphrodite, 'above' which lay the Stadium. The expression $\pi \rho o ̀ s ~ \tau \bar{\omega} \sigma \tau a \delta i \varphi$, which describes the position of the altar of Herakles and Hermes, seems to me to imply closer proximity than that of the altar ' 128 ' to the position which I have theoretically assigned to the Stadiura.

Paus. viii. 32. 4.

[^72]$:$

The expression $\dot{\epsilon} \nu \tau \hat{\eta}$ 位i $\rho \underline{a}$ taúty probably means 'in the part of Megalopolis south
 which Chap. xxxii. begins.
Hill ( $\lambda o ́ \phi o s$ ) with- The region denoted by the words mpòs ávío $\quad$ ovra ${ }_{\eta}^{\prime} \lambda \iota o v$ ('eastward') naturally depends shrine of Artemis on the position of the Stadium and the other objects adjacent to it. Those who, with Ross Agrotera, etc. and Curtius, suppose these latter to have been situated east of the theatre are of course obliged to place the shrine of Artemis Agrotera still further east,-namely, upon the steep hill at the other side of the public road. We, on the other hand, supposing the Stadium to have

[^73]49 каì тoûro. It is not clear to what the kai refers.
been situated west of the theatre, are at liberty to place the shrine in question either there or in the region between the theatre and the road.

My own opinion is in farour of the latter alternative: first, because the extant remains probably west of west of the road, though mostly of late date, are more numerous than those on the opposite side : and secondly, for a reason which I am about to explain. Pausanias's expression '̇ $\nu$ áúw (i.e. $\dot{\epsilon} \nu \operatorname{ti\hat {o}} \lambda_{o ́ \phi \varphi}$ ) seems to imply that the shrine of Agrotera was on the slope rather than on the top of the hill; and, if this suggestion be considered hypercritical, it will still be admitted
 of a slope. Now the hill east of the slope is almost precipitous. No part of it could be built on except the top, so that the expression ívoкataßáyti odíyov is wholly inapplicable to it. But on the western side of the road, between it and the theatre, the rise is obtained by a very gradual slope, now partly broken into terraces for agricultural purposes; a slope any part of which might be, and most parts of which have at various times been, built over.

If it should be thought doubtful whether so gradual a slope as this could be called a $\lambda$ ó $\phi o s$, 1 would remind my readers that we have a similar use of the word in connexion with the topography north of the river, where we were compelled to admit that by two $\lambda$ ódoc Pausanias meant no more than two different parts of a generally rising ground.

Of the remains scattered over the hill on which I suppose the shrine of Artemis Agrotera, the precinct and sanctuary of Asklepius, and the statues of the Ergatae, to have been situated, several were partially excavated during our first season's work ${ }^{50}$, and I have had others tested more recently. Nothing of any importance has yet been found, nor any site identified; but it is perhaps worth recording, in case any one should wish to search further, (1) that the remains ' 111 ' may, as already noted in Chap. II., possibly date from a good period, though, if so, they have undergone alteration in Roman times; (2) that at and near the point marked ' 115 ' the workmen whom I employed turned out a number of white marble mullions, evidently from the windows of a Byzantine church. The number of these mullions and their material (which is rare at Megalopolis) alike point to a building of some importance; and, as it is always on the cards that a Christian church has succeeded to a pagan shrine, it is not at all impossible that ancient remains may yet be found near the spot in question. At the same time my own researches in the immediate neighbourhood of this spot have been fruitless.

[^74]If we followed Ross and Curtius in placing the objects discussed in the preceding paragraphs Sanctuary of the east of the public road, we should of course be obliged to locate the sanctuary of the Boy Asklepius east of the road likewise,_perhaps somewhere near the remains marked ' 138 '_ ' 140 ' in the map. Ross ${ }^{51}$ placed it still farther east,-about 100 yards west of the chapel of St. Athanasius.

On the other hand, supposing my theory with regard to the other buildings to be correct, the sanctuary of the Boy Asklepius must have been situated somewhere near the spring which adjoins the remains ' 121 ', in fact nearly in the position assigned by Ross and Curtius to the Stadium. The presence of a spring near the spot which I assign, on other grounds, to the sanctuary of the Boy Asklepius, adds some confirmation to my general views on the topography of Megalopolis south of the river; since Pausanias expressly mentions a spring near the sanctuary in question. It will be remembered that we found it impossible to identify this spring with the $\kappa \rho \eta^{\prime} \nu \eta$ in the Stadium, its distance from the theatre being alone sufficient to preclude such an identification.

In connexion with the bones which were exhibited in the sanctuary of the Boy Asklepius, it is perhaps worth recording that in the museum at Dhimitzina, collected by the venerable priest and late schoolmaster Hieronymus, is a large semi-fossilized bone which he calls the shoulder-blade of an elephant. This bone was brought from Megalopolis. His explanation of it, though it would hardly satisfy a geologist, is at least as near the truth as that given by Pausanias.

## William Loring.

${ }^{50}$ Cf. Chap. II. \& 3.C.

[^75]of the road likewise.

A fossil bone.
Sanctuary of the
Boy Asklepius
$\qquad$


## INSCRIPTIONS OF MEGALOPOLIS AND NEIGHBOURHOOD.

The majority of these inscriptions are published here for the first time. Some of them are the fruit of excavation; others have been found in various places, built into walls or in the possession of peasants in the modern village, and have been copied and in most cases removed to the Museum of local antiquities, which has been instituted chiefly in consequence of our excavations. As the villagers are extremely chary of allowing the stranger to see their treasured ' $\gamma \rho$ ' $\mu \mu a r a$, , which are of unknown value in their eyes, lest he reveal their secret to the attendant Ephor of antiquities, it is quite possible that there may be others in existence in the village which do not appear here. The excavators have however been at work so long, that there is a probability that this list represents nearly all that is preserved which has as yet leen yielded up by the soil. It should be mentioned here that the fragment of the Edict of Diocletian published by Mr. W. Loring in Volume xi. No. 2 of the Journal belongs to this series. Inscriptions previously published from Megalopolis, of which we have been unable to find any trace, are C.I.G. $1537=$ Lebas-Waddington 332, LB. $333, L B .334$, C.I.G. 1538, C.I.G. 1539 , C.I.G. $1536=L B .331$, epitaph Annali 1861, p. 32.

It seemed unnecessary to divide these inscriptions into two parts, those found in excavation and those seen and copied elsewhere. In this publication the inscriptions of the Theatre-seăts are together and head the list, while the inscribed tiles are also by themselves at the end; the rest are in an order which isp roughly thronological, though exactitude where so many date, from the same period is hardly to be attained, It is disappointing that only one instance (the inscription of Antiochos) can be assigned to as early a date as the fourth century. The majority * belong to the second and first centuries b.c., while a considerable number of Roman inscriptions show a long continuity of civic life for the Great City ever in the days of its decay and insignificance. Mr. E. A, Gardner has given nae much help.inethe way of criticism and suggestion, for which I wish here to.thank him:


The repetition of this inscription shows that it is intended to refer to all the 'thrones,' is is expressly stated in the first instance. The letters are larger in ( $\alpha$ ), except in its second line. It might be even held that the words cai rò $\begin{gathered}\text { óxecór } \\ \text { were added as an afterthought; but they }\end{gathered}$ are in the same style, and the size of the letters is very variable. The inscription spreads over three slabs of the back of the seat, and the upper line is $5^{\prime \prime}$ from the top and $14^{\prime \prime}$ from the bottom of these slabs, running horizontally over the surface. The letters vary from $1 \frac{1_{2}^{\prime \prime}}{}$ to $2^{\prime \prime}$ in height. They are by no means in a straight line, and vary in size. The omicron and theta are markedly smaller than the other letters. The forms of $\nu$ and $\sigma$, and particularly the use of $o$ for the diphthong oo suggest the early part of the fourth century; according to Schütz the use of of or the diphthong does not survive long after Euclid in Attic inscriptions, and it is therefore interesting io see it in an Arcadian inscription, which, though it may be and probably is earlier than 350 B.c., cannot be brought back beyond 370 b.c.

$$
\begin{aligned}
& 1 \\
& \text { (2) }
\end{aligned}
$$

$A \cdot P K A^{\prime} \backslash / I E I A \Sigma$ ATV| $\triangle$ MANIA
cANA
$\phi Y|X h m| \lambda \operatorname{Na} A \mid I \Omega N$
$\phi_{\wedge} Y|\operatorname{kaE}| I T \mid \cap N$
HPAK/AE|AE.

$\dot{\phi} \pi|A N||A T| \Omega N$


$$
i \cap N
$$

The interval between two letters is usually about $2^{\prime \prime}$, but the spacing is as irregular as the line. The total length of seat $(a)$ is $21^{\prime} 8^{\prime \prime}$, and the total space occupied by the inscription in the first line is $12^{\prime} 6 \frac{1}{2}^{\prime \prime}$, in the second $2^{\prime} 7^{\prime \prime}$.

This Antiochos is no doubt the delegate from the Arcadian League, who went up to "as Susa in 367 bc. with Pelopidas and envoys from Athens and Elis, to discuss the basis of a peace, and on his return spoke so contemptuously to his fellow-countrymen of the golden plane-tree and the military strength of the Persian Empire (Yen. Hell. vii. 1. 33-88). He was pankratiast and victor at Olympia, and a very prominent man in Arcadia at the time. The
father's name is omitted, though one would expect it. Probably however the mention of the office held by him was quite sufficient for identification, and the father of a successful athlete may have been a person of no rank.
(b) Underneath this inscription, as shown above, has been added later the name of a tribe. The lettering is exactly similar to that of (a) but smaller, so that it occupies little more than one slab, the second.
(c) The letters are here only $1^{\prime \prime}$, or even less, in height, and $\left.1^{\prime \prime}-1\right]^{7}$ apart. The line is only $3^{\prime \prime}$ from the top of the slab, but $17 \frac{1}{2}$ " from the bottom. The curious thing alout tie inscription is that the first slab with 'Avrioxos árovo日er- is followed by a blank clal, and then after a gap of $4^{\prime} 3^{\prime \prime}$ on the third we get $-\eta^{\prime} \sigma a s \dot{a}^{\prime} \nu^{\prime} \theta \eta \kappa \epsilon$. It is unlikely that this was intentiomal. The alteration that was probably made in the two end-seats is described elsewhere (v. p. 38)

From this inscription we obtain a very early date for the construction of the Mieatre auditorium, early that is to say for Megalopolis. These seats of honour would naturally be the latest part of the work, and in some theatres were dispensed with altogether. If the view be accepted that the Antiochos of Xenophon was the dedicator of these seats, then taking into account the early character of the lettering, one is led to believe that this, the latest portion of the fourth century Theatre, was added at a date not later than 360 b.c.
(2) Seat No. 2. Back.
'Арка[8]ьбiás.

Seat No. 3. Back.
' $\mathrm{A} \pi[0] \lambda \lambda \omega \nu i a s$.

Seat No. 4. Back.
MavaӨavaias.

Seat No. 5. Back.
${ }^{\prime} H \rho а \kappa \lambda \epsilon i a ¢$ (very irregular spacing).

Seat No. 6. Back.
Mavias.

Seat No. 7. Back.
? ' $\mathrm{H} \rho \mathrm{f}$ ala[s.

There can be no doubt that these inscriptions are all of the same date. The manner of cutting and lettering shows this. All run along the top of the seat-backs, the apex of the letter being about $\frac{1_{2}^{\prime}}{}{ }^{\prime \prime}$ below the rim. They occupy the two central slabs of the four into which each seatback is divided, and the letters are spaced with long or short intervals and are larger or smaller ( $2^{\prime \prime}-3^{\prime \prime}$ in height) according as the word is long or short; but cyen in one word the intervals vary by several inches. It is unfortunate that in the case of Seat 7 the slab is broken off, so that the beginning is lost; -aas the ending is certain. As there is room before that for four letters, the conjecture 'Hpaias has nothing especially to commend it; but the remains of only one upright stroke are to be traced in the letter that preceded the division of the slabs; so that it may well have been a $\rho$. The fact that of the five other tribal names four are derived from the names of divinities, also makes it probable that this was the case here as well. But Aukaias is a possibility, in which case it would probably answer to the later Avкâitat (Zeus Lykaios), and other suggestions might be made.

We find then Megalopolis in the third and second centuries b.c., and probably also in the fourth, divided into six local tribes, five of which are named after divinities, while the sixth, the 'Apкaסıoia $\phi \nu \lambda \eta$ ', perhaps represents the mixed body of Arcadians from unimportant and distant parts, who swelled the numbers of the Great City. It is interesting to find in an inscription of the fourth century from Mantinea (P. Cauer, Del. 448) that that state was divided into five tribes, whose names were derived from Athena Alea, Enyalios, Zeus Hoplosmios, Poseidon and the Dioscuri. It has been suggested, and is probably true, that these names are both religious and topographical, grouping the population round various temples in different parts of the city.

In the case of Tegea（Cauer，Del．454，Paus．viii．53．6）the same thing is possible，but Pausanias tells us that the four tribes each set up a statue of Apollo Agyieus，and does not mention a

 （viii．45．3），the hill of Zeus Klarios（53．4），the statue of Apollo Agyieus（53．1），and a hieron of Hippothoos，the old hero－king．Thus the nomenclature of the tribes at Megalopolis followed general Arcadian example．It is very difficult for us however to conjecture the local distribution of these tribes，following the account of Pausanias，and perhaps impossible to do so with any approximation to the truth．The tribes named after Athena and Hera（？）may have been on the hilly ground north of the agora，round the shrines of Athena Polias and Hera Teleia（viii．31．9）； those named after Herakles and Apollo west and east of the theatre respectively and south of the river ；while as to the other two we can say nothing．
（3）Seat No．3．Front．（On all four slabs．）

$$
\Phi v|\lambda \grave{\eta} \mathrm{M}| a \iota \nu a \lambda \mid i \omega \nu .
$$

The letters－$\nu a \lambda$－are on a broken piece at first missing．
The letters are very large：$\phi 8 \frac{1_{2}^{\prime \prime}}{}{ }^{\prime \prime} v 7^{\frac{3}{2}}{ }^{\prime \prime}, \lambda 5 \frac{1}{2}^{\prime \prime}$ ，and the rest $5-6^{\prime \prime}$ ．The interval varies from $17 \frac{1_{2}^{\prime \prime}}{}$ to $5 \cdot 2^{\prime \prime}$ ．

Seat No．4．Front．

$$
\phi(\nu \lambda \grave{\eta}) \quad \Lambda \nu|\kappa a \epsilon| \iota \tau \mid \omega \nu .
$$

The monogram（ $1^{\prime}$ high）is only $5{ }^{\prime} 2^{\prime \prime}$ from the $\lambda$ ．The other letters（ $4^{\prime \prime}$ high）are spaced at intervals of from $16^{\prime \prime}$ to $22^{\prime \prime}$ ．

Seat No．5．Front．

$$
\phi \nu \lambda|\hat{\eta} \varsigma \Pi a| \rho \rho a \mid \sigma i \omega \nu .
$$

The letters（ $5-7^{\prime \prime}$ high）are at intervals varying from $15^{\prime \prime}$ to $9^{\prime \prime}$ ．The variety in capital sigma when used at the end or in the middle of a word should be noticed，as it corresponds to our distinction in printed minuscule．

Seat No．6．Front．

$$
\phi(\nu \lambda \dot{\eta}) \Pi|a \nu| \iota a \tau \mid \bar{\omega} \nu .
$$

Letters $4 \frac{1}{2}^{\prime \prime}$ in height on the average ；monogram $9^{\prime \prime}$ ；intervals $28 \frac{1^{\prime \prime}}{}{ }^{\prime \prime}-13^{\prime \prime}$ ．
Seat No．7．Front．

$$
\phi(\nu \lambda \grave{\eta}) \quad \text { 'A }|\pi \sigma \lambda| \lambda \omega[\nu l a] \mid \tau \hat{\omega} \nu .
$$

Intervals $8^{\prime \prime} \cdot 3-24^{\prime \prime} \cdot 8$ ；letters $5^{\prime \prime}-5 \frac{1}{2}^{\prime \prime}$ in height；monogram about $10^{\prime \prime}$ ．
It will be seen that the earlier six tribal names are supplanted by five in Roman times， of which three are new and are strictly local in reference；two remain from the old list．

In one of these two cases，Mavias Maviat $\hat{\omega} \nu$ occur on back and front of Seat 6 ；but whereas ＇A $\quad$ тo $\lambda \lambda \infty \nu i a s$ is on the back of Seat 3，＇A $\pi о \lambda \lambda \omega \nu L a \tau \hat{\omega} \nu$ is on the front of Seat 7．The three new names represent the territory to the west and north－west of the city，Mount Lykaion，to the north Parrhasia，to the east Mount Mainalos．For the tribe $\Lambda v \kappa a \in i ́ \tau a \iota ~ c f . ~ N o . ~ X V I I . ~$

The appended table will show exactly how the inscriptions occur ：－

## Front．

1．Antiochos＇Dedication（in full）
2．．．．．．．．．．．
3．$\phi \nu \lambda \grave{\eta}$ Maivanlon
4．$\phi$ Лvкаєוт $\omega \hat{\nu}$
5．$\phi u \lambda \bar{\eta} \varsigma$ Пappaбlıи．Antiochos＇Dedication
6．$\phi$ Пavıar $\hat{\omega} \nu$

8．．．．．．．．．．．
．Antiochos＇Dedication

## Back．

＇Aркабıбias
＇Atroגえ由ylas
Mava日avalas

Mavías
．．．aías

It remains to consider what is the import of these tribal names（ 2 and 3）．There can be no doubt that the inscriptions reserve the wedges of seats in the auditorimm，which are faced by these superior benches，each to a separate tribe．This was an arrangement which would greatly facilitate order in the multitude of spectators and enable the poople to take their seats． more expeditiously．The Theatre of Megalopolis must have leeenk luilt almost as much with a view to its use as a place of assembly as for the exhibition of plays；and this division would be even more useful for the purposes of a public assembly．In the case of the Theatre of Dionysos at Athens the same reservation of a wedge of seats to a tribe is made proballe by several facts， e．g．the number of bases of statues set up to Hadrian by the varions tribes，no two of which are found in the same wedge（see Haigh，Attic Theatre，p．307）．The arrangements at Athens and Megalopolis were doubtless the same in this respect．In neither case does the number of wedges correspond to the number of tribes，and it need not surprise us that on this theory first three and later four wedges were unreserved，when we consider how the population of the Great City declined．

## II．

$\because 1 \Sigma T \Omega N$
［＇A $] / \sigma \tau \omega \nu$
XA｜PE
$\chi$ хӓ̈рє
Sepulchral stele from cottage in Sináno，now in Museum．It has small pediment with moulding，the name on a raised strip beneath．Breadth of stone， $18 \frac{1^{\prime \prime}}{}$ ；average height of letters， $1^{\prime \prime}$ ；letters spaced fairly regularly at distance of about $2^{\prime \prime}$ ．A break has destroyed the first two letters of the name．

We read of an Ariston，a damiorgos from Megalopolis who represents lis native town， being one of ten deputies at a synod（？at Tegea）when Phylarchus the historian was declared proxenos and benefactor of the Arcadians，in the inscription dated by Foucart 224 b．c．（Lebas－ Foucart，Meg．et Pelop． 340 and C．I．G．1538）．It would suit this inscription to identify him with the one whose epitaph is here given．The apex－formation of the letters is not yet fully developed，and the forms of omega and alpha suggest a date at any rate in the third century． The dating of Foucart is，however，rejected by Dittenberger，after Droysen（s．v．Sylloge，167），who puts it between 251 and 238 b．c．，and regards the Ariston of Megalopolis（in 168 в．c．）mentioned in Polyb．xxviii．6．2．8，xxix．25．6，as grandson of the other．It is improbable that our inscription can be as late as that．The name occurs also in C．I．G． 1538 from Megalopolis．

III．
KA．OA
Apparently a proper name of the dedicator．Letters ${ }^{\prime \prime \prime}$ in height．Only the first two letters are certain，but they are of early period，and therefore K $\lambda$ aúdos is excluded．This is all that remains of the inscription of a fragmentary relief of good period（fourth or third century） found at a spot marked 125 on the plan．It is the left－hand portion of what would seem to－ be a dedicatory offering to Asklepios and Hygieia．A female figure followed by three male figures， behind the last of whom is a female corrying a＇cista，＇advances to the right，where doubtless stood Asklepios，accompanied by some of his daughters perhaps as well as Hygieia．

IV．
／II／INEEO
1ЛOATOPAEOEI $\Pi$ MEPIDI
YNE $\triangle$ PIONKYPIONEETS
АMМАТОФYАAKI $\Omega$ TOTTP

IENAEITEINENTOIENOMO，
VOIEKYPIONEET $\Omega$ TOEQETC
1 $\triangle O$ EEIT $\Omega|\Sigma Y N E \Delta P| \Omega \mid A \Delta I O I K E I$

AAへOTPIתOHNAITABYBNIA认IOITETPAMENOITEPIT $\Omega N$
NEYAOKEI $\Omega \Omega I M E T A O F$
I $\Sigma N O M O N H \psi A \Phi I \Sigma I$
EKAIOBAATTTOIAIT
PEIANYMANATK
$\tau] \operatorname{c\nu } \dot{\cos } \boldsymbol{\sigma} \theta[\omega \ldots$.



5




$10 \mu a \tau о ф v ́ \lambda a \xi]$ à $\lambda \lambda о \tau \rho \iota \omega$ Ө̂̀vai тà $\beta v \beta \lambda i ́ a[e ́ \pi \iota \tau-$


 отр七ผ́ণ


A block of stone, only inscribed on one side, broken irregularly all round, $6 \frac{1}{2}$ " thick, greatest length and breadth $1^{\prime} 5 \frac{1_{2}^{\prime \prime}}{}$ by $9 \frac{1}{2}^{\prime \prime}$, letters $\frac{3^{\prime \prime}}{}{ }^{\prime \prime}$ high and very regularly cut, leeing, with the exception of omikion and omega (the text is not accurate to this extent), almost all of the same height. It was found in excavation on the site of the Agora, just against the outer wall of what we have taken to be the Temenos of Zeus Soter, between this wall and the column bases (cp. Paus.
 go to prove that the luilding in which it was found was the ápqeia mentioned by Pausanias; but it would be unsafe to draw any such conclusion, inasmuch as it neither suits the clescription of Pausanias nor the results arrived at by excavation (Chapter V. on the Agora). It is at any rate an interesting and valuable fragment of a decree of the people dealing with the preservation of the laws and state documents. From it we learn that there were at Megalopolis state officials called yonoyoápot, who entered in the statute-book the laws passed, as in the cases of the Aetolian League, Sparta, Hermione, and the ncighloouring Arcadian city of Tegea; and others called rpapнatoфúxanes, whose business was to have charge of the archives, as at Teos and Smyrna
 combined at Athens in the one of vomoфinakes.

1-4 is the end of a paragraph, and apparently contains some "question of fines for offences, but defies restoration. A break oceurs between the two paragraphs, and it is possible that the first ended and the second began in what $I$ have accordingly numbered as a line.

6-7. The length of the lines is settled with something like certainty to be approximately 34 letters by the restoration here. The case seems to be dealt with in which a matter arises for which the existing laws have no provision. The last letters of 7 are without any doulte $\dot{\varepsilon} \phi e \tau o-$, the $o$ is not complete, lout enough of it remains to show that it was that letter and no other. The word must obviously be connected with $\epsilon^{\epsilon} \phi i ́ t a t$, but $\dot{\epsilon} \phi \epsilon \tau \bar{\omega} \nu$ cannot be read, and I have restored
 of $\dot{\varepsilon} \phi i \epsilon \mu a \iota$, but it may just as well be that of $\dot{\varepsilon} \phi i \eta \mu u$. If this is correct, it makes still more unlikely
 transfer its functions, a special court of appeal decides in case of offences to which the existing laws
 ध̂кк入ทтos $\pi o ́ \lambda \iota s$.
12. What has happened in this line is obvious. The stone-cutter by an ordinary mistake

 'to remove to another place.' The documents are not to be altered except under certain circumstances as prescribed by statute.

It is not easy to fix the date of the inscription. The small omikron, and the alpha with its cross-bar straight, point to the third century b.c., while the forms of theta and pi point rather to the first. Probably it belongs to the second century. The great length of the letters epsilon and sigma is a peculiarity.

## V.



Lettcres apparently $2^{\prime \prime}$ in height.
This is the inscription of an interesting relic, which we found lying on the ground near the Demarch's house, and used as a pig-trough. It is a large slab of stone, $11^{\prime \prime}$ in height, $2^{\prime} 3^{\prime \prime}$ in width where it is complete, and $2^{\prime} 7^{\prime \prime}$ in length to the point where it is broken. It contains, sunk in its. upper surface two complete basins, and two that are broken off where the stone has been smashed. The largest contains the above inscription, the letters starting from the rim downwards at four points of a cross: they are only preserved close to the rim, but it is easy to restore ' ${ }^{\prime} \mu\left[{ }_{[0 \rho e}\right]$ is

much regard to spacing; or more probably the inside has been very much worn away, particularly near the bottom, in which there is now a hole.

The diameter of the Amphoreus is $\mathbf{1}^{\prime} 5^{\prime \prime}$ : of the small perfect basin $4^{\prime \prime}$. This small basin was filled exactly by twice the contents of my measuring-glass, which held 250 culbic centimetres. It is impossible to find out the proper content of the Amphoreus, as olviously it holds much more now than it did when used, having been so worn away. However, as I made the experiment of filling it with water, I will just mention that in its present condition the full glass of 250 cc . had to be poured in 111 times to fill it; so that in its present condition it holds $55 \frac{1}{2}$ times as much as the small measure.

The diameter of the larger broken basin seems to have been about 9-10". I also found another fragment of a table of liquid measures; in its mutilated condition (it was lying upside down by a cottage door) it cannot be determined whether it was part of the same block or not. As I also measured the contents of these, I give the figures for what they are worth, though in the worn and broken condition of the stone that is not much. In this case the basins are mostly very small :-

(7) Diam. $3 \frac{1}{4 \prime}$ ", Content, 160 cc .
(8) " $5 \frac{1}{4}^{\prime \prime}$,, broken
(9) $, 4^{\prime \prime} \quad, \quad 310$,
(10) " $4 \frac{1}{4}^{\prime \prime} \quad " \quad 415$,
(11) " broken

The Attic Amphoreus or $\mu \epsilon \tau \rho \eta \tau \eta{ }^{\prime} s$ contained 12 xóss and 144 кoтúnab. The кotú $\lambda \eta$ was probably a fraction of the Amphoreus at Megalopolis, but it is not easy to say which of the andove small measures represented it.

## VI. HEAEKAHTTIתIYRIEMMI TTAEAIE

Letters about $5^{\prime \prime}$ in height.
This is the dedicatory inscription of a small altar or basis now built into the wall of a ruined house in Sináno. It was only in two lines, and the name of the dedicator is partly lost. There was a temple dedicated to the pair on the south side of the Helisson towards the east (Paus. viii. 32. 4), and on the hill above, a shrine to Asklepios the Boy: this inscription must obviously have been brought from that neighbourhood. From the forms of the letters it seems possible that it may date from the end of the third century. With the form of the dedication we may compare the famous Hippocratic oath, which was taken in the name of Apollo, Asklepios, Hygieia and all the gods and goddesses.
VII. This inscription was seen and copied by G. Hirschfeld (Bull. d. I. 1873, p. 216), and at the time was built into the well-head at the house of 'Avסpfas 'A $\bar{\epsilon} \xi$ iov. I ascertained that the stone was formerly there, but had been removed probably in 1886, and I saw it in the possession of
 that it is inscribed on both sides. The contents of the two sides are, however, entirely different.
A. reads according to my copy and squeeze:-

$$
\begin{aligned}
& \text {... aфóp } \omega \nu
\end{aligned}
$$

$$
\begin{aligned}
& \ldots . .
\end{aligned}
$$

. . . . фópov eis....

10
èmьбкєиi» in line 1 , $\delta o ́ s \neq \eta$ in 6, $\delta a ́ y p a \mu \mu a$ in 7 , are all certain, though all mistakes of the stone-cutter. It is most tempting to suppose that this $\delta{ }^{\prime}{ }^{\prime} \gamma \rho a \mu \mu a$ refers to the restoration of the walls in 175 b.c., for which Antiochos Epiphanes supplied the money (Liv. xli. 20), but uncertain, as so vast a circuit must often have needed repair. I have nothing to add to Hirschfeld's restoration.
B.

```
            \以M'
        NEINTINADEENNORE'
        XONTOMPOTEPONXPHMA
        TOANN\SigmaYNT\OmegaIAIKAI\OmegaIKAI
E\triangleOEETOI\Sigma\SigmaYNEAPOI
    TOYYIONTEMENONET
    POETIMAI\SigmaOOEOI-
    ATEAEEI////TAI
    \Delta\Omega\SigmaI . . . HI
    A...NAIEI
    F\OmegaTIPOEE,
        A..ON
        `....
        f..
```

The inscription of this side is cut in a different style to the other, the letters being larger ( $\frac{1}{2}^{\prime \prime}$ high), uniform in size, and very shallow. It is not easy to date it with any precision from the lettering. It would seenl at first sight a decree of the senate conferring divine honours on some state benefactor, as was done in the case of Philopoemen, the decree in honour of whom has been published (C.I.G. 1536; as restored Ditt. Syll. 210), though the stone has, we fear, been lost. Mr. E. Gardner has suggested to me that the recipient of these honours was the son of Aratus, and that the divine honours of his father are merely mentioned as shown in the above conjectural restoration. The family of Aratus continued to the time of Plutarch at Sicyon, and the latter mentions a son of the Achaean statesman, apparently of the same name (Plut. Vit. Arat. 49 ó vє由́тє os "A $a t o s$ ), who, like his father, fell a victim to the treachery of Philip V. The person mentioned here may however be a grandson, and this is more likely, as the inscription can hardly be dated before 200 b.c. As the restoration of line 10 seems to be exceedingly probable, one may note as worthy of remark that one of the two annual festivals at Sicyon in honour of the heroized Aratus was called the 'Soteria,' the Feast of Deliverance, and the priest of Zeus Soter presided over the ceremonies. For the temenos of Zeus Soter at Megalopolis (which is also mentioned in the Philopoemen decree) see the chapter on the Agora.
 necessary, for the word $\lambda o y \epsilon i o \nu$ at any rate can hardly be tabooed, whatever may be made of its meaning. The publication in the Theatre of some matter, of which we cannot say anything, is then alluded to.
(5) The curious mistake by which two letters of $\boldsymbol{\gamma} \epsilon \boldsymbol{\nu} \boldsymbol{\rho} \mu \in \nu=\nu$ are dropped shows the stonecutter to have been very careless, inasmuch as another mistake certainly occurs in line 7, and possibly in line 8.

For other mention of the $\sigma u \nu^{\prime} \delta \rho i o v ~ c p . ~ N o s . ~ I V ., ~ V I I I . ~ T h e ~ s t o n e ~ i s ~ b r o k e n ~ o n ~ a l l ~ s i d e s ~$ quite irregularly, but it is probable, if one looks at the contents of $A$, that very little is lost on the left-hand side, possibly one or two letters, but not more.

## VIII. $A$.

```
                                    rPAMMATEOETOI\Sigma\Sigma
                                    \SigmaTOYFEPONT\OmegaNEXE\SigmaTPATOYTO
                                    NOYTOY\odotEOTIMOYXOPALIKAEO\SigmaT
                                    \triangleEATEDANANTOTOIATTOETANEN
                                    YNIKOMAXOYФIAI\SigmaKOEAAIOA\OmegaPOY
                                    PAYATOMOAIEMETA. NO\PiOAITANKAIS
                                    AP̀I\triangleA\SigmaI\Pi\Pi\PiNOEAAK. MOEAYKINOY
                                    OEENO\SigmaAPI\SigmaTODAMOYIEP\OmegaNANTIK
                                    \triangleATA\SigmaMEPI\triangleO\SigmaTAE\odotPATPIAKONTATENTE
                                    H\SigmaANTEPI\OmegaPITOTE\SigmaOITE\SigmaYNAIKOIK
```

```
    NTOXPONONTAIAEEXOMENAIAN
    FOYAEIONEXONTE\SigmaKAITOY\SigmaAPXON
    NTONTOTONEEAYTANTANTEITONEIA,
OP\OmegaNFINOMENA\SigmaTA\SigmaX\OmegaPA\Sigma\triangleAMO\Sigma
NTOTONTONANTIAAETOMENONA\Sigma
=TITIMI\OmegaNT\OmegaNE三AKONOY\odotOYNT\OmegaNK
    XE\Sigma\odotAIMETANO\PiOAITANATEAY\SigmaAMEI
    AYT\OmegaI\PiPOTA\SigmaE\PiITANX\OmegaPANEEO\triangleOY\Sigma
    POITOK ATANOTON\SigmaYNTTEPIФOPA\SigmaENTEY
    TOIOYTOY\SigmaOIMHBIAZONTAITOTITAOMO 
NOITIOIOYNTITADIKAIA
NIOYNIKOKAHENIKOMAXOYTOYNIKOM
\PiEPITA\Sigma\triangleIKA\SigmaTA\Sigma\SigmaYAIKA\SigmaA\SigmaE\Gamma\Omega?
NO\SigmaTIOAYEENO. API\SigmaTANAPOY
\SigmaTOYAPI\SigmaT\OmegaN,.O\Sigma\PiA\Sigma\OmegaN
XEINENTTAEI\SigmaT\OmegaITTFAI\OmegaITAT
TOITPOA
```










$\angle A M I C . . \Omega I$
TOYTOYEתEITENEOE
TA $\Sigma X \Omega P A \Sigma \Pi E M T O Y E N A T A I I \Sigma$
AT．PA $\Sigma T O Y \Sigma \Gamma F P I . . . A N$
ATתПA．．．．．．．．．．．．．．$\Sigma$
$\Omega K \Omega \Sigma \Pi A P A T O Y \Pi A . . . . O N A_{L}$
TOYПATEPOEMOYП ．．．．AФOYTTAP，
TPOTEPHOHEAIATOYAIKA乏THPIOYEПEI－
ATETANX $\Omega P$ ANФAME ．．．．APXEINTOYTO
ENIOI $\Sigma$ TAYTATAX $\Omega P I A M H \ldots A P \ldots N \triangle A$
TתNTPOTOYENTNEIET ．．П．$\Delta \ldots$ ．．．．．AA
AIEX $\Omega$ ГEITONATOYTIMAM．T．．．．．．P．
FPOETAPATANTAEYPANTANП ．．．．．．ONA
इAYミMA乏M＿POEEIミミTONTE．．．．．．ANO

```
ETOYTOYTA ...... TAM ... Y\SigmaMA\Sigma
TON\SigmaKOA.. S...ONAIKP.O. ATMO\Delta
PO\SigmaAPKTONE\Sigma\SigmaTPEMMENANENTA
    NEENIKANTA . . . AAKE\triangleAIMON
    KAEOEENO\Sigma . .. . \triangleAMETANOTOA
        AI\PiАE\odotPATTENTHKONTAOI\SigmaFEI
        EAABHKENAN . . . TOYTONE
            \SigmaE\PiAPADEEIMEN.... OEAPI\DeltaA
            KAITEPI\OmegaPITATOM .... PO
                OAITOYTOTOTIMA ...
                    TIMAMAAPミAM.
```

＇E $\pi i] \delta \boldsymbol{\sigma} \mu \iota 0[\rho \gamma] \hat{\omega}[\nu]$

 ？т $\iota \mu$ ］arทpas тò̀s $\pi \epsilon \rho \iota$［ $\omega \rho i \sigma] a \nu[\tau a \varsigma$
．． $\boldsymbol{a} \boldsymbol{\tau} \omega \pi \lambda$ ．．．．．．．$\sigma$

．．тov̀ $\pi a \tau \notin \rho o s ~ \mu o v ~ \pi[a \tau \epsilon ́ \rho a] ~ d ं \phi ' ~ o v ̉ ~ \pi a \rho-~$


．．évióos tav̂ta тà $\chi \omega \rho i a \mu \eta{ }^{\prime}[\tau \epsilon \dot{u} \pi] a ́ \rho[\chi \epsilon \iota] \nu \delta a[\mu o ́ \sigma \iota a$


$\mu]$ épos $\pi a \rho a ̀ ~ \tau a ̀ \nu ~ \pi \lambda \epsilon \nu \rho a ̀ \nu ~ \tau a ̀ \nu ~ \pi[\rho o ́ s ~ \eta ँ \lambda l] o \nu ~ a ̀[\nu a \tau e ́ \lambda \lambda o \nu \tau a ~$
rò $\pi \rho \grave{o}] \mathrm{s} \delta \nu \sigma \mu a ̀ s ~ \mu \epsilon ́ \rho o s ~ \epsilon i ́ \sigma<\varsigma>\tau o ̀ \nu ~ \pi \epsilon[\ldots . ..] \lambda \lambda o$
 тò̀ $\sigma \kappa о[\lambda \iota o ́ l \delta[\epsilon \iota \rho] o \nu$ סíкp［o］ov à $\pi$ ò $\delta$－
 $\tau \grave{a}] \nu \quad \xi \in \nu \iota \kappa \grave{a} \nu \tau[\grave{a} \nu \dot{\epsilon} \pi i(?)]$（？$\Lambda a \kappa \varepsilon \delta a \iota \mu o \nu-$

$20 \quad$ aı $\pi \lambda \epsilon ́ \theta \rho a \pi \epsilon \nu \tau \eta ́ \kappa о \nu \tau a$ ois $\gamma \epsilon[[\tau \omega \nu$
 $\sigma \epsilon \pi a \rho a ̀ \Delta \epsilon \xi \iota \mu \epsilon ́ \nu[\epsilon \iota \tau \hat{\omega}]$ © $\Theta a \rho i \delta \delta_{a}$
каì $\pi \epsilon \rho \iota \omega ́ \rho \iota \gamma a$ тò $\mu[$ е́िок］ро
－$\theta a \iota$ тоиิто тò тí $\mu a[\mu a$
$\tau i \mu a \mu a \dot{a} \rho \xi a \mu-$
C．C．I．G． 1534.



тó̀ıs Meqa入oтo入ı七ầ


$\delta!\omega \nu \mathrm{N} \iota \kappa о \lambda a l \delta a \mu a \sigma \pi \epsilon \ldots \epsilon a \iota \pi о \sigma \tau о \iota \pi a \nu \iota \sigma \iota \omega . \epsilon \ldots \delta \epsilon \phi \alpha_{[ }[\mu \in \nu \circ \iota \mu \eta$








－$\epsilon \dot{\boldsymbol{a}} \boldsymbol{\pi} \boldsymbol{\sigma}$－
D．Bull．Inst．Arch．1873，p． 217.
＇Apıбтஸ́vvu］os Пáб由vo［s кat mò入ıs Meya－
$\lambda_{0 \pi 0 \lambda ı \tau a ̂ \nu} \sigma v[\lambda \iota \kappa a ̀ \nu \delta i \kappa a \nu(?) \pi \rho]$ ока $\lambda \epsilon \sigma a \mu \epsilon ́ v a$



 －$\omega \nu$ סьo $\delta \iota к а \sigma \theta \iota \iota a \iota \sigma a \iota \pi \lambda \epsilon ́ \theta \rho \omega \nu$ סıaкобi $\omega \nu \omega \mu$－


 иукivov］＇A
 $-\nu-\epsilon i \varsigma \mu i \sigma \theta \omega \sigma \iota \nu \dot{\xi} \xi \dot{\omega} \nu$ каі форьап $\lambda a \beta \omega$ каі $\pi \rho-$ avoas $\sigma u ́ \mu \epsilon \sigma \in \sigma u ́ \lambda a \kappa a \varsigma ~ \mu e ̀ v ~ \delta i v) \sigma \grave{\imath} \sigma v ́ \lambda o ı s ~ a-~$

 $\sigma \epsilon \sigma u ́] \lambda a \kappa a \varsigma$ ठı̀̀ тov̂ a $\mu \circ \hat{v} \sigma u ́ \lambda o v \mu \epsilon \tau a \phi \in ́ \rho \omega \nu$

ধ゙тоия тєта́pтои каi тєббарако́бтои－ıр－
$A$ and $B$ ，which are published here for the first time，are inscribed on the two sides of a slab of local stone（ $6^{\prime \prime}$ thick）in the possession of Athanasios Leokopoulos of Sináno，when copied．It is unfortunately only a fragment：the beginnings of the lines are mutilated，and somewhat less than half of them is gone．The surface is worn very smooth，and in some parts quite broken away，especially in $B$ ．The letters are $\frac{1^{\prime \prime}}{4}$ in height，and point to the latter half of the second century b．c．or possibly the beginning of the first．The date of which one at once thinks，viz．the period of the rebuilding of Megalopolis after Sellasia and the accompanying troubles during which the philosopher Prytanis intervened，is probably too early．Still less can one follow Boeckh in supposing that the Aristodamos，father of Proxenos，mentioned is the tyrant（for cp．No．XV．） Eumaridas，son of Hippon，is obviously the same as the dedicator of the statue in the Theatre（cp． No．IX．）．Along with these two documents are republished here，$C$ and $D . C$ is an inscription published C．I．G． 1534 from a very bad copy of Fourmont＇s，the provenance being given as ＇Charitenae．＇It may easily have found its way to Karytaina，but if so seems to have been destroyed．$D$ is published by Hirschfeld（Bull．Inst．Arch．p．217），who saw it upside down in the door of the house of Panagiotes Tsenganis．That it has since been destroyed is certain，as the house in question has been rebuilt．The recurrence of the same string of names makes it apparent that these also belong to the same series of records．Whether $C$ and $D$ were on the same stone as $A$ and $B$ cannot be proved，as the length of the lines cannot be established with absolute certainty， but is probable enough．I publish their texts with slight and mostly obvious changes，but cannot pretend to make much of them．It is，however，desirable to have the whole series brought together for comparison，and it is to be hoped that some scholar will be thus enabled to make further suggestions which will make more clear the details of this exceedingly interesting dispute．

I wish to express my obligations to Canon Hicks，who has kindly assisted me in restoring these inscriptions and interpreting them．

A．1－21 is the report or award，ámóфáıs（1．4），of certain commissioners，Nikoklês，Philiskos and others，oi a a roarant⿱㇒日धєs．This seems to be the beginning of the series，which deals with a compli－ cated dispute as to lands between the state of Megalopolis and a number of private litigants，whose names are enumerated twice in $A$ ，once in $C$ ，and once or twice in $D$ ；and possibly also between these individuals as against one another．Apparently there had been already a boundary delimitation on the part of（1）the $\sigma \dot{v} \nu \delta \iota \kappa o \iota$ ，the representatives of the state，（2）the parties concerned． These special commissioners now report their тєрьopıomós，and state at what points they had decided that the lands in dispute＇became public＇（1．14）．It is apparently here not a case of a $\xi \in v \in c o \nu$
 סıкaбтai from Iasos settle disputes at Kalymna），but a commission appointed by the Arcadians to deal with a local dispute．It seems most likely that the $\sigma$ vive $\delta \rho o c$ of line 1 are the senators of the restored Arcadian League，which was doubtless still in existence at this time，though we know nothing as to its actual powers and importance；that it was not the local senate seems probable from the first line of $B$ ，which reads apparently $\overline{\epsilon \pi i} \delta a \mu \iota o \rho \gamma \omega \bar{\omega}$ ，since in the inscription relating to Phylarchus（often referred to elsewhere in this publication）the members of the Boule of the Arcadians are spoken of as $\delta a \mu \iota \rho \rho \gamma o i$. ．It may however be argued that the $\gamma^{\prime} f \rho o u t e s$（ 1.2 ）are more probably the members of the local oup＇$\delta \rho \iota o \nu$ ，the seniors alone being mentioned here by name；and， considering how little we know of the constitution of Megalopolis and Arcadia generally at this period，one cannot deny the possibility of this contention．For the dative cp．Ditt．Sylloge，321． 1.

1-3: The restoration of these names is chiefly conjectural.
4. This line (cp. 22) and 6 seem to give the length of the whole lines, but with no absolute
 54 letters. It is also doubtful whether the name of Polyxenos (which we find later, cp. XVII. a) begins the list of individual litigants, for in $D 10$ it is preceded by a son of Philopoimen (this, by the way, agrees with the date suggested above), which seems also to have occurred in line 24, and the first four letters of line 25 , which are quite certain, seem to indicate the probability that the name of another (making nine in all) has been lost, unless it be that the names are not always enumerated in the same order, and in some cases individuals are inserted, in others omitted. If so, the lines would be considerably longer, perhaps of nearly 70 letters. The restorations given above are however only to be regarded as an approximation to the sense of the original.
6. A blank space for one letter occurs in the word Meraлoroдırà , as shown above. The stone-cutter apparently made the mistake of doubling the $\lambda$ and then erased one; he allowed it to stand in line 15 however in the word àтıддєүó $\mu \in \nu=\nu$. He also doubled a $\sigma$ incorrectly $B 14,17$, $D$ 3. Polyxenos is probably son of the Aristandros who built the $\Sigma_{\text {roà }}$ 'Aptotávopecos (Paus. viii. 30. 5).
8. The last of these names is restored from $C$, but the copy of $C$ is bad, and it is very doubtful.
 (Grammatik der Attischen Inschriften, p. 58) examples of $\gamma$ for $\kappa$. Perhaps however little stress can be laid upon it in view of the above-mentioned mistakes.
12. The magistrates of Megalopolis accompany the boundary commission.
13. yeєtoveiầ : cp. B.M. Inscrs. Pt. I. xxxvi. I ; Hicks' Manual, p. 148 ; B.M. Inscrs. Pt. II. No. 377 pass.
19. The neighbours of the land in question are to be treated with 'consideration,' perhaps compensated.

At 21 seems to begin a new document. This seems to be a letter from Nikokles as to his part in the transaction.
 oúdoıs, and 17. These phrases seem to refer to trespass, with theft of produce or cattle, and mutual reprisals; and $\sigma \nu \lambda \iota \kappa \eta$ dic\zh7 is a suit arising out of these circumstances.
$B$. This side is much more damaged and rubbed than the other, and not much can be made out of it. It seems to be the report or award of an individual, perhaps the further report of Nikokles.

1. The reading may be $\delta a \mu t o \rho \gamma \omega$ (genitive singular), but from the indications remaining one gathers that the following letter was $\nu$.
2. Sosigenes (probably father of the person whose name is lost) had a statue in the Hieron of the Mçá入al $\Theta_{\epsilon a i,}$, as a citizen who had been foremost in introducing their worship (Paus. viii. 31. 7):
3. There are traces on the abraded stone of the missing letters, but not clear enough to put into the transcript.
4. For the name Thearidas cp. the inscription from Megalopolis C.I.G. 1538.

The various definitions of locality cannot be sufficiently made out, but the mention of Sparta in line 18 seems to show the lands were partly to the south of the city.
$C$ seems to begin a series of appeals against the award of the special jury. The same litigants are mentioned by name. The 'road to Lykosoura' is mentioned, which shows that some of the land lay to the west, and Boeckh is doubtless right in identifying the חv́rov (9, 13) with the $\Pi \dot{v} \theta_{\nu 0 \nu}$ mentioned by Pausanias as lying on the east side of Mount Lykaion (viii. 38. 6).

In $D$ the plaintiff is feminine, and is possibly Megalopolis itself. An assessment of damages at 400 drachmae is mentioned in line 8, and previous claims arising out of trespass are mentioned. It is unfortunate that no clearer idea of the details of this litigation can be derived from these two supplementary inscriptions.

## IX. EYMAPIDAEITM $\Omega$ NOE AГתNONETE $\Sigma \%$ NEOHKE

 T. $\triangle .$. Y YOIKAITAITIOAI
## NIKITITOE $\Sigma \Omega$ TI NNOE heranotoontaz : ETTOIHEE



$\tau[\hat{\omega} \iota] \Delta[\iota o \nu] \dot{v} \sigma(\omega) \iota \kappa a i ̀ \tau \hat{a}_{\iota} \pi \dot{\partial} \lambda_{\iota}$

This inscription is found on a columnar statue－basis，which stands in the orchestra of the Theatre，close to the western end of the first row of seats．The statue was in all probability one of Dionysos．This Eumaridas，son of Hippon，who is mentioned here as holding the office of árovo $\theta_{\text {ét }}^{\prime}$ s，is one of the litigants in the set of inscriptions dealing with a land dispute（No．VIII．）． This inscription，like those，probably dates from the last half of the second century b．c．or the first half of the first．Nikippos，son of Sotion，sculptor of Megalopolis，is not otherwise known，and Dr．Emanuel Löwy，to whom I sent an impression of this inscription，can give me no further information about him．Aristeas，son of Nikandros，and Kallikles（？），son of Kallikrates，are probably contemporary Megalopolitan sculptors，who were active at Olympia and Epidauros；so that it would seem that both here and at Messene there were small schools of sculpture in the last two centuries b．c．（Inschriften Griechischen Bildhauer，271，271 $\alpha$ ）．The short vowels in lines
 written．There is just room and no more for an iota in the break between scovúgo and kaí．We can only see here stone－cutters＇blunders．

X．

$$
\begin{gathered}
E ? \cdot P Y . E \Delta \Omega \\
\ldots I P E
\end{gathered}
$$

##  <br> $\chi^{\text {aîpe }}$

This is a very mutilated inscription from a sepulchral slab found in a field between the modern village and the Theatre．I give it according to Mr．Loring＇s copy，not having seen it myself．I cannot verify on the impression the PYA，which are given as doubtful，so that the name conjectured is only a possible guess．

$$
\text { XI. HחIEI . } \boldsymbol{\eta} \boldsymbol{\eta} \pi \iota \epsilon \text { ? }
$$

Small fragment of marble inscribed，found by a workman．

## XII．

## XAIPETE

Letters apparently $11^{\prime \prime}$ high．
This remnant of a funeral inscription is from a slab of white stone in the chapel of St．Athanasios，where No．XXIV．is also to be found．

XIII．

$$
\begin{aligned}
& \text {-YOTAOY申IACTOIME\C-AIM/ } \\
& \text { IETAKAEIAEAINEEONEY三ENIAI } \\
& \text { O } \triangle \text { AMOKPATOYミAEKTP } \Omega N H N E T K A T O M / \\
& \text { E=NIAEO . . . NKYMPIAOEIPOTOAON } \\
& \text { HIMONIFAPNAOIOTEPIEEYEPKEAOPINKON } \\
& \text { JHKATOKAI三//YNOIE . . KA } \triangle A^{\prime} T \text { TMOEI } \\
& \text { EIDEГYNATA//YTOIOKAAANA:AへAEATOФAMA. } \\
& \text { //YOAYMAT//OTONSNTAIEIETEETIAPETA }
\end{aligned}
$$

This interesting inscription has been at least thrice copied，but we have been enabled to read all that is left of it for the first time，and to approach nearer to the true reading in the remaining lines．It consists of four elegiac couplets in honour of a female descendant of Philopoemen；and the stone was taken from the site of Megalopolis，rounded at the top，whereby the beginnings and ends of the lines were mutilated，and so used as one of the steps to the woaia $\pi v \lambda \eta$ or central entrance into the sanctuary of the church of St．Nikolaos in Sinano．The top step thus has long covered the greater part of the last couplet，and no traveller seems to have
copied it fully before it was put into the church. It has since been removed by Mr. Kastroménos, Ephor of antiquities, and placed in the village museum. Letters of average height of ${\underset{3}{ }}^{3}$.

Line 1. Foucart's restoration, 'Apuàs '̇ry'rupov, cannot be right, as it is obvious that a foot is lost at the beginning and three syllables at the end. It is still doubtful what these words are. The above is a mere guess.
2. Wescher's copy, made when the stone was not so much worn, giving INEM, shows the tue reading to be $\xi \in i v e:$ and similarly 3 , NAПO $\Delta$, shows à to be right.
4. The first word of the line must be an epithet of Aphrodite. Hirschfeld's copy agrees
 $\xi$ 兒ias. The epithet for Aphrodite, if right (and it is difficult to see how it can be wrong), seems to be quite unexampled. Foucart says the stone was found S. of the Theatre. There is no doubt anyhow that it belonged to the sanctuary of Aphrodite, who was worshipped on the south side of the Helisson under three aspects (Paus. viii. 32. 2) as Oípavia and חádonuos, and the third name
 had this title anything to do with what is mentioned in line 6 ?
5. Foucart's $\boldsymbol{\tau}$ t $\rho \mu \mathrm{ovc}$ is certainly wrong.
 latter half of the line is ingeniously and convincingly restored by Mr. E. Gardner. Euxenia then, it appears, built a dwelling attached to the temple within the ring-fence for the use of the combined ipaviotai. She endowed a perpetual college of feasters in honour of the Friendly Goddess; thus, as the last lines express it, 'earning a good report for this expenditure of her wealth, a fact that is not surprising for a descendant of Philopoemen.'
XIV.

EENIEKAXAIPE

$$
\exists \varepsilon \nu i \sigma \kappa a \quad \chi^{a i \rho \epsilon}
$$

This is inscribed on a fragment of stone with moulding which was found in the excavation of the Theatre close to the front of the earlier stage-buildings. The whole inscription occupies $1^{\prime} 7 \frac{1}{2}^{\prime \prime}$, and the letters are $1 \frac{3^{\prime \prime}}{}{ }^{\prime \prime}$ in height. How it came there it is not easy to say. It seems to date from the same period as most of the inscriptions here published, viz. the last two centuries b.c.

Letters slightly over $1^{\prime \prime}$ in height.
This inscription is at present in front of a house in Kassidochori, a village to the N.W. of the Agora on a hill, and was no doubt brought from one of the sites below. It is apparently a statue-basis, $2^{\prime} 103^{\prime \prime}$ by $2^{\prime} 1^{\prime \prime}$, but broken to left. The inscription is on a $4^{\prime \prime}$ deep rim. In the centre of the slab is a small square dowel-hole.

The name Aristodamos is obviously not that of the tyrant, to judge from the letters, which can hardly be before the first century b.c. (the letters alpha and sigma are not accurately shown above), but it is interesting to see the name perpetuated (cp. VIII.). For the name Ago see No. XIX. The $\theta_{\epsilon o ̀ ~}^{\text {efyádoc }}$ are most probably the Dioscuri. There is no record of their worship in Pausanias, who speaks however of the $\theta_{\text {eai }} \mu$ cyá $\lambda a \imath$, Demeter and Kora, as worshipped in a larger Hieron in the Agora. (Cp. the Andania Inscription, Ditt. Syll. 388, 34, 68, 91.)

## XVI.

$\tilde{T} \mid B>K \Lambda A Y \triangle I E$
$X A I P E$

$\chi \chi^{a \hat{\rho} \rho \epsilon}$

This inscription is at Rousvánaga, a village about two miles from Sináno on the southern side (towards Sparta), near which are some Greek remains of buildings (? Ladokeia mentioned in Paus. and Polyb.). It is a slab $6^{\prime \prime}$ by $1^{\prime} 4^{\prime \prime}$, built sideways into the window of a house formerly occupied by Charalampos Makrópoulos, but vacant when I copied it. The letters are $1 \frac{1}{2}-1 \frac{3^{\prime \prime}}{}$ in height, very broad and cut shallow. The stone is the ordinary blue-veined limestons of the district. The names of the Claudian Caesars seem to have been borne by many of the Megalopolitans, who were perhaps Imperial freedmen.


Three fragments obviously of the same inscription. (a), (b), are built in as corner-stones of a hovel in a back street of Sináno; (c) in the corner of a house at a little distance, just off the Messene road. It would hardly be worth inserting, inasmuch as the fantastic restoration of Blouet (Expédition de la Morée), has been corrected in Lebas-Waddington, were it not for completeness sake, and that a new interest attaches to this tribe of the Lykaeitai, now that its name is found on the theatre seats. Perhaps this inscription supports the view that the tribal names (I. 3) date from the first century A.D.

The restoration here of lines $4-6$ is made certain by the parallel of No. XXVI. The names of the early Caesars seem to have been very common at Megalopolis; whether borne by freedmen or taken in compliment, we cannot tell. For the office of áropavó $\mu o s$, which regulated weights, measures, and prices, and had police functions, v. Gilbert, Handbuch der griech. Staatsalterthümer, II. 331.
XVIII. Fragment of an inscribed slab with frame moulding; the inscription bilingual; dimensions as far as it remains $3^{\prime} 4 \frac{1}{4}^{\prime \prime}$ by $2^{\prime} 11^{\prime \prime}$. The letters vary in height: the Latin ones are $1 \frac{3}{4}^{\prime \prime}$ or $2^{\prime \prime}$, the Greek ones $2 \frac{1^{\prime \prime}}{4^{\prime}}, 2^{\prime \prime}, 1 \frac{1}{4}^{\prime \prime}$. (Now in the local museum: when we first saw it, it was outside the Demarch's house, and the place where it was found cannot be ascertained.)


## [Imperator Caesar Divi Vespasiani

Filius Domitianus Augustus]
Pontif[ex Maximus Trib Pot XIIII Imp $\overline{\mathrm{XX}} \overline{\mathrm{I}} \overline{]}]$
Cos XVI. Censor P[erpetuus Pater Patriae Porticum Mega-
lopolitanis incendio co[nsumptam funditus suo sumptur restituit.

```
Aù\tauокриíт\omega\rho Kaî\sigmaa\rho ©eo[\hat{v}\mathrm{ Ov̇єбтa-]}
\sigmaaavov̂ viös [\о\mue\tau\imatha\nuòs \Sigma\e-]
\betaa\sigma\tauòs] á\rho\chi\iota\epsilon\rho\epsiloǹ̀s \mué\gamma\iota\sigma\tauo\varsigma, [\delta\eta\muаар\chi\iota\kappa\etaิs]
```





The above bilingual inscription dates from the year 93 A.D., or at any rate falls between Sept. 13, 93 a.d. and Sept. 12, 94 A.d., for an inscription of July, 93 A.d., records the twelfth year only of Domitian's tenure of the tribunician power. He was consul for the sixteenth time in 92 a.d. The restorations are practically certain : - $\sigma \iota a \nu o \hat{v}$ is of itself enough to point to Vespasian, and the erasure of the name of the emperor conclusively proves that Domitian is the one in question; it seems also that the title 'censor perpetuus' is peculiar to him. It is interesting to note that this is the second bilingual inscription found at Megalopolis; the other (C.I.G. 1537, $L B .332$ ) has, we fear, perished, as it is no longer to be discovered 'ad unum ex pontibus Alphei.'

It remains to be considered whether we have any means of ascertaining what Stoa is meant of the various ones that lined the Agora. There is no positive proof, but a possibility that it is the Stoa Philippeios, so called according to Pausanias (viii. 30. 3) out of compliment to Philip of Macedon, an illustration of the strong philo-Macedonian proclivities of the people of Megalopolis. It must therefore have been built during the reign of Philip, or very soon afterwards. We have identified by our excavations the Stoa that bounds the Agora on its northern side as the Stoa Philippeios; for not only is that the only name that fits its position, if the description of Pausanias is of any value, but a tile has been discovered in it which identifies it without any doubt whatsoever ( $v$. XXVIII. 4). Now the architectural features of this building forbid our supposing it to have been built in the fourth century. It may be supposed that the original Stoa was burnt down and rebuilt in the time of Domitian; but if on the other hand the Stoa Philippeios is the one which was destroyed by Kleomenes, and restored 'permissu Achaeorum' in 189 b.c. (Livy xxxviii. 34), the probability is that it was not destroyed a second time.

## XIX <br> $\stackrel{B}{6}$

ov $\mathrm{M} \eta \nu$. . . $\quad$ тоѝ
 $\delta \rho \iota o \nu] \kappa a l \tau \omega \bar{\omega}$ 'А $\rho \kappa a ́ \delta \omega \nu$ [тò $\kappa о-$

$5 \quad \tau \hat{\eta} \varsigma \tau] \hat{\omega} \nu \pi 0 \lambda \epsilon \iota \tau \omega \hat{\omega} \nu \omega \phi \rho \circ \sigma \dot{\nu}-$


$\Psi[\eta \phi i \sigma \mu a \tau \iota] \mathrm{B}[o u \lambda \tilde{\eta}\}]$.

Found in excavation close to the place where the high road crosses the north-east corner of the Agora. A thick block of stone $2^{\prime} 4^{\prime \prime}$ by $2^{\prime} 2^{\prime \prime}$, which served as the basis of a statue, and on the side of which the above inscription is found. The inscription is broken at the top corners, so that the name of the person honoured is lost.

The statue was apparently put up by his son and daughter-in-law, who was also his niece, in pursuance of the wish expressed by the state at large. 5. The title of the office held by him,
 parallel, but is presumably a paraphrase, suited to the pompous style of an inscription, of $\sigma \omega \phi \rho o \nu \iota \sigma \tau \eta$ 's. As we learn from other sources, and from Aristotle's 'A $\theta \eta \nu a i \omega \nu$ Пo $\lambda c \tau \epsilon i a$, there were at Athens ten $\sigma \omega \phi \rho o \nu \iota \sigma \tau a \grave{i} \tau \hat{\omega} \nu \dot{\epsilon} \phi \eta^{\prime} \beta \omega \nu$ representing the ten tribes. Probably this person held a similar office at Megalopolis. The names Theris and Ago are both found as borne by Cretans (vide Pape and Benseler, s.v.). Ago is also found in an Attic inscription ; also see No. XV.
XX.

AYi JKPATOPINVE. . HA . . .
(IIIIIIIIIIIIIIIIII . . . . $Y$. . 101 IIIIIIIII|

A block of stone brought from the site of the city to be used for building the new bridge over the Helisson, but now lying unused on the northern side under the embankment. The
inscription on it was partly erased in antiquity; the rest has been deliberately chipped of quite recently, so that it is only possible to detect the letters in a very strong mid-day light. The stone is no doubt an architectural fragment, and the inscription was on the front of some building commemorating an imperial benefaction ( $3^{\prime} 5^{\prime \prime}$ by $2^{\prime} 1^{\prime \prime}$; $1^{\prime} 2^{\prime \prime}$ thick). Letters $1 \frac{1^{\prime \prime}}{\prime \prime}$ high. It is probably fragmentary on the right-land side.

Of the fourth line nothing can be made owing to the chipping away of all the letters. The old erasures are clear. From the occurrence of Evoc $\beta \eta^{\prime}$ it would seem that the emperor in question is one of the Antonines. The erasure seems to point to Commodus. One may therefore conjecture with some hesitation the following restoration:-

$$
\begin{aligned}
& \bar{\delta} o \nu] \text { є } \dot{\sigma} \epsilon \beta[\hat{\eta} \sigma \epsilon \beta a \sigma \tau o ́ v \\
& \text {. . . . . . . . . } \dot{\eta} \pi \dot{\pi} \lambda \iota \iota \text {. }
\end{aligned}
$$

In line 1 the indications are certain up to Kato ; then there is a space for three letters followed by apparently - $\eta \lambda$. Others have seen these letters more clearly than myself. I had thought that $A{ }^{\boldsymbol{Z}} \lambda_{o o v}$ must have appeared here; but this name, though frequent in Latin inscriptions, seems not to be found in Greek. The restoration of line 2, though not certain, fits in well; and as to line 3 , it is as likely as anything else. There seems to be no room for the usual $\Lambda$ or M in line 1. The abbreviation Kaı is not without parallel, though uncommon. Antoninus Pius built Pallantium (Paus. viii. 43), so that the Antonines must have been popular in Arcadia.

The possibility of the erased name being that of Elagabalus is not quite excluded. On inscriptions he is called 'Imp. Caesar M. Aurelius Antoninus Aug.', and has the title of 'Pius Felix.' In the cases where his name was erased the word 'Antoninus' was selected (see Cagnat, Cours d'épigr. Lat. p. 168).

## XXI.



- Small scrap of stone with moulding found close to the steps of the okny' in the Theatre.

Letters $2^{\prime \prime}$ high.
XXII. IOEE . KAI . . . . . . PAE
-PEПミNKAITAEIONAKIETA
AYKOATANTETTOHKEKAIKAT
DIANTOIEXPEIANEXOYEIQIAAN
5 इ巨пTOY
TEPITAEIETOYDETOIOYMENC
TPAIKAITOIE
nyEitenoyzc. . . otekaipoi
arimn
toreф . . . $\kappa \lambda$. . . . . . pas $[\epsilon \hat{e v}$. . . . . .







' $\lambda \in 1 \pi \sigma$ -
 It has been cut away on all sides, on the short sides with shallow mouldings, so that it served as a rude capital of a pillar in some edifice of Byzantine or later times. The letters where they liave been covered by what rested on the pillar are preserved, at the edges worn away. Letters $3^{\prime \prime}$ in height. seems to have been a benefactor to a particular tribe and clan of the state in time of distress. It dates probably from Imperial times.
i. Line 1 is hopeless; apparently seven or eight letters are lost before the last three, which seem certain.
2. The horizontal stroke over the second and third letters seems to belong to the omega, but is wanting in the letter when it recurs; in line 5 it may possibly mean that a sigma has been omitted or may have become shifted. The symbol $\bar{\Sigma}$ stands elsewhere for $\xi$; cp. C.I.A. 3, i. 458, C.I.G. 5789.
3. There is mention here of the $\Lambda$ uroâtal. Lykoa seems (Paus. viii. 3. 4 ; viii. 36. 7) to鱼ave been a small place about six miles from Megalopolis to the East, on Mt. Mainalos, which had fallen into ruins at the time of Pausanias. In the text of viii. 27. 3 it appears as Aúkaıa, where certainly the same place is meant as tav́ras $\mu \grave{\epsilon} \nu$ '́є Macváخou follows; but it would seem that the name of this insignificant mountain village was confused at the time of Pausanias with the canton of the $\Lambda$ vкaıâtal, the dwellers on Mt. Lykaion. The name of the Megalopolitan tribe is given in XVII. and on the theatre-seat as $\Lambda v \kappa a \varepsilon i \tau a l$, which is doubtless the correct form of which Avкaıâtal is a variety. It may be conjectured with probability that the same tribe is meant in this inscription.
6. The subject is probably tò $\sigma \nu \nu \epsilon \in \delta \rho \iota o \nu$.
7. The form фátрa and фатрítaı, where Attic would have фfarpía and фрárepєs, is not 'surprising, as $\pi a ́ \tau \rho a$ is a Doric form found, and Grammarians and late inscriptions have фarpía.
XXIII.

| EПAфPI | ${ }^{\prime} \mathrm{E}_{\pi} a \phi \rho i \omega \nu \chi \chi^{a i \rho} \epsilon$. |
| :---: | :---: |
| ○N |  |
| XAIPE |  |

Rude and late sepulchral stele with triangular top, $1^{\prime} 2^{\prime \prime}$ by $1^{\prime} 10^{\prime \prime}$; letters $13^{\prime \prime}$ high; formerly in possession of $\Theta e o ́ \delta \omega \rho o s \mathrm{M} \pi \rho a \tau \xi \vdash \circ \lambda a \hat{s}$ at Sináno.
$\therefore$ The name is in all probability a Christian one, and the date quite late.
XXIV.


Letters $2 \frac{1}{2}^{\prime \prime}$ in height.
Stele ( $3^{\prime} 7^{\prime \prime}$ by $2^{\prime} 6 \frac{1^{\prime \prime}}{}$ ) built into the floor of the chapel of $S$. Athanasios, which is situated on the south bank of the Helisson to the right of the bridge as one passes over it from Sináno in the direction of Karytaina.
$i$
$\vdots$
$\vdots$
$\vdots$
$\vdots$

| XXV. | IßLMく |
| ---: | :--- |
|  | $>\Gamma \diamond \Pi \diamond I E I N$ |
| $=$ | $\phi I \lambda A N \Delta P E$ |
|  | $\Pi \diamond E E I N H$ |
|  | TSEEIT $\omega$ |

- тos $\mu$ о
$\lambda 0]$ уотои $\varepsilon \iota \nu$
$\ldots \epsilon \Phi i \lambda a \nu \delta \rho \epsilon$
. . . $\pi \circ \theta \epsilon \iota \nu \eta{ }^{\prime}$
. . $\pi 0 \theta \epsilon l \tau \omega$.
Letters apparently $\frac{5^{\prime \prime}}{}{ }^{\prime \prime}$ in height.
Apparently the ends of the lines of a metrical epitaph, of late Imperial times. The writing is almost cursive in its style. Brought to us by a villager, and now in the museum.

```
XXVI. HПONI\SigmaHMERANO
    TOAEITWNMTAADION
    \SigmaTEAIANONMTADIOY
    TEIMOKPATOYEYON
    TATEA\lambda\lambdaA\PiO\lambdaEITEY\SigmaAMENON
    \phiI\lambdaOTEIMWEKAIATWNOOETHEAN
```

$\dot{\eta} \pi o ́ \lambda \iota s \dot{\eta}$ Merão-
$\pi о \lambda_{\epsilon \iota \tau} \omega \hat{\nu}$ M. Tá $\delta \iota o \nu$
$\Sigma_{\pi \epsilon \delta i a \nu o \nu} \mathrm{M}$. Tadion
Teıнокрátous vióv,



## TATWN ${ }^{\text {Y KKAIWNKAIKAIEAPHWN }}$ AAM ПPWEKAIENAPETWETPOIDEEA <br> MENHETOANADWMAK入AYAIAEIOY <br> גITHETHETYNAIKOEAYTOYKAITWN TTAIDIWNTADIWNTEIMOKPATOYE KAIEWTHPIXOY <br> $\bar{\psi}$ <br> $\bar{B}$




```
\(\mu e ́ \nu \eta \varsigma ~ \tau o ̀ ~ a ̀ \nu a ́ \lambda \omega \mu \mu a ~ K \lambda a v \delta i a s ~ ' I o v-~\)
```




```
kal \(\sum \omega\) т \(\eta \rho l \chi o v\).
\(\Psi(\eta \phi l \sigma \mu a \tau \iota) \quad \mathbf{B}\left(o \nu \lambda \eta_{\hat{s}}\right)\).
```

                                    ;
    On block of stone lying outside the door of the principal $\xi \in v o \delta o \chi \varepsilon i o \nu$ in Sináno. $2^{\prime} 6^{\prime \prime}$ by $1^{\prime} 63^{\prime \prime}$. Letters $\frac{3}{4}^{\prime \prime}$ in height.

An honorary decree to the husband of the lady Klaudia Julitta, whose brother (cp. XVII.) was Agoranomos, and who on behalf of her tribe of the Lykaeitai helped to pay his expenses. The Lykaeitai (cp. I. iii.) as a tribe of the city preserve the memory of the migration into Megalopolis of the inhabitants of the slopes of Mount Lykaion, and the worship of Zeus Lykaios was carried on in the centre of the agora of the town. So that we are not surprised to hear of a festival, the Lykaia, celebrated perhaps like the modern panegyris (Baedeker's Greece, p. 304) on the mountain top, where was a stadium and even hippodrome; or to find the worship of the emperors coupled with it in the Imperial times of this inscription. The writing is already very cursive in character.
XXVII. Scrap of soft stone, almost illegible, $8^{\prime \prime}$ by $6^{\prime \prime}$; letters $\frac{1^{\prime \prime}}{}{ }^{\prime \prime}$ in height. In museum in Sináno.

> NA!
> IIIMIA $\operatorname{lilK}$ ENeAMI
XXVIII. (I) $\boldsymbol{\alpha}$.

CKANOOHKACA
b. $10 \Delta 1$
(2) NAEAIS

NTOEA pIAIח\#EIOY

EתP:
El01
IHEEM/ APOחEIOEIL
$4 \geq \triangle A$
$\triangle A M O C I O I A P X I N O Y$
MOMF
ogetaia
AXO,
2AKA
NIKI

王

IEPMANO 'Epmầo[s


$$
?
$$

- $\nu a s \Delta t \omega-$
$-\nu t o s \Delta$.

$\theta] \epsilon \omega ิ \nu$.
ocol?
$-\eta \sigma \dot{\varepsilon} \pi a-$
-братеє $\theta \in \iota \delta$ - ?
$-a s \delta a[\mu a \sigma \ldots$



The above are a seríes of inscribed tiles, either used in roofing or for drains at various parts of the site. The letters stamped on them sometimes seem to indicate the building for which they they were intended; they are of course raised on a depressed ground. The period varies from third century B.c. to first century A.D.
(l) (a) A great number of these tiles'were found in the inclosed space beneath the western supporting wall of the Theatre auditorium, and belonged probally to the roof. This was obviously the $\sigma \kappa a v o \theta i \kappa \eta$, a word not elsewhere found, which on the analogy of $\sigma \kappa e v o \theta \eta \kappa \eta$ would seem to mean ' the green room,' where the actors' outfits and apparatus were kept.

The $\Delta$ which occurs here and in (3) and (7) seems to be the maker's mark, and it would appear from an Olympia inscription of a Megalopolitan artist (Löwy, I.GY.B. 271), APIETEA $\Sigma N I K A[N] \triangle P O Y$, that it is not a combination of alpha and delta, but simply a form of delta, which may have been the initial letter of the maker's name. It may, however, be merely a stone-cutter's mistake.
(b) One instance of this inscription was also found in the same place; it is too much rubbed to be decipherable.
(2) Picked up by the new bridge, in the earth taken thither chiefly from the neighbourhood of the Agora to form an embankment. The names of divinities on these tiles seem to indicate that they were used in a temple precinct; thus a vast number stamped $\Delta \in \sigma \pi o i v a s$ in lettering of various periods have been found in the excavation of the Temple of Despoina at Lykosura. There was a sanctuary of Hermes Akakesios in the Agora, ruined in the time of Pausanias.

The Doric form 'Epháv is found jn the inscription relating to the Andania Mysteries, and in a Tegean inscription (vide Le Bas-Waddington, 326a, 338).
(3) One of the tiles of a pipe supplying the gutter in the Temenos of Zeus Soter.
(4) This tile, unearthed in the east end of the Stoa north of the Agora (March 26, 1891), proves that to have been the Stoa Philippeios. Another fragment was also picked up at a later date.
(5) Although this tile is fragmentary, enough remains to make almost certain Mr. Loring's restoration of $\tau \hat{\omega} \nu \mu \varepsilon \gamma a ́ \lambda \omega \nu \theta] \epsilon \hat{\omega} \nu$, as it was found at a spot between the Agora and the stream to the west (vide map of site).
(6) The fragment comes from the Thersilion.
$\because$ (7) This inscription seems to contain some long proper name. Mr. Loring reads the second line as rho; but from the somewhat poor squeeze that I have, and from the spacing of the letters, it looks to me more like an iota, which would give the common name of Diopeithidas. It would be unsafe to conjecture in the first line 'Eтápıroc. The tile was found by Mr. W. Leaf just east of the Hieron of Zeus Soter.
(8) was found in the Theatre.
(9) This tile was found in the portico of the Thersilion: in fragments.
(10) -(15) are fragments too small to be in any way intelligible, except (11).
G. C. Righards.




Fig. 1. GENERAL VIEW OF THE THEATRE FROM ABOVE THE AUDITORIUM.



Fig. i. View from the west side of the auditorium.


Fig. 2. VIEW OF THE SKANOTHEkA, PORTICO, ETC., FROM THE EAST.


Fig. i. VIEW OF THE PORTICO AND BACK WALL FROM THE SOUTH-EAST


Fig. 2. VIEW OF THE TWO EASTMOST BLOCKS OF SEATS








## FIG I

SECTION THROUGH THE THEATRE ON LINE A B

Scale of Feet

 Shows probable original line of Ground.
 kawn by William . Stirling: and R.W.S $\cdot 1892$.


FIG 4 : ELEVATION OF NORTH W

FIG 5 : ELEVATION OF WEST WALL OF



CFKELL PHOTO-LITHO B.FURNIVALSTHOLBORNE.C


TION THROUGH THERSILION ON LINE C. D.


Datum line

SOUTH WALL OF TiHERSILION AND BACK WALL OF PORTICO


F NORTH WALL OF SKANOTHEKA AND STEPS OF PORTICO


WALL OF THERSILION AND SECTION THROUGH SKANOTHEKA ETC.


: FIG. $1:$ DETAILED SECTION SHOWING OOMPARATIVE LEVEL®

- 妾


FIG.2: DETAILED $P$

OF THE STYLOBATE


## ZLS OF SEATS OF AUDITORIUM: STYLOBATE \& BACK WALL OF PORTICO: \&PIERS OF THERSILIO



- 1 - 75 .


## PLAN SHOWING THE PRESENT STATE

[E AND BACK WALL OF THE PORTICO

.Schulter . 1891-92 .





FIG. I. A RESTORED PLAN OF THE STOA OF PHILIP




[^0]:    1 These remains were supposed by Leake (Travels in the Morea, ii. 38) to belong to the Gymnasium. Their identification as the 'Stoa Philippeios,' which Curtius had
    already suggested, has now been placed beyond the reach of doubt,-v. $§ 5(a d f i n$.) of the present chapter.

[^1]:    2 For an account of the materials used at Megalopolis, थ. Chap. III. (init.).
    3 Vol. xi. pp. 294 sqq.

[^2]:    ${ }^{4}$ Beneath the type there are traces of some letters, but we have, so far, failed to decipher them.
    ${ }^{5}$ For the substance of my remarks upon the gold disk, and for its identification as 'ghost-money,' I am indebted

[^3]:    7 Paus. viii. 36. 5.

[^4]:    8 Mr. Gardner and I disagree with Mr. Richards' view (Chap. V.) that the large foundation in the middle of the court, and in front of the shrine, is not likely to have supported the group of statuary by Kephisodotus and Xenophon. The group was of marble, and even if not colossal must have been of considerable size, since it consisted of three Ggures and two sculptors were employed apon it; while the shrine was a small one. There is

[^5]:    ${ }^{11}$ The numeration adopted is that given in the edition of Rose and Müller-Strubing (Leipzig, 1867).

[^6]:    1 I am greatly indebted to Mr. F. W. Rudler, F.G.S., Curator of the Museum of Practical Geology, for kindly - examining specimens of the various materials, and giving me much valuable information regarding them which has been embodied in this description.

    2 This is the same material which is known in Athenian buildings as Piraic stone (see Pemrose, Athenian Architecture, 2nd ed., p. 2 et ser.). It was in common use in Greece and was employed in many notable buildings. It was largely

[^7]:    used at Olympia, and Pausanias (vi. 19. 1, v. 10. 3) alludes
     also under â̂pos in Liddell and Scott's Greek Lexicon.) It is also commonly known amongst German archaeologists at the present day, under this name of poros stone. (See G. R. Lepsius, Griechische Marmorstudien, p. 128, Trans. Berlin Ac. 1800 ; also, Blümner, Technologie und Terminologie, vol. iii. p. 57.)

[^8]:    ${ }^{3}$ It will be shown further on that the central part of the south wall was a later addition.

[^9]:    4 The reason for this is difficult to determine unless it were that there existed a slightly raised platform in the centre inside.

[^10]:    ${ }^{5}$ These later blocks and steps are marked $b$ on Plates VI. and VII.
    ${ }^{6}$ Some of these pieces have been put together by the excavators-relatively in their original position-and I

[^11]:    7 Of course it can be argued that this portico did not necessarily need to have any direct connection with the Theatie when used for dramatic representations, on which occasions a temporary stage or scene could have been

[^12]:    2 In speaking about the length and width of these slabs, the term length is intended to mean the dimension of the stones or blocks along the face of the steps, while the width is the dimension from front to back.

[^13]:    ${ }^{15}$ Only one example of the capital has been found, and on this the stucco, which coated the face of the stone, no longer exists.

[^14]:    

[^15]:    1: I feel bound to say however that at the Theatres of Athens and Zea, both of which have narrow deep gutters, there is sufficient room for completely circular orchestras, and Dr. Dürpfeld has suggested to me that previous to the

[^16]:    addition of the benches there may also have been a circular orchestra at Megalopolis, and that the passage in front of the seats was there wider at each end thas in the centre, as is the case in both of the examples here quoted.

[^17]:    ${ }^{15}$ I ann informed by Mr. Linest (dardner that, during the course of thoroughly cleaning out this drin since my visit to Megalopolis, a sinking has been found in the cill towards the west end, which looks as if it had been cut for the

[^18]:    ${ }^{20}$ This passage immediately behind the front benches is also to be seen in the Odeum of Herodes Atticus at Athens, where it is arranged in a manner somewhat similar to the one bebind the benches above the diazoma at Epidaurus (see Fig. 29).
    ${ }^{21}$ At Argos, as far as I could judge, this same arrangement of one passage in front of the thrones and another behind seems to have been followed, but further excavation will be necessary here before it can be cited as a definite example either way.

[^19]:    22 At Sicyon (Papers of American School at Althens, Vol. v.), whore the theatre has a narrow deep gutter similar to the one at Athens, there is no broad passage, in front of the benches, which stand on a narrow step raised above the kerb of the gutter. As I did not have an opportunity of visiting this site, and as I understand that the excavations there are still incomplete, I do not feel justified in guoting it further for the purposes of comparison.
    ${ }^{23}$ See Note 18, p. 34.

[^20]:    ${ }^{24}$ To fully investigate this it will be 'necessary to dig from 6 to 8 feet deeper than has yet been done.
    ${ }^{25}$ A piece of foundation wall, which has been discovered this spring, east of and parallel with the wall of the later proscenium, and which will be alluded to in a further note, slopes upwards into the parodos with a rise approximately of $1-10$. This goes to show that the inclination was

[^21]:    27 I do not maintain that this higher level did not originally run along the entire length of the wall and that the upper slabs have merely disappeared along the remaining third, but $I$ only mention the state in which it has been found.

[^22]:    ${ }^{26}$ From the present evidence which we have, it is impossible to say definitely whether it was an outlet or an inlet drain ; the chances are however in favour of its having been an outlet, as no other drain has been found.

[^23]:    ${ }^{21}$ In this description where the nature of the stone is not otherwise defined it will be undersfood that conglomerate is the material which has been employed.
    32 It will be observed that this wall is considerably thicker than the wall of the Thersilion. This may be accounted for to a certain extent by the nature of the

[^24]:    Continuous stylobate in Triple Stoa.

[^25]:    ${ }^{35}$ The temple of Despoina, at Lycosoura, which is about the same width as this one, has a portico of six Doric columns resting on a stylobate 3 feet 1 inch in width, and

[^26]:    
    2 Allowing a space of 13 inches for each person. This space ( 0.33 m .) appears to have been the allowance at Athens (Müller; Die Griechischen Billnenalterthümer, p. 91). Though this allowance seems inconveniently small, we think it better to base our calculations on a measurement which has some monumental authority than to resort to conjecture.

    It will be seen that Mr. Schultz (Chap. III.), by an independent calculation, makes the number at Megalopolis 18,700. The discrepancy is no more than is to be expected, considering that all the upper seats have disappeared and

[^27]:    : See Chap. I.
    ${ }^{0}$ See Chap. V.
    ${ }^{7}$ See Chap. II. § 3.
    

[^28]:    ${ }^{11}$ Wieseler, Theatergebäude, p. 6 ; Bulletin de Correspondance Hellénique, vol. xiv. p. 248.

    12 Ross, Reisen des Königs Otto, ii. p. 117 ; American Journal of Archaeology, vol. vii. p. 268.
    ${ }_{18}$ Mрактіка́, 1883, Pl. I.
    14 Bulletin de Corr. Hellén., vol. xiv. p. 248, and Pl. XVII. Wieseler, Pl. I. 21, and p. 6.

[^29]:    $1 s$ It is to be observed that the possible difference of slope (discussed below) between the upper and lower tiars of seats does not affect the number of seats in our calculation ; since the difference of slope would probably be made, as at Epidaurus, in the height, not in the width, of the single seats.
    ${ }^{19}$ Vit. v. 3, 4.- Et ad summam ita est gubernandum uti linea cum ad imum gradum et ad summum extenta fuerit, omnia cacumina graduum angulosque tangat. Ita vox non impedietur.' The passages we quote from Vitruvius in this paper are taken from Rose and Mïller-

[^30]:    

[^31]:    

[^32]:    
    

[^33]:    

[^34]:    C

[^35]:    ${ }^{22}$ See Appendix D. The restoration here suggested does not correspond exactly with the conjectural restoration given by Mr. Schultz in Fig. 27.
    ${ }_{28}$ Baumeister, Denkmíler, p. 1737 (plan). In Haigh's copy of this plan (Attic Theatre, p. 112), the walls which bound this entrance are indicated by the letters ' c d.'
    ${ }^{24}$ Практккú, 1883, p. 46 and PI. I. (In the plan first

[^36]:    ${ }^{34}$ Perhaps the actual level; but in many cases the footboard of the lowest seats was some inches above the level of the orchestra; e.g., at Athens the difference is about 16 inches, and at Piraeus the difference is about 11 inches, the actual height of the step being about 9 inches Практкќ, 1880, p. 50), and the rest of the difference being made up by a slight slope. If the auditorium at Piraeus is to

[^37]:    ${ }^{35}$ It is a curious coincidence that in the Theatre at Athens the $\theta$ póvo corresponding to each of the ond blocks are six in number, while all the other blocks have only five Opóvoc in front of them (Mpaктıkó, 1878, plan; Miiller, p. 89, plan. The plan in Baumeister (p. 1737) does not show this difference and is so far erroneous. That in Haigh (p. 112) also is inaccurate in this respect).

    In Mittheil. xvi. p. 257, Dr. Dörpfeld states that the inscribed benches at Megalopolis have demonstrably (nachweisbar) been moved from their original position, but does not say on what grounds the demonstration rests. There is, on the contrary, strong evidence for the opposite view. We have measured the curvature of a number of the

[^38]:    
    inches higher or lower than any other part.
    ${ }^{4 n}$ This course is best seen in the sections of steps on Plates XI. and XII.
    ${ }^{41}$ The difference of level between the surface of the course in question and the footboard of the $\theta$ póvot is about 17 inches, but the kerb of the orchestra is everywhere a trifle (from $\frac{3}{4}$ inch to $2 \frac{3}{4}$ inches) higher than the footboard of the $\theta$ póvol. We have taken 2 inches as the. average difference.
    42 Практька́, 1886, PI. III.
    ${ }^{43}$ Juulletin de Corv. Ifellén. xir. PI. XVII.

[^39]:    ${ }^{43}$ Before the addition of the seats of honour the diameter was even greater, viz. 114 ft

    47 The above measurements are taken, for Athens, from Kawerau's plan in Baumeister's Denkmäler, p. 1737 ; for Epidaurus, from Практскá, 1883, Pl. I. The measurement in each case is taken to the front of the seats of honour.
    ${ }^{48}$ Anerican Journal of Archaeology, vol. vii. p. 275, and Pl. XI.
    ${ }^{49}$ Ibid. vol. v. p. 276, and vii. p. 281.
    so Mittheilungen d. deutsch. arch. Inst. Athen. xvi. p. 266.

[^40]:    ${ }^{11}$ This is also the view of Dr. Dörpfeld, who regards the portico as the 'Hintergrund des Spiels,' Berl. Phil. Woch. 1891, p. 419; .Ifitheilungen, .xvi. p. 258.; cf. also Mittheilungen, xvii. p. 98. He further suggests that on exceptional occasions (ausnalmsweise), when the nature of the piece required it, temporary scenery was erected in front of the colonnade;-a suggestion which has our entire approval.
    ${ }_{5} 2$ Vitruvius v . 8.

[^41]:    53 Dr. Dörpfeld indeed calls it the 'frons scenae' (Berl. Phil. Woch., loc. cit., and also 1891, p. 515 ; Mittheilungen, locc. citt.); reserving the name 'proscenium' for the temporary scenery which he supposes to have been occasionally erected in front of it.
    ${ }^{54}$ For a more detailed account of the portico the reader is referred to Chap. III.
    as By calcareous tufa, or more shortly tufa, we denote a rough stone, resembling travertine, such as is commonly known in Germany as 'poros' and in France as 'tuf.' Sce Mr. Schultz's account of materials used in Megalopolis (Chap. III. Section 1).
    ${ }_{\text {as }}$ In Plates. VI., VII., and XI. these stones have been shown as existing in situ. We therefore think it our duty expressly to call attention to the fact that the stones

[^42]:    ${ }^{59}$ Mittheilungen, xvii. p. 98, 'Bei der Erbauung des jetzigen steinernen Theaters die Orchestra tiefer gelegt wurde als der Fussboden ror der Vorhalle des Thersileion.'-In a previous statement of his views (Mittheilungen, xvi., p. 256 sqq.) Dr. Dörpfeld supposed the lower steps of the Portico to be contemporary, not with the whole Theatre, but with a change in the level of the

[^43]:    ${ }^{63}$ It is true that the modern stage is always slightly tilted towards the orchestra. But in the first place the conditions are entirely different, and we have no evidence whatever for a similar device in ancient Theatres; and in the second, the usual slope in modern Theatres is 1 in 24, while at Megalopolis, had there been a slope at all, it must, even supposing it to lave extended right across the mápooo (i.e. nearly to the centre of the orchestra), have been a slope of $I$ in 12 in the first period and of 1 in 9 in the second. And such a slope extending nearly to the centre of the orchestra, while the rest of the orchestra was flat, would have seriously hampered the chorus as well as the actors. Hence we feel we are justified in setting this alternative aside without more comment.
    ${ }^{0+4}$ The level of the orchestra is indeed a few inches

[^44]:    67 It may be objected that our own theory,-that of a platform (or stage) before the stylobate,-involves the necessity for the actors or chorus of occasionally ascending and descending steps. This necessity would, however, only

[^45]:    ${ }^{63}$ But $9 \frac{1}{21}$ inches below the nearest part of the 'Vitruvian' proscenium in its present state. The extreme end of the proscenium however was not a colonnade but a wall (see Fig. 36, Ch. III.).

[^46]:    ${ }^{70}$ Marked 'later proscenium 'in Plates V. and VII.
    ${ }^{71}$ The authority for the word is the inscription belonging to the proscenium at Oropus (Прaктıк⿱㇒日, 1886, p. 54, and Pl. III.).

[^47]:    72 The positions in which we found them are marked in the provisional plan of the Thentre, J.H.S. vol. xi. p. 295.
    ${ }^{73}$ Not in situ.
    is Vitruvius v. 8, 2.
    ${ }^{55}$ Iрактекá, 1883, p. 47, and Pl. II.
    76 Ibid. 1886, Pl. III.
    ${ }^{77}$ The proscenium at Epidaurus, being Ionic, while ours at Megalopolis is Doric, is useless as a basis for calculating the height of the proscenium from the diameter of the columns.
    ${ }^{78}$ Практєка́, 1883, Pl. II.
    ${ }^{70}$ Tbid. 1886, p. 54, and Pl. III.

[^48]:    ss Even by those who, like Dr. Dörpfeld, deny that Vitrurius knew what use the 'proscenium' in the Greek Theatre served, See e.g. Berl. Phil. Woeh. 25 Apmil, 1891, p. 510 ('Das griechische Thenter seiner Zeit'), and Baumeister, Denkmäler, p. 1734 (' und Bauten dieser Art

[^49]:    müssen auch Vitrur bekannt gewesen sein').
    ${ }^{80}$ Практька́, 1886, Pl. III.
    mo e.g. Beoliner Phil. Woch. 12 April, 1890, p. 467 ; ibid. 25 April, 1891, p. 514. In the latter of these passages thestatement, so far as it applies to Megalopolis, is incorrect.

[^50]:    ${ }_{6}^{6}$ Vitruvius v. 6, 2.
    ${ }^{92}$ This is a deduction from the rules laid down in Vitruvius r. 6, 1.

[^51]:    ${ }^{06}$ Chap．VII．No．XXVIII．（4）
    ${ }^{96}$ Ibid．（5）．

[^52]:    ${ }^{3}$ Eretria, American Journal of Archaeology, Vol. vii. pp. ${ }^{275}$ sqq., and P1. XI.-Sikyon, iJid., Vol. v. p. 276, and vii. pp. 281, 282.-Magnesia, Mittheilungen, Vol. xvi. p. 266.
    ${ }^{10}$ Americ. Journ. Arch., Vol. vii. pp. 260-262.
    ${ }^{11}$ Ibid. PI. XI.
    12 Baumeistex, Denkm., p. 1742; art. 'Theatergebäude.'
    ${ }_{13}$ Vitr. v. 6, 1.
    ${ }^{4}$ Vol. xii. pp. 356-365.
    ${ }^{25}$ ' The comparison,' he says (p. 361), 'required by Vitruvius
    is between the pulpitum of the Greek and the pulpitum-

[^53]:    ${ }^{17}$ Vitr．v．8，2．The word＇ita＇shows that the comparative narrowness of the＇pulpitum＇in the Greek Theatre is a deduction from the rules just given for setting out the Theatre．But a＇pul－ pitum，＇as distinguished from the＇proscenium，＇has not been so much as mentioned，much less any rules given for determiningits breadth． This being 80，Fra Giocondo＇s theory，as interpreted（rightly or wrongly）$b_{j}$ Mr．Louis Dyer，involves the following suppositions ： （1）that the object of the two supplementary circles mentioned by Vitruvius is to determine，not the length of the＇proscenium，＇but the part of the＇proscenium＇from which the＇pulpitum＇is to pro－ ject－though，us I have already noted，no＇pulpitum＇has so much

[^54]:    ${ }^{1}$ See Haigh, Attic Theatre, pp. 33, 98.
    ${ }^{2}$ It will hardly, I imagine, be contended that these Italian Greeks had a theatre more like the Roman. The proscenia on the vases are exactly like those of Greek theatres, and not

[^55]:    like the Roman stage.
    ${ }^{3}$ A vase-painters tradition would not meet the case; for, as

[^56]:    ${ }^{1}$ See Hultech, Metrologie, 2nd ed. 1882, p. 70.
    ${ }^{2}$ See Dörpfeld, Mittheil. d. deutsch. Insh, Athen, 1882, p. 277, sqq.
    ${ }^{2}$ Michaelis, J. H. ©. iv. p. 387.

[^57]:    ${ }^{2}$ Pausanias (viii. 30, 7) calls the Akrotatos who was defeated and killed in an engagement with Aristodemos son of Kleomenes. In this he disagrees with Plutarch, who (Vit. Agis iii.) distingujshes Akrotatos son of Areus, whose reign was thus cut short, from his grandfather

[^58]:    ${ }^{1}$ Travels in the Morea, ii. 32.
    ${ }^{2}$ Blouet, Expédition Scientifique de Morés, vol. ii. Pl. 36-40.
    ${ }^{3}$ Ibid. pp. 43-56.

    - Ibid. Pl 37.

    5 Vol, ii. PI. 5.
    ${ }^{6}$ S.v. 'Megalopolis.'
    ${ }^{7}$ Ross, Reisen im Peloponnes, pp. 81 sqq.
    ${ }^{8}$ Peloponnesos, vol. i. pp. 284 sqq.

[^59]:    ${ }^{-}$ix. 21.
    ${ }^{10}$ Or, if any of them have realized it, they have altogether mistaken the direction in which the walls ran. Curtius eays (p. 282) that the position of the town . . . . ' wie die Ruinen beweisen, bei geringer Breite einen bedeutenden Theil des langgestreckten Helissonthales ein. schloss.' This has now proved to be exactly an inversion of the facts.
    ${ }^{11}$ Morea, vol. ii. p. 40.
    12 Ibid. vol. ii. p. 41.
    
    
    
    
    
    
    ${ }^{14}$ Morea, vol. ii, p. 42.
    ${ }_{15}$ P. 76.
    ${ }^{16}$ P. 32.

[^60]:    17 'What I regard as the earlier group.' It is impossible to prove that this group is the earlier of the two ; but there is clearly a difference of date between the two styles, and there is a strong probability that the better style, that

[^61]:    19 This entrance, and the walls to which it belonged, may perhaps ere long have entirely disappeared. They have already been in large measure destroyed for building purposes. ' $J$ ' and ' $L$ ' have been similarly, though not quite so badly, treated. The wanton destruction of

[^62]:    29 Blouet, Expéd, Scient. de Morée, vol. i. P\}. 22. ${ }_{21}$. Blouet, op. cit. vol. ii. Pl. 31.
    ${ }^{21}$ Bulletin de Corvespondance Hellénique, xiv. P1. 1.

[^63]:    ${ }^{25}$ See Mr. Woodhouse's historical sketch of Megalopolis (Chap. I.).
    
    

[^64]:    ${ }^{27}$ On the surface of the wall ' $L$ ' I found several pieces of tile. But even if these belong to the wall (which is by no means certain), they belong probably to some restoration of its upper portions, which (as I have stated below) were probably of sun-dried bricks, and may therefore have been rebuilt any number of times. In no case did I find tile built into the wall.

    28 xli. 20 'Megalopolitanis in Arcadia murum se circumdaturum urbi est pollicitus, maioremque partem pecuniae dedit.'
    ${ }^{29}$ An inscription published in the Bulletino for 1873, p. 216, may possibly refer to another repair of some portion of the walls. It has been republished by Mr. Richards, Chap. VII. No. VII. A.

[^65]:    ${ }^{30}$ Pl. I.
    ${ }^{31}$ The piece of wall which is preserved to the greatest height is that marked ' $K$,' which attains in some places a height of 3 ft .4 in . Of the walls of earlier period it may be said generally that one course alone is preserved, though it is rather misleading to speak of courses where the blocks used are not hewn even approximately into shape.

    32 Schuchhardt, Schliemann's Excavations (Eng. trans. by E. Sellers), p. 44.
    ${ }^{3} 3$ Vitr. ii. 8, 9.
    ${ }^{34}$ Xen. Hell. v. 2. 5 ; Paus. viii. 7. 8.
    ${ }^{35}$ Guide Joanne for Greece, vol. ii. p. 373. This portion of the guide is written by M. Fougeres, the principal excavator at Mantineia.

[^66]:    'Behind the Stoa which they call after Philip of Macedon are two hills ( ${ }^{\prime}$ ó $\phi o c$ ) of no great height. On one of them are remains of a sanctuary ${ }^{37}$ (ífóv) of Athena Polias; on the otheris a shrine (vaós) of Hera Teleia, this likewise in ruins. Beneath the latter hill a spring ( $\pi r \gamma \gamma^{\prime}$ ) called Bathyllus contributes-like that which flows from the hill Skoleitas ${ }^{88}$-to the size of the Helisson.'
    . Paus. viii. 31. 6.
    
    
    

[^67]:    ${ }^{360} \mathrm{Mr}$. Richards, on the other hand, regards this stream as obviously the Bathyllus of Paus. viii 31. 9 (v. Chap. V.).
    ${ }_{3}$ I have throughout this translation adopted the words 'sanctuary' for icpóv, and 'shrine' for vaós, instead of translating them both indifferently 'temple.' Though the two Greek words may be often interchanged, their range is entirely different, ífóv designating a sacred place with or without a covered building, while a vaós is necessarily a covered building, but often so small a one as to be better called a chapel than a temple.
    ${ }^{35}$ кai $a i ̈ \tau \eta$, referring back to viii. 30. 7.
    ${ }^{98}$ Cf. §. 1 (init.).

[^68]:    40 Peloponnesos, Vol. i. p. 288, and PJ. V.
    ${ }^{41}$ It should be noted that Blouet (Expéd. Scient. de Moree, Vol. ii. p. 46), in describing the remains BB, which I suppose to be identical with my ' 45 ', mentions a number of stones adjacent to them and approximately in situ, and praises 'le choix de ces pierres, la beauté de leur taille et de leur arrangement.' This statement has been copied (with variations) by Curtius (Pelop. i. 288) and in the Guide Joanne (p. 303). Wherever these remains were situated at the time of the French Expedition (whether near my ' 45 ', or elsewhere), they seem to have entirely disappeared.

[^69]:    ' A house which stands near the Thersilion, and which in my time was the property of a private individual, was Paus.viii, 32. I, 2. originally built by the Megalopolitans for Alexander, son of Philip. By the house ( $\pi$ pos $\tau \hat{\eta}$ oikía) is a statue of Ammon, made like the square Hermae, and with rams' horns on its head.

    - Of the sanctuary made by the Megalopolitans for the Muses, Apollo, and Hermes in common, I found but a small part of the foundations to record; but there remained one of the Muses and a statue of Apollo of the tetragonal Hermes type.'

[^70]:    'The sanctuary of Aphrodite, too, was in ruins, with the exception of the pronaos and three statues of the Paus. viii, 32. $2,3$. goddess. One of the statues had the title Ourania, another Pandemos, to the third no special title had been given.

    - Not far hence is an altar of Ares; and it was said that originally a sanctuary also had been built for the god.
    ' Above the Aphrodite ( $\dot{\imath} \pi \grave{\rho} \rho \tau_{\eta}{ }^{\prime}$ 'A.) a Stadium has been constructed ( $\pi \in \pi o i \eta r a l$ ). One end of it reaches to the theatre, and here the Megalopolitans have a well ( $\kappa \rho \eta^{\prime} \nu \eta$ ) which they consider sacred to Dionysus; at the other end a shrine of Dionysus was said to have been thunderstruck by the god two generations before me, and but few remains of it were extant in my time.
     alone was left.'

[^71]:    45 The Múpoo, or General Assembly of the Arcadian League (cf. Chap. I.).
    ${ }^{16}$ Reisen im Peloponnes, pp. 74, 75.
    47 Pelop. i. 284, 285.

[^72]:     this too ${ }^{49}$ being the dedicatory gift of A ristodemus.
    'On the right of the Agrotera is a sacred precinct ( $\tau \dot{\epsilon} \mu \in \mathcal{L}_{0}$ ), containing a sanctuary of Asklepius, with statues of himself and Hygieia; and, a little farther down the hill, a number of gods, in the tetragonal form previously described, with the title of Ergatae ("the Workers"). These workers are Athena Ergane, Apollo Agyieus ("of the Ways "), Hermes, Herakles, and Eileithyia.'

[^73]:    ${ }^{43}$ Expéd. Scient. de Morée, Vol. ii. p. 45.

[^74]:    ' Beneath this hill there is another sanctuary-namely, that of the Boy Asklepius ('Aбкגךпtov Maiסós). The statue of Asklepius himself is a standing one, about a cubit high'; but there is also a statue of Apollo, seated on a throne, not less than six feet in height. In this sanctuary are also dedicated some bones, which appear too large to be haman ; indeed I was told that they belonged to one of the giants whom Hoplodamus marshalled to the assistance of Rhea-a story which will be more fully told in the sequel.
    ' Near the sanctuary is a spring, the water descending from which is received by the Helisson.'

[^75]:    31 Reisen im Peloponnes, p. 75.

