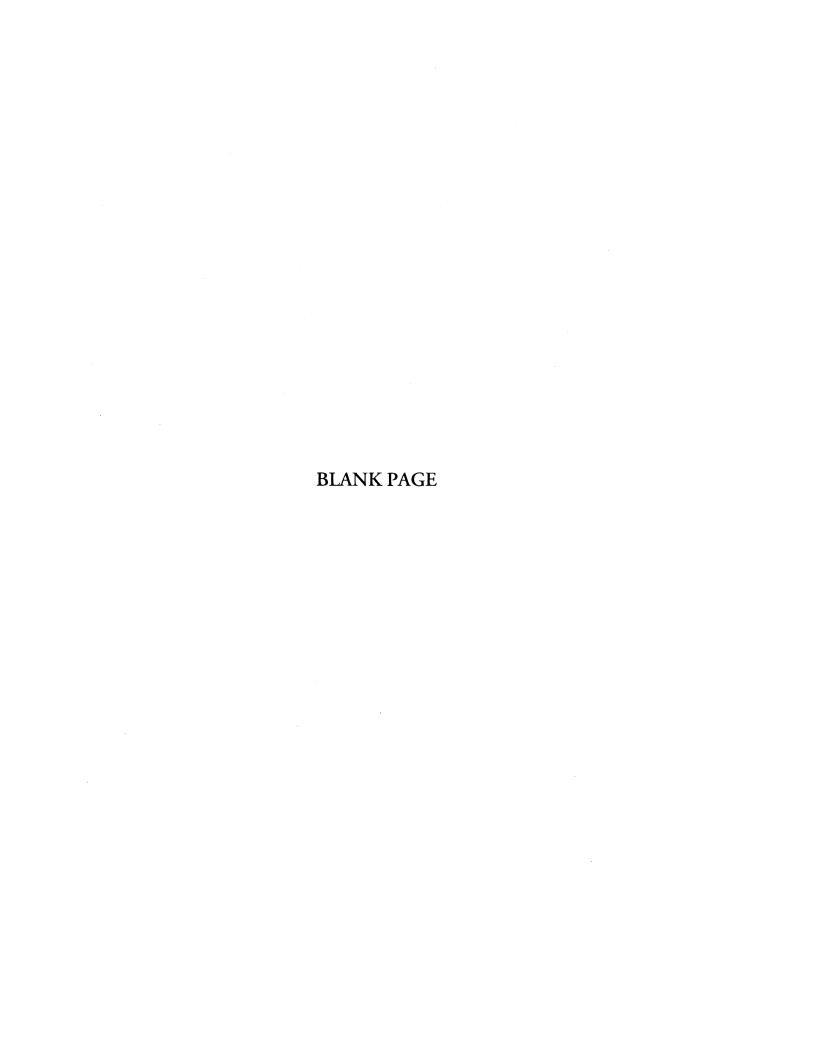


OSTIA FROM THE AIR (1943)

See description of Pl. II



ROMAN OSTIA

RUSSELL MEIGGS

SECOND EDITION

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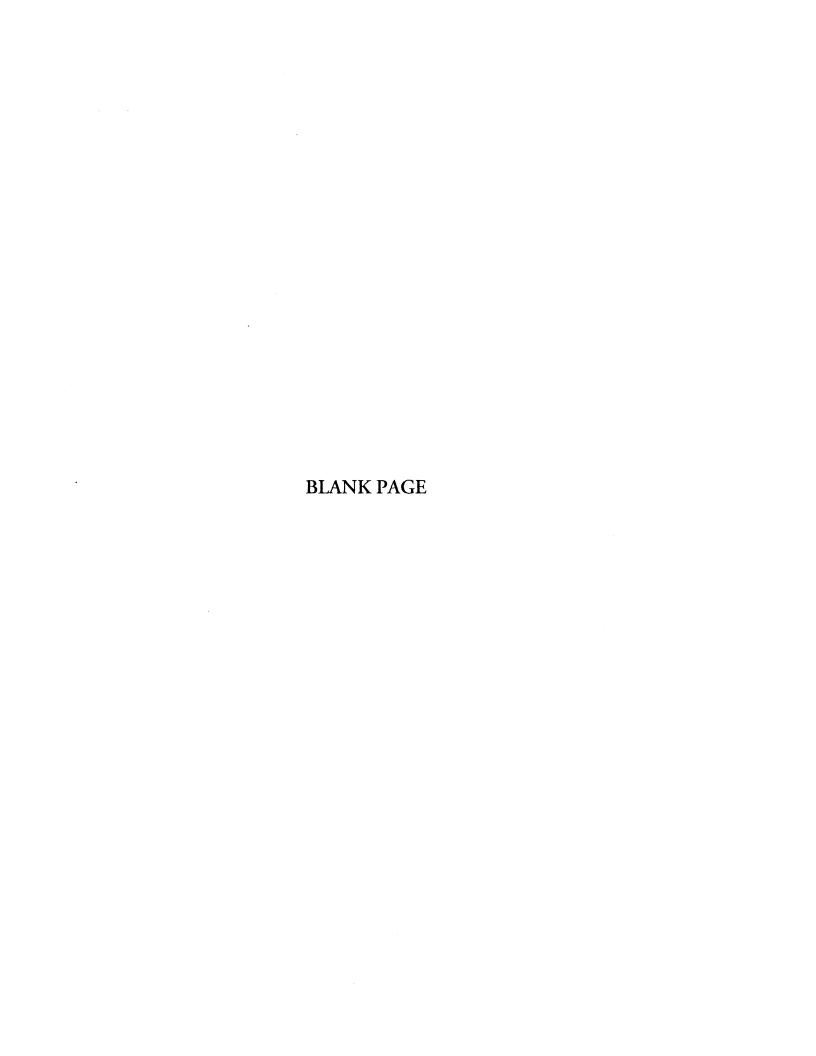
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SODALIBVS OSTIENSIBVS



PREFACE TO THE FIRST EDITION

Y first visit to Ostia was in 1925. I had set out to collect material for a thesis on 'Roman guilds in the light of recent excavations at Ostia'. In two long days among the ruins I found no evidence whatsoever—there was none: it was not until much later that the subject came alive. But from the first I was fascinated by the site, and it has retained its hold; Ostia is my second patria. By 1939 a short book was almost completed. It was stifled by the outbreak of war—mercifully, because by 1945 the subject had been transformed. The campaign of 1938–42 had doubled the excavated area. The evidence now required a different kind of book.

The foundation of the present study was laid during the summer of 1951 at the British School of Rome. I have returned for short visits whenever a busy teaching life and a tolerant wife have allowed; but my last visit was in September 1957. Had I waited longer a better book could have been written, for important problems concerning the course of the Tiber and the form of the Claudian harbour were then in sight of solution, and several hundred inscriptions still remained unpublished. Friends wisely warned me of the dangers of a receding horizon; since 1957, though minor additions have been made, I have concentrated on revision.

With some misgivings I have included the imperial harbours in my study. Their history is so closely linked with Ostia that they clearly form part of a common story, but I have not been able to study them in adequate detail. Many days have been spent in puzzling over the problems of the Claudian harbour on the site, but Trajan's harbour I know considerably less well. I was able to make two visits in 1926 and 1927, but during the critical stages of my work the site was inaccessible to scholars. An unorthodox entry ended, before I had reached my first objective, in humiliation.

In a short preface it is impossible to acknowledge all the kindnesses and help I have received. A wide range of benefactors, from ambassadors to schoolboys, must go unrecorded though I remain grateful to them; but certain debts must be mentioned. The most important part of my work was done in Italy among Italians and with their help. Dr. Guido Calza I remember with particular affection and respect. Even

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when I was a very immature student he gave me every facility I required; I owe much to his advice and encouragement. His colleague, Dr. Italo Gismondi, has helped me even more. No man knows, or ever will know, more of the unwritten history of Ostian buildings, and I have gained more from his shrewd wisdom than individual acknowledgements in text and notes can suggest. Successive directors have also been unfailingly kind to me, from Professor Romanelli to Professor Pietrogrande. But my closest associations have been with Professor Giovanni Becatti and Signora Raissa Calza. Their continuing hospitality and friendship have provided an ideal background for my work; many of my own views have been developed through discussion with them. Professor Barbieri's sharp eye in reading inscriptions has helped me to sharpen my own and he has generously given me access to a wide range of unpublished material. Similar kindness in her own fields has been shown by Dr. Maria Squarciapino. To these Ostian friends, sodales Ostienses, this book is offered. Nor shall I readily forget the warm welcome and practical assistance which 'professore capelli lunghi' has always received from the custodi.

I have been fortunate in having Mr. John Ward Perkins as Director of the British School in these last years. Archaeological argument has many pitfalls for the untrained; he has saved me from many crude mistakes, has made valuable suggestions at many points, and has helped me considerably with his camera. Mr. Richard Goodchild, while he was librarian of the School, was also more than once a stimulating critic in the field. Air photographs would have been less valuable to me without the co-operation of Mr. John Bradford in the library and on the ground.

When the British School was closed the American Academy hospitably adopted me. I owe much more to Professor Bloch than the precision and imagination of his own Ostian studies; discussion with him has always been fruitful. Miss Marion Blake has also given me valuable help in problems of construction, and the list of Americans who, directly or indirectly, have helped me would be a long one. Among friends of long standing in Rome Professor Boethius has been particularly stimulating. His enthusiasm for Ostia has added considerably to the pleasure and profit of my talks with him.

In England my main debt is to Professor A. H. M. Jones, who read my manuscript, and improved it by constructive criticism: I wish I could have been able to answer all his pertinent questions. In Oxford Preface ix

my Balliol colleagues, Mr. Gordon Williams and Mr. Robert Ogilvie, have helped me in form and substance, particularly on points of Latinity. Of past and present pupils who have helped me at various stages, Mr. Martin Frederiksen, Mr. Alan Hall, Mr. Glen Bowersock, and Mr. Graham Clarke deserve my special thanks. The chapter on religion has gained from Dr. Weinstock's learning and sympathy. My use of coins would have been even more amateurish without the guidance of Dr. C. H. V. Sutherland and Dr. C. Kraay. Mr. Frank Lepper and Mr. Eric Gray generously checked several points for me on the site.

It will be clear from text and notes how much I owe to previous writers, but my detailed criticisms of Professor Carcopino require a corrective. I have come to disagree with all the main hypotheses of his Virgile et les origines d'Ostie, and almost all my many references are critical. But few books have excited me more, and this would have been a more prosaic and superficial study if Carcopino had not stimulated me to ask difficult questions and to risk bold answers.

It is a great pleasure to offer my thanks here to those whose financial assistance helped me in my work. My first college, Keble, made it possible for me to serve my research apprenticeship in Italy by awarding me a post-graduate scholarship to supplement the University's Pelham Studentship. In the latter stages generous grants from the Leverhulme Trustees and the Craven Committee enabled me to attempt a scale that would otherwise have been beyond my means.

I cannot adequately thank the staff of the Clarendon Press. They have handled me with a friendly patience and understanding that has comfortably survived any possible strain.

The formal record of my wife's part in this production is easily made. She has typed an almost illegible manuscript; she has released me from domestic duties in times of crisis; she has allowed me to lead a very selfish life. It is more important to confess that without her encouragement and threats I should still be making detailed notes on crucial problems or writing further appendixes.

In the design of this book the opening chapters trace the history of Ostia in outline; they are followed by more detailed studies of various aspects of the town's life. Some repetition is necessary, but the number of forward references has been limited. The table of contents will show where what is treated cursorily in the general history is more fully developed.

I have deliberately not reproduced a detailed town plan. If the scale is sufficiently large for clarity the size becomes unmanageable. If a single-folding map is used the detail becomes unintelligible. An air photograph perhaps provides the most practical compromise. I have therefore used as a frontispiece an air photograph of Ostia in its setting, and have reproduced the area of the town, slightly enlarged, as the second of my plates. The modern division into regions, the numeration of blocks, and the most important street names are shown in a separate plan on p. 137.

The house plans were drawn by Mrs. Selina Ballance. They are based on the official Italian publications, but minor modifications have been made in the light of our joint surveys. The plans of other buildings have been taken by Miss Helen Gibson from Gismondi's large-scale plan in the first volume of *Scavi di Ostia*. The remaining illustrations in the text have been adapted by the Clarendon Press from my own rough sketches. Any merit that accrues is theirs; mistakes may be safely attributed to me. For my photographs I am indebted to the Italian authorities and to many friends at many times.

Concessions have been made to convenience. Castrum has become the accepted term for the fourth-century settlement; I have resisted the pleas of purists. It is virtually certain that the Romans did not call the main streets of their colonies Decumanus Maximus and Cardo Maximus, but the names are too traditional and convenient to be dropped; for the other streets the Italian names have been retained. It would have been more consistent to retain also the Italian names of houses, but the memory of travellers returning from their first visit to Italy with glowing accounts of their experiences in Milano and Firenze deterred me.

The third volume of *Scavi di Ostia* became available to me only when my text was in proof. I have added a long note on one of the problems discussed; otherwise I have had to be content with a few references in footnotes. Similar problems arise from other recent publications. I have commented briefly on the most relevant in four pages of Addenda.

R. M.

Holywell Manor, Oxford August 1959

PREFACE TO THE SECOND EDITION

THE original edition of Roman Ostia went out of print in 1966 and the increasing interest in Ostian studies has now encouraged the publishers to reissue the book. Economic considerations rule out a complete resetting of the type, but the text has been substantially revised. Corrections required by misprints or careless slips have been made in the text: passages which, in the light of new evidence or new argument, need more radical change have been marked with an asterisk and notes will be found on pp. 594 ff. A supplementary Bibliography covers the years 1960-72, and in a separate chapter I have tried to summarize the striking advances that have been made in our understanding of Ostia during this period. Critics whose judgement I value have persuaded me to add a detailed town plan and I am very grateful to the American Academy in Rome for allowing me to adapt the plan used in J. E. Packer's The Insulae of Imperial Ostia, which is based on Gismondi's splendid master plan. Since references to the town plan are not normally given in the text a topographical index is now included.

Reviews and particularly the very constructive criticisms of Professor Becatti and Professor Bloch provided a starting-point for this revision, but any merit that it may have is mainly due to the help I received on the site. After more than ten years in which my main concentration had been on Athenian history and Ostia could only be a brief stop on the way back from Greece I returned like a prodigal son in the late summer of 1972. No prodigal son could have been more generously welcomed and for this I am most grateful to Professor Maria Squarciapino, the present director, and those who work with her and continue to make Ostia such a congenial site to study. My Bibliography would have been considerably leaner if I had not enjoyed free access to the library of the Soprintendenza, and the opportunity to discuss problems with those who are working with the material evidence was invaluable. I am particularly indebted to Dr. Fausto Zevi from whom I learnt much that I should otherwise have missed, and whose acute judgement saved me at more than one point from serious error.

The main work for this new edition was done at Ostia in September 1972, and for most of that month I lived with Giovani Becatti and his family in their delightful house outside the Porta Romana designed by Ostia's 'grand master', Italo Gismondi. In May a cable brought news of Becatti's death. I had discussed with him the work that was to occupy his next five years, and realize what a serious loss his death means to his University and to Roman studies: the personal loss bites deeper. I owe more to his friendship and stimulating encouragement than I can express. This second edition is now dedicated to his memory: I wish it were better.

Garsington June 1973 R. M.

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ABBREVIATIONS

BOOKS

Carcopino J. Carcopino, Virgile et les origines d'Ostie, Paris, 1919.

Ostia G. Calza, G. Becatti, Ostia³ (Itinerari dei musei e monumenti

d'Italia), Rome, 1954.

Paschetto Ostia colonia romana, storia e monumenti, Rome, 1912.

RE Pauly-Wissowa, Real-Encyclopädie der classischen Altertums-

wissenschaft.

Topografia Scavi, di Ostia, I, Topografia Generale, Rome, 1954.

INSCRIPTIONS

I CIL xiv. 1.

S I CIL xiv, Supplement, 1.

Appendix XI, 1.

Bloch, I H. Bloch, Notizie degli Scavi di Antichità, 1953, 239-306.

Thylander, A I (B I) H. Thylander, Inscriptions du port d'Ostie, Lund, 1952.

PERIODICALS

AE L'année épigraphique.

AJA American Journal of Archaeology.

AJP American Journal of Philology.

Ann. Inst.

Annali dell' Istituto di Corrispondenza Archeologica.

Arch. class.

Rivista dell' Istituto di Archeologia della Università di Roma.

BC Bulletino della Commissione Archeologica Communale di Roma.

BSR Papers of the British School at Rome.

Bull. Inst. Bulletino dell' Istituto di Correspondenza Archeologica.

JHS Journal of the Hellenic Society.
JRS Journal of the Roman Society.

MA Monumenti Antichi pubblicati per cura della Reale Accademia dei

Lincei.

MAAR Memoirs of the American Academy in Rome.

Mélanges Mélanges d'archéologie et d'histoire de l'École française de Rome. Mem. Pont. Atti della Pontifica Accademia Romana di Archeologia, Memorie.

NS Notizie degli Scavi di Antichità.

RM Mitteilungen des Deutschen Archäologischen Instituts, Römische

Abteilung.

Rend. Pont. Atti della Pontifica Accademia Romana di Archeologia, Rendiconti.

TAPA Transactions of the American Philological Association.

THE NATURE OF THE EVIDENCE

stia takes her name from her position. She was built at the mouth of the Tiber, fifteen miles from Rome, and therein lies her importance. Inland Rome, growing in power and population, came to depend increasingly on imports from overseas; these imports passed through Ostia and so up river to Rome. Ostia, Rome's harbour town, grew with the growth of Rome.

No Roman history of Ostia survives; it is probable that none was ever written. The Greek City States clung stubbornly to their individuality, even when they were engulfed in large empires; local histories abounded. In Italy all roads led to Rome. The towns were proud of their past and present, but Rome was the focus of literature. Some Ostian families, who remained in the forefront of local government for 200 years and more, were in an admirable position to record the history of their town from family traditions and local records; but there were no precedents to encourage them.

Even so, the contribution of classical writers to the history of Ostia is of primary importance, though much of it is buried in strange places, and it is not all easy to interpret. Ostia's importance as an essential link in the maintenance of Rome by overseas supplies is, as we should expect, well documented. Roman historians were never concerned with details of economic organization, but the fundamental importance of feeding the population of Rome could not be ignored. The misdemeanours of a Saturninus, responsible for the passage of corn through Ostia to Rome, had political repercussions and were therefore recorded; the building of a new harbour at Ostia had an undisputed title to a place in a history of Rome.

For the rest we rely on a strange medley of incidental references, sometimes ambiguous, sometimes trivial. It is interesting to know from the elder Pliny that Fausta of Ostia gave birth, in the principate of Augustus, to quadruplets, thus portending a famine. It was the right place for such a portent to occur, but the incident cannot be pressed

into wider service. Pliny's equally casual remark that a theatre at Rome was roofed by the architect Valerius Ostiensis would be more interesting if we knew whether this Ostian had learnt his trade at Ostia or Rome. We can at least infer that a branch of the Valerii was already under Augustus established in the town, and to a social historian this is not irrelevant.

Also from Pliny come two of the most important sources for our knowledge of the great harbour built by Claudius. It is typical of his book that the first is an excursus on spectacular trees,² the second a footnote on the subject of whales.³ In both passages circumstantial detail is given, and since Pliny had seen the harbour himself his evidence should be decisive. Unfortunately the obscurity of the Latin robs his evidence of much of its value.⁴ His statement in his survey of vegetables that Ostia's leeks were famous is unambiguous,⁵ and adds to our understanding of Ostian agriculture, which is further increased by a biographer's comment on an emperor's gluttony. Clodius Albinus ate ten Ostian melons at a sitting.⁶

But there are more important passages than these, and they are widely distributed. Polybius' account of the escape from Rome of the Syrian prince Demetrius gives us a vivid glimpse of the river harbour in the second century B.C.⁷ A discussion by Galen on dislocation of the shoulder is our most important evidence for the relation of Ostia to the imperial harbours in the second century A.D.⁸ A bitter polemic by Hippolytus against Pope Callistus includes a dramatic glimpse of a harbour scene.⁹ The record of a famine at Rome in the fourth century attests the importance of the cult of Castor and Pollux at Ostia.¹⁰

Excavation has shown a shift of emphasis away from the river towards the sea-shore in the late Empire; casual stories in Suetonius¹¹ and Aulus Gellius¹² and the dialogue of Minucius Felix give colour and background to the picture. The record of his biographer that the emperor Aurelian gave to Ostia a Forum by the sea, in which the praetorium publicum was later installed, ¹³ points the same way.

For the history of Christianity at Ostia the literary sources are even more important. From excavation alone we might assume that there were few Christians in Ostia before the fourth century. The Acts of the

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<sup>1</sup> Pliny, NH xxxvi. 102. <sup>2</sup> Ibid. xvi. 202. <sup>3</sup> Ibid. ix. 14. <sup>4</sup> p. 155. <sup>5</sup> Ibid. xix. 110. <sup>6</sup> SHA, Clodius Albinus, 11. 3. <sup>7</sup> Pol. xxxi. 11–15. <sup>8</sup> Galen (ed. Kuhn), xviii. 348. <sup>9</sup> Hippolytos, Elenchos, 9. 12–14. <sup>10</sup> Amm. Marc. xix. 10. 4. <sup>11</sup> Suet. De rhet. 1. <sup>12</sup> Aul. Gell. xviii. 1. <sup>13</sup> SHA, Aurelian, 45. 2.
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martyrs, unreliable as many of them may be in much of their detail, provide a corrective. Even where no specifically Ostian evidence is available Roman writers are indispensable guides to a reconstruction of the background. One of the most striking contributions of the recent excavations has been the revelation of the handsome houses of the late Empire; Ammianus Marcellinus in his diatribes against the extravagant living of the nobility in Rome illuminates the Ostian picture. Inscriptions tell us very little of the town's administration in the fourth century; the Theodosian Code provides a basis for reasonable inference.

When a historian has to rely on a random assortment of incidental passages, he is tempted to squeeze too much out of too little. The temptation is more easily resisted at Ostia owing to the wealth and variety of the archaeological evidence of buildings and inscriptions. The shells of the buildings remain, and, from a study of the changes in building technique, we shall eventually be able to reconstruct the town's development. For the Republic and the early Empire, however, we shall never secure more than a tentative outline, since the city we now see is a city of the second century A.D. with comparatively minor subsequent modifications. Earlier history can only be recovered by excavation below this level and the opportunities for such investigation are restricted.

For the tracing of Ostia's history the original date and function of a building are of primary importance, but reconstructions and changes of use also need study. They may not, however, all be significant. It is tempting to draw social and economic inferences from such observations as the blocking of a door, the changes in the size of flats, the encroachment of houses on shops; but only when examples are numerous enough to suggest a general tendency are such changes valuable to the historian. It is also tempting to simplify the history of a building by classifying its alterations into a limited number of periods; modern parallels remind us that changes which might logically be connected are not necessarily contemporary.

The evidence of buildings is supplemented by a wide range of inscriptions. More than 4,000 inscriptions in whole or part survive. The abundant records of the trade guilds are our main evidence for the commercial and industrial life of the town; the religious pattern is derived largely from dedicatory inscriptions. The careers of public men, from statue bases and tombstones, and official records of public acts,

¹ e.g. Amm. Marc. xvi. 8. 11 ff.; xxix. 1. 19; xxxi. 5. 14.

enable us to reconstruct the history of the town's administration and invite an analysis of its changing social structure. This analysis, however, depends to a large extent on the study of names, and Roman names can be deceptive. Since the father normally passed all his names to his eldest son, identification is often precarious. At least three men were named Aulus Egrilius Rufus in the first century A.D. The danger of confusion in such a case is apparent, but the continued prominence in Ostia of such families as the Egrilii is an adequate warning. It is easier to forget that when a rare name occurs only twice in surviving Ostian inscriptions, identification remains possible rather than probable unless there is evidence that the two inscriptions are roughly contemporary. Nor is it always possible to distinguish a family of free descent from descendants of its freedmen. Slaves when freed took their first two names from their owner. They normally retained their slave name as a cognomen; but their sons and grandsons could adopt more respectable names. Similarly a Greek cognomen usually implies oriental descent, but not always. Western slaves could be given Greek names, oriental slaves could be given Latin names. In using cognomina as evidence we deal only with probabilities.

Inscriptions can also help to identify and date buildings; but most of such Ostian inscriptions have lost something of their original value. In the late Roman period and in the early Middle Ages, inscriptions were taken from their original settings to serve as building material, to line floors or walls, to serve as thresholds, even to provide the seats of a public latrine. Only rarely therefore can they provide the clue to the identification of a building.

Sculpture has suffered the same fate. The aesthetic value of a portrait or relief is not affected if it is found in a drain; but for the social historian the main interest of sculpture is the context in which it is found, and this at Ostia is rarely the original context. Heads of some quality were used in a late raising of the level of the main street; statues were used to block house entrances against raiders. Even when a large nest of sculpture is found in a building it may have been collected from the general neighbourhood in order to be converted into lime.

The nature of the site also affects the method of excavation. Standing walls are buried under a deep mass of earth and rubble. From the minute sifting of this mass some precarious inferences might be drawn

¹ NS 1910, 10. ² NS 1913, 230. ³ NS 1922, 87.

⁴ For the principles adopted in excavation and restoration, G. Calza, Topografia, 43-52.

concerning the history of the site after the Roman period, but such a procedure generally applied, unless supported by a bottomless purse, would reduce the progress of excavation to a snail's pace for results that might be negligible. This problem is not always appreciated by critics, especially those who are accustomed to British and German methods. In Britain and Germany Roman remains are comparatively rare, and, with few notable exceptions, very little is preserved. The recovery of even the broadest outline of the history of the site requires meticulous attention to the minutest detail. If the same methods were applied at Ostia as in the excavation of a fort on Hadrian's wall, the excavation campaign which was completed between 1938 and 1943 would have lasted considerably more than 100 years. It is difficult to feel so generous towards our successors.

The campaign which began in 1938 was, however, an extreme case. An extensive campaign was dictated to prepare the site for an international exhibition in 1942; the speed of the work, accentuated by the uncertainties of war, was a dangerous precedent. There is little doubt that valuable evidence has been lost, though the immediate gain of seeing an almost complete ancient city is for the present generation no mean compensation. It is, however, significant that, even before the exhibition campaign was launched, the study of the pottery found at Ostia had lagged far behind the study of buildings, inscriptions, and sculpture.

On British sites so little remains that the smallest sherd of the commonest ware claims attention; at Ostia, where lorry-loads of sherds are taken from most buildings, the detailed examination of every piece is impracticable. But imported wares could provide valuable chronological controls, and the early economic history of Ostia should become less obscure when pottery, hitherto described loosely as 'Etrusco-Campanian', is classified by fabric and form.

The ruins, as we see them now, are not as the excavators found them. When the covering earth and rubble is removed, walls still stand to heights ranging from a few centimetres to more than 10 metres, but often much of the brick facing has fallen away. In the accumulation above and around are found fallen vaults, drums of columns, fragments of balcony, and, in one instance, a considerable stretch of walling from an upper floor including two windows. Walls would suffer if they were left as they were found. Unfaced concrete gradually disintegrates under the pressure of rain and frost; to restore the facing is essential. And, to

give the evidence its full value to others than specialists, as much of the building is restored as surviving elements justify. Vaults are more intelligible when they spring from walls than when they lie on the ground. The handsome entrance to the Horrea Epagathtiana et Epaphroditiana is not entirely ancient, but even a casual glance shows that enough of the original is incorporated to place the restoration beyond doubt.

Visitors tend to take the restorations they see for granted. Having seen many buildings in process of excavation, immediately after excavation, and again after restoration, and having been allowed to see a complete photographic documentation, I remain continuously impressed. This work of restoration is due primarily to the intimate knowledge of and feeling for Roman construction acquired by Gismondi during forty years at Ostia and on many other Roman sites in Italy and Africa: it is carried out by the inherited skill of Italian craftsmen.

Sometimes the restoration is rather too Roman than not Roman enough. One instance in particular has left smarting memories. I had become interested in the so-called Schola del Traiano on the western Decumanus, and in particular in the shallow basin that ran the length of the open court. It was a unique feature that I had not seen before and the bricks were unique. They were small, triangular, yellow, hard, and were still in very good condition. I had never seen such bricks at Rome or Ostia before, but logic was ready to solve the problem. The walls of the basin were preserved to a roughly level height of only a few centimetres; therefore, I argued, at some point they had been destroyed to this height. The bricks were in very good condition; therefore the long basin had been dispensed with after a very short life. The type of brick could not be found elsewhere; therefore they were specially made for this special job, probably at Ostia. I had evolved a highly satisfactory account of the history of the building when I learnt that the bricks were modern, and that the whole facing had been restored. Returning shamefacedly to the site I found that a very few of the original bricks survived in the lowest course at one point.

This is an extreme case; the basin had been completely renovated as a special feature for the intended international exhibition. But, even where much of the original facing remains, it is often difficult to determine where Roman work ends and modern begins. I have many times seen students minutely examining a completely restored surface on the assumption that they were collecting evidence for the dating of Roman

buildings. It is right that such sites as Ostia should never become the monopoly of the specialist and student, but perhaps their interests were not given due weight when the international exhibition of 1942 was the focus of concern. The earlier practice of showing restoration by recessing restored brickwork is unsightly, but the demarcation of Roman from modern by an incised line, such as has been occasionally used, would seem to be a satisfactory compromise.

Some mosaic and marble pavements survive almost intact; more often part of the surface has disintegrated. If the scattered elements were left as they were found all trace even of the basic design would soon be lost. Resetting and restoration are the essential complements to excavation. Normally the pavement is restored as it existed in its final phase; in special cases late disfigurements are ignored. When, for instance, the grand mosaic of the Baths of Neptune was uncovered it was found to have been patched in the late Empire by random pieces of marble which completely ruined the total effect. The marble has wisely been removed and the mosaic restored to its original condition. But the state of the mosaic on discovery, not unimportant for the understanding of the late Empire at Ostia, is recorded in the published report. So long as the condition on finding is publicly recorded when such restorations are made we have the best of both worlds.

To the romantic at least Ostia is more attractive today than she would have been when at the height of her prosperity. The judicious planting of trees and shrubs, the apparently effortless landscaping of the site, are responsible. Some archaeologists may resent this intrusion of nature and they are justified in those very few cases where creepers threaten damage to walls or conceal important features, but having seen Ostia stark and naked thirty years ago I rejoice to see the Judas trees in bloom, without losing my appetite for measuring bricks or counting the number of tesserae in a square metre.

The value of a site to the historian and archaeologist depends not only on the quality of the excavation and restoration, but also on the arrangement of the museum. I know no site in or outside Italy where the interests of specialists and the general public are better combined. The taking from Ostia to private collections and public museums of so many statues and reliefs from the Renaissance to the present century has not been an unmixed evil. A large museum loses much of its attraction. Enough sculpture of quality and interest remains to give a fair indication

of Ostian standards, and the admirable display of photographs of sculptures that have been taken from the site in the past fills out the picture. Central in the museum is the town plan to the large scale of 1:200, a precedent which other sites might well follow. Here the visitor, exhausted by the ruins, can find his bearings again and the specialist can study, in the right setting, the many problems of the town plan and its development.

The museum has wisely not been overcrowded. It contains only a limited selection of the finds, and is so arranged that every exhibit can be comfortably seen. The minor finds, including pottery, lamps, and terra-cottas, are separately stored, but accessible to students. They form a valuable supplement to the evidence concentrated in the museum. Ostia has also set a fine example in concentrating the inscriptions from the site where they can be studied together. When most of Ostia's inscriptions were scattered through museums in Rome and elsewhere their study was considerably hampered. The policy of retaining all inscriptions on the site and concentrating them in the basement of the Capitolium and in the Via Tecta makes a comparative study practicable and profitable. It should not be too much to hope that the example of the National Museum in Rome in returning all Ostian inscriptions to Ostia will encourage others to follow. The few Ostian inscriptions in the Naples museum have little importance in so large a collection; they would be much more valuable if they could stand near other inscriptions from the same workshops. The funerary altar recording the career of Cn. Sentius Felix, which has perhaps been quoted more than any other Ostian inscription and to which we shall many times refer, now stands in a small unlighted room, closed to the public, in the Uffizi Galleries. For that reason it has rarely been seen, and so unnecessarily misdated. It was set up to Felix by Cn. Sentius Lucilius Gamala, his adopted son. The same man set up a much smaller altar to his natural father; this now stands in the Archaeological Museum at Florence in company which gives it no significance.² If the two altars could be brought together in Ostia, their natural home, their value would be considerably enhanced.

The literary sources, the buildings, the sculpture and lesser objects, and the inscriptions are the main sources for a history of Ostia. But, for the study of Ostian territory outside the walls of the city, there is a further indispensable guide. The use of air photography in archaeology

is a comparatively modern development, but its value is now securely established. During the war British aircraft covered the area of Ostia from a height of 22,000 feet. The purpose was not archaeological, but the study of these photographs, taken without reference to the problems that concern us, shows how much could be achieved by a planned cover of the area at the right height, at the right time of year, and at the right time of day. I have been considerably helped by these aerial photographs, inherited by the British School at Rome from the Air Ministry. They have led me to sites which I might never have discovered on the ground and sharpened my understanding of the geography of the district. A planned campaign from the air would be the best approach to the plotting of the Roman roads, paths, and buildings of Ostia's territory.^I

Meanwhile we can see much more clearly from the air than on the ground the essential features of the geographical setting. When these photographs were taken the Germans had flooded the coastal area by destroying the pumping installations. A large area that had been growing good crops was once again covered by water, reproducing conditions that had persisted from the Roman period onwards. The area of flood land stretches in a large arc behind the coast from Trajan's harbour to Tor Paterno, interrupted by a belt of higher ground where the Tiber in flood has deposited alluvium. The lake that formed in 1943 south of the road from Rome to Ostia and east of the modern village recalls the Stagno di Ostia, which was recovered for agriculture only towards the end of the nineteenth century. The large plain between Ostia and Acilia was once probably a lagoon, gradually shrinking from the accumulated humus of the marshy vegetation.

The land to the west of the modern village shows no trace of flood; the explanation is seen in geological maps which show a long line of islands of pleistocene sands stretching to north and south of the Tiber. When the coastline ran along the base of the hills that form the eastern limit of the coastal plain, these pleistocene sands were off-shore sand bars. As the sea receded they emerged earlier than the area behind them and became firm compact land, very suitable for habitation. It was on this land that the Roman Ostia we see today was settled in the fourth

¹ In the use of air photographs I have been generously helped by John Bradford, who has illustrated their value for Ostian studies in *Ancient Landscapes* (1957) 237-56. In interpreting the physical features of the landscapes I owe much to Professor J. A. Speers and to Dr. K. S. Sandford: they well deserved a more intelligent pupil.

century B.C. Its character is in marked contrast with the land not only to the east, but also to the west. The shoreline has advanced more than two miles since the Roman period, but the new land is very different from that on which Roman Ostia was built. From the air and on the ground it is seen as a series of dunes built up by the wind from the sand that the coastal current deposits on the shore.

The geographical distinction between the firm pleistocene sands and the drifting sand that stretches to modern Ostia Marina must be taken into account in calculating the rate of advance of the shoreline. It is clear from the evidence of watch-towers that the rate of advance in the post-Roman period has been very uneven, and considerably faster in recent centuries. We shall see reason to believe that during the Roman period the advance of the shoreline was negligible. For a long time the pleistocene sands marked the shoreline. Once they were passed the accumulation became increasingly rapid.

Geologists and geographers may be able to add considerably to our understanding of the fundamental facts governing the development of Ostia. Other important problems may be solved by further excavation. Roughly two-thirds of the Roman town have already been uncovered, but the excavation of the remaining areas may modify the general picture. The shoreline and the western end of the town have barely been touched. It is possible that in the late Empire they were, apart from the Forum, the main focus of public and private life. Nor has excavation yet reached the Tiber bank. We may still hope to learn much more about the organization of shipping and dock facilities.

OSTIA AND POMPEII

covered with grass, bush, and crops, Gaston Boissier, historian and archaeologist, ranked the site with Pompeii in importance. 'These two towns are the best-preserved relics of Roman antiquity. As they have the advantage of illustrating it from different angles and are complementary, it is well, when we wish to understand Rome, not to separate them.' But while the excavations of Pompeii became increasingly familiar to visitors and their evidence widely influenced accounts of Roman life, Ostia was for long neglected. Until the electric railway to the coast was opened in 1923 a visit from Rome to Ostia meant two hours in a carriage jolting over a bad road, or four hours' hard walking. The site was uninviting except to the eye of faith. In summer the district was still malarial, at all times the country around was bare and monotonous. The land was being slowly restored, but the struggle was still hard.

Nor were the ruins spectacular. The area excavated was considerably smaller than at Pompeii; little more than bare walls remained. The important contributions that Ostia was clearly making to Roman studies had a limited currency; Pompeii still dominated the handbooks. Roman housing in the imperial period, as reflected in Martial, Juvenal, and in the Digest, had little in common with what could be seen at Pompeii; but the Pompeian house continued to be regarded as the normal Roman house. And the error persisted long after buildings had been excavated at Ostia which fully satisfied the Roman evidence.

Only those who experienced the adventure before the railway was opened can fully appreciate the change. The journey from Rome now takes only half an hour in a smooth-running train. From the station a large nursery can be seen, growing blooms for the Roman market. Vines, fruit-trees, and vegetables grow freely in the house gardens outside the village. The land is restored to health. Trees line the roads

¹ Cited from 'Les dernières fouilles de Pompéi et d'Ostie', Revue des deux Mondes, Oct. 1878, by Carcopino, Mélanges, 30 (1910) 397 n. 1.

and landscape the ruins; in spring and summer the excavations are flecked with a rich variety of wild flowers. Some two-thirds of the ancient town have been uncovered, and the policy of judicious restoration developed between the two world wars makes the ruins more intelligible and more attractive.

Calza's detailed analysis of the city type of house has focused attention on the apartment blocks of Ostia; inscriptions, and particularly the fragments of the town's official records, have made important contributions to the central stream of Roman history; and the new excavations have illustrated the literature of the fourth century by a vivid picture of a local aristocracy in the late Empire; Boissier's bold claim for the importance of Ostia needed imagination; it no longer calls for defence.

Ostia is not another Pompeii; the two towns differed radically in history and character. Pompeii had already had a long life before she felt the impact of Rome. She may briefly have fallen within the Etruscan orbit in the sixth century when Etruscan power stretched down to Campania, but Etruscan influence was neither deep nor lasting. Her early fabric is woven mainly from Samnite and Greek threads. A Samnite invasion of the fifth or early fourth century B.C. provided the dominant element in her population; the Greek colonies that fringed the coast from Cumae to Herculaneum influenced her cults and buildings. Roman influence was felt in Campania from the late fourth century, but in southern Campania the influence was remote. As late as the second century Oscan and not Latin was the language of Pompeii; her political constitution was radically different from the Roman model; her buildings were a compound of native Italian and Greek elements. When the Italian allies attempted to break the power of Rome in the Social War Pompeii joined the rebels and fought hard. It was not until the collapse of this resistance that Pompeii was incorporated in the Roman state.

The penalty for the town's stubborn resistance to Sulla's army was the settlement of a colony of Sullan veterans. The colonists brought with them Roman ways of living and Roman building methods; friction between the natives and the new settlers gradually died down and the two groups intermarried. The constitution was remodelled on Roman lines; the Latin language replaced Oscan. But to the end Pompeii was Romanized rather than Roman. Neither in her buildings nor in her people was Pompeii a typical Roman town.

Her position dictated her means of livelihood and general character.

Situated south of Naples, on the less fashionable side of the Roman Riviera, with Vesuvius in the background and, to the south, the hills that sweep out to Sorrento, Pompeii was a busy provincial town of prosperous bourgeois making comfortable livings from agriculture, small-scale industry, and trade. Though a small river harbour supported a modest flow of trade with other parts, the land was the main basis of her prosperity. Villas devoted to leisure remained exceptional, for the soil enriched by Vesuvius was too fertile to be given over to parks and ornamental gardens. It was to Baiae, Herculaneum, Naples, or Sorrento that men retired for recreation; Pompeii remained a town where fortunes were made as well as spent. But Pompeii plays little part in the main course of Roman history. She produces no senators, no high equestrian officials, few recruits to the armed forces; her outlook is local. Political passions are concentrated on the annual municipal elections. The feud with the local enemy from Nuceria can still flare up dangerously at the shows in the amphitheatre.

Ostia presents a very different picture. There may, as Roman tradition maintains, have been an early Roman settlement for the production of salt in the neighbourhood, but the site on which Roman Ostia developed was first occupied in the fourth century B.C. The primary function of this settlement was to defend the coast, but her position dictated a change of emphasis when Roman power was fully established. Situated at the mouth of the Tiber, she became inevitably Rome's harbour town. In the late Republic her main function was to receive, store, and send upstream the increasing volume of corn and other goods that Rome brought in by sea. Her importance to Rome demanded the attention of the authorities at Rome. The emperors, who were particularly sensitive to the danger of famine, could not afford to neglect her. It is natural therefore that the influence of Rome should be paramount in Ostia. Herein lies the main contribution of Ostia to Roman studies.

If we wish to clothe the bones of the marble plan of Rome with the flesh of buildings a visit to Ostia is an essential complement to a visit to Rome. Temples, basilicas, theatres, amphitheatres, baths, can still be better seen at Rome itself, but of the more prosaic buildings little remains. From the scattered and fragmentary ruins of house blocks in Rome it is difficult to visualize living conditions; at Ostia such houses can be seen with their ground floors fully preserved and, in some cases, large parts of the first floor. The streets of Ostia as rebuilt in the second century are the best illustration we can find of the nova urbs created

by Nero after the great fire of A.D. 64. The houses, three and more stories high, radically different from the Pompeian house, reflect the Rome of Martial and Juvenal. Of the large series of warehouses at the foot of the Aventine only one conspicuous ruin survives; at Ostia we can see the ground plan and general disposition of buildings used for the storage of corn, oil, and other products. In the series of mosaics from the Piazzale delle Corporazioni behind the theatre we can see the most vivid illustration of Roman overseas trade that survives. The imperial harbours of Claudius and Trajan emphasize the effective organization deployed in sustaining a population of over a million people in Rome. For a reconstruction of the quarters of the vigiles and urban cohorts in Rome we have to turn to the Barracks of the Vigiles in Ostia where a well-preserved mosaic emphasizes the imperial cult and writings on the wall bring the colour of life to the men's rooms.

Ostia, however, is not to be regarded as a suburb absorbed by Rome. She developed her own individual character and had her own changing social pattern. The earliest cults of the colony are distinctive and retained a strong hold even when oriental cults spread with the growth of overseas trade. Nor was Ostia merely a harbour settlement. Warehouses and shops were balanced by temples, basilicas, baths, theatre, and other public buildings. Her citizens were proud to be Ostians as well as citizens of Rome.

The difference between the buildings of Ostia and Pompeii derives partly from their different origins and character; it is emphasized by the difference in date. Pompeii's history ended abruptly in A.D. 79, the Ostia that we see today is predominantly a town of the second century A.D. Test excavations at a lower level have shown that the contrast between the two towns was less striking in the late Republic and early Empire.

The study of Ostia suffers seriously in one respect in comparison with Pompeii. When Vesuvius burst into eruption the disaster to Pompeii was sudden and overwhelming. The town was covered by a thick layer of ashes and no trace of it was left. Most of the inhabitants managed to escape and made new homes in the neighbouring towns of Campania. Neither the Roman government nor individuals found it practicable to uncover the buried town, and Pompeii remained almost untouched, preserved under its ashes. Modern methods of excavation have become so meticulous that houses can be completely restored with their original material and even the fountains in the gardens made to play again. Wooden shutters, beds, chairs, even stumps of trees, have left their

moulds in the ashes and most of the instruments of daily life can be recovered. From the painted notices on the walls of the houses we can enter into the rivalry of the elections and even the slaves come to life in the scribblings on their kitchen walls. Ostia, on the other hand, died a slow and lingering death and, after it had been deserted, it long remained a quarry for builders and treasure hunters. Sculptures, coins, pottery, and bronzes are still found in the ruins, but they are an insignificant fraction of what was once there: the vividness of every-day life has largely departed.

We shall never find at Ostia a house that is such a revealing character study of its owners as the House of the Vettii; nor can we ever know an Ostian as well as we know Caecilius Jucundus, the shrewd Pompeian auctioneer. But from literary sources, buildings, and inscriptions we can recover the main lines of the town's history from the late Republic to the early Middle Ages. The beginnings are much more difficult to unravel.

THE ORIGIN AND EARLY GROWTH OF OSTIA

THE SETTLEMENT OF ANCUS MARCIUS

Note first half of the second century A.D. Ostia, then at the height of her prosperity, commemorated in a finely cut inscription on marble her foundation as the first Roman colony by Ancus Marcius, fourth king of Rome. This inscription reflects a tradition established in the popular mind at least as early as the end of the third century B.C.; for Ennius, in the second book of his great national poem, refers to the foundation in his record of the main events of Ancus Marcius' reign:

Ostia munita est; idem loca navibus celsis munda facit; nautisque mari quaesentibus vitam.²

Ennius is the first of a long line of writers who attribute the foundation of Ostia to the fourth king of Rome.³ When he wrote, Ostia looked primarily to the sea and had established her main value to Rome as a naval base in the war against Hannibal; his account of the foundation may be coloured by later events. Such colouring is clear in Florus.⁴ When Florus tells us that the king foresaw that the wealth and trade of the world would flow to Ostia he confused cause and effect: in the regal period Rome had no such ambitions.

Livy's account is less spectacular and more credible: 'The Maesian forest was taken from Veii: Roman rule was advanced to the sea, and at the mouth of the Tiber a city was founded, and salt-beds established

¹ S 4338: 'A[NCO] | MAR[CIO] | REG[I] | QUART[O A R[OMUL[O] | QUI A[B URBE C]ONDIT[A | PRI]MUM COLON[IAM | —] DEDUX[IT].'

² Ennius, Ann. ii, fr. 22 (Vahlen).

³ e.g. Cic. De Rep. ii. 5 and 33; Livy i. 33. 9; Dion. Hal. iii. 44. 4; Isid. Orig. xv. 1. 56. Cf. Pliny, NH iii. 56 ('a Romano rege'), but xxxi. 89 ('Ancius Marcius rex . . . salinas primus instituit').

⁴ Florus i. 1. 4: 'iam tum videlicet praesagiens animo futurum ut totius mundi opes et commeatus illo velut maritimo urbis hospitio reciperentur.'

near by.' Livy's account of the foundation fits intelligibly within his survey of the regal period. The early kings had destroyed Alba and carried on war with the Etruscans. Ancus Marcius had driven the Veientines from the salt-beds to the north of the Tiber, and now completed his work by advancing Roman territory along the left bank. Ficana was first destroyed.² It is to be identified with Dragoncello, which lies at the northern edge of the last ridge of high land between Rome and the sea and dominates the Tiber like a Greek acropolis.³ Ficana eliminated, the control of the low coastal plain by the Tiber passed to Rome. Ostia, Livy implies, was settled so that Rome could control directly the nearest source of salt. Salt was a prime necessity, and, until Veii was broken, access to the northern beds across the Tiber could not be secure.

The credibility of such an early foundation of Ostia depends in large part on the credibility of the traditional Roman account of the regal period; and it is not surprising that it should be rejected by historians who regard that account as a tissue of patriotic invention. Pais, for example, held that the attribution of the colony to Ancus Marcius was a projection of fourth-century history into the past. During the fourth-century wars against Etruria, C. Marcius Rutilus, first plebeian dictator, played a distinguished part: the recorded operations of Ancus Marcius are, according to Pais, a mere echo of these campaigns, assigned to a royal ancestor to increase the prestige of his house. Such rationalism is most unconvincing. The operations of the two leaders, in spite of superficial resemblance, are substantially different. The field of action is the same, but the first are offensive, the second defensive. The first come in a period of expansion; the second when Rome, crippled by the Gallic invasion, is virtually beginning her struggles again.

The attack on tradition appears less compelling now than it did a generation ago, for the new archaeological evidence reflects wider contacts and greater wealth in seventh- and sixth-century Rome than earlier evidence had suggested.⁵ But while excavation at Rome might

¹ Livy i. 33.9: 'silva Maesia Veientibus adempta. usque ad mare imperium prolatum et in ore Tiberis Ostia urbs condita, salinae circa factae.'

² Livy i. 33. 2.

³ Nibby, Annalisi, ii. 41; Carcopino, 456. The identification is not perhaps certain; see p. 474, n. 9.

^{*} E. Pais, Storia critica di Roma i (1918) 470; cf. Carcopino, 34.

⁵ I. Scott Ryberg, An Archaeological Record of Rome from the Seventh to the Second Century B.C. (1940). Various excavations, notably on the Palatine and in the Forum, have since added more early Greek pottery. A modern review of the value of the literary

be held to make the tradition of Ostia's regal foundation more acceptable, excavation at Ostia itself has by many been considered a final refutation of the tradition. For at the heart of the town of the imperial period can still be seen the outline of a rectangular fort, called for convenience the Castrum, from which the later town developed. The maturity of the construction of the walls of this fort and the type of stone used preclude a date earlier than the fourth century. The earliest pottery associated with the fort cannot be earlier than the fourth century. Neither within nor without the fort has any evidence of earlier occupation been found.

There is thus clear evidence of the establishment of a Roman settlement in the fourth century, which is not even mentioned by the literary authorities. Does their apparent ignorance of a foundation which is proved to exist condemn their account of an earlier settlement of which no traces have been found? In spite of the absence of archaeological evidence, a tradition firmly established as early as Ennius should not be lightly dismissed. Nor should Roman interest in the sea routes be ignored. Livy's references to the early import of corn are convincing, and Dionysius of Halicarnassus adds circumstantial detail. In 508, when it was essential to retain the common people's loyalty after the expulsion of the kings, the Romans sent to the Volscians and to Cumae for corn.¹ In 492, when Rome was faced with famine, partly as the result of the neglect of the fields during the secession of the plebs, convoys were sent to collect corn from the Etruscan coastal area, from the territory south of the Tiber as far as Cumae, and even from Sicily.² The Roman record did not give the precise origin of the Sicilian corn. Some of the early annalists guessed that it came from Dionysius of Syracuse; the substitution of Gelo was at least chronologically consistent.³ But these were mere guesses; it is more likely that the corn came from the western Carthaginian sphere, where Rome could expect a welcome under her treaty with Carthage.4 Sicilian corn appears again in Livy's record of 486.5

When the crops of the Roman campagna failed, Rome had to look farther afield. The coastal plains of Caere and Vulci to the north, and the Pomptine plain to the south, were the nearest sources from which a

tradition, P. Fraccaro, 'La storia romana arcaica' (discorso inaugurale, Ist. Lomb. di Scienze e Lettere; Milano, 1952).

¹ Livy iii. 9. 6. ² Livy ii. 34. 2-5. ³ Dion. Hal. vii. 1. 3-6.

For the date of Rome's first treaty with Carthage, p. 481.

Livy i. 41. 8.

surplus could be expected. Cumae was approached to tap the rich resources of Campania. When these areas were hostile or their supply inadequate Sicily was called in to fill the gap. Corn from these areas came to Rome up the Tiber. Such trade is no proof of a Roman occupation of the river mouth, but it makes an early settlement at Ostia more plausible.¹

Excavation has shown beyond reasonable doubt that there was no occupation before the fourth century within the area of imperial Ostia. This negative evidence, however, loses its sting if the natural site for an earlier settlement lies elsewhere. Livy's account suggests a close association with salt-beds. In later times, and probably from the outset, Ostia's salt-beds lay on the north side of the road from Rome, roughly half a mile to the east of Roman Ostia. Above the salt-beds the land rises gradually towards the Tiber. It is on this higher ground near the river that we should expect to find a settlement that was intended primarily to produce salt. The search for such a settlement has not yet begun.

The existence of such a site before the fourth-century settlement might help to explain the elusiveness of early tombs. In spite of systematic searching no tombs that can be associated with the early stages of the Castrum have yet been found, though we should expect the earliest tombs to be not far from the walls. The reason may be that the fourth-century colonists at first continued to use the burial ground of earlier settlers east of the later town. It was in this area that a large hoard of coins deposited not later than the middle of the second century B.C. was found in 1911.² There is more direct evidence of two settlements in a tradition preserved by Festus: 'Ostiam urbem ad exitum Tiberis . . . Ancus Marcius rex condidisse fertur; quod sive ad urbem sive ad coloniam quae postea condita est refertur.'³

The traditional account of Ostia's foundation should be provisionally accepted, at least until the area east of the town has been explored. We may imagine a small band of settlers living in primitive huts of clay or wattle and daub, such as shepherds still use in the Roman campagna, growing their own food and sending salt to Rome. Rome's dependence on Ostian salt, however, was comparatively short-lived. By the crushing of Veii, and the successful fighting against the Etruscans in the middle of the fourth century, Rome was able to control securely the

¹ See also Appendix I, p. 479.

² S. L. Cesano, Riv. It. Num. 24 (1911) 275.

³ Festus (Lindsay), 214, quoted by Dessau, CIL xiv, p. 3, n. 7; cf. Carcopino, 37.

larger and richer salt-beds on the right bank of the river. These became the salinae Romanae.¹ They satisfied the needs of Rome and provided a surplus for trade. Salt was still probably produced on the left bank, but a settlement nearer the river mouth became increasingly necessary for defence and for the servicing of shipping. The decisive step was taken in the fourth century.

THE FOURTH-CENTURY COLONY

The building on a new site of a strongly fortified colony marks a new departure in Roman policy. When in the fourth century Rome had successfully concluded her war with the Etruscans, her energies were diverted to meet land and sea raids on Latium. Plundering bands of Gauls were still active on land and in 349 B.C. we hear that Greek fleets ravaged the coast from Antium to the Tiber's mouth.² The Roman consul, Camillus, was dispatched against the Gauls and L. Pinarius, praetor, was deputed to guard the coastline against the Greeks. The consul, after a successful campaign against the Gauls, was ordered to join forces with the practor, but operations came to a standstill: 'nec illi terra nec Romanus mari bellator erat.'3 While Caere in south Etruria had been powerful her fleet had policed these seas, but Caere's power had declined by the fourth century and when she took advantage of Rome's apparent weakness to attack Roman territory in 353 she could no longer be trusted. The shores of Latium needed new protection.

It was this concern for the protection of the coast lands and the ineffectiveness of normal military action that led to the establishment of maritime colonies. Colonists were sent to Antium in 338, to Anxur (Terracina) in 329, to Minturnae and Sinuessa in 296, and, at an unknown date, to Pyrgi. To defend a coastline a series of forts is the most adequate substitute for a standing fleet: Rome's maritime colonies postponed the need but paved the way for sea power.

At what precise date the foundation of Ostia should be placed is uncertain, for the archaeological evidence is not decisive. The walls are built of a tufa easily recognized by the quantity of black scoriae that it contains. It is quarried over a wide area from Fidenae to Prima Porta,

¹ Livy vii. 19. 8.

² Livy vii. 25. 4: 'mare infestum classibus Graecorum erat oraque litoris Antiatis Laurensque tractus et Tiberis ostia.'

³ Livy vii. 26. 13.

but it does not seem to have been used by the Romans before the conquest of Fidenae and Veii in the early fourth century. Its use was comparatively short-lived, because it was more friable and less durable than other tufas equally accessible to the Roman builders. But, since the dating of those parts of the Roman walls which employ this tufa is still highly controversial, the walls of Ostia cannot offer a firm criterion of date.²

More important is the evidence of pottery. When the area beneath the imperial Forum, which lies in the centre of the Castrum, was explored, imported painted ware was found in small quantities at the lowest level. For dating purposes the most significant pieces are fragments of red-figured Attic vases and a series of so-called 'Genucilia' plates. The Attic fragments come from vases which can be closely paralleled from Olynthus and, since Olynthus was destroyed in 348 B.C., the production date of these vases should be not later or very little later than the middle of the fourth century, and some were probably made earlier.³

The production of Genucilia plates, whose design is centred on a female head, is generally thought to have begun in the late fourth or early third century at Falerii or some unknown centre in Etruria or Latium. But there is reason to believe that production was transferred to Caere in the first half of the fourth century and moved back to Falerii in the middle of the century; the eleven examples found at Ostia have been attributed to Caere. The archaeological evidence suggests a date not earlier than 400 and hardly later than 340.

Carcopino has suggested narrower limits by reference to Rome's relations with Antium. The Volscians of Antium had followed the Greeks in their attacks on the coastline, and had raided the territory of Ardea and the land by the Tiber mouth.⁶ In 338 Antium was crushed by Rome and her fleet was surrendered. Carcopino places the foundation of Ostia between the eclipse of Antium in 338 and 317 when, he thinks, Antium received a Roman colony.⁷ This latter date is selected as a

¹ T. Frank, Roman Buildings of the Republic, 21.

² M. E. Blake, Ancient Roman Construction in Italy, 27.

³ See Note A, p. 471.

⁴ J. D. Beazley, Etruscan Vase Painting, 10, 175; Ryberg, op. cit. 101.

⁵ M. A. del Chiaro, *The Genucilia Group* (Univ. of California publications in Class. Arch., vol. 3, no. 4, 243–372). Chronology, 308–12; Ostian examples, 255–68.

⁶ Livy viii. 12. 2: 'Antiates in agrum Ostiensem Ardeatem Solonium incursiones fecerunt.'
7 Carcopino, 17-35.

terminus ante quem in order to preserve Ostia's traditional position as the first Roman colony. But this argument points to a date before 338, for Livy explicitly dates the Roman colony at Antium to the year of conquest¹ and the confusion which Carcopino finds in his narrative does not exist. Livy states that in 317 Antium complained that she lacked clearly defined laws and magistrates; as a result 'dati ab senatu ad iura statuenda ipsius coloniae patroni'.² How, asks Carcopino, is this reconciliable with a colony established in 338? The answer lies in the existence of two separate communities at Antium, native and Roman.³ The account of 317 in fact confirms the earlier colony. Nor are the subsidiary arguments used to support Carcopino's date of substantial weight.

Carcopino considers that the bringing of captured ships from Antium to Rome shows that there was no Roman settlement at the river's mouth, and that the omission of Ostia in the *Periplous* of the pseudo-Scylax, composed about the middle of the century, is good evidence that Ostia had not yet been founded. Neither inference is valid. The surrendered ships from Antium were brought to Rome for display; their beaks were used to adorn the speakers' platform in the Forum. The account of the *Periplous* is not sufficiently detailed to argue from silence.

Carcopino's date has been generally accepted, but the evidence of the pottery has not been given due weight. The Attic fragments in particular point to a date before or near 350, and such a date better fits the historical context. In the first half of the fourth century Rome was preoccupied with inland fighting; in 349 her attention was turned to the coast by Greek raiders. The building of the Castrum may have been an immediate response to the ineffectiveness of Roman operations in 349. After the crushing of Antium in 338 we hear no more in Livy's narrative of the coastal region.⁴

When the limits are so narrowly fixed, however, the precise date is less important than the character of the settlement, and of that there can be little doubt.⁵ The area enclosed is a rectangle of some 5½ acres (194×125.70 metres). The walls are strongly built of large blocks of tufa laid in alternate courses of headers and stretchers without mortar, the foundations being formed by four courses of smaller stones. The thickness of the walls is constant at 1.65 metres, the maximum height

¹ Livy viii. 14. 8.

³ A. N. Sherwin-White, Roman Citizenship, 77.

⁴ Livy viii. 14, 12.

² Livy ix. 20. 10.

⁵ G. Calza, Topografia, 63.

preserved, on the east side, is 6.60 metres. In the centre of each side (for the north side there is no specific evidence) a gate was set, and the foundations of two of these gates can still be seen below the level of the imperial Decumanus. It has been suggested by Säflund that these stone walls date only from the period of the wars against Carthage in the third century and were preceded perhaps by vallum and ditch; but such defences would have been anomalous and old-fashioned by the fourth century.²

The colony is thus seen as little more than a strongly fortified camp, built in the angle between coast and river, standing back from, but commanding both. The distance from the river was 225 metres; the sea coast, the precise line of which cannot be determined, was probably farther from the walls. Three hundred colonists were sent to the maritime colony of Anxur;³ the size of Ostia suggest a similar strength. The colonists could grow their own food; their main function was to defend the coastline and the river mouth. The nearest surviving parallel to this early Ostia is at Pyrgi on the coast some fifty miles to the north, where substantial tracts of the original wall, particularly on the northern side, can still be seen.⁴ The style of construction of the walls, 'cyclopean' like those of Cosa (possibly a near contemporary), is different, but the plan is similar and the area not much larger. Pyrgi, like Ostia, was intended as a strong fort to defend the coastline.

Ostia's function in the fourth century was not limited solely to defence; the river harbour was already important to Rome. The range of Roman overseas trade in the fourth century cannot be assessed with any degree of security, but it was not negligible. Whatever may be thought of the date and nature of Rome's first treaty with Carthage, there is no good reason for discrediting the treaty assigned by Livy and Diodorus to 348 B.C.⁵ A treaty implies contact existing or anticipated, and the incentive may have been Rome's repulse of Greek coastal raiders in the previous year. The terms are probably those attributed by Polybius to his second treaty: they exclude the Romans from Spain and Africa, with the exception of Carthage, but free access is allowed to the Carthaginian sphere in Sicily; the Carthaginians are given reciprocal

¹ G. Säf lund, Le Mura di Roma Repubblicana, 239.

² I. A. Richmond, JRS 22 (1932) 236, reviewing Säflund.

³ Livy viii. 21. 11.

⁴ Dennis, Cities and Cemeteries of Etruria², i. (London, 1883) 289; F. Castagnoli, Ippodamo e l'urbanistica a pianta ortogonale, 87; id. (with L. Cozza, 'Appunti sulla topografia di Pyrgi', BSR 25 (1957) 16.

⁵ Livy vii. 27. 2; Diod. xvi. 69, 1.

rights in Latium and Rome. The continued interest of Carthage in the Roman sphere is shown by the sending of a golden crown to Roman Jupiter to commemorate Rome's victory over the Samnites in 343,¹ the renewal of the treaty in 306,² and the offer of help when Pyrrhus invaded Italy.³

There are further signs that Rome's horizon was not limited to the land. Theophrastus refers to a Roman attempt to settle in Corsica before the end of the fourth century: Rome's relations with Massilia presuppose an interest in trade with Gaul. A Roman dedication sent to Delphi to commemorate the capture of Veii in the early fourth century was set up in the Massiliote treasury, and tradition records relations with Phocaeans, the founders of Massilia, as early as the sixth century; trade is the natural explanation of such links. Rome's food problem also forced Rome's attention seawards. In the early Republic corn had come to Rome from Sicily, and the coastal plains to the south and north of the Tiber; in time of shortage imported corn was still needed from these areas. The Genucilia plates found at Ostia, if rightly identified as of Caeretan origin, reflect Rome's connexion with the coastal district of Etruria; the Attic vases whose fragments survive at Ostia might have been carried direct by Greek traders, but they could have come through Caere.

There is little doubt that in the second half of the fourth century merchantmen were coming to the Tiber mouth and that Ostia served the needs of trade as well as of defence. By the end of the third century the emphasis had shifted to the navy. When Antium's fleet was surrendered in 338, some of her ships were destroyed; it is reasonable to infer that Rome had not yet decided to maintain a large navy. But when it became clear that Rome was committed to the defence of the Campanian coastal towns warships were essential; in 311 duumviri navales were appointed 'to equip and keep in repair a fleet'. A more important stage in the building up of Rome's naval organization is the appointment of additional quaestors in 267.

The number and function of these new quaestors are both controversial, since there is a lacuna at this point in the text of Livy's epito-

¹ Livy vii. 38. 2. ² Livy ix. 43. 26. ³ Livy, Ep. 13.

⁴ Theophr. Hist, Plant. v. 8. 2; but see J. H. Thiel, A History of Roman Sea-power before the Second Punic War, 1954, 19, who suggests that this was an Etruscan expedition. Theophrastus dates the expedition considerably before his time ($\pi o \tau \epsilon$); we know too little of sixth-century Rome to assume confusion in his account. Cf. Pliny, NH iii. 57: 'Theophrastus, qui primus externorum aliqua de Romanis diligentius scripsit.'

⁵ Diod. xiv. 93. 5. ⁶ Justin xliii. 3. 4. ⁷ Livy ix. 30. 4.

mator and the notices of our authorities disagree. But Lydus may be right in recording their title as classici, the motive for their creation as hostilities against the allies of Pyrrhus, and their function the collection of funds. Rome's triumph over Pyrrhus had emphasized her predominance in Italy and led to the consolidation of her power both in north and south. The title classici suggests that she had also wider ambitions. The removal of all serious opposition in Italy meant that Rome was free to turn her attention to Carthage. The new quaestors' duty was probably to collect money and ships from Rome's dependents and allies for her fleet; later in the Republic we hear no mention of them in connexion with naval preparations and their duties seem to have become more general. From 267 Ostia was the base of one of these new quaestors, and it has been suggested that a mint may have been temporarily installed in the colony.²

Rome was not yet a strong naval power, but the struggle with Carthage for Sicily, begun in 264 B.C., could not be decided by land forces alone, and Rome was forced to take more seriously to the sea. With typical stubbornness she replaced the fleets that bad weather and bad seamanship lost, and the decisive engagement of the war was a naval battle. No mention of Ostia is made by Polybius in his detailed narrative of the first Punic War, but Ostia was the natural assembly base for new fleets sailing to Sicily. Polybius refers to the building of large fleets, but he does not tell us where the ships were made. We may suspect that shipbuilders, drawing on the coastal pine, were busy at Ostia. When peace was made Rome was left with a strong navy and the annexation of the greater part of Sicily, soon followed by the seizure of Sardinia and Corsica, made a standing fleet necessary. From this point onwards there was a detachment of ships stationed at Ostia, which played its part in the struggle with Hannibal.

In this war the decisive engagements were fought on land, but the Roman fleet had important if less spectacular work to do. The securing of provisions from Sicily and Sardinia was vital to the Roman legions in Italy, supplies of men and equipment had to be convoyed to the

¹ Lydus, De mag. i. 27; Mommsen, Staatsrecht, ii (1)³, 570.

² H. Mattingly, 'The first age of Roman coinage', JRS 25 (1945) 65, associates the first issues of silver and bronze coinage in the Roman name at four distinct mints, approximately contemporary, with the establishment of the *quaestores classici*. The evidence for a mint at Ostia is a very large hoard of early asses found 'near Ostia' (p. 68). In his analysis, the Ostian mint closes at the beginning of the second Punic War. The coins from this mint seem to have circulated mainly in Etruria and Cisalpine Gaul.

army in Spain, Philip of Macedon had to be paralysed, and reinforcements for Hannibal from Africa had to be barred from Italy. Ostia seems to have been the chief naval base of the period, and her function is allusively illustrated in Livy's record of the war. In 217 transports carrying supplies from Ostia to the army in Spain were intercepted ninety miles up the coast off Cosa by a Carthaginian fleet and captured. 'The consul was immediately instructed to proceed to Ostia to man the ships lying at Rome and Ostia with Roman troops and naval allies, to pursue the enemy fleet and to protect the coast of Italy.' The protection of Italy's western coastline was in fact the main function of the Ostian fleet; throughout the war a battle strength of thirty ships was maintained, normally commanded by a Roman practor. But in an emergency the Ostian fleet could be used farther afield. When in 215 envoys from Philip to Hannibal were intercepted, the Ostian fleet was sent to Tarentum, with instructions to carry an army across the Adriatic if Philip's movements seemed dangerous.²

The importance of Ostia in Rome's naval organization is best illustrated in the crisis of 207. When Hasdrubal succeeded in bringing reinforcements into Italy desperate efforts had to be made to raise new troops. Crippling losses in the early battles of the war had severely reduced military manpower in Italy; the maritime colonies were now called on to supply recruits. By statute they had exemption from military service, but when they appeared before the senate to state their case, the senate ruled that, since the enemy was on Italian soil, the legal privilege must be waived. Ostia and Antium alone were exempted from service in the legions, but the men of military age in these two colonies were required to take an oath that they would not sleep outside their walls for more than thirty days.³

Ostia was treated in this privileged way, because her men were needed not only for ships' crews but also for maintenance services and to handle the supplies that came to and were distributed from the river harbour. In 216 Hiero, king of Syracuse, sent to Ostia 300,000 modii of wheat and 200,000 modii of barley. In 212 we hear of corn that had come from Sardinia and Etruria being sent from Ostia to two newly established forts on the coast of Campania so that the army should have supplies through the winter. In this emergency handling

¹ Livy xxii. 11. 6.

³ Livy xxvii. 38. 4.

⁵ Livy xxv. 20. 3.

² Livy xxiii. 38. 8.

⁴ Livy xxii. 37. 1-6.

of large supplies of corn we see a foreshadowing of Ostia's main role of the late Republic and early Empire.

The privilege given to Ostia in 207 was not repeated when Italy was freed from danger. In 191 the Romans raised a fleet to carry war against Antiochus, king of Syria, and it was proposed to recruit for the fleet from the maritime colonies. The colonies appealed to the tribunes, who referred the issue to the senate. The senate unanimously ruled that they were not by statute exempt from service with the navy—'vacationem rei navalis his coloniis non esse'. Ostia had joined in the protest, but was no longer given special treatment.¹

With the crushing of Carthage began the decline of Rome's naval power. For her wars in the east she relied mainly on the ships of her allies, and now that her only serious rival in the western Mediterranean was crippled, a large fleet seemed unnecessary. The Ostian squadron only reappears in our literary record in the period of pirate terrorization at the close of the Republic when the ships, under the command of a consul, were destroyed and the colony sacked.2 Augustus was wise enough to learn from the mistakes of senatorial government and organized standing fleets to control the waterways and safeguard Mediterranean trade; but in the imperial system Misenum became the headquarters of the western fleet. There were triremes at Ostia during the following period, and a number of tombstones have been found, both in the colony and near the imperial harbours that were laid out to the north of the town, of men who died on service or veterans who lived after retirement in the town where they had served; but these ships were only a small detachment from the main fleets of Misenum or Ravenna, and their main function was to police the harbours.

SECOND-CENTURY EXPANSION

At the end of the second Punic War Ostia was still first and foremost a naval base. A century later her primary importance to Rome was as a commercial harbour, and the small fort of the fourth century was growing into a trading town. This development is the indirect result of the social and economic changes that followed the long struggle with Hannibal. During the second century the population of the city of Rome rapidly increased, partly as a result of the migration of peasants from the land, partly by the influx of foreign slaves, brought back in the wake of victorious armies or supplied by an active slave trade.

¹ Livy xxxvi. 3. 4-6.

² Cicero, De imp. Cn. Pomp. 33.

³ p. 216.

Though the main demand for these slaves was on the land, considerable numbers served to maintain in Rome the higher living standards that an increasingly wealthy aristocracy demanded. For successful war brought wealth to the rich; and the large-scale investment in land, when the poor were ready to sell and the public control of public land was weak, brought large fortunes to the shrewd and enterprising.

While the population of Rome increased, the natural sources of her grain were yielding less. The great plain between the Volscian hills and the sea, which stretches south from Antium, could have supplied a large part of the Roman market if the water had been carried from the hills to the sea by an adequate drainage system; but the manpower needed for intensive farming had been cruelly reduced by the fighting against Hannibal, and the easy profits of grazing provided a more attractive alternative to the rich. What had once been a fertile plain was soon to become the Pomptine marshes. The cultivated area of Etruria, which had been an important source of supply for Rome, was also shrinking. It was here that Tiberius Gracchus on his way to Spain was shocked by the growth of large estates and the desertion of the fields. Rome therefore urgently needed the corn that was now available from her provinces of Sicily and Sardinia.

The new emphasis on overseas corn and the recurrent danger of acute shortage is clearly reflected in Livy's narrative of the early second century. Annual tithes had been imposed on Sicily and Sardinia, but these were not enough. In 196 the aediles were able to distribute one million modii of wheat, which the Sicilians had sent in honour of C. Flaminius.³ In 191 a second tithe was demanded from Sicily for the Roman army in Greece, and a second tithe from Sardinia to be sent to Rome.⁴ In the same year Carthage and the Numidian prince Masinissa sent 500,000 modii of wheat and 250,000 of barley to Rome.⁵ In 190 and 181 a second tithe was again imposed on Sicily and Sardinia to be divided between the army in the field and the population of Rome.⁶ The corn dealers had to be closely watched. In 188 they were heavily fined for hoarding supplies against a rise in prices.⁷

¹ Pliny, NH iii. 59: 'palus Pomptina, quem locum XXIIII urbium fuisse Mucianus ter consul prodidit.' Fourth-century proposals to allocate part of the land to new settlers, Livy vi. 6. 1; vi. 21. 4.

² Plut. Gracchi, 8. 9. ³ Livy xxxiii. 42. 8. ⁴ Livy xxxvi. 2. 12.

⁵ Livy xxxvii. 4. 5. ⁶ Livy xxxvii. 2. 12; 50. 9.

⁷ Livy xxxviii. 35. 5, dedications by the aediles 'ex pecunia qua frumentarios ob annonam compressam damnarunt'.

For the first half of the century Sicily and Sardinia remained the main sources of Rome's supply. The position was considerably easier when Carthage was destroyed and Africa made a province in 146. The amount of corn contributed in taxation by Africa was at first small, but there were rich corn lands in the province which gave ample scope to the corn dealer buying for the Roman market, and it was not long before Romans were seizing the opportunity to develop African land. When Gaius Gracchus provided for the settlement of 6,000 men from Italy on the territory of Carthage he may have been thinking partly of the need for African corn in Rome. The lots assigned were large—200 iugera—and encouraged large-scale production. Optimate propaganda led to the repeal of his law, but much of the land had already been assigned and the new owners remained.

Conquest in east and west also stimulated trade. Though the men who seized the new opportunities were for the most part not Roman, but Italians and Greeks from Campania and the south of Italy, they had an eye on the Roman market where there was a growing demand for the refined products of the Hellenistic world and the specialities that could be found in Spain and later in Gaul. Puteoli, with its well-sheltered harbour and long association with Greek traders, controlled the larger part of Rome's eastern trade, and became the main distributing centre for the luxuries that Italy drew from the Hellenistic world; but there is no evidence and little probability that Puteoli also monopolized the trade with Spain, Gaul, and Sardinia.

Strabo, after cataloguing the rich resources of Roman Baetica, emphasizes the volume of exports carried in large merchantmen 'to Puteoli and Ostia, Rome's harbour'; in number, he says, they almost matched the shipping from Africa.² Spanish and African goods carried to Puteoli were not intended for the Roman market, but for distribution in thickly populated Campania and the south of Italy. Western goods exported to Rome came through Ostia. The distribution of Sicilian exports in Italy is less clear but it is probable that Puteoli secured the greater part of the trade. Even goods intended for Rome seem to have been unloaded at Puteoli. The harbour was better, the Greek background more congenial, and the dominance of corn ships in the restricted river harbour at Ostia probably made it difficult for other ships to unload their cargoes quickly. Though transport by land was considerably more expensive than by water such products as papyrus,

glass, and linen from Egypt, sculpture and jewellery from Sicily, were probably carried by the Via Appia to Rome. Bulk supplies of corn, however, were different. Unless secure evidence is found to the contrary we should assume that the corn from Sicily as well as from Africa and Sardinia came to Rome through Ostia.

This great expansion in imports from overseas to Rome through Ostia is reflected in the early second-century building activity recorded by Livy. In 193 two Aemilii, aediles for the year, built a porticus outside the Porta Trigemina, adding an emporium by the Tiber. In 174 the censors paved this *emporium* and fenced it round; at the same time they carried through a restoration of the Porticus Aemilia and provided steps from the Tiber to the emporium.2 Livy's bare words tell us little, for porticus covers a wide range of construction, though we might infer from the reputation made by this aedileship that the work was of some importance. The ingenious identification by Gatti of a fragment of the imperial marble plan of Rome, together with surviving walls, gives us a clearer idea of the scale and nature of the work.³ It seems that it had a total length parallel to the river of 487 metres and a depth of 90 metres; it was divided into fifty bays by tufa piers supporting barrel vaults. Considerable stretches of its walls, faced with irregular blocks of tufa (opus incertum), still survive to show the strength of the building.

In 192 we hear of a 'porticus extra portam Trigeminam inter lignarios' whose position in the dock area indicates that these lignarii were handling timber carried up river to Rome. This early evidence of timber imports should not surprise us. Early in her history Rome had been well supplied with easily accessible oak and beech; later, softwoods could be carried down the Tiber from forests near the upper river. But it is clear from Livy's annalistic account that there was a tremendous expansion of public building at Rome in the early second century, a natural reflection of Rome's growing self-consciousness as an imperial city. The Porticus Aemilia shows the scale to which Roman builders could already work. Concrete and tufa were the basic materials of construction, but for roofing, shuttering, doors, windows, and general furnishing, the demand for timber, and particularly for long and stout beams, expanded sharply. It is possible that part of the demand was met from the coastal forests of oak and pine between Ostia and Antium, which could be brought to Ostia and shipped up to Rome or carted by

¹ Livy xxxv. 10. 12.

³ G. Gatti, BC 62 (1934) 124.

² Livy xli. 27. 8.

⁴ Livy xxxv, 41. 10.

ox wagon. But the coastal pine was weak timber and for many purposes softwoods were preferable to oak. In the Augustan period the mountains above Pisa and along the Ligurian coast were an important source of supply for Rome's builders; this timber trade with Liguria may have developed after the second Punic War. Corsica also had accessible forests of large conifers which the Romans had learned to appreciate before the close of the fourth century.²

In his account of 179 Livy reports the building by M. Fulvius, censor, of a porticus outside the Porta Trigemina, and another beyond the navalia; and, since the buildings sponsored by M. Fulvius were distinguished from those of his colleague as being of greater utility, we may believe that he too was attending to the needs of trade. This building activity outside the Porta Trigemina, in the dock area between Aventine and Tiber, is dictated by the growth of imports, particularly but not solely corn, coming up river to Rome. All goods that were handled at these Roman docks had first passed through Ostia, and, as the swift current and winding course of the Tiber made it impossible for the larger merchantmen to come upstream, there was much unloading and reloading to be done at the river mouth.

We therefore expect to find in the second century B.C. a development at Ostia corresponding to the building activity at Rome outside the Porta Trigemina. The rate and extent of this growth, however, is difficult to determine, for during the second century A.D. Ostia was almost completely rebuilt; republican Ostia can only be traced by excavation below this later level. Trial pits to the level of the sand have been dug at many points and much valuable evidence has been accumulated; but until the excavators have had time to extend their tests more widely conclusions can only be tentative. Traces of second-century extension, however, outside the fourth-century walls can already be seen at many points.

The clearest evidence perhaps is seen in concrete walls faced with blocks of tufa of irregular shape and size, opus incertum. It was probably not until after the second Punic War that the use of concrete, which revolutionized building construction, was firmly established at Rome; but already in the Porticus Aemilia at Rome we see a mature handling of the new technique. Nor does there appear to be any striking change in treatment during the century. The second half of the second century

¹ Strabo, 223.

² Theophrastus, Hist. Plant. v. 8. 2.

³ Livy xl. 51. 4-6.

was not a congenial period for new developments. Rome was preoccupied with domestic crisis; of new public buildings we hear very little, in striking contrast to the early decades of the century. It was not until the turn of the century, and particularly in the period of Sullan domination, that the architects came into their own again. By Sulla's time the facing of walls is becoming more regular. The blocks of tufa are roughly squared, more uniform in shape and size and smaller: opus incertum is giving way to opus quasi-reticulatum.

We may with some confidence then place walls faced with opus incertum at Ostia between the opening of the second century and Sulla's dictatorship. They can be seen at scattered points along the main roads extending beyond the walls at least 50 metres to east, west, and south. The distribution at the lowest level of fragments of black glazed ware, typical of the second century, also testifies to the expansion, but a more detailed discussion of the problems involved may be postponed until we consider more closely the physical aspect of the town.

The passing of Gaius Gracchus' law sanctioning the cheap distribution of corn led, we may assume, to an increase in the efficiency and volume of the corn trade, which affected Ostia no less than Rome; and it is probably in the Gracchan period or shortly afterwards that Rome found it necessary to prevent uncontrolled development on the Tiber bank at Ostia which would interfere with services essential to the state. Five travertine boundary stones have been discovered, aligned along the Decumanus on its north side, with identical inscriptions: 'C. Caninius C. f. pr(aetor) urb(anus) de sen(atus) sent(entia) poplic(um) ioudic(avit).' They cover a length of some 600 metres westwards from a point a little outside the eastern Sullan gate. Immediately beside the westernmost stone another was later added which marks the end of the public zone: 'privatum ad Tiberim usque ad aquam.'2 The praetor ruled that the area marked by boundary stones between the Decumanus and the river was the public property of the Roman people. It was probably mainly along this stretch of river bank that in the Republic merchantmen unloaded their cargoes.

The emphasis on trade is reflected in the changing character of the

¹ S 4702; phot. NS 1910, 233. The lettering suggests a date not later than Sulla (Dessau, ILS 9376), 150-80 B.C. are the approximate limits. Identification with C. Caninius Rebilus, praetor in 171, supported by Carcopino (14) and Calza (Topografia, 19) must be ruled out; for Rebilius was praetor in Sicily (Livy xlii. 31. 9), not praetor urbanus.

² See Note B, p. 471.

duties of the quaestor stationed at Ostia. Originally, as his title classicus implied, his main concern was with the needs of the fleet. By the end of the second century he is preoccupied with the import of corn. It was from this post that Saturninus, not yet a revolutionary, was removed by the senate in 104 when the corn situation at Rome became critical; and the importance of the post is shown by the transfer of its duties to no less a person than M. Aemilius Scaurus, princeps senatus. Later at least, according to Cicero, the post was not popular. It meant hard work without any compensating social and political distinction.²

Only one passage in literature throws intimate light on the harbour at Ostia during the second century, but it is a good story, and revealing. Polybius describes the escape of the Syrian prince Demetrius from Rome in 162 B.C. in some detail.³ When Seleucus Philopator, the elder son of Antiochus the Great, died, he was succeeded by his younger brother Antiochus Epiphanes, who had been held as a hostage in Rome. In his place the Romans kept as hostage Demetrius, son of the later king. Epiphanes died in 163 and Demetrius, who had long been restless, pressed the senate for his release. When this was refused he determined to escape. Arrangements were made through a certain Menyllus of Alabanda, who had come to Rome on a mission from the Egyptian king. He undertook to have a ship in readiness to take Demetrius back to Syria to make his bid for the throne.

At the mouth of the Tiber Menyllus found a Carthaginian vessel, 'one of those specially selected to carry, according to ancestral custom, the first fruits to the gods of Tyre (mother city of Carthage)'. Menyllus chartered a passage for himself and his retinue, procured provisions for the voyage, and at the last moment explained that he himself had to stay in Rome, but was sending on some of his men. Demetrius and his small party came down after dark and boarded ship at midnight. The captain sailed at dawn thinking that he was carrying some soldiers to Ptolemy. It was four days before the truth was out, and by then it was too late; the ship had already passed the straits of Messina.

This circumstantial story shows that one could expect to sail east as well as west from Ostia, and it seems likely that, though most of the eastern trade came to Puteoli, some cargoes bound for Rome came to

¹ Cic. De har. resp. 43; Pro Sestio, 39; Diod. xxxvi. 12.

² Cic. Pro Murena 18: 'Illam (quaesturam) cui, cum quaestores sortiuntur, etiam adclamari solet, Ostiensem, non tam gratiosam et inlustrem quam negotiosam et molestam.'

³ Polyb. xxxi. 11-15.

the Tiber mouth. Second-century Rhodian amphorae discovered at a low level beneath the four republican temples west of the theatre point the same way. But it was not an eastern ship that Menyllus chartered. The Carthaginian merchantman which was glad to sell a passage to Syria was presumably on its way with Carthaginian first-fruits to Tyre. Why had it gone out of its way to call at Ostia? No doubt it had brought goods, probably corn, which had a ready market at Ostia, but it cannot have been expected to complete the longer half of the journey without some replacement. Perhaps the ship's captain could rely on collecting passengers for some eastern Mediterranean port, men of substance who could pay a good price.

The Carthaginian merchantman seems to have stayed some time in harbour. It was probably rare for ships to unload, turn about, and sail away at once; when the volume of shipping increased substantially the river harbour would clearly become too restricted. While ships stayed in the harbour they had to replenish their stocks of food and water; Menyllus buys his own provisions for Demetrius' journey. From this trade Ostia derived increasing profit; it helps to account for the virtual monopoly of street fronts by shops.

The dependence of Rome on Ostia in the late Republic is clearly reflected in the strategy of the Civil War between Sullans and Marians. When Marius returned from Africa to join Cinna in Italy, Ostia was his first major objective. The Roman senate had installed a garrison, but they chose the wrong commander. Marius was allowed to enter; he occupied the town and plundered it.² Three years later Sulla, returning from the east, instructed the commanders of his advance forces to occupy Ostia if they could not enter Rome.³ Both sides realized that if they held Ostia they could hope to starve Rome into submission.

NEW TOWN WALLS

The plundering of the city by Marius must have been a serious setback to the prosperity of Ostia, but with the establishment of Sulla's domination came order and security. It is probably to this period that the walls which were to serve the colony throughout its subsequent history, enclosing an area nearly thirty times as large as that of the fourth-century settlement (c. 160 acres), should be dated.⁴ For the

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<sup>1</sup> R. Paribeni, MA 23 (1914) 446, 479.
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² Livy, Ep. 79; Appian, BC i. 67. 5. 3 Appian, BC i. 88. 7.

⁴ G. Calza, BC 53 (1925) 232; Topografia, 79.

date of these walls, a cardinal point in the history of Ostia, there is no direct evidence, but different approaches converge to a common context.

The style of the construction should be the decisive criterion, but in the period between 150 and 60 B.C. there is not enough dated material in the neighbourhood of Rome to provide a firm guide. The new Ostian walls were built of concrete, faced on the outside with small roughly squared blocks of tufa; on the inside they were unfaced and probably backed with a ramp of beaten earth. The character of the face, however, is not uniform and varies according to the different work parties involved. In some places it approaches very closely to the net-like regularity of opus reticulatum; in others the blocks are considerably more irregular and barely distinguishable from opus incertum. By the early Augustan period, opus reticulatum is fully developed at Ostia; the town walls are substantially earlier than Augustus, but how much earlier we could not say from their style alone. Outside Ostia the nearest parallel that I have seen is in the basilica at Ardea, which has been dated to the beginning of the first century B.C.¹ More general arguments support a Sullan dating.

When the eastern gate by which the Via Ostiensis passed into the town was restored in the early Empire the inscription set up on the attic recorded that the senate and people of Rome gave her walls to the colony of Ostia.² Such a formula, incongruous with the dominance of the emperor in the imperial period, recalls the Republic, and the inscription has been interpreted as a copy on the new gate of what stood before on the old. If Ostia had expanded without new walls in the early second century it is unlikely that the Roman senate would have attended to the problem in the disturbed period between the Gracchan revolution and the Social War. Such argument from general probability is by no means compelling, but it receives some support from the account of Marius' seizure of Ostia. Marius owed his entry into the town to the treachery of the commander of the cavalry garrison.³ If

¹ E. Holmberg, Boll. med. stud. ii (1931) June-July, 16, pl. 3, fig. 4.

² S 4707: 'se[natu]s [p]opulu[sque R.] |.c[olon]ia[e O]s[tie]nsium m[u]ro[s] dedi[t].' Restoration discussed by Wickert, Sitz. Berl. Ak. phil.-hist. Kl. 1928, 46. The sense is inescapable, but the abbreviation R for Romanus is very unpalatable. The length of line is based on the assumption that the inscription was flanked on each side by a winged Minerva. This is most uncertain.

³ Granius Licinianus (Teubner, 1904) p. 18, l. 4: 'Marius Ostia urbe potitur (per) Valerium, cuius equites praesidebant.'

Ostia had been walled it would have been more appropriate to send infantry to hold it. The use of cavalry suggests that Ostia had no walls.

We conclude that Ostia's walls were not built before Sulla's dominance; the Sullan settlement provides the best historical context. There is a dangerous tendency to attach to the Sullan name all buildings of the late second and early first centuries that are not precisely dated, but it is at least clear from the sources that Sulla was a great builder who left his mark on Rome. The fighting against the Marians had revealed the importance and vulnerability of Ostia; Sulla himself may have turned his attention to the town's needs. More generally, the Social War and its repercussions had focused attention on the towns of Italy and their relation to Rome; against this background the new walls of Ostia have a natural place. It is difficult to find such an appropriate setting later.

The new walls of Ostia were provided by Rome and it was probably on Roman initiative that they were built. They set a limit to expansion, marked the transformation of a naval base to a trading town, and encouraged Ostia to develop a new urban personality. The physical recognition by the new walls of a developed town may have been accompanied by constitutional change. When the colony was established by Rome in the fourth century it was directly controlled from Rome. Minor administration no doubt was carried on by local officials, whatever their title; major decisions and jurisdiction rested with Roman magistrates. In the imperial period Ostia had a fully developed constitution and managed her own affairs. It is possible that the charter which provided the new pattern of government accompanied the building of the new walls and that, though the general control of overseas trade bound for Rome rested with the Roman quaestor, the development of Ostia now rested with the Ostians themselves. If this is so the town records may have been set up on a public building from this date. When we first meet them they record the consuls of the year, selected events from the Roman record of the year, the chief local magistrates and major events concerning the buildings and constitution of Ostia. The first surviving fragment records events of 49 B.C., but it is clear that this is not the starting-point.2

¹ Pliny, NH xxxiv. 26 (Curia); Tac. Hist. iii. 72 (restoration of Capitolium). Further contemporary construction, E. B. Van Deman, 'The Sullan Forum', JRS 12 (1922) 1-31; M. E. Blake, Ancient Roman Construction, 137-45.

² A. Degrassi, Inscr. Italiae, xiii (Fasti et Elogia), 173.

In the generation that followed the building of the new walls there was much new construction, and the city began to develop more monumental features. Most of this new building is now buried under the later imperial city, but temples preserve their site and form. Trading was the life-blood of Ostia but throughout her history religion retained a strong hold and in some of her cults Rome was directly concerned. At approximately the same time as her new walls were built, possibly a little earlier, a sacred area was reserved west of the Castrum in which a large temple of Hercules was the dominant feature. Near by is a smaller contemporary tetrastyle temple, unidentified; a little later a third temple was added. Before the end of the Republic another sacred area was reserved, standing back from the Decumanus east of the Castrum. Here on a common podium four small temples were built and surrounded by a large open area limited on three sides by a portico, open to the south from the Decumanus.²

The local aristocracy meanwhile could afford spacious houses, spreading horizontally, with atrium and peristyle such as their contemporaries were building at Pompeii. Beneath the imperial level, along the Cardo south of the Forum and along the Decumanus west of the Forum, the remains of several such spreading houses can be seen. Most of these houses had to be destroyed when space grew increasingly valuable and it was necessary to provide accommodation for a largely increased population within the same area; but two survived from the first century B.C. into the late Empire on the west side of the Cardo, immediately south of the Forum. Though they were modified more than once to meet changing tastes, their original plan can be largely recovered.³ The ground plan of much smaller houses, confined to atrium and surrounding rooms can also be seen under the so-called Basilica House immediately north of the Curia. A Pompeian coming to Ostia in the late Republic might have been bewildered by the shipping but he would have felt quite at home in the houses.

The period immediately following the building of the new walls was probably prosperous; political differences at Rome did not at this stage affect the volume of trade. Within twenty years, however, came a severe and unexpected check. Piracy, which had always been a serious menace in the Mediterranean when no strong fleet controlled the seas, had revived as a result of Rome's increasing apathy. Mithradates had

¹ p. 347.

² R. Paribeni, MA 23 (1914) 441.

³ Becatti, Topografia, 107.

⁴ NS 1923, 180.

encouraged and used the pirates, who were now organized in regular fleets. While Verres was governor they had raided Sicily; shortly before 67 B.C. they actually sailed into the Tiber mouth, destroyed a Roman fleet commanded by a consul and plundered Ostia. Cicero, supporting the Lex Manilia in 66, tersely emphasized the humiliation: 'Ostiense incommodum atque ignominiam rei publicae.'

Dio gives a fuller account.² The pirates 'even sailed into the Tiber mouth, burnt the ships and plundered everything. Finally, when they met with no opposition, they stayed in the territory as if they were in their own homes, and disposed of the spoils and the inhabitants who escaped the sword.' No traces of widespread destruction have been found to mark this disaster, nor should we expect to find them, for the pirates had nothing to gain by destroying buildings. Their motive in risking such a bold attack was not to provoke or intimidate Rome but to seize the goods and movable wealth of a rich trading centre. Having seized the cargoes by the Tiber bank they no doubt raided storehouses, shops, and the wealthier houses. But their stay must have been comparatively short; they could not have risked an encounter with an organized Roman military force. The set-back to Ostia was temporary only and the disgrace helped to awaken public opinion at Rome. In 67 the people forced the senate's hand and Pompey was entrusted by the Lex Gabinia with an extraordinary command. Within three months he had cleared the seas and trade once again flowed freely to the quays of Ostia.

Much more serious to Ostia was the long period of unsettlement between Caesar's march on Rome and the final victory of Octavian at Actium. Ostia was near enough to Rome to follow nervously the growing tension between Caesar and the nobility. When in 49 Caesar crossed the Rubicon, sympathies at Ostia may well have been divided. What Ostia needed above all was security on the seas and settled conditions at home. Who was more likely to provide them quickly? Pompey had swept the pirates from the sea and more recently, under the special authority of a cura annonae, had relieved a corn crisis at Rome and had reorganized the flow of corn ships. For these services Ostia had good reason to feel respect and gratitude. But a trading city having close associations with Gaul will have realized more sharply than the average Italian the calibre of Caesar's generalship. It is not surprising that no

¹ Cic. De imp. Cn. Pompeii, 33.

² Dio xxxvi. 22.

chief magistrates were elected in Ostia at the normal time for 49; an interregnum was needed.¹

For Ostia the first phase of civil war was less damaging than might have been expected. Caesar won loyalty in Italy by his speed, generosity, and tact. Pompey withdrew across the Adriatic and was defeated at Pharsalus before he could exploit the potential resources of sea power. There was as yet no interruption of the trade from Africa, Spain, and Gaul. This, however, came later, during the struggle for dominance between Octavian and Antony.

Shortly after the insecure renewal of the triumvirate at Brundisium, where Antony, Octavian, and Lepidus had once again divided the Roman world between them, Pompey's son Sextus made his bid for power. Controlling Sicily and Sardinia, he raised a substantial fleet, attempted to blockade the western coast of Italy, and raided as far north as Ostia.² Octavian's political survival depended on the elimination of Sextus and the reopening of the seas; but the struggle was difficult and drawn-out, for a fleet had to be built, and the crews trained. These were lean years for Ostia, and it was not until 36 that the issue was settled at the battle of Naulochus. During the crisis Lepidus, who at Misenum had received control of Africa and Spain, played an equivocal hand. After the defeat of Sextus Pompeius his legions went over to Octavian, who now had secure control of the west.

In the struggle between Octavian and Antony, Ostia's sympathies probably lay throughout with Octavian, for Ostia looked west and can have had little sympathy for Antony's eastern ambitions. She will have needed no intimidation to take the oath of loyalty to Octavian before the final campaign. But the long period of disturbance from 49 to 31 must have raised many delicate problems and certainly demanded cool-headed leadership in the colony. This leadership probably came from the *auctoritas* of a small local aristocracy.

Perhaps it is not fanciful to see the dominant figure of these years in C. Cartilius Poplicola. When he died he was honoured with a public funerary monument by the sea-shore, outside the Porta Marina; the inscription commemorates his services:

By public authority. For C. Cartilius Poplicola, son of Caius, [—], and his children and his decendants, by decree of the council and by the unanimous will of the citizens of the colony, a man of leadership. To

commemorate his services this monument was set up and the gratitude which he deserved was recorded. He was eight times, absent and present, elected duovir, three times with censorial power, by the verdict of the colonists. . . .

The monument is a rectangular tomb of solid masonry with a monumental façade. Above the inscription runs a frieze cut in marble, fragments of which have survived; they show the beaks of triremes and scenes of fighting. The style of the reliefs, the form of the monument, and the mixture of tufa, travertine, and marble in the construction suggest a date in the thirties or twenties B.C.^I

This remarkable career of C. Cartilius, eight times chief magistrate, may well have spanned the difficult years. His standing is further reflected in his dedication of a heroic statue in his own image in the temple of Hercules.² He was elected to chief office absens et praesens: his absence may be explained by military service which his monument recalls. Perhaps we should see in Poplicola a local partisan of Octavian who helped to steer his town's policies along judicious channels. Another leading Ostian of this period can be suggested, though his date is considerably more controversial; for the long inscription recording his career has for more than a century been lost and most of those who have concerned themselves with the problem have preferred a second century (A.D.) date.³

Eleven Ostian inscriptions preserve the name of P. Lucilius Gamala: they cover the first two centuries A.D. and reflect a succession of generations of the same family holding high office. The Publius Lucilius Gamala with whom we are now concerned held the duovirate in Ostia after passing through the normal preliminary posts and was also pontifex Volcani, the highest religious authority in the town. He made a large number of public bequests and was given a public funeral. One clause of the inscription seems decisive for an Augustan date: 'item ahenea (statua) . . . posita proxume tribunal quaes. propterea quod cum respublica praedia sua venderet ob pollicitationem belli navalis HS XVCC reipublicae donavit.' This Publius Lucilius Gamala had given 15,200 sesterces to the city when the government was having to sell public properties on account of a promise given in connexion with a

¹ This monument has now been published in Scavi di Ostia, III. i. 169 ff. See Note K, p. 475.

² R. Calza, Arch. Anz. 1938, 657, fig. 17; Museo, 121; Scavi di Ostia, III. i. 221.

³ I. Further discussed, Appendix V, p. 493.

'bellum navale': in recognition of this service his statue in bronze was set up near a tribunal. The tribunal in question was presumably that of the quaestor, for quaes(toris) is the natural supplement of what was inscribed. But the Ostian quaestorship first instituted in 267 B.C. lapsed in the principate of Claudius, when the quaestor's duties were transferred to an imperial procurator.

This indication of an early date is supported by the reference to a 'bellum navale'. The phrase has been interpreted as the equivalent of 'naumachia', and such a desperate remedy is needed if the inscription is to be dated to Trajan's principate, but there is no good parallel for such usage. I 'bellum navale' should mean a naval war and, as Mommsen first saw (he changed his view later), the natural context is the war against Sextus Pompeius with which, as we have seen, Ostia was vitally concerned. Dio tells us that Octavian collected money from the cities of Italy. Ostia will surely have been among the most willing subscribers. Nor is it difficult to understand why in the lean thirties she should have to sell public properties to realize her promised contribution.

If we are right in our interpretation, Publius Lucilius Gamala was one of Ostia's leading citizens during the Civil War.

THE AUGUSTAN REVIVAL

Actium marks the end of an ugly phase. After a brief transition the new order was formally established in the Roman senate at the beginning of 27 B.C. Constitutional practices were restored; Octavian, now Augustus, ruled. By every means in his power Augustus attempted to revive what was useful in past tradition and prepare Rome to advance along new paths. The poets reflect the pride and confidence of the new age; the settlement was also accompanied by a carefully calculated building programme.

We should expect to find a corresponding building activity in Ostia, for she was always sensitive to the capital's mood. Augustan Ostia, however, lies buried for the most part beneath the city of the second century and only where earlier buildings have been restored and transformed or where excavation has been carried to the lower levels can we hope to see signs of Augustan construction. Nor is it easy to distinguish the work of the age of Augustus from that of his early Julio-Claudian successors.³ By the end of the Civil War opus reticulatum was

¹ p. 498. ² Dio xlviii. 49. 1.

³ For changes in building styles, Appendix IX, p. 535.

mature; the net-like pattern of the surface was elegant and regular. Such construction continued in use until the end of the Julio-Claudian period, though fire-baked bricks were increasingly used at Ostia either alone or in conjunction with reticulate as the century developed.

Three temples, revealed by excavation, can with some assurance be dated to the principate of Augustus: a small temple of Bona Dea, and two unidentified temples on the north side of the Decumanus in the Forum.¹ An Ostian calendar of Roman religious festivals resembles calendars from other Italian towns which can be dated to this period; they are a typical reflection of Augustan religious policy.² It is probable that Augustus' call for a revival of the traditional cults of the Roman people found a ready response in Ostia.

Reticulate walls that may be Augustan can be seen in all quarters of the city and there is little doubt that Ostian builders were busily employed on houses, shops, and other commercial premises, as well as temples. There are also signs that space was becoming more precious within the city. When the four republican temples on a common platform were built in the first half of the first century B.C. they were surrounded by a large open area limited on three sides by a portico. Under Augustus, or shortly afterwards, a new boundary wall was built, drastically reducing the area on the north, east, and west sides and running less than 2 feet from the temples themselves.3 The area between the new limiting wall and the back wall of the original portico was probably used for shops and housing. A similar new boundary wall reduced the free area of the Temple of Hercules, and an Augustan building below the later 'Curia' immediately adjoins the western of two temples in the Forum that were destroyed when the Hadrianic Capitolium was built.4

The most impressive of the new secular buildings was the theatre.⁵ Its present form represents a thorough rebuilding and enlargement at the end of the second century, but the reticulate walls of the original construction can still be seen at the lateral entrances. Their style is typical of Augustan work and a fragment of a monumental inscription recording the name of Agrippa was found below the ruins of the stage.⁶ The theatre was probably built on the initiative of Augustus' closest

¹ p. 351 f. ² S 4547. Augustan parallels, CIL i², pp. 220-42.

³ This wall, marked in the plan (MA 23 (1914) 468), is not described in the text. The dark-red bricks are almost certainly pre-Claudian.

⁴ Becatti, Topografia, 105. 5 G. Calza, Il Teatro romano di Ostia. 6 82.

colleague. It accommodated some 3,000 spectators and was one of the earliest permanent theatres in Italy; not until 55 B.C. had Rome herself enjoyed such a luxury.

But the most striking feature of Agrippa's work was less the theatre itself than the treatment of the area behind to the north. Here was laid out an impressive double-colonnaded portico, making with the theatre a single architectural complex. The addition of a portico to a theatre was not unusual, for it had a sound practical function to fulfil, as Vitruvius tells us: 'behind the stage porticoes should be built to provide a refuge for the audience when sudden showers interrupt the spectacle, and space for the setting up of the stage machinery'.2 What is remarkable about the theatre portico at Ostia is its scale and use. The original length was 125 metres, the width 80 metres. Surrounding the area on east, west, and north was a light reticulate wall of the same character as the walls of the theatre, pierced at the north end towards the river by eight entrances. Round the three sides ran a double colonnade, the Ionic columns of brick concealed under plaster. On the south side immediately behind the theatre stage was a monumental portico extending along two-thirds of the width and carried on tufa piers. In the area thus enclosed no traces of contemporary building have been found: we imagine public gardens here, in the centre of which a temple was later built. By the Severan period this large colonnade was occupied by traders, mainly from the provinces. Its original function is less certain, but it will be argued later that it was intended from the outset for the use of traders and that it was controlled by the local authority.3

Augustus boasted that he had found Rome a city of unbaked brick and left it a city of marble. In the scale of her buildings and the quality of their decoration Ostia lagged far behind the capital. Tufa was still the dominant building material; travertine, which had to be transported from quarries beyond Rome, was something of a luxury; marble very rarely used. The public monument of C. Cartilius Poplicola well illustrates the economy in the use of materials. The face is of marble, the sides of travertine, and the back of the monument, least exposed to view, of tufa. Even the theatre employs tufa throughout, nor is travertine used for the monumental portico immediately behind the stage. But though economy was shown in the choice of building materials, Ostian architects were capable of seizing the opportunities offered them.

¹ G. Calza, BC 43 (1916) 178. ² Vitruvius v. 9. 1. ³ p. 283. ⁴ Suet. Aug. 28. 3.

Until the early Empire Ostia had no aqueduct, and depended on wells. In spite of the nearness of the sea the water was untainted¹ and adequate drinking water is still drawn from a well on the site. But the lack of a generous supply of running water set limits to amenities. There could be no fountains to relieve the summer heat in the streets and public baths were severely restricted. How far cisterns were used to supplement wells by supplies from rainfall we do not know, but one large cistern survives and, though it is in an excellent state of preservation and is one of the most impressive of the surviving monuments, it has attracted little attention. It lies underneath the Baths of Neptune on the north side of the Decumanus, half-way between the Porta Romana and the Forum. It is roughly 36 metres long and 26 metres wide and is divided longitudinally into six interconnected compartments. Floor, walls, and vaulted ceiling are protected by a thick coat of cement.²

When the baths above it were built under Hadrian this cistern had passed out of use, for drains of the late first century cut across it. Originally it was above ground, on the same level as other walls immediately to the north which were partially destroyed when the baths were built; its water came from rain collected from the roof. Though it has been called republican this cistern dates from the early Empire, for at various points where the cement has broken away, large red bricks which did not come into use before Augustus can be seen. No traces of similar cisterns have been found at other points and this large reserve may have been designed to meet a special problem. A lead pipe ran from near the north-west angle in a north-easterly direction towards the river.³ Gismondi has suggested to me that it may have been intended primarily to provide fresh water for the ships that docked by the Tiber bank.

If this be the explanation the need was short-lived, for very soon an aqueduct was built to bring in water from the high land four miles to the east, overlooking the coastal plain. The earliest emperor's name to be preserved on any of the pipes is that of Gaius: the building of the aqueduct will fall between the date of the cistern, not earlier than Augustus, and the end of Gaius' principate, possibly under Tiberius. Very soon a set of public baths, remains of which can still be seen under the Via dei Vigiles, was built to capitalize the new luxury.

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<sup>1</sup> Pliny, Ep. ii. 17. 25.

<sup>2</sup> NS 1911, 262, 407, 452; NS 1913, 395 (plan).

<sup>3</sup> NS 1911, 452.

<sup>4</sup> S 5309<sup>6</sup>.

<sup>5</sup> NS 1912, 204.
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As the Julio-Claudian period advanced, further improvements could be seen at Ostia. In the principate of Tiberius or shortly afterwards a temple of Rome and Augustus was built at the south end of the Forum. Only the reticulate walls of the substructure of the temple still stand, but sufficient elements of the marble pediment, cornice, and columns have been found to show that Ostian architecture was approaching much nearer to the standard of imperial Rome. In decorative effect there is a striking advance from the modest temples of the late Republic and what we can infer of Augustan work in Ostia. On the east side of the southern Cardo can still be seen three large travertine columns that supported a portico probably constructed towards the middle of the century; under Augustus such a colonnade would have been carried on tufa piers or columns. Travertine was also used for the columns at the four angles of the portico of the Horrea of Hortensius on the south side of the Decumanus opposite the theatre. These horrea for the storage of corn are probably the earliest of those that can now be seen, and were perhaps the largest that had yet been built. A central free space is surrounded by a portico off which open a series of thirty-eight narrow, deep rooms. The building is severely practical in design, but has the merits of effective simplicity and is impressive in scale. The walls are of reticulate with a subsidiary use of brick, suggesting a date in the first half of the century.

Many towns in Italy display in their buildings the confidence and prosperity of the early Empire, but none felt the benefits of the new régime more continuously than Ostia. Even the weakest emperors knew the fundamental importance of a regular and adequate flow of corn to Rome. In the Republic it was not easy to pin down responsibility for a corn shortage, nor was the system of administration adjusted to deal with such problems. The emperors knew that in the last resort they were responsible, and Augustus found that remote control was inadequate. When crisis threatened in 22 B.C., he himself took over the cura annonae² and it was to the Ostian quaestorship that his step-son Tiberius was sent as the first important stage in his public career.³ A more permanent solution was found towards the end of his life, when a special department was established under a praefectus annonae to ensure continuously that supply met demand. Augustus laid the foundations of an efficient administration from which Ostia directly benefited.

¹ Topografia, tav. ix; below, Pl. xxxix a.

² Res gestae, 5. ³ Vell. Pat. ii. 94. 3.

During the Republic Ostia had grown accustomed to seeing the departure and return of governors of western provinces and Cato, returning from Cyprus, was probably not the only distinguished senator to sail back from the east up the Tiber. But it is doubtful whether Ostia had seen much of Roman consuls in the Republic; imperial visits in the Empire became a commonplace and inscriptions record a long series of honours paid to emperors and their families.

Augustus must have used the harbour more than once in his travels, and it is possibly for this reason that one of his praetorian cohorts was stationed in the town.² Three Ostian inscriptions and a stamped tile record the sixth praetorian cohort and one of its men was honoured with a public funeral for his service in fighting a fire.³ Perhaps the principal function of the praetorians, apart from a display of discipline if trouble broke out in the docks, was to do the work later assigned to a detachment of the regular fire service, the *vigiles*. When the praetorians were concentrated in Rome soon after Augustus' death their absence was felt. Seneca records that 'under Tiberius when a light had appeared in the sky the cohorts rushed to the help of the colony of Ostia, thinking that it was on fire'.⁴

Carcopino has suggested that there is a more important reflection of Augustus' concern for Ostia in Virgil's Aeneid.⁵ He believes that Virgil chose the mouth of the Tiber as the setting for Aeneas' new Troy, against the general current of tradition, in order to popularize Augustan policy. Caesar had contemplated a new harbour at Ostia; Carcopino believes that Augustus revived the project, began the work, but abandoned it on the death of Agrippa. It is possible, though unlikely, that Augustus influenced the form of the legend that Virgil adopted. It is not impossible that Augustus gave some thought to Caesar's plans; but it is virtually certain that he did not begin the work. If Virgil intended to glorify an imperial harbour, projected or begun, he has left his intentions singularly obscure.⁶

Tiberius had started his political apprenticeship by serving at Ostia as quaestor, and it was from Ostia that he left for Rhodes,⁷ an occasion no doubt of much muttering and gossip in Ostian streets. A more

¹ Plut. Cato minor 39. 1-2.

² Suet. Aug. 82. 1: 'Si quo pervenire mari posset, potius navigabat.' But Ostia might have been chosen merely because of its nearness to Rome: Suet. Aug. 49. 2: 'reliquas (cohortes) in hiberna et aestiva circa finitima oppida dimittere assuerat'.

³ 215. 223, S 4494, 4495. ⁴ Seneca, Nat. Quaest. i. 15. 5.

solemn occasion was the reception of the body of Lucius Caesar, Augustus' younger grandson, who died at Massilia in A.D. 2. The buildings were dressed in mourning and the Ostian magistrates carried the body through the town¹. Similar scenes were repeated when Gaius, immediately on Tiberius' death, brought back the ashes of his mother and brothers with great ceremony.² On one occasion, however, Ostia acted too soon. A slave of Agrippa Postumus had intended, when Augustus died, to rescue his master from his island prison and challenge the succession of Tiberius. Bad weather and the prompt murder of Agrippa forestalled him. Instead he lay low for some time until his beard and hair had grown appropriately and then began to impersonate Agrippa. 'The rumour that Agrippa had been preserved by the grace of the gods spread through Italy, and was believed at Rome.' At Ostia a huge crowd greeted him when he arrived. The town council must have felt very embarrassed when the adventurer was quickly exposed at Rome.

They had perhaps been even more disturbed in 23 B.C. when Fannius Caepio and Varro Murena conspired against Augustus. Both men were condemned in the courts, but Fannius escaped from Rome. A slave carried him in a chest to the Tiber where a boat took him down river. From Ostia he made his way by night to his father's Laurentine villa. He attempted to escape by sea, but was wrecked, and finally put to death at Naples. This was the most serious crisis that Augustus had had to face since the Civil Wars. Fannius was probably well known to Ostians; the events of 23 may well have puzzled them.

The close association of the emperors with Ostia may have led to the establishment of an imperial residence in the town. An Ostian palace is clearly attested later under Commodus and is perhaps to be identified with a large and richly furnished building in the west of the town by the river, which Visconti partly excavated in the middle of last century. This building dates only from the reign of Antoninus Pius and the earlier history of the site is unknown, but there were already imperial freedmen and slaves at Ostia in the Julio-Claudian period. Under Augustus, C. Iulius Pothus, freedman of Nymphodotus, probably an imperial freedman, joined with his patron in restoring the Macellum; he became an Augustalis at Ostia and set up a tablet in honour of

¹ Fasti, A.D. 2: 'hominu[m plus —] | inta millia can[delis ardentibus] | obviam processe[runt. magistratus] | Ostiensium pulla[ti corpus tulerunt,] oppidum fuit orn[atum—].'

² Suet. Cal. 15. 1. ³ Tac. Ann. ii. 40. 1.

⁴ Macrobius i. 11. 21. For the conspiracy, R. Syme, The Roman Revolution, 331.

Drusus, son of Tiberius.¹ The handsome tomb of one of his freedmen, C. Iulius Amethystus, survives outside the Porta Laurentina, and it was used by imperial freedmen and slaves. Four slaves born in the imperial service, *vernae Caesaris*, are recorded in the tomb;² they were probably born and brought up in Ostia.

By the early Empire Ostia had grown into a substantial town that had long outlived its primitive function of defence. Meanwhile changes even greater had come over the area to the south. The coastline from the Tiber mouth to Antium forms a natural unity. On and behind this coastline had once stood powerful cities. At the southern end Antium had for long challenged Rome. Some six miles to the north, standing back from the coast, stood Ardea, spreading below her natural acropolis over a large plateau, defended by ravines and, on the landward side, where natural defences failed, by a huge rampart of earth; a strong, populous, and thriving centre in the sixth and fifth centuries, importing Greek wares and farming a large territory. Some distance farther to the north on high ground overlooking the sea was Laurentum, commanding the coastal territory to the Tiber's mouth;3 later, but before Rome had advanced to this coastline, Lavinium grew up, spreading from a restricted acropolis over an ample table-land. Beside these cities fourthcentury Ostia was but a village.

By the end of the Republic Ostia had eclipsed them all. Antium had been reduced by Rome in the middle of the fourth century, and submitted to a Roman colony. At first the two communities existed side by side; later they amalgamated, but Antium steadily declined until she developed a new livelihood as a favourite seaside resort for the wealthy. The emperor Nero had a magnificent villa here, but the veterans whom he settled in the town could not or would not make a living from the land.⁴ Ardea was shrinking back within her acropolis; the neighbourhood had become marshy and unhealthy:

locus Ardea quondam dictus avis, et nunc magnum manet Ardea nomen, sed fortuna fuit.⁵

¹ Bloch, 67; S 5322. ² Paschetto, 472; inscriptions, 482-9; plan, p. 458, Fig. 32.

³ The independent existence of Laurentum is controversial. I accept in general the arguments of G. Bendz, Opuscula Archaeologica, i (1934) 46-63, and of B. Tilly, Virgil's Latium, 83-102. Much of the evidence is ambiguous, but Strabo (229 and 232) seems to have no doubt. The arguments for identifying the city of the Laurentines with Lavinium are most fully developed by Carcopino, 171-274.

⁴ Tac. Ann. xiv. 27. 3.

⁵ Virg. Aen. vii. 411.

Laurentum was almost deserted; Lavinium, preserved primarily for her religious associations, was much reduced in size and wealth, and her cult of Venus, common to the Latins, was administered from Ardea. 'The Samnites', Strabo tells us, 'sacked these regions and there remain only the remnants of cities; but they have won fame through the passage of Aeneas and the cults which are said to have been handed down from those days.'

In the religious revival of the Augustan age these old centres received new respect because of the antiquity of their cults, and Virgil in the later books of his Aeneid recalled their greatness; but they belonged to the past. Land that had once supported large populations was now given over mainly to the villas of the wealthy and to grazing. It is probable that villas began to develop in this coastal area after the second Punic War; by the end of the Republic it was becoming increasingly popular, for the combination of sea and woodland provided an attractive setting for the nobility. Though the Romans were not at home on the sea, they enjoyed looking at it, and the boars and deer among the oak and pine provided good hunting. The bay of Naples was more notorious for the refinements of living, but the Laurentine villa of Hortensius could probably compare with the extravagances of Baiae. By his villa Hortensius had enclosed some thirty acres of woodland in which he built a high pavilion where he dined his friends. At the note of a trumpet 'such a crowd of deer, boars and other animals came running up that the sight was as attractive as a hunting display in the Circus Maximus'.2 The emperors followed the nobility and surpassed them. Where the coastal fort of Tor Paterno was much later built, Augustus had his Laurentine villa, which in due course passed to Claudius. Hortensius had enclosed a reserve for deer and boar: Claudius kept elephants in his grounds.3

The land north of the Tiber from Ostia had less romantic associations and a more colourless later history. Caere near the coast, some twenty miles to the north, and Veii farther inland had once controlled this area. Both were broken early by Rome and were no longer important settlements. The coastline was taken under Rome's direct control and, in 247 and 245, colonies were settled at Alsium and Fregenae. These

¹ Strabo, 232. ² Varro, RR iii. 13. 2.

³ CIL vi. 8583, a Claudian freedman 'procurator(i) Laurento ad elephantos'; cf. Juv. xii. 102-7. Did some of these elephants go to Britain (Dio lx. 21. 2)?

⁴ Vell. Pat. i. 14. 8.

colonies remained important while the coast was vulnerable. When Carthage's power was destroyed they could expect to become little more than residential villages.

But all was not well with Ostia. When Egypt was annexed after the battle of Actium, the Alexandrian corn ships did not come to the Tiber. Augustus knew the value of Egypt. He hoped that by expanding corn production in the Delta he could eliminate the recurring corn crises that had increased political instability at Rome when rival dynasts were competing for power. In the Republic Rome had relied primarily on Sicily and the western provinces; Egypt's contribution was probably unimportant. Augustus set the army in Egypt to revitalize the long-neglected irrigation system. Before he died, if we can believe a late authority, 20 million modii, more than six times the tithe from Sicily, had been added to Rome's annual supply.

But the Alexandrian corn fleet ended its journey at Puteoli and not at Ostia. The river harbour was probably already dangerously over-crowded. More important, large ships could not enter the river mouth without transferring part of their cargoes to tenders at sea. The Alexandrian corn transports were among the largest merchantmen afloat; the risk could not be taken, and they unloaded their cargoes at Puteoli, whose excellent harbour facilities were already well known to Alexandrian traders. New granaries must have been built to store the Egyptian corn until it could be moved to Rome. It is possible that some of this corn was carried by mules along the Via Appia. It is more likely that it was reloaded into smaller vessels to complete the journey by water.

¹ p. 56.

² See Note C, p. 472.

³ Aurelius Victor, Epit. 1.

THE IMPERIAL HARBOURS AND PROSPERITY

THE RIVER HARBOUR

Empire, the river harbour was no longer proving adequate to meet the needs of Rome. The increase in the size of merchantmen and in the volume of imports emphasized a problem which had been developing for a long time. The sand bar at the river mouth was becoming increasingly dangerous. Nor were the sea approaches satisfactory. To the south there was no good harbour between Gaieta and the Tiber; similarly the coast to the north was harbourless below Portus Herculis by Cosa. Until these weaknesses were remedied Rome's shipping faced serious risks.

We have two descriptions of the harbour at the river's mouth. Dionysius of Halicarnassus, writing at the close of the first century B.C., gives the more favourable picture:²

The river widens considerably as it reaches the sea and forms large bays, like the best sea harbours. And, most surprising of all, it is not cut off from its mouth by a barrier of sea sand, which is the fate even of many large rivers. It does not wander into changing marshes and swamps, thereby exhausting itself before its stream reaches the sea, but it is always navigable and flows into the sea through a single natural mouth, driving back (with the force of its current) the waves of the sea, though the wind frequently blows from the west and can be dangerous. Ships with oars, however large, and merchantmen with sails of up to 3,000 (amphorae)³ capacity enter the mouth itself

T Pliny, Ep. vi. 31. 17, emphasizing the value of Trajan's new harbour at Centum-cellae: 'nam per longissimum spatium litus importuosum hoc receptaculo utetur'; Dio xlviii. 49. 5, referring to the west coast during Octavian's struggle against Sextus Pompeius: 'ἀλίμενα γὰρ καὶ ἔτι τότε τὰ πλείω τῆς ἡπείρου ταύτης ἦν', implying the contrast with his own day.

² Dion. Hal. iii. 44.

μεχρὶ τρισχιλίων: the unit is not specified; cf. Dio lvi. 27. 3 (restrictions on exiles):
 μήτε πλοία πλείω φορτικοῦ τεἐνὸς χιλιοφόρου.' Volume was normally expressed in amphorae.
 3,000 amphorae = 3,000 talents = 9,000 modii = c. 78 tons (capacity).

and row or are towed up to Rome; but larger ships ride at anchor outside the mouth and unload and reload with the help of river vessels.

His younger contemporary Strabo emphasizes the disadvantages:1

Ostia is harbourless on account of the silting up which is caused by the Tiber, since the river is fed by numerous small streams. Now although it means danger for the merchant ships to anchor far out in the surge, still the prospect of gain prevails; and in fact the plentiful supply of tenders which receive the cargoes and bring back others in exchange makes it possible for the ships to sail away quickly before they touch the river, or else, after being partly relieved of their cargoes, they sail into the Tiber and run inland as far as Rome.

There is no real contradiction between these two accounts. The river mouth was navigable for ordinary small trading vessels, but large merchantmen and especially the big corn transports had to ride out at sea. The swift-flowing Tiber sweeps down large quantities of silt as it rushes to the coast, and the channel was becoming difficult for ships with a deep draught. There is already a hint of trouble in Ovid's story of the arrival of the Great Mother in the crisis of the struggle with Hannibal. There had been a long drought and the ship which carried the sacred image grounded on the river mud:

sicca diu fuerat tellus, sitis usserat herbas: sedit limoso pressa carina vado. quisquis adest operi, plus quam pro parte laborat, adiuvat et fortis voce sonante manus. illa velut medio stabilis sedet insula ponto.²

Silting was not the only problem. The river was only some 100 metres wide as it flowed past Ostia. Small merchantmen had ample space for manœuvre, but, when the volume of shipping increased in the late Republic, it must have become increasingly difficult to handle the larger vessels, especially when the corn harvest arrived from overseas. The river harbour was too restricted for the needs of imperial Rome.

The growing inadequacy of Rome's natural port was, like many similar problems of a pressing nature, ignored in the political struggles of the late Republic. But when a strong personal government emerged from the Civil Wars, public works again claimed the attention due to

¹ Strabo, 231-2.

them. Caesar had been the first to think seriously of building a new harbour, and his plans are described in some detail by Plutarch:

In the midst of the Parthian expedition he was preparing to cut through the isthmus of Corinth, and had put Anienus in charge of the work. He also proposed to divert the Tiber immediately below Rome by a deep canal which was to run round to the Circaean promontory and be led into the sea at Terracina. By this means he would provide a safe and easy passage for traders bound for Rome. In addition he proposed to drain the marshes by Pometia and Setia and so provide productive land for thousands of men. In the sea nearest Rome he intended to enclose the sea by building moles, and to dredge the hidden shoals off the coast of Ostia, which were dangerous. So he would provide harbours and anchorages to match the great volume of shipping. These schemes were being prepared.¹

With the draining of the Pomptine marshes which would be facilitated by the new canal we are not concerned. The canal, an ambitious project, was to be revived in a different form by Nero. It would have cut out the dangers of part of the west coast passage and, had it been wide and deep enough, would have enabled the largest merchantmen to dock at Rome. The improvements proposed at Ostia are not an alternative but a complement. The canal was intended primarily for shipping from Sicily and the east, perhaps also from Africa; it would not have been used by traders coming from Gaul, Spain, and Sardinia. What exactly Caesar proposed to do at Ostia is not clear from Plutarch's words. Literally interpreted they should mean that Caesar intended to dredge the foreshore near the Tiber's mouth and to provide a series of harbours enclosed by moles. It is possible that Caesar's intention was to provide a series of sheltered anchorages along the coast near the river mouth where ships could lie until conditions were favourable for their entry into the river. But, though this seems to be the literal interpretation of Plutarch, it is not convincing. Suetonius allows a less complicated solution. He speaks of 'portum Ostiensem . . . a Divo Iulio saepius destinatum ac propter difficultatem omissum'.2 The natural interpretation is a single new harbour, anticipating that of Claudius. Whatever the precise nature of his schemes Caesar had a shrewd insight into the nature of the problem and realized that radical measures and not mere

Plut. Caes. 58. 10: τῆ δ' ξγγιστα τῆς 'Ρώμης θαλάσση κλεῖθρα διὰ χωμάτων ἐπαγαγών, καὶ τὰ τυφλὰ καὶ δύσορμα τῆς 'Μοτιανῆς ἡϊόνος ἀνακαθηράμενος, λιμένας ἐμποιήσασθαι καὶ ναύλοχα πρὸς τοσαύτην ἀξιόπιστα ναυτιλία».

² Suet. Claud. 20, 1.

palliatives were needed. As in so many of his social and economic conceptions he anticipated the work and plans of later emperors.

Augustus was by temperament more cautious and, unlike Caesar, he determined to build the new order securely before tackling public works that could wait. His large-scale building in Rome was essential to his social policy; for the corn supply he was content to provide the basis of a more effective administration. When his main tasks were done he was getting old, and his own financial resources and those of the state were strained. His successor Tiberius was not the man to initiate bold and expensive schemes; he concentrated on financial consolidation. It was left to Claudius to begin the work.

THE CLAUDIAN HARBOUR

The project of Caesar may have played a part in influencing Claudius, 1 but more compelling was the threat of famine when he succeeded Gaius. According to Seneca there was only eight days' corn in reserve; 2 Claudius realized that the satisfaction of the mob at Rome was essential to his security. The immediate crisis could perhaps have been met by emergency measures, but Claudius took a long-term view. It was dangerous for the corn transports to ride at sea off the river mouth even in the summer; in winter it was impossible. Dio emphasizes the need for maintaining imports through the winter if necessary and there is no reason to discredit his emphasis.3 Winter sailing was not popular, but if summer shipments proved inadequate to meet Rome's needs it was essential that some corn ships at least should continue in service when the normal sailing season was closed. This was particularly important if the ships available were barely adequate to carry the quantities needed, and Claudius' further action shows that there was indeed a shortage of transport. He offered incentives to shipowners who maintained their ships in the service of the corn supply, and by guaranteeing state insurance against losses by storm he removed one of the main deterrents to winter sailing.4

The building of a new harbour at Ostia was a considerably more difficult undertaking than the draining of the Fucine lake or the building of an aqueduct; and the proposal seems to have met with opposition from experts and amateurs. Dio reports that the architects tried to dissuade the emperor by exaggerating the expenditure that would be

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<sup>1</sup> Suet. Claud. 20. 1.
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² Sen. De brev. vit. 18. 5; cf. Orosius vii. 6. 17.

³ Dio lx. 11. 3.

⁴ Suet. Claud. 18. 2; Gaius, Inst. i. 32 c.

necessary, and the discussion found its way into the textbooks. Quintilian cites as a typical example of a coniectura: an portus fieri Ostiae possit; and in his manual of oratory there seems to be a hint of amateur interference: when the building of a harbour at Ostia was debated it was not for the orator to give his opinion, it was the calculation of the architect that was needed.

Claudius overrode the opposition and in A.D. 42 work was begun on a completely new harbour some two miles north of the Tiber. Two curving moles were built out into the sea, and between them an island was formed by the sinking of the huge merchantman which Gaius had used to transport from Egypt the obelisk that was erected in the circus on the Vatican hill.⁴ It had taken in ballast 120,000 bushels of lentils and was large enough to serve as the foundation of a four-storied lighthouse:

tandem intrat positas inclusa per aequora moles Tyrrenhamque pharon porrectaque bracchia rursum quae pelago occurrunt medio longeque relinquunt Italiam.⁵

The building of the harbour was accompanied by a closer centralization of the corn administration under imperial control. The senatorial quaestor was withdrawn from Ostia and replaced by a procurator responsible to the *praefectus annonae*.⁶

The cutting of an outlet to drain the Fucine lake required, according to Suetonius, the labour of 30,000 men for eleven years;⁷ the work involved in completing the Ostian harbour and its ancillary services was more extensive and more difficult. Considerable progress had already been made by 46, for a monumental inscription of that year which can still be seen near the site of the Claudian harbour records the cutting by Claudius of canals from the Tiber to the sea, to connect his new harbour directly with Rome and, at the same time, by providing a secondary outlet for the river, to save Rome from flood.⁸ By 62 at the latest, when Tacitus records the loss of 200 vessels within the moles, the harbour must have been in regular use.⁹ But it was not until 64 that a commemorative coinage was issued from the mints of Rome and Lugdunum depicting the new harbour.¹⁰ It is possible that these coins

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    Dio ix. 11. 3.
    Quint. De inst. or. iii. 8. 16.
    Ibid. ii. 21. 18.
    The relation of the lighthouse to the left mole is disputed: p. 155.
    Juv. xii. 75-78.
    Suet. Claud. 24. 2; Dio lx. 24. 3 (A.D. 44).
    Suet. Claud. 20. 2.
    8 85.
    Tac. Ann. xv. 18. 3.
    C. H. V. Sutherland, Coinage in Roman Imperial Policy, 168.
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commemorated the important part played by the harbour in saving Rome from famine after the great fire; it is much more likely that they mark the formal completion of the work. We infer that the moles and lighthouse were built and that the harbour was already in use before Claudius died, but that work continued on the harbour buildings for the first ten years of Nero's rule. The coins give the official title of the new harbour, 'portus Augusti Ostiensis'; portus Claudius would have been a fairer name.

It is generally assumed that Claudius hoped, by providing a larger and safer harbour at Ostia, to make Rome independent of Puteoli. If this was his intention it was not realized. Seneca, in a letter written between 63 and 65, describes the scene of general excitement on the sea front at Puteoli when the Alexandrian corn fleet is signalled.3 He implies that this is the end of their voyage, and that it is a regular event in the town's life. Similarly when Statius' friend, Maecius Celer, sets out for his legionary command in the east he sails on an Alexandrian corn ship from Puteoli and not from Ostia.4 St. Paul, appealing as a Roman citizen to the emperor, lands at Putcoli, 5 as does Titus returning to his Jewish triumph.6 Mucianus reported that he had seen elephants walking backwards down the gangway from their ship at Puteoli because they were terrified of the distance from the shore;7 the elephants were probably bound for Rome. The evidence of Pliny the elder, writing under Vespasian, points the same way. In recording fast sailing times he quotes voyages from Spain, Gaul, and Africa to Ostia; Alexandria is linked with Puteoli.8

The continued attention paid by emperors to Puteoli confirms the impression drawn from these scattered sources. Claudius sent an urban cohort to Puteoli as well as to Ostia to act as a fire service;9 the reason is

¹ Since no bronze coinage was issued under Nero until 64, the harbour might have been completed earlier in the reign. See Addenda.

² The harbour may not have been called *portus Augusti* until its completion under Nero. A Claudian procurator, in an inscription which should give the official title, is *proc. portus Ostiesis*, 163. On Neronian coins roughly contemporary with the harbour issues attention is drawn to the corn supply with the legend *Annona Augusti Ceres s.c.* (BMC Emp. Nero, 126-9).

³ Sen. Ep. 77. ⁴ Statius, Silvae, iii. 2. 21-24. ⁵ Acts xxviii. 13.

⁶ Suet. Tit. 5. 3. An interesting exception is the arrival at Ostia rather than Puteoli of Alexandrian envoys bound for Rome in the early Julio-Claudian period, H. A. Musurillo, The Acts of the Pagan Martyrs, iii, p. 13, l. 4 (P. bibl. univ. Giss. 46). This, however, is not a contemporary record and may reflect later conditions.

⁷ Pliny, NH viii. 6. ⁸ Pliny, NH xix. 3-4. ⁹ Suet. Claud. 25. 2.

surely that Roman corn from Egypt was stored in the town. Domitian's rebuilding of the branch road that left the Via Appia near Sinuessa and rejoined it at Puteoli, cutting out the detour through Capua, implies that speed of travel between Puteoli and Rome was still important.¹

Claudius was not intending to divert shipping from Puteoli; his main concern was to provide security for the corn from Africa, Sicily, Sardinia, and the western provinces. There remained the problem of Egyptian supplies. The emperor Gaius is praised by Josephus for beginning the enlargement of the harbour at Rhegium for the benefit of the Alexandrian corn fleet;² Claudius presumably completed the work. It provided shelter at a dangerous point on the voyage. But safe arrival at Puteoli was not the end of the matter. The Egyptian corn stored in Puteolan granaries had to be moved to Rome either by road or by sea. The quantity involved would have made land transport, by mule or wagon, extremely uneconomic; the sea route along the west coast, poorly provided with harbours, was dangerous.³

This problem Nero hoped to solve when he revived a plan that Caesar had first formulated. Caesar had intended a canal from Rome to Terracina; Nero's engineers designed a route from Lake Avernus to Ostia, and it may be significant that work was begun in 64, the year in which the harbour commemorative coinage suggests that work on the Ostian harbour was completed. Tacitus hardly takes the project seriously.⁴ The object of Nero's architects was 'to fool away the resources of an emperor'; to him it was a scheme as extravagant and egoistic as the building of the Golden House. Suetonius is no more favourable.⁵ He links it with Nero's personal extravagance; like the Golden House and the pleasure pool stretching from Misenum to Avernus it is mad expenditure, 'impendiorum furor'.

But, even if the scheme had not been thoroughly and practically prepared, there was a serious purpose behind it.⁶ Caesar had thought some such scheme worth while, and in such matters Caesar was neither a fool nor a dreamer. Nero's projected canal, like Caesar's, would cut out part of the stormy passage up the west coast of Italy and bring the

¹ Statius, Silvae, iv. 3. Domitian commemorated by Puteoli, AE 1941, 73.

² Jos. Ant. xix. 205.

³ Tac. Ann. xv. 46. 3, describes the loss of a large part of the Misenum fleet in a storm on its way from Formiae to Campania.

⁴ Tac. Ann. xv. 42.

⁵ Suet. Nero, 31. 3.

⁶ For a more serious estimate of Nero's canal, B.W. Henderson, The Life and Principate of the Emperor Nero, 247.

corn along a sheltered waterway to Ostia and so to Rome by river or by a further canal. At the same time it would contribute effectively to the draining of the coastal marshes, an important problem created by the neglect of the Republic.

Tacitus, ignoring the motive, has also exaggerated and misrepresented the difficulties. He pictures the canal passing through a waterless waste until it came to the Pomptine marshes; but there is little doubt that the engineers intended to make use of the numerous coastal lagoons, and the canal could also have been fed from the Volturnus, the Liris, and other small rivers that flowed into the sea along its route. In this respect it presented less difficulty than Caesar's project. Nor were the hills an impassable obstacle. Agrippa had shown that the crater of Avernus could be successfully pierced, and the only other high ground in the way was the promontory of Caieta and the hills above Terracina. Indeed work was begun at several points and traces of 'the scheme that came to nothing' could still be seen when Tacitus wrote: Pliny the elder even attributed to it the main responsibility for the decline in the famous Caecuban wine. But before long it was abandoned. The work may have proved more difficult, especially near Terracina, than was expected. Nero may have become discouraged by the increasing difficulties of the political situation.

TRAJAN'S POLICY

The scheme for a southern inland waterway to the Tiber, envisaged by Caesar and Nero, was never revived; a different solution of the problem was found by Trajan. Though this emperor's interests and abilities were primarily those of a soldier, he showed also a keen and intelligent interest in the agricultural and commercial prosperity of Italy. At Ostia he excavated a large land-locked inner basin of hexagonal form behind the Claudian harbour:

sed trunca puppe magister interiora petit Baianae pervia cumbae tuti stagna sinus, gaudent ibi vertice raso garrula securi narrare pericula nautae.²

The fierce storm of 62 which had wrecked 200 ships within the Claudian moles had emphasized the danger of anchoring in mid-harbour; shelter could always be secured in the lee of one of the moles, but a sudden gale would quickly whip up the wide expanse of shallow water. In 62 the harbour was probably particularly crowded, and the ships were taken by surprise. The new basin offered complete security and even the largest corn transports could now anchor in safety.

Trajan's work at Ostia had wider consequences. The increased harbour area and the security of the inner basin made it possible to bring the large merchantmen of the Alexandrian corn fleet, which had hitherto docked at Puteoli, to Ostia. The earliest specific evidence that their Italian headquarters had been transferred comes from the end of the second century; but it is probable that the change of policy followed directly the completion of the new basin and that it was in fact one of Trajan's main motives in undertaking the work. Henceforward Ostia becomes the main reception port for merchantmen from the east as well as from the west.

The new Ostian harbour should be seen as the central feature of a comprehensive plan to set the maintenance of Rome on a more secure and economic basis. The dangers of the west coast passage from the south required points of shelter on the route. Nero had already built an artificial harbour at Antium;² it was probably Trajan who added a new harbour at Terracina.³ To the north of the Tiber there was no good harbour between Cosa and Ostia; Trajan built a new harbour at Centumcellae.⁴ This new harbour followed the Ostian model on a much reduced scale, having an inner basin entered from the main harbour, which was protected by moles and an island which was deliberately built as a breakwater on the seaward side of the entrance.⁵ The new harbour at Centumcellae had a double purpose. It provided safe shelter for ships bound for Ostia or returning from Ostia in bad weather and served as an auxiliary port for goods dispatched from Gaul and Spain to Rome. The increase in shipping during the early second

¹ IG xiv. 918, a statue base in honour of Commodus, set up by ol ναύκληροι τοῦ πορευτικοῦ ᾿Αλεξανδρείνου στόλου. Probable evidence under Antoninus Pius, Pl. xvIII d, description.

² Suet. Nero, 9.

³ Lugli, Forma Italiae, Regio I, i. 126. There is no specific evidence that Trajan was responsible for the harbour, but it was certainly Trajan's engineers who cut through Pesco Montano to lead the Via Appia from the harbour along the coast. Lugli also interprets (p. 128) a relief, now in the National Museum, as illustrating Trajan supervising the construction. The genuineness of the relief, however, is with good reason disputed, W. H. Gross, 'Römisches Relief aus Terracina', Arch. Anz. 53 (1938) 148.

⁴ Pliny, Ep. vi. 31. 15-17.

⁵ S. Bastianelli, Centumcellae, Castrum Novum (Italia romana; municipi e colonie, ser. 1, vol. 14, 1954).

century would have overcrowded even the enlarged Ostian harbour at peak periods; Centumcellae, only thirty-five miles distant by the Via Aurelia from Rome, gave useful relief. Meanwhile in Rome itself the river embankment of the docks below the Aventine was rebuilt; Trajan was almost certainly responsible.¹

By attracting eastern shipping to Ostia the building of Trajan's harbour marked a decisive stage in the decline of Puteoli's importance and prosperity. A letter addressed to the senate of Tyre on 23 July A.D. 174 by the Tyrian traders at Puteoli gives a lively illustration of the change.

By the gods and by the fortune of our lord emperor. As almost all of you know, of all the trading stations at Puteoli, ours, in adornment and size, is superior to the others. In former days the Tyrians living at Puteoli were responsible for its maintenance; they were numerous and rich. But now we are reduced to a small number, and, owing to the expenses that we have to meet for the sacrifices and the worship of our national gods, who have temples here, we have not the necessary resources to pay for the rent of the station, a sum of 100,000 denarii a year; especially now that the expenses of the festival of the sacrifice of bulls has been laid on us. We therefore beg you to be responsible for the payment of the annual rent of 100,000 denarii . . . We also remind you that we receive no subscriptions from ship owners or traders, in contrast to what happens with the station of the sovereign city of Rome. We therefore appeal to you and beg you to take thought of our fate and of the affair.²

In the Republic Puteoli had been of first importance to the Tyrian trader, but his ships could now pass on to the imperial harbours, and the main station was transferred to Rome. Similarly in the second century an Egyptian recruit for the fleet bound for headquarters at Rome to report for duty and learn to what unit he was to be attached sails on to Trajan's harbour, where he finds a man to take a letter to his mother. 'I am now writing to you from Portus for I have not yet gone up to Rome and been assigned.' A second letter tells us that he arrived in Rome on the same day.³

But though the Alexandrian corn fleet no longer discharged at Puteoli, the storage capacity designed for Egyptian corn was still available and it was sound sense to use it. That Puteoli was still con-

¹ G. Gatti, BC 64 (1936) 55.

² BGU 27; Dittenberger, OGIS 595; Dubois, Pouzzoles antique, 83.

³ Michigan Papyri, viii (Youtie and Winter, 1951) 490, 491.

cerned with Rome's corn supply is clear from inscriptions. The finding of a dedication to the genius of the colony at Rusicade, an important export centre for African corn, is inconclusive, for the corn exports implied could have been for local distribution from Puteoli; but Puteoli's inscriptions include records of two junior officials in the Roman corn department, a paymaster² and a clerk,³ and the paymaster's duties covered Ostia as well, disp(ensator) a fruminto Puteolis et Ostis; these men were concerned with Rome's corn. The natural inference is that Roman corn was still stored at Puteoli. There was a limit to the storage capacity that could be provided at Ostia, and it was a wise insurance against widespread fire to distribute Rome's reserves. But a secondary role in the provisioning of Rome was poor compensation for the loss of the greater part of Rome's eastern trade. When Ostia was at the height of her prosperity in the middle of the second century Puteoli was being supervised by curators imposed by the central government,⁴ a sure indication that the town's economy had lost its buoyancy.

Ostia was now not merely the harbour of the world's largest consuming centre, but an important link also in the great trade route from east to west. During the Republic there was no real unity between the two halves of Rome's empire. On land there was a large block of unconquered territory between Macedonia and Gaul, and when on the sea Rome successively took over the heritage of Carthage in the west and of the Hellenistic kingdoms in the east, she made no continuous attempt to control the Mediterranean effectively. Piracy shadowed the waterways and, apart from Pompey's well-organized campaign, nothing was done to bring east and west together. To Augustus belongs the credit of seeing this need and satisfying it. By the incorporation of Noricum, Rhaetia, and Pannonia as provinces he postponed the danger of a partition of the empire which the Civil War had threatened, and, by laying down the basis of a permanent naval organization for the policing of the seas, he increased the volume and widened the limits of trade. There was now free movement from Syria and Egypt to Gaul and Spain. Eastern traders settled in Arles and Bordeaux, and penetrated to the Rhine; the harbour system of Claudius and Trajan, the largest and most efficient on the west coast of Italy, became of primary importance as a port of call and possibly of exchange.

¹ CIL viii. 7959. ² CIL x. 1562.

³ CIL x. 1729: 'Aug(usti) lib(ertus) prox(imus) comm(entariorum) ann(onae).'

⁴ CIL x. 1814 (A.D. 161); x. 1791 (A.D. 181).

The new harbours were connected by canal with the Tiber and so with Rome. The Via Campana had from the early Republic led to the salt-beds. It may have been extended to reach the harbour; but at some time a new road, the Via Portuensis was added. It might be thought that the logical sequel was to develop a new town, transferring the storage capacity of Ostia to the harbour area and providing adequate accommodation for the working population to live near their work. Such a transfer could not have been made immediately, but the deliberate rebuilding of Ostia in the first half of the second century suggests that it was not then contemplated. The council and magistrates of Ostia controlled the site, and the Claudian harbour was not yet portus Romae, but portus Ostiensis. Ostia remained the centre of the trading guilds and still for a long time housed the greater part of the working population. A number of ferry services provided easy transport across the river and a road must have been laid across the island between river and canal. Trajan's harbour was surrounded with horrea but the new storage capacity built in the old town was more than was needed for her own population. Ostian horrea still held a reserve for Rome.

OSTIA'S DEVELOPMENT UNDER CLAUDIUS AND NERO

The new harbours brought increasing prosperity to Ostia, but it is more than a generation before clear signs of a dramatic development are seen in the excavated area. That the town benefited, however, from Claudius is highly probable. Certainly none of the early emperors was a more familiar figure in the town. It was from Ostia that he sailed to take the honours of the conquest of Britain² and the stiff rebuke to the town for not giving him an adequate reception, which Suetonius records, may mark his return.³

Later the building of his harbour probably brought him frequently down the river. Pliny records a picturesque and typically Claudian incident on one of these visits. A whale had been attracted into the harbour by the wreck of a cargo of hides imported from Gaul, and had stuck fast in the shallows. Claudius embarked his praetorians in small boats and directed the attack. Nets were stretched across the harbour

¹ For the Via Campana and Via Portuensis, T. Ashby, *The Roman Campagna in Classical Times*, 219. The Via Portuensis, not recorded before the fourth century, cannot be dated. Another road on the right bank remains a mystery, the Via Vitellia, which ran 'from the Janiculum to the sea' (Suet. *Vit.* 1. 3), Ashby, op. cit. 226 f.

² Dio lx. 21. 3.

³ Suet. Claud. 38. 1.

entrances to prevent escape and the men hurled their spears. 'We saw one of the boats go down,' says Pliny, 'waterlogged from the spouting of the monster.' It was at Ostia also that Claudius heard of Messalina's dangerous excesses. He was paying a state visit accompanied by his corn-supply prefect, the commander of the praetorian guard, his secretary Narcissus, and his main counsellors. His advisers took the news seriously and Claudius was rushed back along the Via Ostiensis. Vettius Valens, climbing a tree at Rome, saw 'a fierce storm coming from Ostia'.²

Claudius stationed at Ostia an urban cohort from Rome to provide a fire service for the granaries and warehouses.³ The Grandi Horrea probably date from his principate,⁴ and the baths that can be seen under the Via dei Vigiles are roughly contemporary.⁵ A handsome mosaic depicting winds and provinces from one of the pavements in these baths may reflect the benefits to trade which were to come from the new harbour.⁶ But it is doubtful whether new building at Ostia under Claudius was extensive; Ostian labour was probably diverted largely to the construction of the harbour.

Suetonius speaks of Nero's trips down the Tiber as though they were not infrequent, but his principate has left no recognizable mark. It might have been very different if his imaginative ambitions had been tolerated longer. Suetonius records that he had conceived the plan of extending Rome's walls to Ostia and of bringing the sea from Ostia by canal to the old city. This note follows in Suetonius a summary description of Nero's innovations in the rebuilding of Rome after the great fire in 64, and the association is plausible. The scale on which a large part of central Rome was converted into parkland for the Golden House makes the proposal for the inclusion of Ostia within Rome's bounds less incredible. This would have been a very new type of imperial city; but Nero was a very new type of emperor. A canal from Ostia to Rome, however, was a serious project, for the Tiber between Rome and Ostia follows a very winding course and the current is strong. It would have considerably eased the shipment of cargoes from

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<sup>1</sup> Pliny, NH ix. 14. Cf. Dio lxxii. 4. 6. <sup>2</sup> Tac. Ann. xi. 26. 7 ff.
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³ Suet. Claud. 25. 2. ⁴ NS 1921, 360 (for the date, p. 380).

⁵ NS 1912, 204; brickstamps, Bloch, Bolli laterizi, 219. 6 p. 448.

⁷ Suet. Nero, 27. 3: 'quotiens Ostiam Tiberi deflueret aut Baianum sinum praeternavigaret.'

⁸ Suet. Nero, 16. 1: 'destinarat etiam Ostia tenus moenia promovere atque inde fossa mare veteri urbi inducere.'

the coast, and had a precedent in the canal dug in Narbonese Gaul by Marius' army to avoid the difficulties of the lower Rhône.¹

The Civil War which accompanied the death of Nero did little harm to Ostia. She was not on the path of invading armies and, though the corn of Africa might have been withheld if Clodius Macer's bid for power had not been quickly stifled, there is not likely to have been any serious interruption in trade. A hoard of coins in Ostia, which was sealed at the very outset of Vespasian's principate, includes rebel issues of 69 from Gaul and Africa which presumably came over in merchantmen.² If Vespasian had been able to control the strategy of his supporters there would have been a crisis in Ostia, for it was his intention to force surrender by blockade; and Vespasian was at Alexandria from which the Egyptian corn fleet sailed—a good base for the purpose. But Antonius Primus did not wait for instructions, and Italy was won before the double-edged weapon of starvation was tried.

THE REBUILDING OF OSTIA

How much was built at Ostia under the early Flavians we do not know, but Vespasian's financial policy and encouragement of trade and above all his restoration of stability after the quixotic hellenism of Nero and the upheavals of 69 must have profited Ostia; the cult of Vespasian and Titus was long maintained in the colony.³ Domitian received no such posthumous honours, for his memory was publicly damned by the Roman senate; but Ostia probably had good reason to be grateful to him.

Ostia was so intimately bound up with Rome and so vital to her economy that it is reasonable to see imperial policy in major developments in the city. It was probably under Domitian that the building level was sharply raised in all new construction. Hitherto there had been no drastic change, though, with successive rebuilding, the level had slowly risen. The new buildings were now raised by at least a metre above the old, involving enormous quantities of earth and rubble for the fills. The practice, in such clear contrast with earlier custom, is deliberate policy and is so uniformly applied that it may well have been controlled by statute. The purpose was probably twofold:

¹ Strabo, 183; Plut. Mar. 15. 3-4.

² M. F. Squarciapino, NS 1948, 326.

³ Later flamines, 400, S 4664.

⁴ Suggested by F. H. Wilson, BSR 13 (1935), 53.

to raise the town above flood level, for the Tiber was a dangerous neighbour and the water level may have risen; and to provide adequate foundations for a new type of domestic architecture. To house within an area restricted by cemeteries a population which steadily increased with the increase of trade it was necessary to follow the new architecture of Rome and to expand vertically. The new tall buildings required stronger support and the maturely developed technique of concrete foundations could provide it if the level was raised sufficiently to keep the foundation trenches dry.

This revolution in Ostian architecture is most apparent in the great rebuilding of the first half of the second century, but the evidence suggests that it was under Domitian that the new policy originated. The evidence is not conclusive, for no buildings of the period can be securely dated by inscriptions and the only criterion available is the character of the brickwork. In the second century it becomes easier to date Ostian buildings, for from the last years of Trajan a proportion of bricks were stamped with the consular date. Even in the first century, however, brickstamps, though undated, can be of considerable help, for the development in their form and the dated buildings in which they occur provide a rough chronological sequence. But early brickstamps are rare and their evidence has to be supplemented by a study of the bricks themselves. Since Ostia drew mainly on the brickfields that supplied Rome, buildings at Ostia can be approximately dated by comparison with buildings at Rome, and on the Palatine and elsewhere there is abundance of Domitianic work.

The Domitianic phase in Ostian building is best attested in the area which includes the Baths of Neptune and the Barracks of the Vigiles behind them to the north. This area was completely rebuilt under Hadrian and two streets at least, the Via dei Vigiles and the Via della Palestra, covering buildings of the Julio-Claudian period, involved a change of plan. There are, however, clear traces below the Hadrianic level that drains were laid and new building begun here (but perhaps never completed) before the Hadrianic plan was executed. The brick-stamps found in this intermediate phase have been attributed to the end of the first century.¹

The same approximate date has been assigned to the stamps found by Lanciani in the temple of the Piazzale delle Corporazioni.² This temple

¹ Bloch, Bolli laterizi, 240. Many of the broken bricks used in the concrete of the Hadrianic buildings seem to be Flavian.

² NS 1881, 113.

was regarded by Calza as an integral part of a general reconstruction of the square contemporary with the rebuilding of the theatre, at the end of the second century. But the brickwork of the temple is very different from that of the theatre, and the thick triangular bricks are very similar to Domitianic bricks from Rome.

The brickwork of this temple is closely paralleled in the 'Curia' where one of the same stamps has been found.² The 'Curia' replaces a building, probably of Augustan date, at a much lower level and has been shown to be earlier than the building adjoining it to the west, which has early Hadrianic stamps. Its brickwork is very different from Trajanic work at Ostia and is probably Domitianic.³ Opposite the Curia is the Basilica, which, from the close similarity of its brickwork, is clearly contemporary. These two public buildings, adjoining the Forum, were richly decorated with marble and considerably enhanced the dignity of the town centre. At scattered points other traces of Domitianic brickwork can be seen. Ostian builders were busy at the end of the first century.

The damnatio memoriae by which the Roman senate took belated revenge on Domitian may account for the lack of inscriptions in his honour at Ostia, but a colossal head found in the recent excavations seems to be a portrait.4 This head had been broken but not defaced and the place of its finding may be significant. It came from a drain near the temple of Hercules, and had perhaps once been set up in or near the temple; on the Via Appia near Rome Domitian had built a temple to Hercules and the cult statue had carried his own portrait head.⁵ There may also be a reflection of Domitian's predilection for Minerva at Ostia. Some 30 metres inside the city from the Porta Romana was discovered a monumental statue of a winged Minerva. 6 The block from which the statue was cut is square dressed at the back and did not therefore stand free. It has been suggested that it is one of a balancing pair of statues which were incorporated in the decoration of the gate. Since it was found some considerable distance away this must remain doubtful, but the fact that it was made from the same Greek marble as the gate suggests that, at the least, it comes from a contemporary monument.

¹ G. Calza, BC 43 (1915) 183.
² Bloch, Topografia, 221 (under ii. 7. 5).

³ For the date of the 'Curia', see also p. 220.

⁴ Inv. 446. My attention was drawn to this head by Signora Calza.

⁵ Martial ix. 101: 'Appia, quam simili venerandus in Hercule Caesar | consecrat, Ausoniae maxima fama viae.'

⁶ NS 1910, 229.

The statue, on grounds of style, has been assigned to the late first or early second century; a closer date could not be pressed but the emphasis on the cult of Minerva under Domitian and the very similar Minerva from the Forum of Domitian at Rome which was completed by Nerva favour a Domitianic context.

If this hypothesis is valid the main gate of Ostia will have been restored at this time. The architectural decoration and the letters of the inscription on the attic are consistent with such a date, but both would be equally fitting under Trajan.² The rebuilding was carried out in travertine with the main decorative elements in Greek marble; in style it is severe and dignified. It was built at the new higher level. But even if we are right in assigning the beginning of Ostia's rebuilding at the higher level to Domitian's principate, the work of this period was eclipsed by what followed in the first half of the second century.

Under Trajan, Hadrian, and Antoninus Pius, and helped in part by their generosity, Ostia was transformed. The pattern for the new Ostia was provided by experience at Rome, where the great fire of 64 had given the opportunity for the replanning of large areas with wider streets and systematized apartment blocks. But when Rome was rebuilt houses were still normally faced with tufa blocks; second-century Ostia was primarily a city of brick.

Fire-baked brick had by now firmly established its reputation, and had become the standard material for facing walls. It had been tentatively used under Augustus, and a good example of early Tiberian brickwork can still be seen in the outer wall of the praetorian camp at Rome. But brick production was a new industry and developed slowly. For nearly a hundred years at Rome and Ostia after the introduction of the new material opus reticulatum was still freely used. At first, while production was limited to comparatively small-scale producers, bricks may have been more expensive; and that may be a reason why, until the middle of Hadrian's principate, reticulate was often used in conjunction with brick. But demand created supply. The big landowners realized the possibilities of the new trade, and developed production wherever they held or could secure suitable clays. By inheritance and confiscation the emperors gradually absorbed this rich source of wealth until brick production became virtually an imperial monopoly and broke down with the collapse of imperial continuity in the third

¹ L. Savignoni, Ausonia 5 (1910) 69; E. Strong, La Scultura Romana, 132.

² Becatti, Topografia, 128, prefers a Trajanic date.

century. Though there was a small output of bricks in Ostian territory, most of her soil was too sandy for the purpose and Ostia drew her main supplies from the brickfields that fed Rome.

It is not easy to form a picture of Ostian housing in the Julio-Claudian period, for though clear traces of the houses of the rich can be seen, with atrium and peristyle, there is much less evidence for the middle and lower classes. But it seems likely that Pompeii provides valid material for comparison. The two towns as they are now seen present a sharp contrast; but that is less because they fulfilled different functions and had been subjected to different traditions, than because Pompeii was destroyed before the architectural revolution had transformed Ostia. The houses of the rich in plan and size are closely similar during the early Empire, though their standards of comfort and decoration can no longer be compared: the small atrium houses at Ostia show the same architectural principles employed for humbler homes. And there is little doubt that the more modern type of housing for the common people brought to Pompeii by the Sullan colonists was widespread in Ostia. But, while building was still on or very little above the level of the sand, high buildings were out of the question at Ostia, nor was there need for them until the population problem became acute.

The new brick blocks were three, four, or even five stories high. The street fronts were in most parts of the city reserved for shops, with small mezzanine quarters for the shopkeeper's family above his work. The rest of the block was either divided into self-contained flats or reserved for the letting of rooms singly or in groups; but while the general principles of construction were the same there was considerable variety in their application, which will be described later. These new blocks were not intended merely for the manual workers, but included substantial apartments expensively decorated. Some were restricted in space and provided few amenities; others were liberally laid out around gardens available to all the tenants of the block. The House of the Paintings, which combines shops, flats, and garden, and other similar blocks, brings to life the terms of an Ostian will inscribed on marble, probably towards the middle of the second century:

Iunia D. f. Libertas hortorum et aedificiorum et tabernarum Hilaronianorum Iunianorum ita uti macerie sua propria clusi sunt quae iuris eius in his sunt usum fructumqu(e) dedit concessit libertis libertabusque suis.²

¹ Housing is more fully discussed, Ch. 12, p. 235.

² G. Calza, Epigraphica, 1 (1939) 160.

Junia Libertas bequeathed to her freedmen and freedwomen the use of and income from the gardens, buildings, and shops enclosed by their own boundary wall. This block with shops on the street front and apartments with a common garden had been built as a single unit and should have been a profitable investment.

A few of the large republican atrium houses have survived, but most were destroyed and replaced by the new insulae. Outside the walls space was less restricted and the suburban villas of the period probably showed a considerable advance in size, display, and comfort. One such villa, some 200 yards to the south-west of the Porta Laurentina, has been partially excavated. Its original construction seems to date from the early second century though it was restored and modified in the late Empire. From its ruins came a statue of Perseus and a handsome large fourth-century mosaic in colour of the seasons; it had its own private set of baths. The district stretching south from Ostia was already popular among men of substance in the late Republic; the number of residential villas along the coast probably increased during the second century.²

It was in this area, perhaps some five miles from Ostia, that Pliny the younger had his Laurentine villa built, overlooking the sea, with woods behind it. From Tor Paterno a path leads northwards towards Castel Fusano. To the right is woodland; to the left rises a line of bush-covered mounds, the sites of villas, among them Pliny's. Behind them stretch sand dunes, bush, and coarse grass where the sea-shore has receded. Pliny brings the Roman scene to life: 'The villa roofs, now in unbroken line, now scattered, resemble a number of towns and add colour to the coastline with their charming irregularity.' He also speaks of a small village with a few shops and three sets of baths, 'a great convenience if by chance a sudden arrival or some slight delay discourages your own heating system'. This village, which may be identified with the vicus Augustanorum known from inscriptions and with the site two miles

¹ A brief report in Arch. Anz. 49 (1934) 436 and 51 (1936) 460; but the site is only vaguely indicated.

² The sites of coastal villas between Ostia and Castel Fusano were raided in the eighteenth century, but no details were published. A brief account, Fea, Viaggio, 63.

³ Pliny, Ep. ii. 17. 27. A villa in the Castel Fusano estate has at various times been identified with Pliny's villa, but it is of the wrong date and in the wrong place.

⁴ Ibid. 26, but his main supplies came from Ostia: 'suggerunt adfatim ligna proximae silvae; ceteras copias Ostiensis colonia ministrat.' The requirements of the rich villa residents must have helped to keep Ostian shopkeepers and market gardeners cheerful.

north of Tor Paterno which was excavated in the late nineteenth century, benefited from the patronage of wealthy Ostians. M. Cornelius Valerianus Epagathianus, a Roman knight, who was a member of the Ostian council and patron of a boatmen's guild, became one of its quattuorvirs; L. Arrius Vitalianus, who filled the same office in the village, had his tomb built outside the walls of Ostia. P. Aelius Liberalis, an imperial freedman, who was procurator annonae at Ostia, was among its patrons. 4

Within the city the new architecture reflects the rise of a middle class growing rich on the profits of trade. In the early Empire Ostia had still been controlled by a limited aristocracy of comparatively old families that had lived for long in Ostia or come to Ostia from other parts of Italy. As the volume and distribution of trade increased Ostia became increasingly cosmopolitan. Men from all parts of the Mediterranean were attracted to Rome's harbours; even more important was the rapid growth of freedman stock. Slaves who had been given freedom could not themselves hold office, but they could amass the fortune necessary to launch their families on a public career. There is little sign in the governing classes of Ostia of this new stock before the close of the first century; in the second century wealth could open doors previously closed. Descendants of old families still play their part in local government, but the sons and descendants of freedmen are increasingly prominent.

With the rise of the middle class comes a development in the number, size, and wealth of the guilds. The movement began in the association of workers in a common trade, and most of the wealthiest guilds took their titles from the trades most important in the life of the city, the corn merchants, the corn measurers, the men who controlled the various categories of shipping, the builders. But the tendency to form associations developed widely in the second century and their scope was extended to include public slaves, veterans, and burial clubs. In the period of growing prosperity these guilds attracted the patronage of the wealthy, and built guild houses and even temples.

The foundation of Ostia's wealth was trade and the magistrates and, even more, the town council, were drawn increasingly from

¹ The excavations of vicus Augustanorum have not been published. A passing reference, G. Henzen, Bull. Inst. 47 (1875) 3; cf. Carcopino, 183. The site is identified by an inscription, 2045.

² 34I. ³ 30I. ⁴ 2045.

business men and traders of the middle class. But Ostia's sea-shore attracted visitors from Rome and they were normally of a different stamp. Today the electric railway brings Ostia Marina within the reach of all classes. Before the railway was built, the fifteen miles from Rome required a carriage. This the poor could not afford. Young men of quality and distinguished philosophers figure in the only two actual sea-shore scenes that are preserved in literature; they are probably typical. It was not incongruous when Minucius Felix made the setting of his dialogue between Christian and pagan a stroll along the water-front at Ostia.²

The new building of the prosperity period provided not only better accommodation for more people, but improved public amenities. Within little more than two generations at least eight new sets of public baths were built, three of them on an impressive scale—the Baths of Neptune, the Forum Baths, which have both been excavated, and a third set south-east of the Porta Marina which has only been partially uncovered. The Forum was enlarged and enhanced by the Basilica and 'Curia' on its western side and the great new Capitolium at its northern end. The sculptors kept pace with the builders and provided statues for public squares as well as for temples and other public buildings.

The growing infusion of foreign stock throughout this period led to the spreading of oriental cults in Ostia. Few traces of them survive from the Republic or early Empire in buildings, inscriptions, or other evidence; in the second century their growth is well attested. Cybele, Isis, and Serapis led the invasion. Mithraism, which eventually eclipsed them all in the number of shrines and devotees, developed strongly only after the middle of the century. But there is little evidence that these new cults exercised any strong influence on the governing class, and architecturally, apart from Cybele, they were comparatively insignificant. The temples that caught the visitor's eye as he wandered through the streets housed the traditional cults that had grown up with the Roman people.

The persistence of these traditional cults is proved beyond question by buildings, inscriptions, and dedications. The most impressive new monument of the age was the early Hadrianic temple dedicated to the Capitoline triad at the north end of the Forum.³ The temple of Vulcan,

¹ Suet. De rhet. 1; Aulus Gellius xviii. 1.

² Minucius Felix, Octavius.

³ p. 380.

whose cult was at the heart of early Ostian history, was impressively restored under Trajan; and restorations of the second century can be seen in nearly all the temples surviving from the Republic. The Roman praetor still came down to Ostia every year to celebrate the games in honour of Castor and Pollux. It was more than a vague superstition that kept these cults alive.

The new Ostia that was virtually completed by the death of Antoninus Pius was a handsome city. Predominantly it was a city of brick freely declared, for the walls of the insulae were not faced with stucco. Surfaces were relieved by a generous supply of windows, and balconies of varying types; entrances were framed by brick columns or pilasters mounted by pediments that have an attractive Georgian flavour. Though some blocks were developed piecemeal, in most of the rebuilding large areas were planned as units giving an impressive regularity. Long porticoes carried on brick piers lined the most important streets and conferred coherence of design.

In contrast with the severity of the brickwork were the marble façades of temples and the rich decoration of public buildings. For the new prosperity is clearly emphasized in the choice of building materials. Travertine, which seems to have been a luxury under Augustus and was still handled with economy under the Julio-Claudians, is now freely used. Its great strength and durability made it the natural material to be used at points of stress where large tufa blocks had once been used; that is why odd blocks are often found in brick buildings where corners might be worn by passing traffic. But it is also now used in company with brick for purely decorative purposes. The freedom with which it is used is best illustrated by the treatment of thresholds. In the Horrea of Hortensius of the Julio-Claudian period there are at the threshold of every room two blocks of travertine, one at each side of the doorway. The gap between them is filled by brick, a cheaper material; and this was an adequate compromise because it was the sides only that had to carry the weight of the doors. In the second century travertine is normally used throughout, though a few instances of the old economy survive. Similarly travertine is commonly used for the first flight of stairs in the large house blocks. But, apart from the new dominance of brick, the greatest change lies in the widespread use of marble. Under Augustus marble was used in Ostia on a limited scale, and then only Italian marble from the quarries above Luna. Temple walls were still

stuccoed, columns were, normally at least, of tufa or brick. The temple of Rome and Augustus, built early in the Julio-Claudian period, marks a considerable advance in its freer use of marble, but it was probably not until the Flavian period that Ostian architects regarded marble as the natural dress of public buildings.

Though Italian marble was still normally used when large surfaces had to be covered, a rich variety from overseas was also now available. We find columns of Porta Santa in the Baths of Neptune, of Cipollino from Euboea in the Forum Baths, grey granite from Egypt and Elba at scattered points. But the Hadrianic Capitolium at the north end of the Forum was richest in the variety of marbles it used. The walls were lined with Luna, large fluted columns of Pavonazetto were used for the porch, the threshold was a solid block of Africano. The floor of the cella was paved with a geometric pattern of variegated marbles, with Giallo Antico from Numidia predominant.¹

While architects and builders were carrying out their programmes, the craftsmen of the decorative arts were busier than ever before. The painters were the least impressive. Perhaps their best work has disappeared, but enough wall-paintings remain in the apartments of the middle class to judge the general level. It is only rarely that we see an artist at work as in the Insula of the Charioteers. The sculptors did better. Many of the copies and adaptations of Greek originals that were set up in public and private buildings were no doubt bought in Rome or imported from the Greek world, but the portraits of Ostian men and women, most of the sculpture of the cemeteries, and perhaps much else besides came from local workshops. In the series of portrait heads in the Ostian Museum we can feel respect for Ostian sculptors of this period. Nor should the cutters of inscriptions be forgotten. They produced their best work in the Flavian period and in the first half of the second century. They had learnt how to organize the spacing of long texts and in important commissions their letters were neither sophisticated nor careless.

No less impressive in their own field are the mosaic designers. In the apartments of the well-to-do most of the rooms had mosaics on their floors, usually of a geometric pattern: in public buildings, and especially in the baths, there was more scope for figured scenes. The art of the mosaic at Ostia reached its peak during this period, in the ingenious variety of its geometric designs and in the fine vigour of its more

¹ Guattani, Monumenti inediti per l'anno 1805, pp. cv-cxi.

ambitious compositions. It is seen at its best in the Frigidarium of the Baths of Neptune, where Neptune rides through his watery kingdom surrounded by Nereids and fanciful creatures in a well-ordered composition that conveys a fine sense of movement.¹

The growing impressiveness of Ostia is reflected also in the patronage that she attracted. Trajan or Titus (the restoration is uncertain),² Hadrian,³ and probably Lucius Aelius,⁴ his adopted son, accepted the title of duovir and the imperial chest contributed handsomely to the rebuilding of the town. The patrons of the town included Roman senators and knights of high rank, and senators and knights became patrons of Ostian guilds. Meanwhile the number of Roman knights from Ostia increased and two families that had long played a leading part in local government, the Fabii and the Egrilii, rose to consular status.⁵

The phase that we have been considering covers three principates. Under Trajan the Ostian builders had first probably concentrated mainly on the new harbour; Trajanic work at Ostia falls largely towards the end of the reign, and is primarily concentrated in the north-west quarter of the city. It is the principate of Hadrian that has left the most abiding mark on Ostia. In 133 he was honoured by the city for having preserved and enhanced it with all indulgence and generosity: 'colonia Ostia conservata et aucta omni indulgentia et liberalitate eius.' Hadrian deserved the tribute.

From this inscription alone it would be dangerous to infer too much, for Hadrian is honoured in somewhat similar terms by a wide range of communities. But Ostian excavation gives a substantial background to the words. At the beginning of his reign a large area between the Forum and the Tiber, comprising mainly warehouses and shops, was completely rebuilt at the new higher level. This area is crowned by the new Capitolium, also built early in the reign, and the building of the Capitolium in turn leads to a transformation of the Forum into a more monumental and coherent public centre. The Capitolium appropriately balanced the temple of Rome and Augustus. The one symbolized the continuity of tradition; the other the benefits of imperial rule. The area between Capitolium and Decumanus was reserved as temple precinct, flanked by its own portico: the Forum to the south of

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<sup>1</sup> p. 449. 
<sup>2</sup> S 4674. 
<sup>3</sup> Fasti, A.D. 126. 
<sup>4</sup> p. 201. 
<sup>5</sup> pp. 196-9. 
<sup>6</sup> 95.
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⁷ Carcopino, Mélanges 30 (1910) 397; Bloch, Bolli laterizi, 87.

the Decumanus was framed on east and west by new porticoes. It is probable though not certain that the large-scale replanning derived from imperial initiative, for this central dock area was no less important to Rome than to Ostia.

There is less doubt about a second large area farther east, which was rebuilt towards the end of the reign. The central buildings here are the Baths of Neptune, and the Barracks of the Vigiles which lay behind them to the north. But the blocks to east and west are an integral part of the same plan. The Barracks of the Vigiles must have been built by imperial authority: Hadrian was also responsible for the Baths of Neptune, promising two million sesterces for the purpose. Amenity and utility were nicely balanced in these two adjacent buildings. The baths were probably the most luxurious that the city had yet enjoyed; the permanent establishment of a detachment of the Roman fire service met an urgent need.

In Augustus' principate the sixth praetorian cohort had been quartered in the town, and the public funeral given to one of the soldiers who died while fighting a fire suggests that they could be used as a fire brigade.³ When the praetorians were concentrated in Rome by Sejanus in A.D. 23 no attempt was made to replace the Ostian force until Claudius sent down one of his two newly raised urban cohorts 'ad arcendos incendiorum casus'.⁴ This cohort moved to Rome in the disturbances of A.D. 69,⁵ and it is uncertain what provision if any was made for Ostia under the Flavians. The stamp on a Domitianic pipe which refers in an uncertain context to 'castra' suggests, however, that a contingent from Rome's urban troops had returned to Ostia.⁶ Perhaps the significance of the building of the new barracks is Hadrian's decision to send vigiles, trained fire-fighters, to replace them.

Hadrian's personal interest in Ostia can also be inferred from the record of the Fasti for 126. This shows that in that year Hadrian held the title of duovir, chief magistrate of the colony, for the second time. To have accepted the title once would have indicated little, for Hadrian, we are told, accepted office in a wide range of towns in Italy; a second year of office is striking confirmation of his concern for Ostia.

¹ Ibid. 222. ² 98. For the identification, p. 409.

³ S 4494: 'Ostienses locum sepult(urae) dederunt publicoq(ue) funere efferun(dum) decrerunt, quod in incendio restinguendo interit.'

⁴ Suet. Claud. 25. 2.
5 Tac. Hist. 1. 80.

⁶ G.Barbieri, 'Fistoule inedite', NS 1953, 153 (n. 4): '[i]mperatoris Domitiani Caesaris Aug. | [—] quae ducunt in castris.'

While the emperor may have been responsible for the two most impressive planning projects of the reign, private building was scarcely less active. In every quarter of the town Hadrianic work can be seen in large blocks of houses, shops, and markets. From this period date the Garden Houses, an ambitious composition of shops, apartments, and gardens, a garden city in miniature, which was probably a private investment.¹

Under Antoninus Pius the expansion of Ostia continued. The pace was less intensive, but the new buildings include some of the most interesting that have survived. The Horrea Epagathiana et Epaphroditiana anticipate in essentials the Renaissance palace.² The Forum Baths, with the curving lines of their southern elevation, strike a new note in Ostian architecture; the 'Imperial Palace' eclipsed all other buildings known to us at Ostia in the quality of its decoration.³ The title of 'Imperial Palace' was given by Visconti in the middle of last century. When he opened ground on the site he thought he was excavating another set of public baths, for the first rooms to be uncovered included a handsome Frigidarium. As excavation proceeded it became clear that the baths were an integral part of a much larger complex, with two further series of rooms based on spacious courts.

Excavators are notoriously romantic in their attributions and Visconti's title has rarely been taken seriously. But it does not lack evidence and Carcopino was not uncritical in accepting it.⁴ The direct evidence is the name of the imperial princess Matidia stamped on a long stretch of water-pipe.⁵ This could be either the daughter of Trajan's sister Marciana or her daughter who was given the same name; the latter is more probable since brickstamps suggest that the building dates from Antoninus Pius.⁶ The indirect evidence is not negligible. From an inscription it is known that a 'crypta in palatio' was used as a Mithraic shrine.⁷ The existence of an imperial establishment at Ostia in the second century is further confirmed by inscriptions which record an imperial slave who was 'vilicus a bybliotheca'⁸ and another who was door-keeper, 'ostiarius'.⁹

A further reason for identifying Visconti's building with this establishment is the quality of its mosaics and sculptures and the remarkably

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<sup>1</sup> p. 139.

<sup>2</sup> Becatti, NS 1940, 32; Calza, Palladio, 5 (1941) 19.

<sup>3</sup> Paschetto, 407.

<sup>4</sup> Carcopino, Mélanges, 31 (1911) 219.

<sup>5</sup> CIL xv. 7737.

<sup>6</sup> Bloch, Topografia, 225 f.; cf. Thylander, A 261, a slave of the younger Matidia living Ostia.

<sup>7</sup> 66.

<sup>8</sup> 196.

<sup>9</sup> 201.
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fine workmanship of its walls. The building was maintained in good repair until the late Empire and in every period the rebuilding, whether in brick, block and brick, or tufa blocks, is carefully done and superior to contemporary work in other parts of the town. Judgement should at least be suspended until the site has been cleared again and restudied, and the excavation completed to reveal the full plan of the building.

His biographer records that Pius gave a lavacrum to Ostia.¹ This gift may be less impressive than it sounds, for it is probably to be identified with the Baths of Neptune, which were nearly completed when Hadrian died. An inscription, the association of which with these baths is again probable rather than certain, tells us that Pius provided the money needed to complete the work: 'adiecta pecunia quantum amplius desiderabatur item marmoribus ad omnem o[rnatum perfecit]'.² The Forum Baths, built in the last years of the reign, may have been the gift to the town of Gavius Maximus, who served Pius for twenty years as praetorian prefect.³

In tracing the remarkable expansion of Ostia in the first half of the second century it is easy to give a misleading impression of her size and wealth. In spite of the transformation she was no rival to Alexandria, Carthage, or the great cities of the East. Her area was still little larger than that of Pompeii, considerably smaller than that of the leading towns of Africa, Spain, and Gaul, less than half the size of Lugdunum; though few towns can have been so densely populated. Her temples had grown in number and magnificence, but her baths, Forum, and other public places lacked the monumental spaciousness of a Cyrene or a Lepcis. Ostia still provided very few Roman senators and, though a large number of knights are recorded, none are known to have reached the highest ranks of the service.⁴

Ostia lacked the basic wealth of towns with large and fertile territories such as those of Cisalpine Gaul. Her industries seem to have catered primarily for her own population, and it is doubtful whether her shippers and merchants played any significant part in buying for the Roman market. Wealth was widely spread, but there were probably few spectacular fortunes. Ostia was essentially a middle-class town. Though she retained an individual character and was no mere suburb, her primary function was to provide the harbour services needed to maintain Rome's supplies. Her prosperity was therefore bound to

¹ SHA, Pius, 8, 3. ² 98; Bloch, Bolli laterizi, 245. ³ p. 415.

⁴ One possible exception, pp. 206 f.

depend on the fortunes of Rome herself; it is not surprising that under the late Antonines Ostia, like Rome, should appear less buoyant.

THE CHECK TO EXPANSION

Shortly after the middle of the century Ostia had reached her peak in prosperity and population. The new apartment blocks provided considerably more accommodation than the buildings they replaced, but we can only approximately guess the increase in the population. It may have risen from less than 20,000 at the close of the Republic to some 50,000 by the death of Antoninus Pius.¹

In the second half of the century the tempo of building slackens and disturbing signs begin to appear. Nothing striking seems to have survived from the architecture of this period. Street fronts of shops, with accommodation over them, are continued on the newly established model but they do not form parts of large-scale plans: no new large blocks of apartments are to be seen in the excavated area. If the increase in prosperity had continued, a further growth of population would have dictated a raising of the level throughout the town except where temples stood. But the rebuilding of Ostia was not completed. Immediately within the Porta Romana, on the north side of the Decumanus, a large area has been left at the late republican level, the so-called Magazzini Repubblicani.² Traces can still be seen of the tufa piers and reticulate walls which were the framework of the original shops and business premises. At least three further phases of building in the area can be seen, but they represent readaptation only. If the value of land had continued to rise the old buildings would have been destroyed, the level raised, and new and taller buildings substituted. Similar areas which have retained their old-fashioned character can be seen behind the north side of the Via degli Aurighi and behind the Baths of the Six Columns on the Decumanus west of the Forum.

The guilds, however, still led a vigorous life, if we may judge from the number of commemorative tablets and statues that they set up. Political responsibility had long since passed from the popular assembly; the guild provided a more intimate res publica in which office was within the reach of all, freedman and free citizen alike. The further growth of the oriental cults, especially Mithraism, provided colourful relief to the working classes. But the capacity to sustain the standard of living

¹ See Appendix VIII, p. 532.

² Wilson, 'The so-called magazzini repubblicani', BSR 13 (1935) 77.

established by the middle of the century was being undermined by the general weakening of the imperial economy. The late second century in Ostia, as in many other parts of the Empire, was a period of decline.

In this transitional period the reign of Commodus may have profited Ostia more than that of Marcus Aurelius, for the Ostian evidence suggests that the organization of an African corn fleet on the model of the Alexandrian¹ was not an isolated gesture. It was probably in his reign that the Grandi Horrea, originally built under Claudius, were completely reconstructed to provide a second floor,² and new horrea for corn, not yet excavated, immediately to the west of the Magazzini Repubblicani may also date from Commodus.³ It was perhaps because of Commodus' concern for the corn supply, and therefore for Ostia, that the colony for a brief period took the title colonia felix Commodiana.⁴ The explanation for the title, however, might be more personal. Commodus was particularly attached to the imperial Laurentine villa. When plague raged at Rome, the laurel of the district, it was thought, kept the air free from infection. Commodus was a frequent visitor,⁵ and Ostia was near by.

The institution of sodales Herculani may also be a tribute to Commodus, who, towards the end of his life, fancied himself as Hercules, invictus Romanus Hercules.⁶ Only two surviving inscriptions record the priesthood at Ostia and neither is earlier than the late second century.⁷ The only other two examples known come from Rome and both almost certainly date from the reign of Commodus.⁸ A dedication by Trajan's harbour to Liber Pater Commodianus⁹ reflects something

¹ SHA, Comm. 17. 7: 'classem Africanam instituit, quae subsidio esset, si forte Alexandrina frumenta cessassent.'

² NS 1921, 381. ³ p. 549.

⁴ The title was reported from a lead pipe by the excavator, P. E. Visconti, in the Giornale di Roma, 10 June 1856 (Paschetto, 77). Dessau, RM 28 (1913) 194, rejects this evidence on the grounds that it was not mentioned in the published report by C. L. Visconti and that the pipe is not in the Lateran with the main collection from these excavations, and has not since been reported. Wickert (S 5309) follows Dessau. The text, however, is plausible and invention unlikely. Cf. SHA, Comm. 17. 8: 'ridicule etiam Carthaginem Alexandriam Commodianam togatam appellavit'; 8. 6–9, his proposal to call Rome 'colonia Commodiana'. For Commodus and the corn supply, see also Pl. xvIII d, with description.

⁵ Herodian I, 12. 2.

⁶ ILS 400; cf. Dio lxxiii. 15. 2 and 5: SHA, Comm. 8. 5.

⁷ Bloch, 49. 54. ? Severan or a little later.

⁸ ILS 1120, M. Atilius T. f. Severus, cos. ε. 183 (PIR², A 684); ILS 1121, L. Annius Ravus, cos. 186? (PIR², A 684).

^{9 30.} For a possible reflection of this cult at Ostia, pp. 423 f.

of the same spirit, and it is a nice coincidence that the only non-literary evidence for the month Commodus is a graffito on an Ostian wall.¹

Commodus may have been responsible for adding to the capacity of the theatre. In 196 the reconstructed theatre was dedicated.² The Augustan structure in tufa had been in large part destroyed, and the theatre rebuilt in brick to accommodate a larger audience. The dedicatory inscription is in the name of Septimius Severus and Caracalla, but the brickstamps that have been recorded are from Commodus' reign.³ It is probable that the rebuilding was begun and nearly completed before Commodus died, and that Septimius Severus at the outset of his reign stole the credit.

Few emperors can have been more popular at Ostia than Septimius Severus if we are to judge by the number of inscriptions that have survived in his honour. In itself this is a criterion that should not be pressed, partly owing to the accidents of survival, partly because such tributes have to be weighed rather than counted. There are better general reasons for believing that Ostia would have appreciated his rule. After a period of confusion in the empire, when disintegration threatened, he gave at least the appearance of strength. Like Vespasian he set himself to restore stability, discipline, and trade, and his African origin may have given him a natural sympathy for a harbour town which had long and close trading associations with his native province. But, for an emperor who knew his business, attention to Ostia was a matter of common-sense policy which needed no personal prejudice to stimulate it.

The excavations confirm to a certain degree what historical probability would lead us to expect. The Grandi Horrea, which had already been reconstructed to provide greater capacity for the storage of corn, seem to have been further enlarged on their northern side at this time; and the Piccolo Mercato was extensively repaired. More important was a large semicircular 'emporium' by the Tiber, west of the excavated area. It was partly uncovered towards the end of the eighteenth century and is marked on maps of the early nineteenth century. The brickwork can no longer be seen, but the fact that statue bases of the Severan dynasty were found here makes it probable that this utilitarian

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<sup>1</sup> MA 26 (1920) 369. <sup>2</sup> 114.
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³ Bloch, Topografia, 221 (ii. 7. 2).

⁴ NS 1921, 381. 5 p. 549.