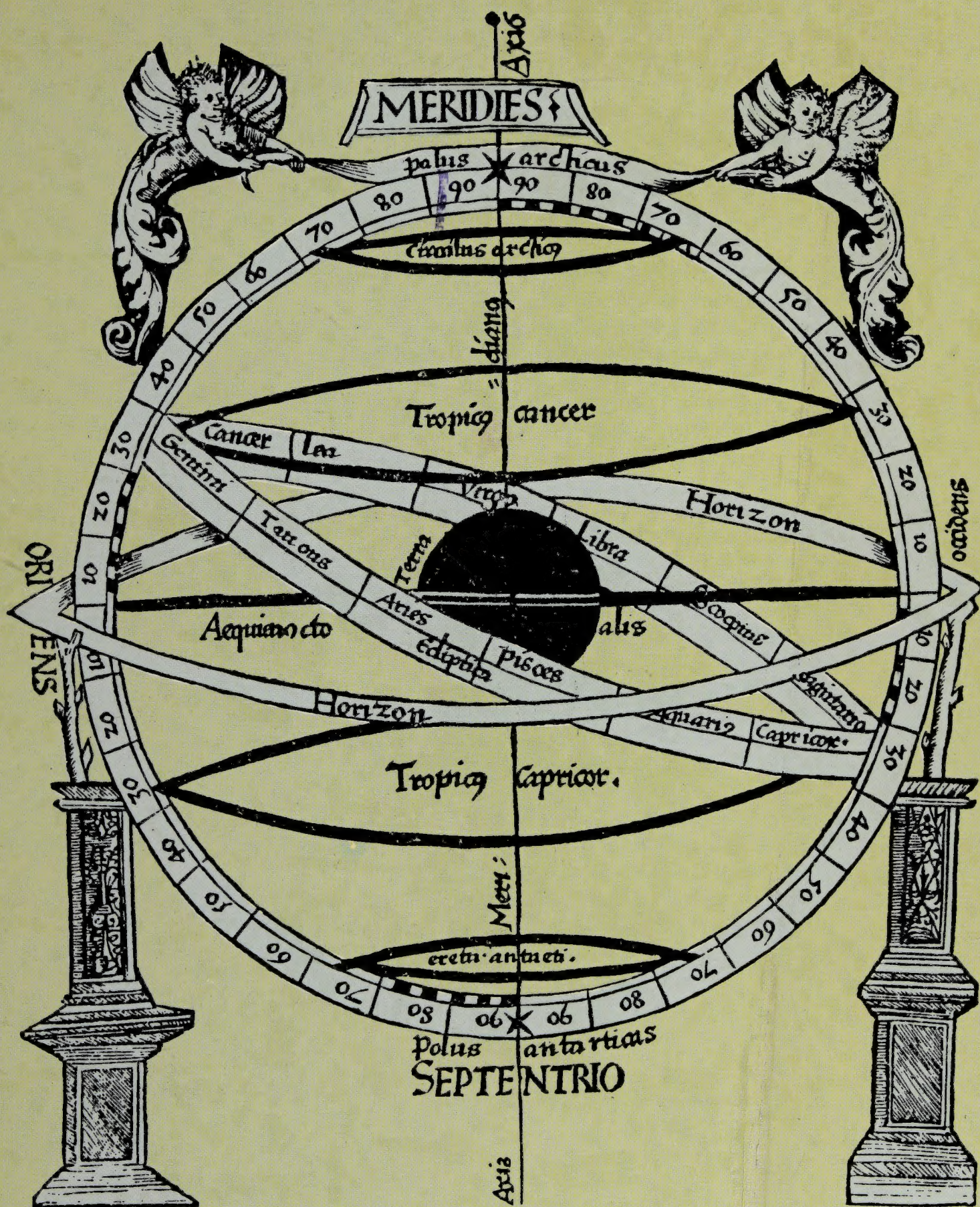




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THE GEOGRAPHY

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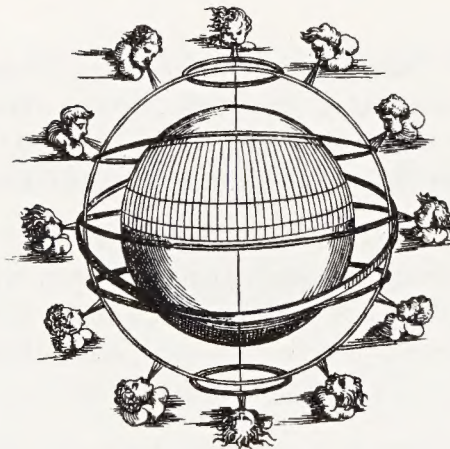
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CLAUDIUS PTOLEMY

THE GEOGRAPHY

TRANSLATED AND EDITED BY
EDWARD LUTHER STEVENSON

WITH AN INTRODUCTION BY
PROF. JOSEPH FISCHER, S.J.



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GEORGE F. BAKER JR.
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WHOSE GENEROUS INTEREST
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TABLE OF CONTENTS



PREFACE	xiii
INTRODUCTION	3
DEDICATION OF DONNUS NICHOLAUS GERMANUS	19

BOOKS AND CHAPTERS

BOOK ONE	25
The First Book contains the following:	
1. In what Geography differs from Chorography	25
2. What presuppositions are to be made use of in Geography	26
3. How, from measuring the stadia of any given distance, although not on the same meridian, it may be determined how many stadia there are in the circumference of the earth, and vice versa	27
4. Observed phenomena should be preferred to those derived from the accounts of travelers	28
5. Attention must be paid to the latest researches because the earth, in the course of time, undergoes change	28
6. Concerning the geographical narrations of Marinus	29
7. The opinions of Marinus relating to the latitudes of the earth are corrected by the observed phenomena	29
8. They are also corrected by measuring journeys on land	30
9. They are also corrected by measuring journeys on water	31
10. Ethiopia should not be placed more to the south than the circular parallel which is opposite the parallel passing through Meroe	32
11. The errors of Marinus in calculating the extent of the habitable earth	32
12. The calculation of the longitude of the earth corrected by land journeys	33
13. The same calculation of longitude corrected by sea journeys	34
14. Concerning the voyage from the Golden Chersonesus to Cattigara	35
15. Concerning the things in which Marinus disagrees with us	36
16. In fixing the boundaries of provinces Marinus has made some mistakes	37
17. Wherein Marinus dissents from the findings made in our time	37
18. Of the inconvenience of the method of Marinus for delineating the habitable earth	38
19. Of the convenience of our method of delineating the whole earth	39
20. Of the lack of symmetry in the picture drawn by Marinus	39
21. What must be done should one desire to delineate the earth in one plane	40
22. How the habitable earth should be shown on a sphere	40
23. Explanation of the meridians and parallels used in our delineation	41
24. How the habitable earth can be shown in a plane map so that its measurements are in keeping with its spherical shape	42

TABLE OF CONTENTS

BOOK TWO — EUROPE (MAPS I-V) 47

The Second Book contains the following: A prologue of the particular descriptions, and a description of the western part of Europe including the several provinces and prefectures which are contained therein.

1. Hibernia island of Britannia	48
2. Albion island of Britannia	49
3. Hispanic Baetica	51
4. Hispanic Lusitania	52
5. Hispanic Tarraconensis	53
6. Aquitanian Gaul	58
7. Lugdunensian Gaul	59
8. Belgic Gaul	60
9. Narbonensian Gaul	61
10. Greater Germania	62
11. Raetia and Vindelica	65
12. Noricum	66
13. Upper Pannonia	66
14. Lower Pannonia	67
15. Illyria or Liburnia and Dalmatia	68

BOOK THREE — EUROPE (MAPS VI-X) 71

The following descriptions are contained in Book Three: The provinces and prefectures found in that part of Europe which lies toward the east are described herein.

1. All Italy	71
2. Corsica island	76
3. Sardinia island	76
4. Sicily island	77
5. Sarmatian Europe	79
6. Tauric peninsula	80
7. Iazyges Metanastae	81
8. Dacia	81
9. Upper Moesia	82
10. Lower Moesia	83
11. Thracia and the Peninsula	84
12. Macedonia	85
13. Epirus	88
14. Achaia	88
15. Crete island	92

TABLE OF CONTENTS

BOOK FOUR — AFRICA (MAPS I–IV) 93

The Fourth Book contains the following descriptions: A description of entire Libya following in order the provinces or prefectures.

1. Mauritania Tingitana	93
2. Mauritania Caesariensis	94
3. Numidia. Africa	96
4. Cyrenaica	99
5. Marmarica, which is properly called Libya. Entire Egypt both Lower and Upper	100
6. Libya Interior	104
7. Ethiopia which is below Egypt	107
8. Ethiopia which is in the interior below this	109

BOOK FIVE — ASIA (MAPS I–IV) 111

The following descriptions are contained in Book Five: Description of the first part of Greater Asia.

1. Pontus and Bithynia	111
2. Asia which is properly so called	112
3. Lycia	114
4. Galatia	115
5. Pamphylia	116
6. Cappadocia	117
7. Cilicia	119
8. Asiatic Sarmatia	120
9. Colchis	122
10. Iberia	122
11. Albania	122
12. Greater Armenia	123
13. Cyprus island	125
14. Syria	125
15. Palestina	128
16. Arabia Petraea	128
17. Mesopotamia	129
18. Arabia Deserta	130
19. Babylonia	131

BOOK SIX — ASIA (MAPS V–IX) 133

The following descriptions are contained in Book Six: Description of the regions in Asia Major.

1. Assyria	133
2. Media	134

TABLE OF CONTENTS

BOOK SIX — *Continued*

3. Susiana	135
4. Persia	136
5. Parthia	136
6. Carmania Deserta	137
7. Arabia Felix	137
8. Carmania	140
9. Hyrcania	141
10. Margiana	142
11. Bactriana	142
12. Sogdiana	143
13. Sacara	143
14. Scythia this side the Imaus mountains	144
15. Scythia beyond the Imaus mountains	145
16. Serica	145
17. Aria	146
18. Paropanisades	147
19. Drangiana	147
20. Arachosia	147
21. Gedrosia	148

BOOK SEVEN — ASIA (MAPS X–XII) 149

Book Seven contains the following: Description of the remote parts of Greater Asia according to the provinces and prefectures.

1. India this side of the Ganges	149
2. India beyond the Ganges	155
3. Location of Sinae	157
4. Island of Taprobana and those islands which surround it	158
5. Descriptive summary of the maps of the world	159
6. Description of the Armillary Sphere in which is represented the inhabited earth	161
7. Epilogue to the foregoing	162

BOOK EIGHT 165

Book Eight contains the following:

1. What presuppositions are necessary in making a division of our habitable earth in the maps	165
2. What adaptations must be made in each map	166
Table of maps reproduced	167

Preface

PREFACE

CLAUDIUS PTOLEMY (ca. 90–168 A.D.) holds a place among the foremost of those who have made contributions to the science of geography. It is not a little surprising that there has never appeared a complete English, German, or French translation of his work in this field, often as his name is to be met with in the literature which treats of the expansion of geographical knowledge and the cartographical records of the same.

In his *Introduction* Professor Fischer has called attention to the lack of a thoroughly satisfactory edition of Ptolemy's Geography, and in the preparation of this translation based upon the generally recognized best Latin and Greek texts, and, it may be further noted, upon the critical texts and studies of Wilberg and Müller, this puzzling fact stands in the forefront of the difficulties with which it has been necessary to contend. No one edition is alone a safe guide.

There are doubtless imperfections in the translation; it, however, has been done with great care and labor. That there is a lack of exact agreement with this or that text will be noted by those who critically examine the translation. With very few exceptions geographical names have been given as in the original Greek or Latin texts. Occasionally the modern English word has been preferred. The intention has been to give that reading which, in the translator's best judgment, is a faithful presentation of what Ptolemy intended to set down in his great work. As close an adherence to the original as possible has been the aim, never overlooking the fact that not a few of his sentences, particularly in Book I and also in Book VII, are considerably involved. It has been stated that this fact may have contributed much to deter readers from a critical study of his Geography, particularly of his Book I, but which, of course, must be read to be able to understand the remaining seven.

It is in the field of mathematical geography that Ptolemy's fame as a geographer especially rests, into which field he was led through his interest in mathematical and astronomical studies. Herein, it may be stated, his was the most considerable attempt to place the study of geography on a scientific basis, giving to him, therefore, first place among the ancient writers on the subject. Perhaps it is the completeness of his system, as has been noted, that especially contributed to that end. There is in it the appearance of a finality, a complete summing up of what had been contributed by those who had preceded him — by Hipparchus, by Eratosthenes, and especially by Marinus. His work is indeed the main foundation of our geographical knowledge of the classical day. "The whole of modern cartography has developed from his Atlas."

He made but little contribution to descriptive geography, noting, as he does, the imperfect character of his own information concerning many parts of the earth, chiefly because of their size and their remoteness, and the difficulty with which one is confronted in an effort to discriminate between statements made by

geographers who had preceded him, and between statements also to be found in itinerary records, in the records of travelers and explorers.

Marinus (ca. 70–130 A.D.) appears to have been regarded his most reliable source and inspiration, whom he praises for his diligence and sound judgment, and whom he seems to have followed closely; yet he points out his many defects.

In chapters six to twenty of Book I we find his principal references to this noted Tyrian, his close contemporary, and it is from Ptolemy alone we have practically our only information concerning that great geographer.

Ptolemy considered it as his chief task *to reform the map* of the inhabited earth; perhaps we may well say *the maps*, considering, as he did, that the only trustworthy method in map-making had its basis in the determination of the latitude and longitude of places.

Professor Fischer, as will be noted, has presented a most admirable summary of Ptolemy's assumed task as a geographer, his methods and achievements, his relation to Marinus and to certain others who were his predecessors in this particular field, to the relation of text and maps in his Geography, to the renaissance of Ptolemy's Geography more than a millennium after his day, in which revival Donnus Nicolaus Germanus was a great leader.

In his Books II–VII he lists more than eight thousand localities, giving what he thought to be the correct latitude and longitude of each, in which, of course there are numerous errors, as we know to-day. The remarkable fact, however, is that he was so nearly accurate in his records; that Ptolemy purposely falsified his records is hardly to be entertained for a moment.

It would be a task of years to carry through to completion a comparative study of the geographical information which we find set down in the various manuscript and printed editions of his work.

Since the issue of the first printed edition of Ptolemy's Geography more than fifty editions have appeared, varying greatly in contents and in value; in some of these the text is incomplete, and in many the maps do not appear.

Good editions of Ptolemy are regarded as items of great interest by those libraries and private collectors so fortunate as to possess copies.

More than forty manuscript copies of the geography are known, and here again there is great variation in the status. The number of those copies which can be considered fairly complete is not large; many are but fragments. The fine existing manuscript copies are in both Latin and Greek, the former dating from the Renaissance period or from the early fifteenth century, the latter as early as the eleventh century, and are the oldest ones known. Of his Geography in Arabic there is a fine copy in Constantinople dating from about the middle of the fifteenth century, and there are a few fragmentary copies extant.

In Europe during recent years a very considerable amount of scholarly research activity has been turned to an investigation of the character and influence of Ptolemy's Geography. Prominent among those who have labored diligently within this field may be named my very good friend Professor Fischer, Paul Dinse,

Gudmund Schütte, Otto Cuntz, Carl Müller, Curtius Fischer, Lauri O. Th. Tudeer, and there are yet others.

It perhaps first would be observed by one who critically examines his maps, that in what were remote regions his most striking errors are to be noted. Important and lengthy lists of errors have been well referred to by certain Ptolemy students; that is, to certain coasts, for example, set down as rivers, to the names of certain mountains given as those of tribes, to a number of actually mistaken names, to certain names doubled or trebled, to the addition of an initial letter to certain names. One can easily become confused in an attempt to search out what we may call the correct spelling of very many of the names as set down in the various editions of his Geography. No special attempt, in this translation, has been made to pass upon the relative merit of the variations; it indeed will be found that many of the names recorded in the text do not exactly agree with the Ebner manuscript map records. That has been selected which, as before noted, has seemed to the translator to be the preferable one. Here again the reader may be referred to such critical studies as those of Wilberg and Müller and to the studies of a number of modern investigators of high rank.

A reference may well be made to his recorded length and breadth of the inhabited earth. He seems to have been the first to give to the terms *length* and *breadth* the designation *longitude* and *latitude*. He greatly exaggerated the total longitude of the inhabited earth, and yet he reduced this from that given by Marinus and by others who had preceded him. He increased by almost one third the length of the Mediterranean; he makes the Indian Ocean an enclosed sea by joining the southeastern region of Asia to southern Africa, and by those who accepted his geography this might well have been the reason for less vigorous and less early effort to reach the Indies of the East by an attempt to circumnavigate Africa; he increased very greatly the size of the island Ceylon (Taprobana). Yet who is there who will not be remarkably impressed with the near approach to accuracy of his records, in the main, not forgetting the time in which he lived? Let the concluding paragraph of Professor Fischer's *Introduction* here be read.

To this translation there has been added, in full size reproduction, the twenty-seven maps of the *Codex Ebnerianus* now belonging to The New York Public Library, to the very remarkable importance of which manuscript attention has been called. Two other maps have been added: the Ruysch Map in the 1508 printed edition of Ptolemy's Geography, and the New World Map in the 1522 printed edition, having the name "America" conspicuously appearing across what we now call South America, where Waldseemüller, in his great World Map of 1507, had placed it.

The *Codex Ebnerianus* is a copy of the Geography prepared by Donnus Nicolaus Germanus, great indeed as a geographical editor and copyist, the maps in this manuscript being largely taken as a basis for the earliest printed editions. (Mention may be made here of the study of "Donnus Nicolaus Germanus, sein Kartennetz, seine Ptolemäus-Rezensionen und -Ausgaben . . . zur Erinnerung an die 450.

Wiederkehr des Ausgabejahres 1482 der Ulmer Ausgabe," by Wilhelm Bonacker and Dr. Ernst Anliker, in *Schweizerisches Gutenbergmuseum Zeitschrift für Buchdruck-, Bibliophilie- und Pressegeschichte*, Bern, 1932, Jahrg. 18, nos. 1-2.) Excepting the published reproduction of the *Codex Athous graecus* in 1867, but not of great value, the reproduction in connection with this English translation is the latest complete modern reproduction of Ptolemy's maps from a manuscript copy. (To the forthcoming issue of the *Codex Urbinas graecus* 82, Professor Fischer has called attention.)

It perhaps will not be without interest here to note that it has been my very great pleasure, but recently, to have issued, in a limited number of copies, a complete facsimile edition, photographed and hand colored, of one of the finest Donnus Nicolaus Germanus manuscripts of Ptolemy's Geography known. A typical renaissance dedication of a great scholar, that of Donnus Nicolaus [Nicholaus] to Duke Borso of Modena, his illustrious patron, as found in this edition, and written at a time when Ptolemy's Geography was approaching the period of its greatest influence, is presented with this translation as a second *Introduction* immediately preceding Book I.

It is the sincere hope that this first English translation of Claudius Ptolemy's Geography may find favor particularly with Ptolemy students, and lend some inspiration to those who seek pleasure and profit through a wider acquaintance with the great geographers of antiquity.

EDWARD LUTHER STEVENSON

Yonkers, N. Y., 1932

Introduction

INTRODUCTION



ON the occasion of his visit in Feldkirch I first heard from Dr. Edward Luther Stevenson that he purposed translating the text of Ptolemy's Geography into English. Since such a translation does not exist, either in English or in German, the information pleased me very much.

Of course I did not conceal from myself and my courageous and enterprising friend the difficulty of the task. A critical edition of the Greek text which would meet all justifiable demands has never yet appeared, nor is there any Latin, Italian or French translation extant that reproduces adequately the previously published Greek text. Dr. Stevenson knew all this; nevertheless he has taken upon himself the exceedingly meritorious labor of translating the eight books of Ptolemy's Geography into English. After much painstaking toil the work is at last successfully completed.

Since in the course of these years I have always testified to a lively interest in the translation, it did not come to me as something unexpected when Dr. Stevenson asked me several months ago to write an introduction to his successfully completed translation of the Geography.

The wish of a scholar so illustrious for his investigations in the field of historical geography and cartography, that I would write an introduction to his translation, I could all the more readily comply with, since my own comprehensive introduction to the great Vatican publication of Ptolemy: *Claudii Ptolemaei Geographiae Urbinas Codex graecus 82 phototypice depictus*, has at length appeared in fair proof. The title of this introduction reads: *Josephi Fischer S. J., Commentatio de Cl. Ptolemaei vita, operibus, influxu saeculari*. References to this Commentary are indicated in the following pages by the word *Commentatio*.

In a manner deserving gratitude Stevenson offers, in addition to the text, a reproduction of the Ptolemy maps, from the valuable *Codex Ebnerianus* of the Lenox Library collection in The New York Public Library. The choice of the *Codex Ebnerianus* is a very fortunate one, since this Codex furnishes the original copy for the maps in the important Roman editions of Ptolemy of the years 1478, 1490, 1507, and 1508, in which the Ptolemaic maps are reproduced more accurately than in most other editions: see *Jos. Fischer S. J., An important Ptolemy manuscript with maps, in The New York Public Library (United States Catholic Historical Society, Historical records and studies, New York, 1913, v. 6, part 2, p. 216-234)*, also *Commentatio*, p. 340-343.

That the maps essentially belong to the Geography of Ptolemy, and offer with essential accuracy the original Ptolemy maps, I have shown in the two treatises: *Ptolemäus und Agathodämon (Kaiserl. Akademie der Wissenschaften in Wien, Denkschriften, philos.-hist. Klasse, Wien, 1916, Bd. 59, Abhandl. 4, p. 71-93)*;

also *Ptolemäus als Kartograph* (*Geographische Bausteine, herausgegeben von Prof. Dr. Herm. Haack, Gotha, 1923, Heft 10, p. 113-129*), as also in the *Commentatio*, p. 104-171.

Since the *Commentatio* is not yet published, and since the most important question for the right understanding and the accurate translation of the text is the question of the maps, we will first try to determine from Ptolemy's own words whether he intended to add maps to the γεωγραφικὴ ὑφήγησις.

That Ptolemy himself wished to add maps to his "Guide to the drawing of the world map" is clear and evident from the often overlooked second sentence of the second chapter of Book I: Προκειμένου δ' ἐν τῷ παρόντι καταγράψαι τὴν καθ' ἡμᾶς οἰκουμένην σύμμετρον ὡς ἔνι μάλιστα τῇ κατ' ἀλήθειαν (But now as we propose to describe our habitable earth, and in order that the description may correspond as far as possible with the earth itself).

The choice of the word καταγράφειν, which Ptolemy always applied in the sense of representing graphically, or of drawing, as well as the exact designation of that which is to be represented (τὴν καθ' ἡμᾶς οἰκουμένην, "our inhabited earth"), and also the statement about the manner of the representation (σύμμετρον ὡς ἔνι μάλιστα τῇ κατ' ἀλήθειαν) with the utmost possible faithfulness of the real earth, prove incontestably that he regarded as his proper task the representation of our oekumene cartographically with the utmost possible accuracy.

How Ptolemy, toward the end of his life (about 150 A.D.), after the completion of his chief astronomical work, the *Almagest*, and of his great astrological work, the *Tetrabiblos*, in which he also treats important geographical questions (*Commentatio*, p. 33-56), came to devote himself to the cartographical representation of the habitable earth, this he himself tells us with all desired clearness in the sixth chapter of Book I.

After praising highly his contemporary Marinus (ca. 70-130 A.D.) who had devoted himself all his life with great zeal and good judgment to the revision of his world map (τῆς τοῦ γεωγραφικοῦ πίνακος διορθώσεως,) and after he had made in several editions (ἐκδόσεις πλείονες) the results of his comprehensive preliminary labors accessible to the contemporary world, Ptolemy continues as follows: "If the latest edition of the 'Emendation of the world map' of Marinus left nothing further to wish for, except that the map was missing, then we would be content to draw the map of the oekumene in accordance with the Commentaries of Marinus (ποιεῖσθαι τὴν τῆς οἰκουμένης καταγραφὴν) without adding anything else (μηδὲν τι περιεργαζομένοις)." Since, however, Marinus (1) has assumed some things without sufficient reason, and (2) has not with sufficient care seen to it that the drawing of the world map is (a) made easier, and (b) that it should be as nearly accurate as possible, then apart from the main task, namely, the drawing of the map, two subordinate problems are to be solved in order to make the work of Marinus more nearly perfect (εὐλογώτερον) and more useful (εὐχρηστότερον).

The positive reference to the words of Ptolemy just cited, which in my study, *Ptolemäus und Agathodämon*, p. 71-93; *Separatabzug*, p. 1-25, I established still

more decisively, has found approval among those of my professional colleagues, who earlier had publicly espoused the opposite view. Thus Professor Theodore Schöne, whose excellent study: *Gradnetze des Ptolemäus*, in the first book of his Geography (*Chemnitzer Gymnasialprogram*, 1909) is often quoted, wrote me, February 10, 1917, "that Ptolemy proposed drawing a map of the oekumene is so evidently stated in I, 6, 2, that I do not quite understand how, under Berger's influence, I was able to doubt it. The map, of course, was not to serve merely for his private use, but was to be a contribution to the work as had been the case with Marinus. The study of your work will, I think, induce other doubters also to consult I, 6, and this passage joined with your other reasons, surely will produce universal conviction." (*Commentatio*, p. 119, note 1.)

The fact that *Hugo Berger*, *Geschichte der wissenschaftlichen Erdkunde der Griechen*, 2. Auflage, Leipzig, 1903, and some of his pupils believed that they must contest the Ptolemaic authorship of the maps transmitted with the text, has its chief support in the Agathodämon legend. Literally this runs: ἐκ τῶν κλαυδίου πτολεμαίου γεωγραφικῶν βιβλίων ὅτι τὴν οἰκουμένην πᾶσαν ἀγαθὸς δαίμων ἀλεξάνδρῳ μηχανικὸς ὑπετύπωσε (*Urb. graec.* 82, p. 110, v. 2, 47-52); in other manuscripts, as for example in the Greek Codex 1401 in the Bibliothèque Nationale, Paris, we find ὑπετύπωσε instead of ὑπετύπωσε. This legend is found both in the A- and the B-redaction, that is, both in the Ptolemy manuscripts which, besides the map of the world, exhibit twenty-six provincial maps, and in those which besides the map of the world, present sixty-four small provincial maps and sometimes in addition four general maps. As to the various Ptolemy redactions, see: *Joseph Fischer*, *Die handschriftliche Ueberlieferung der Ptolemäus-Karten* (*Verhandlungen des achtzehnten Deutschen Geographentages zu Innsbruck*, Berlin, 1912, p. 224-230) of which a condensed summary is given in *Petermanns geographische Mitteilungen*, August, 1912, p. 61-63; also *Ptolemäus und Agathodämon*, p. 81-89; *Commentatio*, p. 105, and p. 209-213; *Der Codex Burneyanus graecus 111* in the *Festschrift: 75 Jahre Stella Matutina*, Feldkirch, 1931, v. 1, p. 151-159, and in the same work the further bibliographical references on p. 152, notes 1-4. The legend is found, as said, in *Codex Urbinas graecus* 82, at the end of Supplements, which refers to a world map that differs in many respects from the world map of Ptolemy. Since these Supplements have been accredited by certain students to Ptolemy himself (see Nobbe, in his critical edition of the text of Ptolemy: *Claudii Ptolemaei Geographia*, Lipsiae, 1913, v. 2, p. 176-190, 255-264), it is not to be wondered at that they did not recognize, without looking into the manuscript copies of the tradition, that they had ascribed to Ptolemy what did not belong to him (the Supplements), and had denied to him what is incontestably to be acknowledged as his, i. e. the maps, except the map of the world.

It is a strange caprice of fate that just that map of the world which one so often sees copied as Ptolemy's map of the world does not go back to Ptolemy. That it does not show the modified spherical projection which, according to Ptolemy's plain words (at the end of the last chapter of Book I), was certainly to

be expected, but the simple conical projection, Schöne has already correctly noted and for this reason has justly denied that Ptolemy could be regarded as the originator of the world map.

In the meantime Professor Dr. Adolf Deissmann has succeeded in finding in the Serail Library of Constantinople, a Ptolemaic manuscript in Greek which gives the world map in the modified spherical projection as used by Ptolemy. Professor Deissmann kindly placed at my disposal text and maps of this manuscript in photographic reproduction. It was my first impression that I had before me the genuine world map of Ptolemy, but I was soon convinced that although the projection is that of Ptolemy the contents of the map do not correspond at all to Ptolemy's data as they are found in the last three chapters of Book VII, but have been greatly modified by the additions of Agathodämon (*Commentatio*, p. 515–521). In the final results of my earlier investigations nothing therefore is changed by the new discovery; the twenty-six provincial maps of the A-redaction, and the sixty-four small provincial maps of the B-redaction go back to Ptolemy, but the world map, essentially the same in both the A-redaction and the B-redaction, is to be accredited to the Alexandrian geographer Agathodämon.

When Professor Dr. Albert Herrmann, in his treatise: *Marinus, Ptolemäus und ihre Karten* (*Zeitschrift der Gesellschaft für Erdkunde, Berlin*, 1914, p. 780–787; *Sonderabdruck*, p. 1–7), and *Die Seidenstrassen von China nach dem Römischen Reich* (*Mitteilungen der Geographischen Gesellschaft, Wien*, 1915, p. 472–500), tried to furnish evidence that Ptolemy did not need to draw any maps since Marinus added to his first edition maps which would have essentially met the demands even of his latest edition of the text, he doubtless recognized that Marinus added maps to his first editions of the *Emendation of the world map*. That this, however, would have met the demands of his latest text edition, or even the text of Marinus as revised by Ptolemy, seems to me as absolutely untenable. So far, primarily, as the projection is concerned, it plainly appears from the twentieth chapter of Book I, that the distorting projection of Marinus does not satisfy Ptolemy at all. Furthermore, while Marinus assigned, though only rarely, an exact position to the individual cities, mountains, and other topographical objects, Ptolemy demanded that in all cases a determination as nearly exact as possible of the latitude and longitude be added.

As a matter of fact, Ptolemy, in Books II–VII, has listed some 8,000 locations determined with apparent accuracy down to five minutes. That these were copied from an extant map is obvious to anyone who takes the pains to compare the text and maps in the English edition by Stevenson. It is clear that the version based on the earlier Marinus maps and the latest Marinus text, in which the world map, outlined in uniform scale of measurement, was lacking, provides no compensation for the loss of the map; and this in fact is expressly emphasized by Ptolemy. Only in the case of the seaports, and in the case of a few inland cities, did Marinus, in the latest edition of his *Emendation of the world map*, furnish, in fairly practical details of position, a statement either of longitude or latitude. In most cases, how-

INTRODUCTION

ever, he gave information about neither longitude nor latitude. It is self-evident that if the maps of Marinus had sufficed for the text of the latest edition, then not so many scholars would have endeavored, but in vain, to make amends for the missing map by supplying an adequate new one. Even Ptolemy himself could not in that case have said, as he did say, that he would complete the latest edition of Marinus by the restoration of the missing map; rather he would have been compelled to say that Marinus had undervalued his own life work since he expressed regret that it had not been possible for him to add such a map also to his latest edition; the earlier map was entirely sufficient. *That* Ptolemy neither thought nor said. For him the restoration of the missing world map was considered the main task. That the maps added to the earlier Marinus editions, however, rendered him (Ptolemy) essential service is obvious, and, as it seems to me, can still be proved.

Ptolemy wanted to restore completely, not only a map which would correspond, as far as possible, to the existing text of the latest edition of Marinus, but he wanted also to furnish an improved Marinus map altogether according to the ideas of Marinus himself. In order to attain this end and secure it for the future, he had to solve, in addition to his main problem, two secondary problems. He had (1) to submit the collected material to a reëxamination, and (2) to perfect the map-drawing (a) by an exact and tabular presentation on one plane, not on eight or more, and together the positions in longitude and latitude of that which was to be entered, and (b) by determining a proper kind of projection. How Ptolemy solved these secondary problems we learn from chapters six to twenty-four of Book I, and in detail in Books II–VII.

Since the Greek text, in many passages, is very difficult to understand, and since the Latin and Italian translations, as already remarked, frequently do not agree, and this statement also applies to the unfinished French translation of Halma, we welcome the fact that the English translation of Dr. Stevenson makes it easy for us to follow the arguments of Ptolemy.

In the first place, Ptolemy, in conformity with his plan, deals with the mistakes of which Marinus was guilty in collecting the material. These relate:

(1) to the exaggerated extension of the inhabited earth in longitude and latitude. Instead of eighty-seven degrees of latitude of Marinus, Ptolemy gets by computation eighty degrees, and instead of the two hundred and twenty-five degrees of longitude there are only one hundred and eighty degrees (*I, 6–15; Commentatio, p. 65–79*).

(2) to the definite location of cities especially, concerning which Marinus in his numerous commentaries made adjustment according to the most divergent points of view, and frequently has made either no statement at all or only contradictory ones (*I, 18, 5*). In my *Commentatio* I have attempted to fix the subdivisions of Marinus' latest work according to the statements of Ptolemy. In doing this it appeared that, in order to find as nearly exact as possible the definite location of a place, at least eight different sections of Marinus would have to be consulted (*Commentatio, p. 80–85*).

(3) to the determination of the several territorial boundaries (I, 16).

Before Ptolemy passes to his second task, or problem, he calls attention to a few more recent discoveries of which Marinus was ignorant. Chapter seventeen is devoted to these discoveries (*Commentatio*, p. 85-89). The rectification of many erroneous positions of Marinus, Ptolemy undertook in Books II-VII without mentioning Marinus. The second subordinate task, which concerns itself with the most faithful possible drawing of the world map, is introduced by a repetition of the words of his plan: Λοιπὸν δ' ἂν εἴη τὰ κατὰ τὴν ἔφοδον τῆς καταγραφῆς ἐπισκέψασθαι (*Reliquum autem erit, ut qua ratione delineanda tabula sit consideremus*, I, 18, 1).

Since the inhabited earth can be represented on a globe or on a plane surface we have to consider two points in the guide to the drawing and in the drawing itself, one general and the other special. Whether the representation of the earth is to be made on a globe or on a plane, there must be in either case earnest endeavor to present in understandable form the cartographical material that is to be inserted.

The absolute necessity of a handy form of presentation of the material Ptolemy justifies under a twofold presupposition; maps either are found with the text or without. If maps are offered they have to be copied and in that process mistakes creep in unobserved, and these mistakes increase to such an extent in additional copyings that the original is scarcely to be recognized. What is to be done in such a case? Well, we go back to the original map or to a carefully made copy. But what if such can not be found? Then surely there is nothing that can be done if the material has not been offered in usable form. Most of those who have undertaken to draft the missing map of Marinus have tried to solve the problem out of Marinus' text. In most instances, in this attempt, they have failed to get the correct determination of position because Marinus did not present the data in a practical form; in one passage the longitude of a place is given, in another the latitude, and in very many instances both of these details are lacking or are contradictory (I, 18, 4).

That under such circumstances the drafting or revision of a map is impossible is self-evident. The material must be so offered that it can be practically treated and for each entry an exactly determined position must be given. When that is the case we can surely draft a map anew, and correct it where it is at fault. This secondary task Ptolemy has performed in Books II-VII. How one could conclude, however, from the performance of this task that Ptolemy repudiated his main task and added no maps to his work, is to me incomprehensible. The most convenient and most reliable means of emending a map perhaps corrupted by copying, he would thereby have sacrificed at the outset. Neither is such a change of his main purpose made more probable by saying that Ptolemy as an astronomer was accustomed to mere tabular lists, since, as we know, the astronomers of antiquity, just as do the astronomers of our day, made use of celestial globes and stellar maps. Reference to mere astronomical tables is, in our present case, all the more futile, inasmuch as Ptolemy himself made use on the one hand of the

INTRODUCTION

celestial globe of Hipparchus (*Ptolemaeus, Syntaxis Mathematica, Book VII, chapter 1, ed. Heiberg, Lipsiae, 1898, v. 1, part 2, p. 11 seq.; Ptolemaeus, Handbuch der Astronomie, tr. Manitius, Leipzig, 1912, v. 2, p. 11 seq.*), and on the other hand assumed that the geographer had a celestial globe accessible. Concerning the globe question consult: *Dr. Alois Schlachter und Dr. Friedrich Gisinger, Der Globus in der Antike (Stoicheia, Berlin, 1927, Heft 8, p. 7-39, 48-58)*. For the sake of certainty Ptolemy demands both, namely maps and convenient text (*Commentatio, p. 130-158; Fischer, Ptolemäus und Agathodämon, p. 78-84*).

In what manner the systematic Ptolemy would offer the improved and additional material of which use can be made he tells us in chapter nineteen of Book I: "In the case of all the provinces we have given their boundaries according to longitude and latitude; for the more important nations their positions relative to each other, in the case of the most important cities, rivers, bays, mountains and similar objects the exact positions." To these details concerning provinces, be it said by the way, the sixty-four small provincial maps of the B-redaction correspond (*Jos. Fischer, Der Codex Burneyanus 111, p. 151-157*), and they have been added in immediate connection with the text in Books II-VII.

By means of the word ἰδιόζων (special) put conspicuously at the top, Ptolemy calls attention to the contrast with the word formerly used by him: κοινόν (general). In general the requirement is that, for the drafting either on a globe or on a plane, the cartographical material must be presented in a handy way. Drawing upon a globe has its peculiar difficulties as has also drawing in a plane its special problems. Since the drawing upon a globe offers in itself a similarity with the shape of the earth, no device of art is necessary for that. The drawing upon a globe has, however, its disadvantages. One can not insert everything which a world map ought to present and can not see at one glance the entire map. These difficulties do not obtain in drawing upon a flat surface, but others in turn appear which must be overcome. Angles and surfaces must be indicated as faithfully as possible. The projection selected by Marinus in which only the parallel of Rhodes is divided in a right relation to the meridian-circle is in no respect suitable; probably the genuine spherical projection invented by Ptolemy is the most usable, and particularly the special modified spherical projection recommended by him, in which the curved parallel, and, except the middle one, the likewise curved meridians display the system of degrees on the globe. In this projection also the faithfulness of representation is best secured. Characteristic of Ptolemy's way of working, is the concluding sentence of the last chapter of Book I, in which he selects for himself the better, even if more difficult, modified spherical projection.

How Ptolemy proceeded in his labors, he himself has told us in the nineteenth chapter of Book I, by designating his chief problem as "a twofold task." He does this with perfect justice, since he wants to furnish a revised collection of material for a Marinus map that has to be outlined, and also himself to insert into the map the corrected material. The restoration of the missing Marinus map Ptolemy tried to accomplish, (1) by making a critical comparison of the materials

offered in various places by Marinus, and then, (2) by checking up the reports of those who had visited the localities in question, and the details inserted in accurately drawn maps. Notice by the way, that we learn from this last assertion how high Ptolemy rated the maps. That among the maps he used, first of all those of Marinus are to be understood, which is assuredly a reasonable hypothesis and, as we shall see later, can be proved even to-day. If according to the data just quoted, we observed the systematizer and cartographer Ptolemy at his work, we see that he had maps before him, especially the world map of Marinus in its several sections, and how he compared them with statements in the latest text of Marinus, and corrected the points of disagreement in accordance with Marinus' latest statements.

But Ptolemy was not satisfied even with that. What had been gathered from Marinus was now compared with the latest reports of investigators and with other exact maps and then corrected and inserted in the world map. Restoration of the text and of the map went hand in hand. That here a mistake might occasionally creep in, is easily seen and is shown by myself in the *Commentatio* in many concrete instances (*p.* 136-163). Here let me call attention only to one example. In the eleventh map of Asia five cities are entered which are not mentioned at all in the corresponding text. On the other hand in the description in the text of the tenth map of Asia these five cities are mentioned in three different places, but in the corresponding tenth map not a single one is entered, although there is no lack of space (*Commentatio*, *p.* 135, 156). It is very remarkable that the consistency is found in the A-redaction but not in the B-redaction of the Geography of Ptolemy. As it seems to me, this circumstance bears witness that in the twenty-six provincial maps of the A-redaction we have before us the first revision of the general map or, let me say, of sections of the unified map of Marinus; but in the B-redaction we have a series of maps adjusted to a text intended for convenient use, and arranged, not according to countries, but according to provinces. In the *Codex Ebnerianus*, Donnus Nicolaus Germanus, who used the A- and B-redactions for his edition, noticed the error, and corrected it according to the B-redaction.

As in this point so also in a much more important respect Donnus Nicolaus has revised the maps of Ptolemy in the spirit of Ptolemy. Instead of the modified projection of Marinus, selected by Ptolemy for his territorial and provincial maps, in which only the middle parallel of the special map was divided in right proportions, Donnus Nicolaus (who is erroneously called Donis Nicolaus in the Ulm edition of Ptolemy of 1482) has on each map divided at least two parallels in right proportion. Thereby he has attained effectively the greater similarity striven after by Ptolemy, with a drawing upon the globe. The maps of the reproduced *Codex Ebnerianus* plainly show this. Since the "Donis Projection" introduced by Donnus Nicolaus Germanus became generally known (*Fischer, Die Entdeckungen der Normannen in Amerika, Freiburg, 1902, p. 82, Beilage 6; English edition, London, 1903, p. 79*) in the Rome editions of 1478, 1490, 1507, and 1508, the Ulm of 1482 and of 1486, the Strassburg of 1513, 1520, 1522, and 1525, it has long been considered as the actual Ptolemaic one, and later on, just

INTRODUCTION

this very projection has had to serve as proof that the maps of Ptolemy could not have originated with Ptolemy, since he assuredly would not have applied the "Donis Projection," but the modified Marinus projection.

We see by this example to what conclusions one is led, unless one goes back to the original source. If one had given but a casual glance at the Greek or the oldest Latin manuscripts, one would soon have been convinced that all the provincial maps of those manuscripts are actually drawn on the modified Marinus projection. In very recent times two works have appeared to which we must here allude, at least briefly. Professor Dr. Albert Herrmann, whom I have already mentioned, has tried to establish, in his study: *Marinus von Tyrus (Petermanns geographische Mitteilungen, Gotha, 1930, Ergänzungsheft 209, p. 45-54)*, in an extended and somewhat altered form, his view that the maps of Marinus would have sufficed. That Marinus, in spite of the explicit statement of Ptolemy to the contrary, added maps to his latest edition, and this, too, in the modified Marinus projection introduced by Ptolemy, is, I am convinced, untenable. To confirm this more exactly would lead us too far. Herrmann is very deserving of gratitude, however, for the two maps which he has appended to his investigations. The first might harmonize well with the conception of Marinus, as exemplified in his latest edition, but instead of the relatively few insertions (about 200) 7,000 of them or more were to be expected. How significant for the discovery of America was Marinus' idea that the earth extended beyond two hundred and twenty-five degrees of longitude is shown on the second map. This exhibits the network of Marinus. The middle parallel is that of Rhodes. As actual author of the map the learned Florentine, Paolo Toscanelli, is designated as "Marinus redivivus" with an appeal to the profound study of *Hermann Wagner, Die Rekonstruktion der Toscanelli-Karte vom Jahre 1474 (Nachrichten der Gesellschaft der Wissenschaften, phil.-hist. Klasse, Göttingen, 1894, Nr. 3, p. 236)*.

The second very recent work to appear has as its author Professor Dr. Ernst Honigmann, the title of whose work reads: *Marinus von Tyros, Geograph und Kartograph (Paulys Real-Encyclopädie, Neue Bearbeitung, Bd. 14, columns 1767-1795)*. Honigmann, too, has appended to his study (col. 1785) a reconstructed Marinus map. It is indeed interesting to note how different are the two reconstructed maps. That Honigmann gives all of the names and legends in the Greek language, while Herrmann renders them in Latin, is of less consequence. Incomparably more important is the difference in the contents offered. Thus in Honigmann no mountains are found, whereas the map of Herrmann exhibits an abundance of mountain ranges. But it is not our task here to explain in detail the two very different reconstructions. Much more important is the well established conclusion that Honigmann, relying upon the clear evidence of Ptolemy, emphasizes decidedly that Marinus added no maps to his latest edition of the *Emendation of the world map*.

But Honigmann, in spite of the purpose, expressed again and again clearly and distinctly by Ptolemy, of furnishing the missing Marinus map, and especially of

thus completing the unfinished work of Marinus, writes: "The numerous passages from which Fischer in his studies *Ptolemäus und Agathodämon*, as also in his *Ptolemäus als Kartograph* tries to prove that Ptolemy had added maps to his work, are evidence, after all, only of this, that he wished to furnish a guide to map-drawing, a fact which has never been questioned." (col. 1771, note.) In saying this he says what to me is incomprehensible. Involuntarily one asks one's self: was Ptolemy really so unintelligent as to write in Book I, 2, 2: "Since it is at present our task to draw our Oekumene with the utmost possible faithfulness of representation with the actual world," and then, instead of this, offered *only tables* according to which a map of the earth might be drawn? When, then, Honigmann continues: "To be sure he (Ptolemy) has also drawn maps, the only question concerning which is, whether he also published them with the Guide," then one can scarcely withhold the query: ought Ptolemy to have renounced the easiest and safest guide to the drawing of maps, and not also have given, at the same time, the maps already prepared? It would simply appear inexplicable that Ptolemy should again and again represent the drafting of maps as his main task, while the practical furnishing of the material and the invention of a suitable projection were but subordinate tasks, and yet in spite of that could cling so obstinately to the solution of the subordinate problems, that he quite forgot the completion of his main task (*Commentatio, Supplements*).

Ptolemy completed text and maps, and text and maps he published together. That any doubt whatever could arise over this is caused on the one hand by a wrong interpretation of the already mentioned Agathodämon legend (*Commentatio, p. 109-120*) and on the other hand, by ignorance of the textual tradition of Ptolemy's Geography. In all of the oldest and most authoritative Ptolemy manuscripts of the A-redaction and of the B-redaction, maps are still found or else reference is especially made in these manuscripts to the fact that maps had been found in the original copy. This last statement holds true especially of the *Codex Vaticanus graecus 191*, which Mommsen and Müller consider so important that its testimony outweighs for them that of all the other Codices (*Commentatio, p. 166-171, and Supplements*).

As proof that both text and maps were transmitted in the same way, we may here first of all name the important Greek manuscripts of the A-redaction: the *Codex Urbinas graecus 82*, the above-mentioned, but hitherto unknown *Codex Constantinopolitanus Seragliensis graecus 57*, the *Codex Athous graecus*, the *Codex Venetus Marcianus graecus 516*, as well as the *Fragmentum Fabricianum graecum*. Also the most important manuscripts of the B-redaction show maps; unfortunately they have not yet been published. The manuscripts of the B-redaction are divided into two groups. At the head of the older group, with sixty-five maps, stands the *Codex Florentinus Laurentianus graecus Plut. XXVIII, 49*; at the head of the later with sixty-nine maps (the four outline maps of Europe, Africa, North Asia, and South Asia are later additions), stands the *Codex Mediolanensis Ambrosianus, D 567 inf.* What was said of the Greek manuscripts holds

INTRODUCTION

also of the Latin manuscripts, especially of the two Florentines, Francesco di Lapaccino and Dominico di Boninsegni, and also of those of the Florentine Pietro del Massaio and Francesco Berlinghieri, and, further, of those of Donnus Nicolaus Germanus in his first redaction, to which belongs our *Codex Ebnerianus*. Concerning the question of manuscripts, see *Commentatio*, p. 208-415, and *Supplements*.

He who assumes that the text of Ptolemy goes back to Ptolemy himself must assume also, in accordance with the principles of a sound criticism, that the maps similarly transmitted also go back to Ptolemy. If we inquire more carefully about the relation between maps and text three interpretations are possible: (1) the maps might have been drawn according to Ptolemy's text; (2) the text might have been derived from the maps; (3) or both text and maps may show an independent transmission, so that the maps may represent the remodeled and completed Marinus maps, and the text the remodeled Marinus text. All three possibilities I have investigated thoroughly. In this investigation I came to the conclusion that the third possibility conforms to the truth (*Commentatio*, p. 136-158).

Still another legitimate objection is, however, to be met: if Ptolemy had actually added to his Geography the maps transmitted to us, then traces of them would necessarily be found in the literature of the ancient people. In my *Commentatio* I have treated in detail the question whether or not from the traditions of the subsequent time the existence of Ptolemy's maps can also be proved. The investigation revealed that the maps of Ptolemy exercised, for a long time, influence among the Greeks and Byzantines (*Agathodämon*, *Pappus*, *Marcian of Heraclea*); among the Syrians, Arabians and Armenians (*Jacobus of Edessa*, *al-Kindi*, *Muhammad ibn Musa al-Hwarizmi*, *Pseudo-Moses of Chorene*); among the Romans and the Germans (*Julius Africanus*, *Ammianus Marcellinus*, *Jacobus Angelus*, *Francesco di Lapacino*, *Domenico Buoninsegni*, *Donnus Nicolaus Germanus*, *Henricus Martellus Germanus*, *Martin Waldseemüller*); *Commentatio*, p. 417-490.

In conclusion a few more brief statements concerning the present condition of Ptolemaic investigations may perhaps be desired. Properly speaking, a biography of Ptolemy does not exist, and even the necessary preliminary labors for one are lacking. Neither is there as yet any complete critical edition of his works, such for example, as his Geography. The life-time of Ptolemy can be pretty accurately determined as extending from about 90 to 168 A.D. (*Commentatio*, p. 11-20.) The place of his scientific activity was certainly in Alexandria, but the place of his birth remains uncertain, even though weighty considerations speak for Ptolemais Hermeiu. The most usual assertion, making Pelusium his birthplace, rests upon a misunderstanding, for in Arabic the first name of Ptolemy, Claudius, is interpreted with "el Qeludī," but this can easily be read as "el Feludi." As a matter of fact Feludi or Pheludi was read and interpreted later as Pelusium (*Commentatio*, p. 20-25). If in the Middle Ages Ptolemy was often referred to as belonging to the royal family of the Ptolemies, and in the Ptolemy manuscripts

he is represented in royal costume with a crown and royal mantle, this is an error easily explained from the name Ptolemy. On the other hand our confidence is invited at the first glance by the portraiture of Ptolemy's personal appearance, which the Emir Abu'l-wafā gives, and which has been preserved for us in the Latin translation of Gerhard of Cremona in the foreword to the *Almagest* edition of 1515. We get there detailed information about the figure, the color of Ptolemy's skin (albus), the red spot on his right cheek (in maxilla dextra signum habens rubrum), his mouth (os parvum), his beard (spissa et nigra), and his teeth, as also about his habits (multum equitabat et parum comedebat) and personal characteristics (fortis irae, tarde sedebatur). Boll rightly remarks, in his studies upon Claudius Ptolemy (*Jahrbücher für classische Philologie, Leipzig, 1894, Supplementband 21, p. 58*), with reference to this description, that while it was not at first evident it was "a groundless invention of our Arabians," after an exact estimate of all the circumstances he is obliged to pronounce the description altogether unreliable (*Commentatio, p. 25-28*).

Of the outward appearance of Ptolemy, then, we know nothing, but of his spiritual nature, of his intellectual aspirations, and his self-chosen life task we obtain from himself much desirable information. He has declared his intentions in these matters in the foreword to his mathematical-astronomical work, the *Almagest*. There, along with other things, he says: "We have come to believe that it is our duty, on the one hand, to regulate our actions harmoniously in order that we ourselves, in the contingencies of daily life may never forget to pay regard to noble demeanor and tactful bearing; on the other hand to devote our entire strength to intellectual activity, for the purpose of imparting instruction in theoretical knowledge, whose branches are numerous and glorious; preëminently, however, to give instruction in that realm which is specifically comprehended under the name of Mathematics." (*Ptolemaeus, Syntaxis Mathematica, Book I, ed. Heiberg, Lipsiae, 1898, v. 1, p. 4 seq.; Ptolemaeus, Handbuch der Astronomie, tr. Manitius, Leipzig, 1912, v. 1, p. 1.*) As in the *Almagest*, so in a series of lesser astronomical writings, Ptolemy realized his goal in life (*Commentatio, p. 28-31*). Ptolemy, however, also applied his extraordinary systematizing talent to labor not strictly mathematical, such as astrology, optics, harmonics. Into these works one can not, of course, enter here.

Of all the works of Ptolemy, however, that holds true, *mutatis mutandis*, what P. Leander Schönberger O.S.B. says of his Harmonic: "There speaks out of his works a magnificent universal conception. . . In Ptolemy again is condensed as in a focal point the entire musical knowledge of Antiquity; and again from this point irradiates and illumines the musical lore of the Middle Ages." (*Schönberger, Studien zum ersten Buch der Harmonik des Cl. Ptolemäus, Beilage zum Mettener Jahresbericht, 1913-14, Augsburg, 1914, p. 111.*) In none of his works did Ptolemy content himself with a mere compilation, even if never so excellent. According to the best of his knowledge and ability he tried to promote further the solution of the scientific problem at hand. "To the sober thoughtfulness of

INTRODUCTION

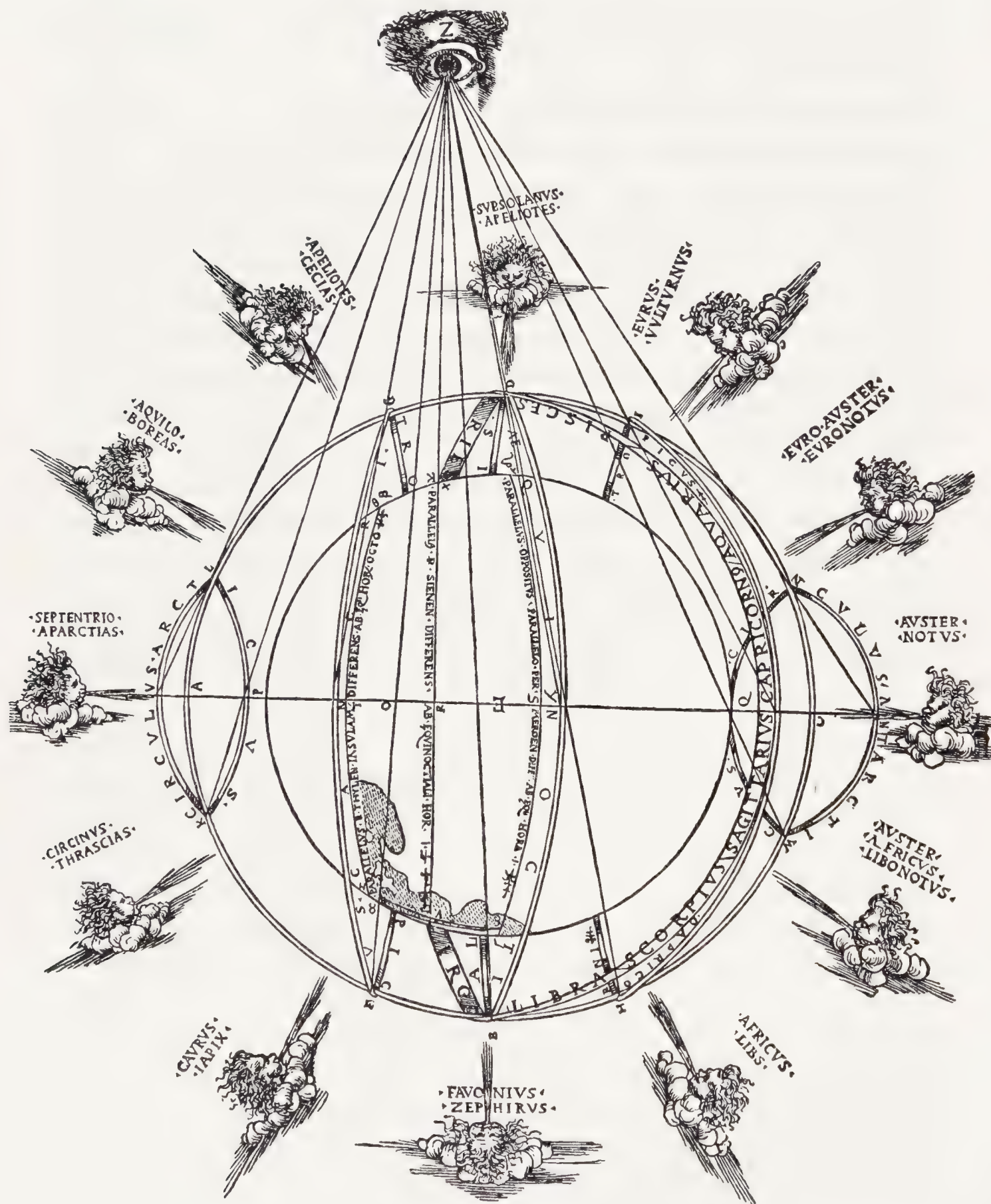
his vision corresponds throughout his calm and serene language." (*Boll, Studien*, p. 110.) The fundamental principles according to which he hopes he could effect some real progress he has constantly and exactly specified, and it is a task no less profitable than stimulating to search the individual works of Ptolemy, for answer to the following questions: What did Ptolemy find at hand? What did he change, omit, or add? For what reason did he do this? How have his changes been received and how are they to be estimated according to their true significance? (*Commentatio*, p. 31-32.)

By utilizing the accessible material I have tried to answer these questions in my *Commentatio* for the geographical (p. 56-90) and cartographical (p. 104-171, and p. 417-490) works of Ptolemy. The reëxamination, emendation and completion of these and similar researches has been extraordinarily facilitated especially for English scholars by Dr. Edward L. Stevenson's very welcome translation of the text of the Geography, and by his publication of a cartographical supplement, which has wielded so great an influence, as the *Codex Ebnerianus*.

If this favorable opportunity is zealously utilized, surely again and again will be confirmed what I have said in my *Commentatio*, p. 496, at the end of the section, on the long-continued influence of Ptolemy with the Germans: "If we wish to-day in retrospect to establish the history of a country or the destinies of a people of the ancient world, we shall always turn with very great profit to the maps and the text of Ptolemy. The location of places, the designation of the mountains and the rivers, the disposition of the tribes may propound to us many geographical and cartographical riddles, but there will be no lack of stimulus, and many a fortunate discovery will always reward serious occupation with the text, and especially, with the maps of Ptolemy."

JOS. FISCHER S. J. (*Feldkirch*)

SPHAERA IN PLANO



Dedication of Donnus Nicholas Germanus

THE DEDICATION OF DONNUS NICHOLAUS GERMANUS



To the Most Illustrious Prince and Lord

LORD BORSO, *Duke of Modena*



I AM not unaware, Most Illustrious Prince, that Ptolemy the Geographer depicted the earth with the greatest skill and the most thorough information, and that were we to attempt anything new in these studies, our work would incur the censure of many; for all those who examine this delineation of ours, contained in these maps, which we now send to You, especially if they are those who are ignorant of the art of geometry, and observe that it differs from that which Ptolemy set forth, will convict us forthwith either of ignorance or of rashness. They will affirm that we did not know our limitations, or that we were indiscreet in falsifying so great a work, as soon as they observe that we have altered it in the least particular. They will never be persuaded, nor will they think it other than impossible, if any one else should have a better method of depicting the earth, that that method had escaped the notice of such a great man as in truth was Ptolemy, for he alone, even including the many excellent geographers who flourished before him, first discerned a method by which he could represent the several localities of the entire earth in picture.

It would be much the same thing as to assert that neither the work of Homer, the prince of poets could be set in order by Pisistratus, or the divine work of Lucretius be emended by Cicero, or the paintings of Tolletana be corrected by Sepponius. Such persons are like those who will praise nothing that they do not think they can understand, since any method that they hope to understand and comprehend themselves they judge to be the best for representing the world.

If confused by the frequency of the lines of longitude, not equally distant one from the other, they might say they would the rather have that rare and vast picture of Ptolemy's set out in straight lines, than this our multiplex and elaborate picture with its inclined and curved lines.

And we do not now claim that there is anything to be found in the picture of Ptolemy that should be corrected or emended, or reduced to order, since all things were by him so skilfully and wisely represented, that nothing relating to the position of countries seems to be wanting in his maps; but we say this much that we may convict those men of their ignorance who, with or without knowledge of

such matters, are moved by a kind of envy and hatred on seeing anything set down that is beyond their comprehension, and immediately turn and abuse the author.

If those who are not altogether ignorant of geography or cosmography, and are in the habit of reading Ptolemy, will compare, with a calm mind, our picture with his, they will certainly think our picture worthy of some praise, instead of blaming it, for they will see that we undertook a hard and difficult task, and brought it to such an excellent conclusion, that they will be compelled to wonder at it, especially when they discover that we have in no particular departed from the intention of Ptolemy, although we have deviated a little from his picture.

Since Thou canst plainly see, O Most Illustrious Prince, how things are, I beseech Thee to give heed for a while to what Ptolemy says and to what we have done.

Ptolemy, as I soon learned from his writings, tells us that there is a twofold system of depicting the terrestrial sphere. The first, he asserts, is that in which instead of circles (I quote his words which are in the eighth book) we represent the meridians neither inclined nor curved but as straight perpendicular lines. The second, he says, is that in which we use everywhere curved and inclining lines, as the scheme of the places on the earth itself demands, and not straight lines.

Of the two methods he approves the second as somewhat more artistic and subtle, but in his picture he has followed the first method, if that picture be his which is to be found in old copies, and in which, it appears that anyone depicting the earth and making use of straight lines for circles, is not far from the truth. But we for our part, Most Illustrious Prince, when we were reading at our leisure his writings, which were not altogether foreign to our profession, and came upon the description somewhere in the first book near the end, wherein he says that we should regard what is done with care and with seriousness in a map rather than what is done too easily and too thoughtlessly; having read this, I say, we suddenly began to reflect by what means we ourselves might obtain some glory.

Believing that an opportunity was offered us whereby our powers might come to light by raising some monument to our industry, we immediately undertook the task of making a picture in the proper way, which would receive more general approval than previous pictures, even were he himself to be the judge.

Instead of circles we have made use of sloping lines, where they would seem to be required, that are not all equidistant (as he himself advises we should do) and the location of places falling between two parallels we have given in a reckoning from both. In order that one might make the more easily and accurately an estimate of the location of any place, which could not be clearly expressed by straight equidistant lines, we have not hesitated to express by means of parallels, in each of our pictures, the extent in miles of every degree whatsoever in longitude.

What shall I say further when in no copy of Greek or Latin text can be found a picture which tells us the size and shape of any island, or gives it proper description, or tells, in any region or province, how many and what kinds of peoples may be found, what towns, cities, rivers, harbors, lakes, and mountains, or under what place in the heavens they lie, or in what direction they face.

DEDICATION OF DONNUS NICHOLAUS GERMANUS

We have inserted certain of these things, but not all, yet all are given by Ptolemy himself in his writings; and we have distinguished boundaries by dotted lines, so that even an unpracticed eye can see them easily.

The size of the picture itself, which heretofore was too large and exceeded the common size of books, we have reduced, while carefully keeping the dimensions of all localities to a size that will make it more acceptable to those wishing to study it. The remaining work of that illustrious man we have left untouched, and it remains as it was at first.

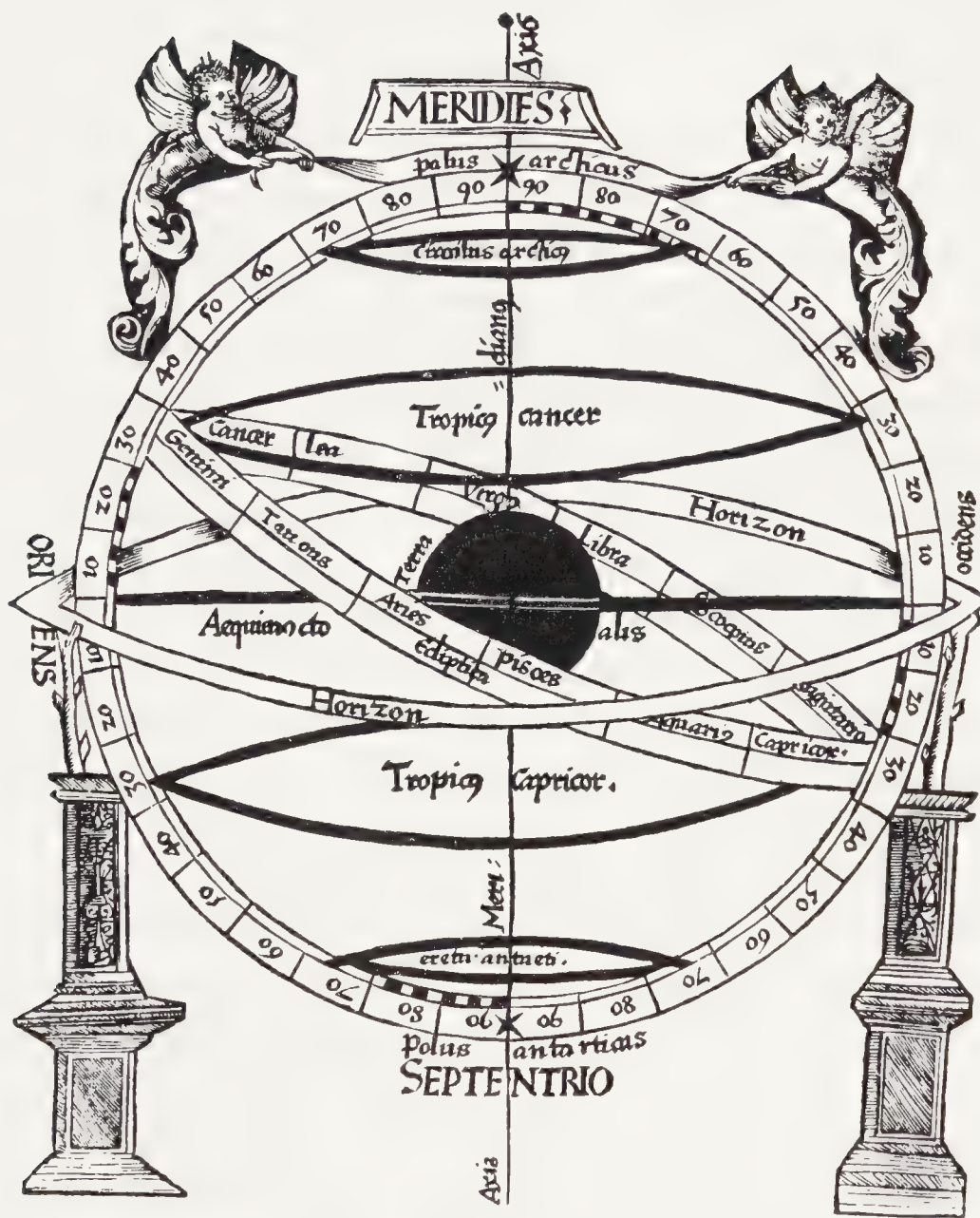
When, therefore, I had almost finished this work, and was thinking of some distinguished person to whom to dedicate it, no one truly seemed to us to be more worthy of this dedication than Yourself, for Thou art the only one, to speak the truth, of all the rulers of Italy, who is greatly delighted by such writings and pictures, and who has around him other learned men excelling in this art, and in many other arts; who can readily correct any mistake on our part, and at the same time can give commendation to what is rightly done.

Omitting other learned men dwelling in Thy city in these times, who is more skilled in mathematics than Johannes Blanchinus, or in physics than Peter the Good? Who is more learned in medicine than Sonzinus? Who is more subtle in dialectics and in philosophy than Brother Francis? Who is more skilled in civil and canon law than Franciscus Porcellinus? Who is more advanced in theology than Johannes Gattus, and at the same time more expert in Greek and Latin? Who, in fine, is more excellent in every kind of teaching than Hieronimus Castellanus? Time would fail me, O Illustrious Prince, to enumerate the famous men who serve in Thy city, and fain would I follow their virtues! Truly they would not dwell in Thy city if they did not witness Thee (because Thou knowest that virtue is the guide of the life of men) giving Thy support to men who are eminent as teachers, and leading them from taking the ease they deserve to the active business of reading and writing. And so Thy integrity and Thy virtue can never be praised as they deserve. As in Thy past life Thy virtue has devoted itself to learning, may it still show favor to the learned, and by its munificence draw the rest of mankind to the same zeal for virtue.

Accept then, O Most Beneficent Prince, Who art the Ornament of our Italian nobility, this work, which we have dedicated to Thee, and which we now send Thee, not so much that Thou shouldst read it as that Thou shouldst correct it. If in it Thou shouldst find anything blameworthy, I beg that Thou mayest ascribe it not so much to weakness of my mind as to the greatness and difficulty of the task.

But shouldst Thou find that in this work we have labored for the common good not in vain, then we earnestly beseech Thee that in many other different arts, which hitherto have remained untouched, it may be permitted to us by Thy kindness and liberality to give free exercise to our talents.

FAREWELL



PTOLEMY'S ARMILLARY SPHERE

Geography of Claudius Ptolemy

BOOK ONE



The First Book contains the following Chapters:

1. In what Geography differs from Chorography.
2. What presuppositions are to be made use of in Geography.
3. How, from measuring the stadia of any given distance, although not on the same meridian, it may be determined how many stadia there are in the circumference of the earth, and vice versa.
4. Observed phenomena should be preferred to those derived from the accounts of travelers.
5. Attention must be paid to the latest researches because the earth, in the course of time, undergoes change.
6. Concerning the geographical narrations of Marinus.
7. The opinions of Marinus relating to the latitudes of the earth are corrected by the observed phenomena.
8. They are also corrected by measuring on land.
9. They are also corrected by measuring journeys on water.
10. Ethiopia should not be placed more to the south than the circular parallel which is opposite the parallel passing through Meroe.
11. The errors of Marinus in calculating the extent of the habitable earth.
12. The calculation of the longitude of the earth corrected by land journeys.
13. The same calculation of longitude corrected by sea journeys.
14. Concerning the voyage from the Golden Chersonesus to Cattigara.
15. Concerning the things in which Marinus disagrees with us.
16. In fixing the boundaries of provinces Marinus has made some mistakes.
17. Wherein Marinus dissents from the findings made in our time.
18. Of the inconvenience of the method of Marinus for delineating the habitable earth.

19. Of the convenience of our method of delineating the whole earth.
20. Of the lack of symmetry in the picture drawn by Marinus.
21. What must be done should one desire to delineate the earth in one plane.
22. How the habitable earth should be shown on a sphere.
23. Explanation of the meridians and parallels used in our delineation.
24. How the habitable earth can be shown in a plane map so that its measurements are in keeping with its spherical shape.

CHAPTER I

In what Geography differs from Chorography

GEOGRAPHY is a representation in picture of the whole known world together with the phenomena which are contained therein.

It differs from Chorography in that Chorography, selecting certain places from the whole, treats more fully the particulars of each by themselves—even dealing with the smallest conceivable localities, such as harbors, farms, villages, river courses, and such like.

It is the prerogative of Geography to show the known habitable earth as a unit in itself, how it is situated and what is its nature; and it deals with those features likely to be mentioned in a general description of the earth, such as the larger towns and the great cities, the mountain ranges and the principal rivers. Besides these it treats only of features worthy of special note on account of their beauty.

The end of Chorography is to deal separately with a part of the whole, as if one were to paint only the eye or the ear by itself. The task of Geography is to survey the whole in its just proportions, as one would the entire head. For as in an entire painting we must first put in the larger features, and afterward those detailed features

which portraits and pictures may require, giving them proportion in relation to one another so that their correct measure apart can be seen by examining them, to note whether they form the whole or a part of the picture. Accordingly therefore it is not unworthy of Chorography, or out of its province, to describe the smallest details of places, while Geography deals only with regions and their general features.

The habitable parts of the earth should be noted rather than the parts which are merely of equal size, especially the provinces or regions and their divisions, the differences between these being rather the more important. Chorography is most concerned with what kind of places those are which it describes, not how large they are in extent. Its concern is to paint a true likeness, and not merely to give exact position and size. Geography looks at the position rather than the quality, noting the relation of distances everywhere, and emulating the art of painting only in some of its major descriptions. Chorography needs an artist, and no one presents it rightly unless he is an artist. Geography does not call for the same requirements, as any one, by means of lines and plain notations can fix positions and draw general outlines. Moreover Chorography does not have need of mathematics, which is an important part of Geography. In Geography one must contemplate the extent of the entire earth, as well as its shape, and its position under the heavens, in order that one may rightly state what are the peculiarities and proportions of the part with which one is dealing, and under what parallel of the celestial sphere it is located, for so one will be able to discuss the length of its days and nights, the stars which are fixed overhead, the stars which move above the horizon, and the stars which never rise above the horizon at all; in short all things having regard to our earthly habitation.

It is the great and the exquisite accomplishment of mathematics to show all these things to the human intelligence so that the sky, too, having a representation of its own character, which, although it can not be seen as moving around us, yet we can look upon it by means of an image as we look upon the earth itself, for the earth being real and very large, and neither wholly nor in

part moving around us, yet it can be mapped by the same means as is the sky.

CHAPTER II

*What presuppositions are to be made
use of in Geography*

WHAT Geography aims at, and wherein it differs from Chorography, we have definitely shown in our preceding chapter. But now as we propose to describe our habitable earth, and in order that the description may correspond as far as possible with the earth itself, we consider it fitting at the outset to put forth that which is the first essential, namely, a reference to the history of travel, and to the great store of knowledge obtained from the reports of those who have diligently explored certain regions; whatever concerns either the measurement of the earth geometrically or the observation of the phenomena of fixed localities; whatever relates to the measurement of the earth that can be tested by pure distance calculations to determine how far apart places are situated; and whatever relations to fixed positions can be tested by meteorological instruments for recording shadows. This last is a certain method, and is in no respect doubtful. The other method is less perfect and needs other support, since first of all it is necessary to know in determining the distance between two places, in what direction each place lies from the other; to know how far this place is distant from that, we must also know under what part of the sky each is located, that is, whether each extends toward the north, or, so to speak, toward the rising of the sun (the east), or in some other particular direction. And these facts it is impossible to ascertain without the use of the instruments to which we refer. By the use of these instruments, anywhere and at any time, the position of the meridian line can easily be found, and from this we can ascertain the distances that have been traveled. But when this has been done, the measurement of the number of stadia does not give us sure information, because journeys very rarely are made in a straight line. There being many deviations from a straight course both in land and in sea journeys, it is necessary to conjecture, in the case of a land

journey, the nature and the extent of the deviation, and how far it departs from a straight course, and to subtract something from the number of stadia to make the journey a straight one.

Even in sailing the sea the same thing happens, as the wind is never constant throughout the whole voyage. Thus although the distance of the places noted is carefully counted, it does not give us a basis for the determination of the circumference of the whole earth; nor do we ascertain an exact position for the equatorial circle or for the location of the poles.

Distance which is ascertained from an observation of the stars shows accurately all these things, and in addition shows how much of the circumference is intercepted in turn by the parallel circles, and by the meridian circles which are drawn through the places themselves; that is to say, what part of the circumference of parallel circles and of the equatorial circle is intercepted by the meridians, or what part of the meridian circles are intercepted by the parallels and equatorial circle.

After this it will readily be seen how much space lies between the two places themselves on the circumference of the large circle which is drawn through them around the earth. This measurement of stadia obtained from careful calculations does not require a consideration of the parts of the earth traversed in a described journey; for it is enough to suppose that the circuit of the earth itself is divided into as many parts as one desires, and that some of these parts are contained within distances noted on the great circles that gird the earth itself. Dividing the whole circuit of the earth or any part of it noted by our measurements which are known as stadia measurements, is a method not equally convincing. Therefore because of this fact alone it has been found necessary to take a certain part of the circumference of a very large celestial circle, and by determining the ratio of this part to the whole of the circle, and by counting the number of stadia contained in the given distance on the earth, one can measure the stadia circumference of the globe.

When we grant that it has been demonstrated by mathematics that the surface of the land and water is in its entirety a sphere,

and has the same center as the celestial globe, and that any plane which passes through the center makes at its surface, that is, at the surface of the earth and of the sky, great circles, and that the angles of the planes, which angles are at the center, cut the circumferences of the circles which they intercept proportionately, it follows that in any of the distances which we measure on the earth the number of the stadia, if our measurements are correct, can be determined, but the proportion of this distance to the whole circumference of the earth can not be found, because no proportion to the whole earth can thus be derived, but from the similar circumference of the celestial globe that proportion can be derived, and the ratio of any similar part on the earth's surface to the great circle of the earth is the same.

CHAPTER III

How, from measuring the stadia of any given distance, although not on the same meridian, we may determine the number of stadia in the circumference of the earth, and vice versa

THOSE geographers who lived before us sought to fix correct distance on the earth, not only that they might determine the length of the greatest circle, but also that they might determine the extent which a region occupied in one plane on one and the same meridian. After observing therefore, by means of the instruments of which I have spoken, the points which were directly over each terminus of the given distance, they calculated from the intercepted part of the circumference of the meridian, distances on the earth.

As we have said, they assume the location of the points to be in one plane, and the lines passing through the terminals of the distance, to the points which are directly overhead, must necessarily meet, and the points where they meet would be the common center of the circles. Therefore if the circle drawn through the poles were intercepted by lines drawn from the two points that were marked overhead, it would be understood that it formed the total extent of the intercepted circumference compared with the whole circuit of the earth.

If a distance of this kind is not on the circle drawn through the poles, but on another of the great circles, the same thing can be shown by observing in like manner the elevation of the pole from the extremities of the distance, and noting simultaneously the position which the same distance has on the other meridian. This we have clearly shown by an instrument which we ourselves have constructed for measuring shadows, by which instrument we can easily ascertain a great many other useful things. For on any day or night we have the elevation of the north pole, and at any hour we have the meridian position of the given distance by performing a single measurement, that is, by measuring the angle that the greatest circle drawn through the line of the distance makes with the meridian circle at the vertical point: in this way we can show the required circumference by means of this instrument, and the circumference of the equatorial circle which is intercepted between the two meridians, these meridians being parallel and circles like the equator. According to this demonstration, if we measure only one straight distance on the surface of the earth, then the number of stadia of the whole circuit of the earth can be ascertained. And as a result of this we can obtain the measurements of all distances, even when they are not exactly on the same meridian or parallel, by observing carefully the elevation of the pole, and the inclination of the distance to the meridian, and vice versa. From the ratio of the given part of the circumference to the great circle, the number of the stadia can be calculated from the known number of stadia in the circuit of the whole earth.

CHAPTER IV

Carefully observed phenomena should be preferred to those derived from the accounts of travelers

SINCE this is so, travelers who have journeyed over the regions of the earth one by one, had they made use of observations of a similar kind, would have been able to give us a wholly correct description of our habitable earth. But when no one except Hipparchus has given us the elevation of the

north pole, and even he, of only a few places out of the great number known to geographers, and since he has marked but a small number of the sites that are on the same meridian; and when others coming after him have noted the position of the places opposite each other, not giving us those of equal distance from the equator, but only those lying on the same meridian, taking this from successful voyages made to the north and to the south; and calculating most of their distances, especially those which extended to east or west, from a certain general tradition, not because of any lack of skill or because of indolence, on the part of the writers, but because in their time, the use of exact mathematics had not yet been established; and when in addition to this not many eclipses of the moon have been observed at the same time in different localities as was that eclipse at Arbela which was noted as occurring there at the fifth hour, from which observation it was ascertained by how many equinoctial hours, or by what space of time, two places were distant from each other east or west; it is just and right that a geographer about to write a geography should lay as the foundation of his work the phenomena known to him that have been obtained by a more careful observation, and should make the traditions subordinate to these, so that the relative positions of localities may be determined with greater certainty and be more nearly accurate than is possible by relying on primitive traditions.

CHAPTER V

Attention must be paid to the latest researches because the earth, in the course of time, undergoes change

AFTER these preliminary remarks we are able to make a beginning of our work. Since, however, all regions cannot be known fully on account of their great size, or because they are not always of the same shape or because not yet satisfactorily explored, and a greater length of time makes our knowledge of them more certain, we think we should say something to the readers of our geography on the subject of varying traditions at various times, viz., of some portions of our continents, on account of their great

size, we have as yet no knowledge; with regard to other parts we do not know what is their real nature, because of the negligence of those who have explored them in failing to give us carefully prepared reports; other parts of the earth are different to-day from what they were, either on account of revolution or from transformation, in which processes they are known to have partially passed into ruin.

We consider it necessary therefore for us to pay more attention to the newer records of our own time, weighing, however, in our description these new records and those of former times and deciding what is credible and what is incredible.

CHAPTER VI

Concerning the geographical narrations of Marinus

MARINUS the Tyrian, the latest of the geographers of our time, seems to us to have thrown himself with the utmost zeal into this matter.

He is known to have found out many things that were not known before. He has searched most diligently the works of almost all the historians who preceded him. He has not only corrected their errors, but the reader can clearly see that he has undertaken to correct those parts of the work which he himself had done badly in the earlier editions of his geographical maps. If we examine closely his last work we find few defects. It would seem to be enough for us to describe the earth on which we dwell from his commentaries alone, without other investigations.

When, however, he appears to agree with certain others in a conclusion that is unworthy of belief, most often in questions concerning the method of drawing, or when he refuses to give the attention he should to an opportune invention, we have been moved by no unworthy motive to think, as regards part of his reasoning and method, that we could bring forward something more in keeping with the rest of the work and its author. And this without wasting words we will endeavor to do to the best of our ability, dwelling briefly on each kind of error as reason dictates.

First of all let us deal with that which pertains to history. He considers that our earth extends a greater distance in longitude eastward, and to a greater distance in latitude southward than is right and true. For not unreasonably we call the distance extending from the setting to the rising sun the longitude, and the distance from the north to the south pole the latitude, when we mark the parallels in the vault of the heavens. Moreover the greater distance we call longitude, which is accepted by all, for the extent of our habitable earth from east to west all concede is much greater than its extent from the north pole to the south.

CHAPTER VII

The opinions of Marinus relating to the earth's latitude are corrected by observed phenomena

FIRST of all, Marinus places Thule as the terminus of latitude on the parallel that cuts the most northern part of the known world. And this parallel, he shows as clearly as is possible, at a distance of sixty-three degrees from the equator, of which degrees a meridian circle contains three hundred and sixty. Now the latitude he notes as measuring 31,500 stadia, since every degree, it is accepted, has 500 stadia. Next, he places the country of the *Ethiopians*, Agisymba by name, and the promontory of Prasum on the same parallel which terminates the most southerly land known to us, and this parallel he places below the winter solstice.

Between Thule and the southern terminus he inserts altogether about eighty-seven degrees which is 43,500 stadia, and he tries to prove the correctness of this southern termination of his by certain observations (which he thinks to be accurate) of the fixed stars and by certain journeys made both on land and on sea. Concerning this we will make a few observations.

In his observation concerning the fixed stars, in the third volume of his work, he uses these words: "The Zodiac is considered to lie entirely above the torrid zone and therefore in that zone the shadows change, and all the fixed stars rise and set. Ursa Minor begins to be entirely above the hori-

zon from the north shore of Ocele which is 5,500 stadia distant. The parallel through Ocele is elevated eleven and two-fifths degrees.

"We learn from Hipparchus that the star in Ursa Minor which is the most southerly or which marks the end of the tail, is distant from the pole twelve and two-fifths degrees, and that in the course of the sun from the equinoctial to the summer solstice, the north pole continually rises above the horizon while the south pole is correspondingly depressed, and that on the contrary in the course of the sun from the equator to the winter solstice the south pole rises above the horizon while the north pole is depressed."

In these statements Marinus narrates only what is observed (on) the equator, or between the tropics. But what, after being learned from the records or from accurate observations of the fixed stars, are the happenings in places south of the equator, he in no wise informs us, as if one should place southern stars rather than equatorial directly overhead, or assert that mid-day shadows over the equator incline south, or show all the stars of Ursa Minor risen or set, or some of them visible at the time when the south pole is raised above the horizon.

In what he adds later he tells us of certain observations, of which, nevertheless, he is not entirely certain in his own mind.

He says that those who sail from India to Limyrica, as did Diodorus the Samian, which is related in his third book, tell us that Taurus is in a higher position in the mid-heavens than in reality it is and that the Pleiades are seen in the middle of the masts, and he continues, "those who sail from Arabis to Azania sail straight to the south, and toward the star Canopus, which there is called Hippos, that is the Horse, and which is far south. Stars are seen there which are not known to us by name, and the Dog Star rises before Procyon and Orion, and before the time when the sun turns back toward the summer solstice."

For these observations concerning the stars Marinus clearly states that some places are located more northerly than the equator, as when he says that Taurus and the Pleiades are directly over the heads of the sailors. As a matter of fact these stars are near the equator. He indeed shows some stars to be

no further south than north, for Canopus can be seen by those who dwell a long distance north of the summer solstice; and several of the fixed stars, never seen by us, can be seen above the horizon in places south of us, and in places more toward the equatorial region than those in the north, as around Meroe. They can be seen as is Canopus itself, which, when appearing above the horizon is never visible to those who dwell north of us. Those who dwell toward the south call this star Hippos, that is the Horse, nor is any other star of those known to us called by that name.

Marinus infers that he himself determined by mathematical proofs that Orion is entirely visible, before the summer solstice, to those who dwell below the equatorial circle; also that with them the Dog Star rises before Procyon, which he says is observed as far south even as Syene. In these conclusions of Marinus there is nothing appropriate or of value to us because he extends the position of his inhabited countries too far south of the equator.

CHAPTER VIII

They are also corrected by measuring journeys on land

IN computing the days one by one, occupied in journeying from Leptis Magna to Agisymba, Marinus shows that the latter locality is 24,680 stadia south of the equator. By adding together the days occupied in sailing from Ptolemais Trogloditica to Prasum he concluded that Prasum is 27,800 stadia south of the equator, and from these data he infers that the promontory of Prasum and the land of Agisymba, which, as he himself expresses it, belongs to Ethiopia (and is not the end of Ethiopia), lies on the south coast in the frigid zone opposite to ours. In a southerly direction 27,800 stadia make up fifty-five and three-fourths degrees, and this number of degrees in an opposite direction (i. e. north) marks a like temperate climate, and the region of the swamp Meotis, which the *Scythians* and *Sarmatians* inhabit.

Marinus then reduces the stated number of his stadia by half or less than half, that is to 12,000 which is about the distance of

the winter solstice from the equatorial circle. The only reason for this reduction that he gives us is the deviation from a straight line of the journeys and their daily variations in length. After he has stated these reasons, it seemed to us necessary not only to show that he was mistaken, but also to reduce his figures by the required one-half.

At the outset, when writing of the journey from Garama to Ethiopia he says that Septimius Flaccus, having set out from Libya with his army, came to the land of the *Ethiopians* from the land of the *Garamantes* in the space of three months by journeying continuously southward. He says furthermore that Julius Meternus, setting out from Leptis Magna and Garama with the king of the *Garamantes*, who was beginning an expedition against the *Ethiopians*, by bearing continuously southward came within four months to Agisymba, the country of the *Ethiopians* where the rhinoceros is to be found.

Each of these statements, on the face of it, is incredible, first, because the *Ethiopians* are not so far distant from the *Garamantes* as to require a three months' journey, seeing that the *Garamantes* are themselves for the most part *Ethiopians*, and have the same king; secondly, because it is ridiculous to think that a king should march through regions subject to him only in a southerly direction when the inhabitants of those regions are scattered widely east and west, and ridiculous also that he should never have made a single halt that would alter the reckoning. Wherefore we conclude that it is not unreasonable to suppose that those men either spoke in hyperbole, or else, as rustics say, "To the south," or "Toward Africa" to those who prefer to be deceived by them, rather than take the pains to ascertain the truth.

CHAPTER IX

*They are also corrected by measuring
journeys by water*

CONCERNING the voyage from Aromata to Rhapta, Marinus tells us that a certain Diogenes, one of those who were accustomed to sail to India, having been driven out of his course, and being off the coast of

Aramata, was caught by the north wind and, after having sailed with Trogloditica on his right, came in twenty-five days to the lake from which the Nile flows, to the south of which lies the promontory of Rhaptum. He tells us also that a certain Theophilus, one of those who were accustomed to sail to Azania, driven from Rhapta by the south wind came to Aromata on the twentieth day. In neither of these cases does he tell us how many days were occupied in actual sailing, but merely states that Theophilus took twenty days, and Diogenes, who sailed along the coast of Trogloditica, took twenty-five days.

He only tells us how many days they were on the voyage, and not the exact sailing time, nor the changes of the wind in strength and direction, which must have taken place during a voyage of such long duration. Moreover he does not say that the sailing was continuously south or north, but merely says that Diogenes was carried along by the north wind while Theophilus sailed with the south wind. That the wind kept the same strength and direction during the whole voyage is related in neither case, and it is incredible that for the space of so many days in succession, it should have done so. Therefore although Diogenes sailed from Aromata to the swamps, to the south of which lies the promontory of Rhaptum, in twenty-five days, and Theophilus from Rhapta to Aromata, a greater distance, in twenty days, and although Theophilus tells us that a single day's sailing under favorable circumstances is calculated at 1,000 stadia (and this computation Marinus himself approves) Disocorus nevertheless says that the voyage from Rhapta to the promontory of Prasum, which takes many days, as computed by Diogenes is only 5,000 stadia. The wind, he says, varies very suddenly at the equator, and squalls around the equator on either side of the line are more dangerous.

From these considerations we thought we ought not to assent to the numbering of the days, because it is plain to all that on the reckoning made by Marinus, the *Ethiopians* and the haunts of the rhinoceros should be moved to the cold zone of the earth, that is, opposite to ours. Reason herself asserts that all animals, and all plants

likewise, have a similarity under the same kind of climate or under similar weather conditions, that is, when under the same parallels, or when situated at the same distance from either pole.

Marinus has shortened the measures of latitude around the winter solstice, but has given no sufficient reason for his contraction. Even should we admit the number of days occupied in the series of voyages that he relates, he has shortened the number of daily stadia and has reasoned contrary to his customary measure in order to reach the desired and correct parallel. He should have done exactly the opposite, for it is easy to believe the same daily distance traveled as possible, but in the even course of the journeys, or voyages or that they were wholly made in a straight line, he ought not to have believed. From them it was not possible to ascertain the distance but it was correct to assert that in latitude the places in question extended beyond the equator. Even this could be known with greater certainty from astronomical observations. Any one could have ascertained exactly the required distances if he had, with more skill in mathematics, considered what takes place in those localities. Since this observation was not made, it remains that we follow what reason dictates, that is, we must ascertain how far the distance extends beyond the equator. We can also ascertain what we require to know through information concerning the kinds, the forms, and the colors of the animals living there, from which we draw the conclusion that the parallel of the region of Agisymba is the same as that of the *Ethiopians* and extends from the winter solstice to the equator; although with us in places opposite to that region, that is, in the summer solstice, they do not have the color of the *Ethiopians*, nor is the rhinoceros and elephant to be found, yet in places not far south of us the inhabitants are moderately black such as from the same cause are the *Garamantes*, whom Marinus himself describes, and whom he places neither under the summer solstice nor north of it, but much too far to the south. In the regions around Meroe the inhabitants are very black, and closely resemble the *Ethiopians*, and there we find that elephants and other kinds of monstrous animals are bred.

CHAPTER X

Ethiopia should not be placed more to the south than the parallel which is opposite the parallel passing through Meroe

IN agreement therefore with this information, viz., that the inhabitants are *Ethiopians*, as those who have sailed there have told us, Marinus describes the region of Agisymba and the promontory of Prasum, and the other places lying on the same parallel, as situated all on one parallel, which is opposite the parallel passing through Meroe. That would place them on a parallel distant from the equator in a southerly direction $16^{\circ} 25'$ or about 8,200 stadia, and by the same reckoning the whole width of the habitable world amounts to $79^{\circ} 25'$ or altogether 40,000 stadia.

Now the distance between Leptis Magna and Garama, according to Flaccus and Maternus, is placed at 5,400 stadia. The time of their second journey was twenty days, a more nearly correct time than the first because it was directly north, while the first journey of thirty days had many deviations. The travelers who several times made the voyage kept the reckoning of each day's distance, and this was not only properly done, but done of necessity on account of the changes of the water and the weather. Just as we should have doubts with regard to distances that are great in extent, and rarely traveled, and not fully explored, so in regard to those that are not great and not rarely but frequently gone over, it seems right to give credit to the reports of the voyagers.

CHAPTER XI

The errors of Marinus in calculating the longitude of the habitable earth

HOW far the latitude of the habitable earth extends is clear to us from what we have just stated. Marinus gives us the longitude, between two meridians, enclosing a total space of fifteen hours. It seems to us that the distance eastward is shown to be greater than it should be, and that if it be reduced, as it ought to be, it will be seen to include not quite the space of twelve hours, that is, by locating the Fortunate Islands at the extreme west and placing

at the extreme east the *Seres*, Sina and Cattigara.

The distance from the Fortunate Islands to the Euphrates at Hieropolis, which we place with Marinus on the parallel passing through Rhodes, must be reckoned according to the number of stadia, determined by Marinus, both because of the continual measuring of this distance by voyagers, and because Marinus has corrected the reports of the distance by ascertaining the allowance to be made for deviation and the variations of the rate of travel. Marinus also makes one degree of the three hundred and sixty which the largest circle contains, measure 500 stadia on the surface of the earth, a measurement which is proved by distances that are known and certain. Likewise the circle which passes through Rhodes, Marinus shows to be 36° distant from the equator, and each degree to measure approximately four hundred stadia, and the excess of that number (according to an exact reckoning of the location of the parallels), in some measure counterbalances the defect in the others, and is negligible in the whole computation.

The distance from the Euphrates at Hieropolis to the Stone Tower, Marinus gives as eight hundred and seventy-six schena, or 26,280 stadia. The distance from the Stone Tower to Sera, the capital of the *Seres*, which is a journey of seven months, he computes at 36,200 stadia. Since these two distances are measured on the same parallel, we shall shorten both by making a necessary correction, as it is clear that Marinus made no reduction for deviations in either journey, and in computing the second journey fell into the same mistakes as those he made when measuring the distance between the *Garamantes* and Agisymba, for in that measurement he reckoned the number of stadia traversed in four months, and was compelled to make a reduction. It is quite possible that the rate of travel was not uniform over so long a space of time, and that this was the case in the seven months' journey it is not unreasonable to suppose, and it is more likely to have been the case, than in the journey from the *Garamantes* to Agisymba. This last journey was made by the king of the country, as was becoming with no small preparation, and was made

wholly in fine weather. The journey from the Stone Tower to Sera was exposed to winter tempests, for it lies, according to Marinus himself, on the parallel that passes through Byzantium and the Hellespont. Wherefore there must have been many deviations in that journey, especially since it was undertaken for the purpose of carrying merchandise. Marinus tells us that a certain Macedonian named Maen, who was also called Titian, son of a merchant father, and a merchant himself, noted the length of this journey, although he did not come to Sera in person but sent others there.

Marinus does not seem to agree with the findings of these merchants, and he especially disagrees with the statements of the merchant Philemon whose reckonings make the length of the island of Hibernia from east to west a twenty days' journey. Marinus would not believe this, although Philemon told him that he himself had heard it from the merchants themselves.

Marinus says of the merchant class generally that they are only intent on their business, and have little interest in exploration, and that often through their love of boasting they magnify distances. In their journey that occupied seven months they brought no information worth remembering, and what they related on their return about the time they had consumed in travel was nothing but an extravagant statement.

CHAPTER XII

The calculation of longitude corrected by land journeys

FOR these reasons therefore, and because the journey is not on one and the same parallel, for the Stone Tower is on the parallel that passes through Byzantium, and Sera is more to the south and on the parallel that passes through the Hellespont, it seems to us proper that the number of the stadia, viz., 36,200, which was computed from a journey of seven months, should be cut down to not less than one-half; and for an easier understanding only to one-half; so that the distance in stadia may be computed as 18,100, or forty-five and one-fourth degrees.

It would be inept and absurd should any one follow on both journeys, that is, on this

journey and on the journey from the Garamantes, reasoning which led to this conclusion, for the reason was based upon the difference noted in the animals which inhabit the region of Agisymba, animals which can not be transferred to localities outside the limits of those assigned to them by nature. This reason does not hold likewise in reckoning the distance of the Stone Tower from Sera, for throughout the whole distance, be the intervals great or small, there is the same temperate climate. It is much the same as though a man, who could not be convicted by law as a thief, could be convicted nevertheless, according to the rightful precepts of philosophy.

Wherefore the former distance which Marinus gave from the Euphrates to the Stone Tower, viz., 876 schena must be reduced because of deviations on the journey, to only 800 schena or 24,000 stadia; and this is verified by the particular measurements taken on that journey, and by the frequent visits made to those places on that journey. That the journey had deviations is clear from statements made by Marinus himself, for in making the journey from the ford over the Euphrates at Hieropolis through Mesopotamia to the Tigris, and through the *Garamantes* of Assyria and Media to Ecbatana and the Caspian Gates, and from there through Parthia to Hechatompilum, the right course is to follow the parallel of Rhodes, as this parallel passes through those regions. To procede from Hechatompilum to the city of Hyrcania it is necessary to deviate to the north. The city Hyrcania lies about midway between the Smyrna and the Hellespont parallels, the parallel of Smyrna is also called the parallel of Hyrcania, but the parallel of the Hellespont passes through the southern shores of the Hyrcanian sea, which are situated somewhat to the north of the city of Hyrcania which takes its name from that sea. The journey thence to Antioch Margiana through Asia, first turns to the south (since Asia is on the same parallel as the Caspian Gates), and then turns to the north, since Antioch is close to the Hellespont parallel.

From Antioch to Bactria the journey deviates to the east, and after ascending the Comedon mountains it bends to the north. From the mountains, where it comes to the

plain at their base, it inclines to the south, for the mountains extend north and east. The ascent is placed by Marinus on the Byzantium parallel, and the southern and eastern ranges are located on the Hellespont parallel. The mountains themselves he places to the east, but plainly extends them so as partially to decline to the south. Likewise he says that the journey for fifty schena before coming to the Stone Tower, deviates to the north. When you have traversed the plain, at the base of the mountains you arrive at the Stone Tower, and from there you come to the mountains which run in an easterly direction, ending at Imao which is north of Palimbothris.

Adding the degrees which have been noted, they amount to sixty or 24,000 stadia. When we have added the forty-five and one-fourth degrees from the Stone Tower to Sera, the total distance from the Euphrates to Sera on the parallel of Rhodes will amount to $105^{\circ} 15'$. We will now add, from the distances which Marinus gives, the other degrees on the same parallel, and first of all from the meridian passing through the Fortunate Islands, as far as the Sacred promontory of Spain $2^{\circ} 30'$, thence to the mouth of the river Baetis, and from the Baetis to the Strait and to Calpe is likewise $2^{\circ} 30'$, being one and the same distance; from the Strait to Caralis, a city in Sardinia, is 25° ; from Caralis to the promontory of Lilybaeum in Sicily $4^{\circ} 30'$; from Lilybaeum to Pachynus is 3° ; from Pachynus to Taenarus in Laconica is 10° ; thence to Rhodes is $8^{\circ} 15'$; from Rhodes to Issus is $11^{\circ} 15'$; from Issus to the Euphrates is $2^{\circ} 30'$; the sum of all these degrees is 72° . Hence, the length of the known earth, that is, from the meridian drawn through or terminated by the Fortunate Islands in the extreme west, to Sera in the extreme east is $177^{\circ} 15'$.

CHAPTER XIII

The same calculation of longitude corrected by sea journeys

ONE might then conjecture that the entire distance was only a certain total, by summing up the separate distances given by Marinus in sailing from India to the region of Sinarus and Cattigara, after taking account of deviations from a direct

course, the variations in the rate of sailing, and the position of the regions themselves.

After the promontory called Cory, which closes the bay of Colchis, he says that the bay of Argaricus is next, and that it extends to the city of Curula, a distance of 3,400 stadia.

He adds that the city is situated north of the promontory of Cory, hence we gather that the voyage, if we subtract one-third for the circuit of the bay of Argaricus, may be reckoned as 2,030 stadia, not allowing for any variation in the wind. If however we subtract one-third for the variation from a direct course owing to the winds, there remains a distance of about 1,350 stadia in a direct northerly course. When this distance is transferred to a distance measured on the equatorial parallel, and is diminished by one-half in proportion to the intercepted angle, we have the distance between the two meridians passing through the promontory of Cory and the city Curula as 675 stadia or about $1^{\circ} 20'$, because the parallel drawn through these points differs from the greatest circle in nothing worthy of note.

From the city of Curula the course of navigation is, so he tells us, toward the winter rising of the sun as far as Palura and measures 9,450 stadia. Subtracting one-third for changes in the direction of wind we have a distance in one direction of 6,300 stadia. Taking from this distance one-sixth we may then reduce it to the equatorial parallel and we shall then find the distance between these meridians to be 5,250 stadia or $10^{\circ} 30'$. The shore of the Gangetic bay he places at a further distance of 19,000 stadia.

From Palura to the city of Sada is 13,000 stadia by navigating the aforesaid bay toward the equatorial rising of the sun, and since the course is directed toward the equatorial rising we must allow for the deviation and deduct one-third. When we have done this we are left with a distance of about 8,670 stadia or $17^{\circ} 20'$.

Thence he makes the voyage from Sada to the city of Tamala to measure 3,500 stadia in a direction toward the winter rising of the sun. Deducting one-third for variable winds we have a distance in a straight line of 2,330 stadia, and deducting

a further one-sixth for deviation toward Velturnus we find that the distance between the meridians is 1,940 stadia or about $3^{\circ} 30'$ plus $20'$, that is $3^{\circ} 50'$.

The next distance from Tamala to the Golden Chersonesus he gives as 1,600 stadia toward the winter rising of the sun, so that a like fraction being deducted there is a distance left between the meridians of 900 stadia or $1^{\circ} 48'$.

CHAPTER XIV

Concerning the voyage from the Golden Chersonesus to Cattigara

MARINUS does not tell the number of stadia from the Golden Chersonesus to Cattigara, but he says Alexander wrote that the shore line extends toward the south, and that those sailing along the shore came, after twenty days, to Zaba. From Zaba carried southward and toward the left, they came after some days to Cattigara. He lengthens the distance, interpreting some days to mean many days, and believing (ridiculously it seems to me) that the expression "some days" was used because the days were too many to be counted. Who is there who could not count the number of days even if they expressed the circuit of the entire earth, or what induced Alexander, when he meant many days, to say some days?

He indeed says concerning Dioscorus that he occupied many days sailing from Rhapta to Prasum. One very naturally would understand by *some days* a *few days*, for that is how we are accustomed to speak. Lest, however, we seem, like our friends, to accommodate our conjectures to the number we have laid down, let us compare the voyage from the Golden Chersonesus to Cattigara, a voyage consisting of two voyages — one voyage of twenty days to Zaba, the other of some days to Cattigara — let us compare, I say, this twofold voyage with the sailing from Aromata to the promontory of Prasum, which took the same number of days as far as Rhapta (as Theophilus relates), and many more to Prasum (as Dioscorus tells us).

Now let us, as Marinus did, agree that *some days* and *many days* correspond in meaning, when from conclusions which are in keeping with reason we have shown by

celestial phenomena that Prasum is situated on the parallel which lies $16^{\circ} 25'$ south of the equator, and when the parallel drawn through Aromata to Prasum is counted as $20^{\circ} 40'$.

Hence it is not incongruous to assign the same number of degrees to the distance between the Golden Chersonesus and Cattigara by way of Zaba. The part of this distance which lies between the Golden Chersonesus and Zaba need not be lessened, because it extends in a straight line, following the course of the equator, but the part of the distance lying between Zaba and Cattigara, because its navigation deviates to the south on its eastern shore, must be lessened, that we may bring it to the norm of the equator. If then we attribute half of the degrees to both distances on account of our knowing no difference between them, and then subtract because of known deviations a third part of the degrees measured between Zaba and Cattigara, which were at first set down as $10^{\circ} 20'$, we shall have a distance from the Golden Chersonesus to Cattigara equated to the position of the equator, or about $17^{\circ} 10'$.

We have already shown that the distance from the promontory of Cory to the Golden Chersonesus is $34^{\circ} 48'$. Wherefore the whole distance from Cory to Cattigara amounts to about 52° . The meridian, which is drawn through the source of the Indus river, Marinus places just west of the most northerly promontory of the island of Taprobana, which is opposite Cory. From Taprobana the meridian which runs through the mouth of the Baetis river is distant a space of eight hours, or 120° , and furthermore the meridian passing through the Baetis is 5° from the meridian drawn through the Fortunate Islands. Whence we gather that the meridian drawn through Cory is distant from the meridian drawn through the Fortunate Islands by a little more than 125° . The meridian drawn through Cattigara is distant from the meridian through the Fortunate Islands a little more than 177° , which very nearly agrees with the distance we found elsewhere by measuring the parallel passing through Rhodes.

If we grant that the entire longitude as far as the metropolis of the *Sines* is 180° , or

twelve hours' interval, observing that all agree that Cattigara lies a little toward the east, then we can determine the length of the parallel, passing through the island of Rhodes as measuring about 270,000 stadia.

CHAPTER XV

Concerning discrepancies in some of the explanations of Marinus

THE general distances of Marinus, both of longitude eastward and latitude northward, we have shortened for the reasons we have already given. Besides doing this we have altered the positions of cities in several places where Marinus has given contradictory and false traditions which he took from various faulty editions with incorrect notes concerning places which were wrongly said to be opposite each other or on the same meridian. For example, he says that Tarragona is opposite Caesarea, which he calls Iol, and he says that one meridian is drawn through Tarragona and through the Pyrenees mountains, which mountains in reality are not a little to the east of Tarragona.

He also places Pachynus opposite Leptis Magna, and Himera opposite Thenis. He gives the distance from Pachynus to Himera as about 400 stadia, and from Leptis to Thenis as more than 1,500 stadia, following the writings of Timosthenes, and in another place says that Tergestum is opposite Ravenna, and from the bay in the Adriatic sea into which flows the river Tilamentus, he says that Tergestum is distant toward the summer rising of the sun 480 stadia, and that Ravenna is distant toward the winter rising 1,000 stadia. He likewise says that Chelidonia is opposite Canopus, and Achamanta to Paphos, and Paphos to Sebennitum. He places Achamanta 1,000 stadia distant from Chelidones. Now the distance from Canopus to Sebennitum, according to Timosthenes, is 290 stadia. But if this last distance is measured on the same meridians, then without doubt it should be greater as lying on the circumference of a greater parallel.

After this he says that Pisa is distant in a southerly direction from Ravenna 700 stadia, but in the division of climas and hours he puts Pisa in the third hour inter-

val and Ravenna in the fourth. From London in Britain he puts Niomagus fifty-nine miles south, in a somewhat westerly direction.

He places Mount Athos on the same parallel as the Hellespont, and yet notwithstanding this, Amphipolis, and the neighboring places on the Hellespont parallel, and adjoining one another, and those that are situated on Athos, and at the mouth of the river Strimon, he places in the fourth clima, that is, next below the Hellespont parallel. In the same way he places almost the whole of Thrace below the Byzantine parallel, and yet all its interior cities he places in the clima that is above the parallel.

He also says he will locate Trapezos on the Byzantine parallel, after showing that Satala in Armenia is sixty miles toward the south, when he draws the parallels he draws the Byzantine parallel through Satala, and not through Trapezos.

He promises that he will truthfully describe the Nile, so that one can trace its course from its source northward as far as Meroe. Likewise he says that navigation with a north wind can be made from Aromata all the way to the lakes from which the Nile takes its beginning, although Aromata is actually far east of the Nile. For Ptolemais Theron lies east of Meroe and east of the Nile a journey of ten or twelve days, and Angustiora, which is between Ocelim peninsula and Diren, is 3,500 stadia east of Ptolemais and the Adulicus gulf, and from this strait to the promontory of Great Aromata toward the east still, 5,000 stadia more.

CHAPTER XVI

*In fixing the boundaries of provinces
Marinus has made some mistakes*

MARINUS makes some mistakes with reference to the boundaries of certain regions. For example, he makes the Pontic sea the eastern boundary of the whole of Moesia. He makes Thrace to be bounded on the west by Upper Moesia, and he makes Italy to be bounded on the north not by Rhetia and Noricum only, but also by Pannonia, and Pannonia on the south he bounds by Dalmatia only and omits Italy. He says that the *Sogdiani*, and their neigh-

bors the *Saci*, who inhabit the middle of the habitable earth, adjoin India, but the parallels through the territory of these peoples do not closely follow those two which are drawn north of the Imaus, the most northerly mountains of India; I refer to the Hellespontine and the Byzantine parallels, but they follow the parallel which is drawn through the middle of the Pontus.

CHAPTER XVII

*Wherein Marinus dissents from the
findings made in our time*

THESE and similar mistakes have been made by Marinus, either on account of the multitude of volumes, all disagreeing, of which he made use, or because, as he himself says, he has not yet come to the last delineation of his maps in which, so he tells us, he would make some necessary corrections in the climas and the hour indications.

In addition to these mistakes he gives us some further assignments of localities with which the knowledge of our times does not agree. For example he places the bay of Sachalita on the western shore of the promontory of Syagros, but all who navigate these parts unanimously agree with us that it is toward the east from Syagros, and that Sachalita is a region of Arabia, and from it the bay of Sachalita takes its name.

Again Simylla, an emporium of India, is not only placed by Marinus west of the Comarris promontory, but west of the river Indus, whereas in fact it is as far to the south as the mouths of the river, according to the testimony of those who have navigated those waters and have thoroughly explored those parts, and have come directly from there to us. It is called by the aborigines "Timula," and from those who have come to us we have learned many more details concerning India, especially of its divisions into provinces, and we have also learned much concerning its interior as far as the Golden Chersonesus, and from there to Catigara. We have also learned that those who sail there sail to eastward, and those returning sail to westward.

The navigators say that the time of the passage is uncertain, and that beyond Sina is the region of the *Seres* and the city Sera. What regions lie east of this they say are

unknown, for they have stagnant marshes, in which grow reeds so thick and so large, that catching hold of them, and upborne by them, men can walk across these marshes. They say further that not only is there a way from there to Bactriana through the Stone Tower, but also a way to India through Palimbothra.

The journey from the capital Sina to the gate of Cattigara runs to the southwest, and therefore does not coincide with the meridian drawn through Sera and Cattigara, as Marinus reports, but with one drawn more to the east.

We have learned also from the merchants that from Arabia Felix they sail to Aromata, to Azania, to Rhapta, and to the regions called Barbary. This sailing is not exactly south, but southwest. The voyage from Rhapta to Prasum is also southwest.

The lakes from which the Nile takes its beginning are not near the sea, but are very far inland. The shore line from the Aromata promontory to Rhapta is otherwise than Marinus has shown it to be; nor can an ordinary day - and - night voyage be counted in stadia because of the changeableness of the winds at the equator, but is limited to about 400 or 500 stadia at the most.

There is, first of all, a continuous bay in which, after sailing for one day from Aromata we come to Panocone and to Opone, an emporium, distant one day's sail from Panocone. Sailing from the emporium, they say that we enter another bay which marks the beginning of Azame, at the entrance to which appears the Zingis promontory, and Mount Phalangis, remarkable for its three peaks. The name of this bay is Apocopa, and it takes two days and nights to cross it. After this is Parvum Litus (Little Shore), at the distance of two days' voyage, then Magnum Litus (Great Shore). Of the five distances, the last two are said to occupy the same time in sailing.

A further four days' sailing, they say, brings us to another bay, in which there is the emporium of Essina. It requires two days and nights to cross this bay; then after a day and night sail one comes to the seaport of Serapionis; thence begins the bay which leads to Rhapta, a voyage of three days and nights. At the head of this bay they say there is an emporium called Toni-

cus. From this emporium toward the Rhaptum promontory there is, they inform us, a river called Rhaptus and also a city of the same name, not far from the sea.

The bay extending from Rhaptum to the Prasum promontory, although great in size, is not of great depth. The barbarians who dwell on its shores are cannibals.

CHAPTER XVIII

The inconvenience of the method of Marinus for delineating the habitable earth

WHAT is worth remembering in tradition and story, we have thus far set down, lest we should seem to have raised doubts and to have left them unsolved, for we believe that all things will be known to us when we have settled all the particulars.

It remains for us to turn our attention to the method of making maps. There are two ways in which this matter may be treated; one is to represent the habitable earth as spherical; the other is to represent it as a plane surface. Both have this common purpose, that is, they are constructed for use, to show (in the absence of any picture) how from commentaries alone the student may be able, with the utmost facility, to construct a new map.

Recently the making of new copies from earlier copies has had the result of increasing some of the faults that were originally small into great discrepancies. If then there are not enough data for the method of constructing maps from commentaries (without any traditional pictures), it will be impossible for us to reach our desired end. That has happened in the work of Marinus several times, for copyists do not follow his last edition of a world map, but attempt to construct a map merely from commentaries. Thus they are misleading in many particulars on account of their unbecoming shape and general confusion which any one expert in geography, can easily detect. Although it is necessary to know the longitude as well as the latitude of any place that we may be able to fix its right position, nevertheless in the edition of Marinus this cannot be immediately found. For in one place he gives only the location in latitude, as in his explanation of the parallels, but in another

place he gives only the longitude; hence in his drawing of meridians we find, as a rule, no note of both longitude and latitude, but in one instance we find reference to parallels, in other instances we find meridians so noted that when we have one position we lack the other.

When we are working with commentaries, it is requisite to have a knowledge of both latitude and longitude at the same time, since in all commentaries something is always said concerning both positions. If we were not to search out, one by one, through the whole volume, the data concerning any given place, we should miss particulars which are worthy of note.

Moreover in giving the positions of cities, maritime cities are the more easily described, and he keeps generally a certain order in naming them, but in treating of cities that are inland, the same method has not been employed; for the distances between them are not noted, except in a few instances where it happens that the longitude in the one case and the latitude in another case have been given us.

CHAPTER XIX

Of the convenience of our method of delineating the whole earth

WE therefore are undertaking a double labor, first in keeping the intention that Marinus had throughout his whole work, besides that which we have obtained by corrections; and second in adding those things, with as much accuracy as possible, which to him were not known, partly on account of history then unwritten, and partly on account of a later series of more accurate maps.

In addition we have given special attention to a better method in fixing the boundaries of each particular country; we have given their particular position both in longitude and in latitude. After that, we have recorded noteworthy information concerning the inhabitants of the various countries, and their relations one to another. We have noted the chief cities, rivers, gulfs, and mountains, and all other things which in the map itself might show distances where they are worth knowing, that is to say how many

degrees (the great circle has 360 such degrees), if it is a question of longitude, the meridian drawn through a certain place is distant from the meridian that marks the utmost boundary of the west. If it is a question of latitude, then we note how many degrees the parallel drawn through it is distant from the equator on the same meridian. We are able therefore to know at once the exact position of any particular place; and the positions of the various countries, how they are situated in regard to one another, how situated as regards the whole inhabited world.

CHAPTER XX

Of the lack of symmetry in the map that accompanies the geography of Marinus

EACH method of map making has something peculiar to itself. When the earth is delineated on a sphere, it has a shape like its own, nor is there any need of altering at all. Yet it is not easy to provide space large enough (on a globe) for all of the details that are to be inscribed thereon; nor can one fix one's eye at the same time on the whole sphere, but one or the other must be moved, that is, the eye or the sphere, if one wishes to see other places.

In the second method wherein the earth is represented as a plane surface there is not this inconvenience. But a certain adjustment is required in representing the earth as a sphere in order that the distances noted therein may be shown on the surface of the globe congruent, as far as possible, with the real distance on the earth.

Marinus gives this point his deepest consideration, criticising and rejecting all previous methods of delineating distances on the surface of a sphere, yet nevertheless he chose a method which is the least satisfactory of all for locating distances with congruency. For with regard to the lines which he inserts for the parallels and meridians he writes in at equal distance from one another, as is the general custom, in the form of straight parallel lines.

Only the parallel through Rhodes has he kept in right proportion to its meridian and the circumference of the equatorial circle. This parallel is distant 36° from the equator. In this he follows almost exactly the

method of Epitecartus. In the case of the other parallels he has paid no attention whatever either to the right proportion of their length, or to their spheric shape.

At the outset, if the eye is fixed on the middle of the fourth part of the northern hemisphere, in which part the most populated portion of the world is situated, the meridians will have the appearance of straight lines, when the sphere is turned, and that surface comes directly under the eye. But this cannot be the case if they are parallel lines on account of the elevation of the north pole; for the segments of the circles clearly show their curvature in the direction of the meridian. Now according to both truth and appearance the same meridians intercept the similar but unequal circumferences of the parallels which differ in length but are always greater the nearer they are to the equator.

Marinus notwithstanding makes all the interceptions equal. The space of the climates north of the parallel passing through Rhodes, he extends beyond the actual, and the climates in the south he makes smaller than the actual. It follows that the distances of places from one another as shown on his map cannot be the same as their measured stadia, for the distances that are on the equator lack one-fifth of their given measurement, which is the proportion the parallel passing through Rhodes is less than the equator. The distances that are on the parallel passing through Thule, Marinus increases by four-fifths, which is the proportion the parallel through Rhodes is greater than the parallel passing through Thule. It being given that there are one hundred and fifteen parts into which we divide the equator, of these parts the parallel passing through Rhodes, which is 36° distant from the equator, measures 93° , and further the parallel which is 63° distant from the equator, and passes through Thule, measures fifty-two such parts.

CHAPTER XXI

What must be done should one desire to delineate the earth on a plane surface

WHEREFORE we shall do well to keep straight lines for our meridians, but to insert our parallels as the arcs of cir-

cles, having one and the same center, which we suppose to be the north pole, and from which we draw the straight lines of our meridians, keeping above all else similarity to a sphere in the form and appearance of our plane surface.

The meridians must not bend to the parallels, and they must be drawn from the same common pole. Since it is impossible for all of the parallels to keep the proportion that there is in a sphere, it will be quite sufficient to observe this proportion in the parallel circle running through Thule and the equinoctial, in order that the sides of our map which represent latitude may be proportionate to the true and natural sides of the earth.

The parallel passing through Rhodes must be inserted because on this parallel very many proofs of distances have been registered and inserted in right relation to the circumference of the greatest circle, following in this Marinus who followed Epitecartus. By thus doing we shall insure that the longitude of our earth, which is the better known, will be in right proportion to the latitude. We will now show how this may be done, treating first, as far as is necessary, of the properties of a sphere.

CHAPTER XXII

How the habitable earth may be shown on a sphere

THE intention of the individual who wishes to make a globe, having regard to the greater or smaller number of place-names he may wish to insert, will determine the size of the globe, which, in accord with his ability and purpose will be constructed. The larger it is made, the clearer and the fuller will be the description of the various places that are indicated on its surface. Whatever size the globe to be constructed may have, the position of the poles being determined, let there be connecting them a semicircle which we will place a very little distance from the globe's surface, so that when it revolves it almost touches it. Let this semicircle be narrow that it may not cover many places by its width. Divide one side into 180 divisions, and mark on this the numbers, beginning at the middle which

cuts the equator. Repeat this process for the other side.

In like manner draw the equinoctial line; divide this second semicircle into a like number of parts, viz., 180, and begin the numbering from the limit of the most western meridian. Begin the work of inscribing by noting the degrees of longitude and latitude assigned to the various places in the known commentaries. Insert each of the places in its right position on the globe, finding the position of the intersection of the parallels of latitude with the movable meridians as we previously explained.

Next inscribe the degrees of longitude found in the commentaries, at the points where the meridians cut the parallels of latitude. Mark the degrees of latitude along a meridian line, then you can put in the localities in their ascertained positions in the manner in which it is customary to fix stars on a solid sphere. We can insert meridians of whatever number we wish, by using semicircles instead of straight lines. The position of the parallels of latitude we can indicate by placing our instrument for drawing parallel lines in its proper position, which position when found with regard to one meridian, we can then adjust to the other meridians, including both meridians that shut in the habitable world.

CHAPTER XXIII

Explanation of the meridians and parallels used in our delineation

THE meridians, according to what we have already shown, will embrace the space of twelve hours. The parallel that bounds the most southern limit of the habitable world will be distant from the equator in a southerly direction only as far as the parallel passing through Meroe is distant in a northerly direction.

It has seemed proper to us to put in the meridians at a distance from each other the third part of an equinoctial hour, that is, through five of the divisions marked on the equator. The parallels that are north of the equator we have inserted so that:

The first parallel is distant from the equator the fourth part of an hour, and is distant from it geometrically about $4^{\circ} 15'$.

The second parallel we make distant half an hour from the equator, and geometrically distant $8^{\circ} 25'$.

The third parallel we make distant from the equator three-fourths of an hour, and geometrically $12^{\circ} 30'$.

The fourth parallel is distant one hour and is $16^{\circ} 25'$. This is the parallel through Meroe.

The fifth parallel is distant one and one-fourth hours, and $20^{\circ} 15'$.

The sixth parallel, which is under the summer solstice is distant one and one-half hours, and $23^{\circ} 50'$, and is drawn through Syene.

The seventh parallel is distant one and three-fourths hours, and $27^{\circ} 10'$.

The eighth parallel is distant two hours, and $30^{\circ} 20'$.

The ninth parallel is distant two and one-fourth hours, and $33^{\circ} 20'$.

The tenth parallel is distant two and one-half hours, and 36° , and is drawn through Rhodes.

The eleventh parallel is distant two and three-fourths hours, and $38^{\circ} 35'$.

The twelfth parallel is distant three hours, and $40^{\circ} 55'$.

The thirteenth parallel is distant three and one-fourth hours, and $43^{\circ} 05'$.

The fourteenth parallel is distant three and one-half hours, and 45° .

The fifteenth parallel is distant four hours, and $48^{\circ} 30'$.

The sixteenth parallel is distant four and one-half hours, and $51^{\circ} 30'$.

The seventeenth parallel is distant five hours, and 54° .

The eighteenth parallel is distant five and one-half hours, and $56^{\circ} 10'$.

The nineteenth parallel is distant seven hours, and 58° .

The twentieth parallel is distant seven hours, and 61° .

The twenty-first parallel is distant eight hours, and 63° , and is the parallel drawn through Thule.

Besides these, one other parallel must be drawn south of the equator with the time difference of half an hour. It should pass through Rhaptum promontory and Cattigara, and should be about the same length as the parallel in the opposite part of the earth which is distant $8^{\circ} 25'$ north of the equator.

CHAPTER XXIV

How the habitable earth can be shown on a plane so that its measurements are in keeping with its spherical shape

IN the delineation which is made in the map, the following will be our method of showing the proportions of the special parallels. We will draw a right-angled parallelogram ABGD, the side AB of which is about twice as long as the side AG. (See Figure I.)

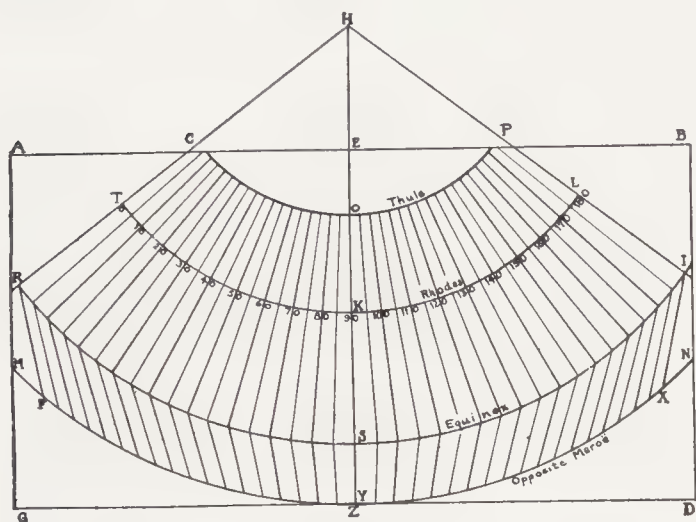


FIGURE I

Place the side AB uppermost which will represent the northern limit of the delineation. We will then divide the side AB in half by the line EZ drawn to it at right angles; and to this line we will so construct the congruent normal straight line that, midway of the length of the former line (AB), it makes one and the same straight line with EZ, that is, then, the line EH. Now let the line EH consist of thirty-four parts, then HZ will measure 131 and five-twelfths. With H as a center and at a distance of seventy-nine parts measured along the line HZ, draw the circle TKL, which will represent the parallel through Rhodes.

Then, that we may arrive at the limits of longitude which are distant at intervals of six hours measured on both sides of the point K, we will take a distance measuring four parts on the line HZ, the line of the median meridian, which is equal to five on the parallel of Rhodes, for the reason that the ratio of a great circle to that parallel is as that of a quinary number to a quaternary, as it is measured by Epitecartus. Measuring nine of these parts from the center K along

the parallel through Rhodes in both directions, we have eighteen points through which to draw meridians with H as a center. Any one of these meridians will differ in time from the next by one-third part of an hour, and also those meridians which bound the edge of the known world will be HTM and HLN.

In the same manner the parallel of Thule is drawn at an interval which is distant fifty-two parts from H in the line HZ: this is the arc COP; then we will draw the equinoctial line ISR from the center H with a radius of 115 parts, and the southernmost parallel, opposite that drawn through Meroe, MYN at an interval of 131 and five-twelfths parts distant from H.

The ratio of the arc RSI and COP will be the same as that of the numbers 115 and 52, which is the ratio of these parallels on a globe, since the line is made up of 115 parts such as the 52 of the line HO, and as the ratio of the line HS to HO so is the arc ISR to COP.

Now there remains the distance on the meridian OK or that between the parallel passing through Thule and that through Rhodes, which is found to measure twenty-seven parts, or segments, and the distance between the parallel of Rhodes and the equator which should measure thirty-six parts or segments, and finally the distance between the equator and the parallel opposite that passing through Meroe which should measure sixteen and five-twelfths like parts or segments.

Furthermore OY representing the extent in latitude of the known world is seventy-nine and five-twelfths such units, or in whole numbers eighty, the median extent in longitude represented by TKL will be 144, which agrees with those which are fixed by the authority of geographers; about the same proportion have the 40,000 stadia of latitude to the 72,000 stadia of longitude in the parallel of Rhodes. From the same center H, and at intervals distant from S the same number of parts or segments we have given above, we can draw as many of the remaining parallels as we wish.

Now indeed we are not permitted to carry the lines which are to be drawn as meridians through in one straight course to the parallel MYN but only to the equator RSI;

and with the arc MYN divided in both directions into ninety parts or segments, equal in size and number to those taken on the parallel of Meroe we can then draw to these marked points the intervening straight lines from those points marked in the equator the course of which will seem deflecting toward the south on the other side of the equator such as are the lines RF and IX.

Then, that we may the more easily mark the localities which are to be placed on the map, let us take a narrow ruler, equal in length to the line HZ or to the line HS, and so attach it at the point H that it can be moved, and when it is swung over, throughout the length of the map, one of its sides can be applied to the meridian line for its entire length, by means of a notch in the side just at the pole. This done, let us divide this side into 131 and five-twelfths parts or segments corresponding to the line HZ or at least into 115 segments on the line HS, and we then number these segments beginning at the equator. Through these numbers we shall be able to draw parallels to the southernmost parallel which we have put down on our map. If, however, we divide the meridian OY on the map into all of the segments, and put the numbers beside them, we are apt to confuse the writing in of the places situated next to them. Having divided the equator into 180° embracing a space of twelve hours, and having given them numbers beginning from the west we may always carry forward the edge of the ruler to any indicated degree of longitude. Finding then the given position in latitude by means of the division made on the ruler we can make the correct notation of every locality, just as we have demonstrated above in the case of spherical delineation.

We shall be able to make a much greater resemblance to the known world in our map if we see the meridian lines, that we have drawn, in that form in which meridian lines appear on a globe, when the axis of the eyes is imagined as directed upon a motionless globe through a point before the eyes in which occurs the intersection of that meridian and that parallel which divides respectively the longitude and the latitude of the known earth into two equal parts, and also through the center of the globe, so that the extreme parts which lie opposite each other

appear and are perceived by the eye in like condition.

First, however, in order that we may determine how great is the inclination of the parallel circles and of that plane which is passed through that point of intersection and through the center of the globe at right angles to the median meridian in longitude, the great circle limiting the hemisphere before our eyes is taken, i. e. the line ABGD (see Figure II), and the semicircle of that

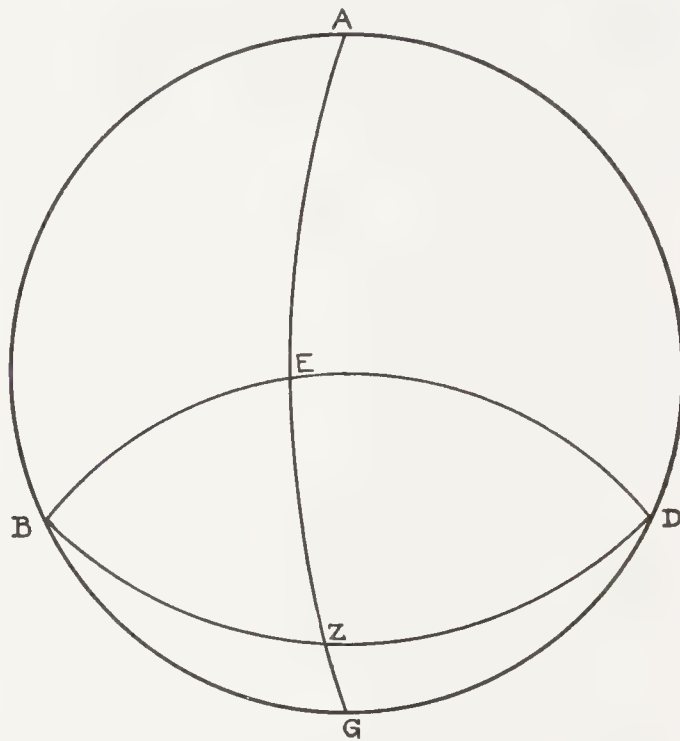


FIGURE II

meridian which divides the hemisphere in halves, is the line AEG, and the point in which, before our eyes, this semicircle intersects the parallel cutting the middle latitude, is the point E; then through the point E there is drawn the semicircle of another great circle BED so that it makes right angles with the semicircle AEG, its plane, as is apparent, falls upon the axis of the eyes; and with the arc EZ, of twenty-five and five-sixths degrees marked off (for by this many degrees, in fact, is the equator distant from the parallel passing through Syene, which is placed almost in the median latitude of the known world), there is also described, through the point Z, the semicircle BZD of the equator.

Therefore both the equatorial plane and the plane of the other parallels will appear inclined twenty-three and five-sixths degrees to the plane placed in the axis of the eyes; and of so many degrees is the arc EZ.

Now the lines AEZG and BED (see Figure III) are considered to stand in the place of the arcs, whence BE has the ratio to EZ that ninety has to twenty-three and five-sixths. And the line GA, passes through the center of the circle of which BZD is an arc, and it is proposed to find the ratio of the line HZ to the line EB. A straight line is drawn which bisects BZ at the point T, there is also then drawn TH, which plainly is the perpendicular to the line BZ. Now since the straight line BE is of ninety parts and EZ of twenty-three and five-sixths, the hypotenuse, BZ, will be ninety-three and one-tenth of the same; the angle BZE 150

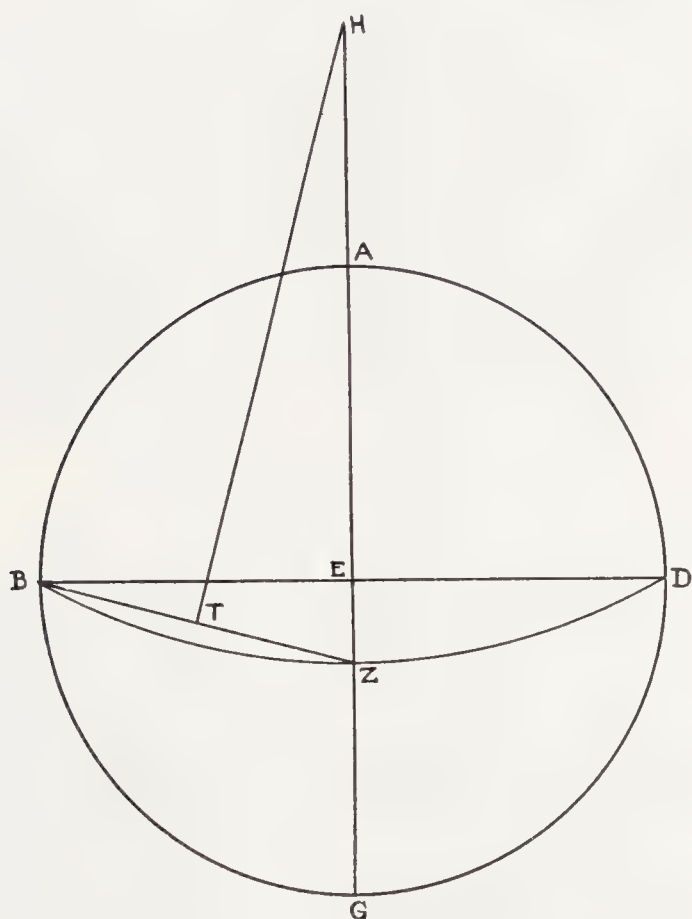


FIGURE III

and one-third (units) of the 360, which is the measure of two right angles; the other angle which is equal to THZ or twenty-nine and two-thirds of the same units. For the same reason, the ratio of the line HZ to ZT is that which 181 and five-sixths has to forty-six and eleven-twentieths. The straight line ZT has forty-six and eleven-twentieths parts as the straight line BE has ninety; therefore the straight line BE has ninety parts and ZE twenty-three and five-sixths, and we will have the straight line HZ measuring 181 and five-sixths such parts and H that point from which all parallels are drawn

when the delineation is to be made upon a plane.

Having settled these preliminaries let us draw again the map ABGD (see Figure IV), in which AB is twice the length of the line AG, and AE and EB equal. Draw EZ at right angles to AB.

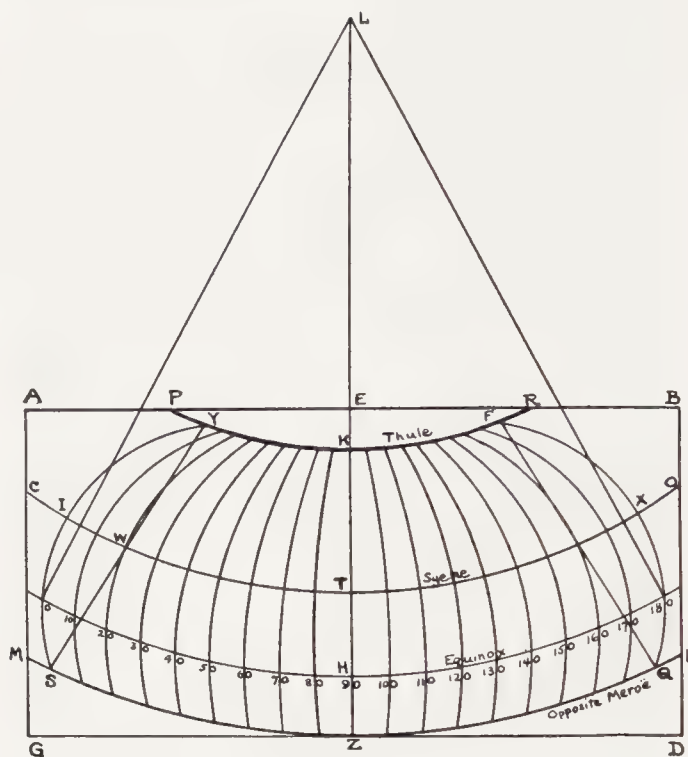


FIGURE IV

Now divide EZ into ninety parts, the number of degrees in a quadrant of a circle, then the line ZH which is marked off at sixteen and five-twelfths degrees, HT at twenty-three and five-sixths degrees, HK at sixty-three of the same; if we consider the point H as lying in the equinoctial line, then the point T will be that through which is drawn the parallel of Syene which is located almost in the middle of the habitable earth, and Z that through which will run the parallel which terminates the southern boundary of the world and is opposite the parallel of Meroe, and K is that through which is drawn the parallel which terminates the northern boundary of the known world running through the island of Thule. Now if we produce the line ZE, and in this produced line we make HL to have 181 and five-sixths of the same segments, or even 180 degrees (whether we take the one number or the other does not make much difference in our map's appearance), then let us draw the arcs PKR and CTO, and MZN, with the center L and intervals K, T, Z. In

this manner, let us keep the right ratio of the inclination of the parallels to the plane that corresponds to the line of vision when the line of vision is made to direct itself to the point T and is necessarily perpendicular to the plane of the map, so that in consequence the extreme parts of the map which are drawn opposite to one another are equally well discernible.

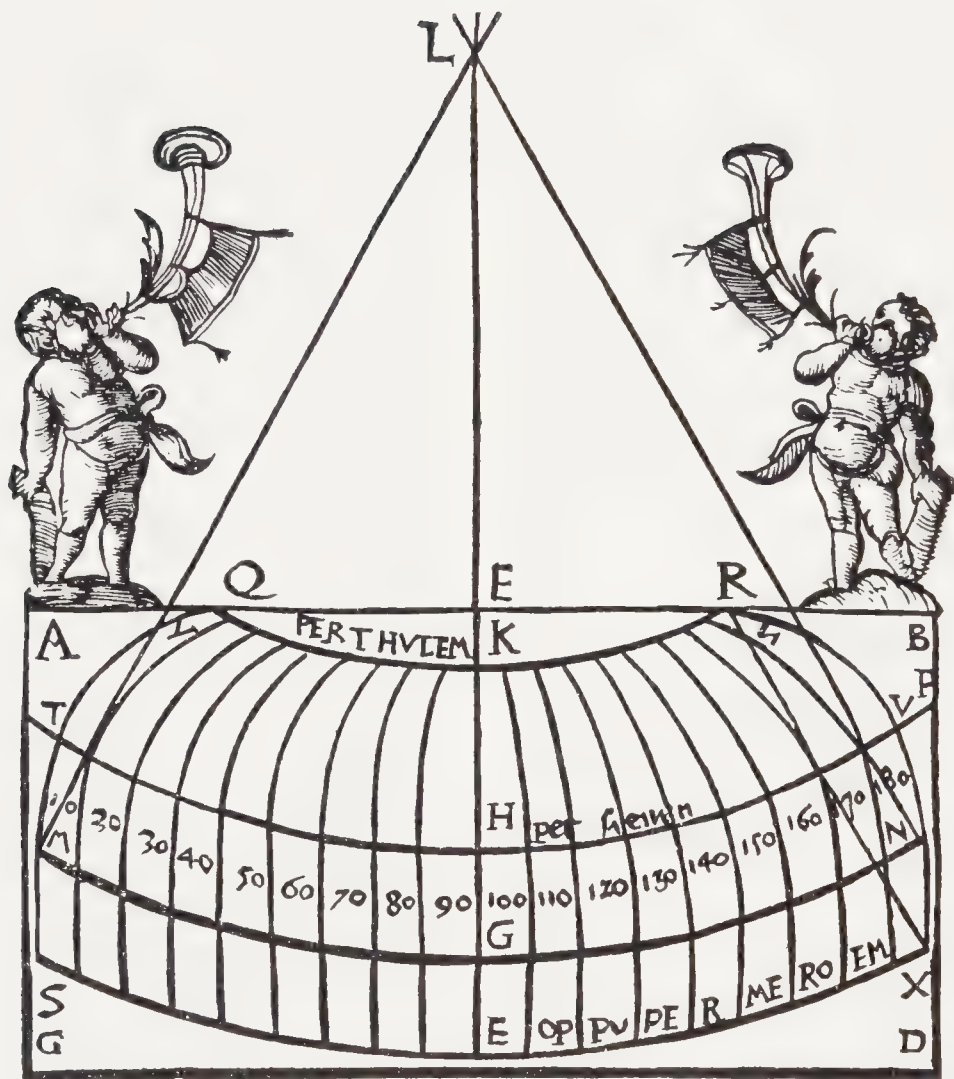
But, in order that longitude may agree with latitude, let it be our task to determine the eighteen meridians so that the number of semicircles may be complete, by which all longitude is embraced, since on a globe a great circle is made up of five parts such as the parallel of Thule has about two and one-fourth, that of Syene four and seven-twelfths and that of Meroe four and five-sixths, and since on either side of the meridian line ZK, at every third part of an equatorial hour, the number is completed; we take segments which on each of these three parallels are equivalent to one-third of an hour, or five degrees; that is, segments of which the line EZ contains ninety, and we make incisions on the three parallels at two and one-fourth units from K, at four and seven-twelfths from the point T, and at four and five-sixths from the point Z. Then when we have drawn the arcs through the three mutually corresponding points to represent the other meridians, as also the arcs SIY and FXQ, which are the limits of longitude, we shall also add the other arcs to represent the remaining parallels, again with the center L, and at intervals of as many segments as are to be made on the line ZK for the distance of the parallels from the equinox.

That a greater likeness to a sphere is achieved by this method than by the former will be self-evident. When the sphere stands motionless before the eyes, and is not revolved (which necessarily holds true for a plane map), and the eye rests on the middle of the object, one certain meridian which, because of the globe's position, lies at the middle of the plane passing through the axis of the eye, will exhibit the appearance of a straight line, while those on either side

appear inflexed with their concave side toward it, and the more so as they lie farther from it, which is also observed here with exact analogy, just as it is also seen that the symmetry of the parallel arcs keeps the proper ratio of one to another, not only in the equatorial line and the parallel of Thule (as was done in the former case), but in the others also, as closely as they can be made — the difficulty of doing this is evident — and that the conformity of latitude as a whole serve toward a true, general longitude ratio, not only in the parallel drawn through Rhodes, but in all of the parallels.

Now if we produce the straight line SWY, as was done in the earlier figure, the arc TW clearly makes a smaller ratio to the arcs ZS and KY than that proper one which is shown in this map and which occurs in the arc IT; and if we were to make this arc TW agree with the extension KZ of latitude, the arcs ZS and KY will be greater than those which agree with the line ZK just as arc IT itself is larger; and if we take the arcs ZS and KY to agree with the line ZK, the arc WT will be smaller than that corresponding to the line KZ, just as it is smaller than the arc IT.

Although for these reasons this method of drawing the map is the better one, yet it is less satisfactory in this respect, that it is not as simple as the other; because with that method, when the ruler is applied and carried over the map, given even one parallel drawn in and divided, individual localities can be put in place; here, however, since such a thing can no longer be done, by reason of the meridian line being inflexed at the middle, all of the other circles must be written in, and positions which lie inside those quadrate circles must be found by conjecture, after finding their relation from the given data to the whole sides which limit the areoles. Since this is so, even though for me both here and everywhere the better and more difficult scheme is preferable to the one which is poorer and easier, yet both methods are to me retained for the sake of those who, through laziness, are drawn to that certain easier method.



BOOK TWO



The Second Book contains the following:

A prologue of the particular descriptions, and a description of the western part of Europe including the several provinces and prefectures which are contained therein

- | | |
|--------------------------------------|---------|
| 1. Hibernia island of Britannia | Map I |
| 2. Albion island of Britannia | |
| 3. Hispanic Baetica | Map II |
| 4. Hispanic Lusitania | |
| 5. Hispanic Tarraconensis | |
| 6. Aquitainian Gaul | Map III |
| 7. Lugdunensian Gaul | |
| 8. Belgic Gaul | |
| 9. Narbonensian Gaul | |
| 10. Greater Germania | Map IV |
| 11. Raetia and Vindelica | Map V |
| 12. Noricum | |
| 13. Upper Pannonia | |
| 14. Lower Pannonia | |
| 15. Illyria or Liburnia and Dalmatia | |
| Provinces, XV | |
| Maps, V | |

Prologue of the particular descriptions

THAT which should be considered in general geography must here be explained, and also how the drawing of maps should be emended in keeping with the present knowledge of the known parts of our habitable earth, as far as it concerns the question of the relation of place to place, and also their likenesses, and the method of depicting them.

Beginning with the particular narration let us first make a statement respecting the degrees of longitude and latitude which have been assigned to well-known places. Approximately these are correct, since the traditions concerning them are continuously the same; that is, in the main the traditions agree. But as to the degrees ascribed to localities not as yet thoroughly explored, because of the incomplete and uncertain knowledge we have of these places, they should be computed rather from their nearness to the localities already laid down, and

the more thoroughly explored. This should be done lest any of those localities which have been inserted for completing the whole earth's picture should be without a fixed and definite place.

Therefore we have written on the margins of the pages notations respecting the different degrees of different places, and have used these as measurements, in the first place of longitude; then we have noted the degrees of latitude in such manner that if any corrections must be made, from a fuller investigation, they can be inserted in the adjoining spaces which have been left vacant between the separate pages.

Moreover we have selected the projection which we especially consider the best in the making of maps, this being the one in which we start at the right hand. The work may then proceed from places already inserted to those not yet inserted. This can best be carried out if we write in the northern latitudes before the southern ones, and the western before the eastern ones; since to the eye of the writer or reader the northern localities appear in the upper part, and the eastern appear on the right hand, on both the globe and the map of the habitable earth.

First of all, therefore, let us set down Europe which we separate from Libya by the Straits of Hercules, and from Asia, after we have put in the seas and the swamp of Myotis, by the river Tanis and by the meridian drawn through it to the unknown region; then let us put in Libya and place it likewise next to the sea which extends from the bay lying near Prasmus, a promontory of Ethiopia, as far as the Gulf of Arabia. Let us separate Libya from Asia by the isthmus which extends from the interior of Heroopoliticus to our sea, and separates Egypt from Arabia and Judea. Let us do this that we may not divide Egypt, in making a division of the continent, by the Nile, because continents are bounded more properly, where it is possible, by seas than by rivers.

In the last place let us put in Asia, keeping the same plan as in the parts of each con-

continent, of disposing of each of them according to its relation to the whole earth, and to the entire inhabited regions in the continents themselves, first writing in the coast that is most northern, then the western, and the seas and the islands that are nearest together, and those which in some particular are most worthy of mention.

After this let us distinguish, in the descriptions, the various prefectures, and provinces of the earth, treating them as we have before noted, in accord with the known positions of localities and according to what especially ought to be inserted, spurning the multitudinous traditional farrago concerning the peculiar qualities of their different inhabitants, except that, in the case of qualities renowned by general report, we make a short and suitable note on the religion and manners. In this way the opportunity will be given to any one, who desires it, for drawing the parts of the earth in maps according to the particular prefectures and provinces, one or many, and the right relation of the places of each other on the maps will be preserved, together with the right size and the right shape. Nor will it make much difference if in these maps we use parallel meridian straight lines instead of curved lines, provided we keep the proper proportion of the meridian degrees to the degrees marked on the great circle, that is the equator, which is in the middle of every map.

Having stated these things, let us begin our particular descriptions with the western part of Europe according to its provinces or prefectures.

CHAPTER I

*Location of Hibernia island of Britannia
(First map of Europe)*

A DESCRIPTION of the north coast, beyond which is located the Hyperborean ocean.

Boreum promontory	11	61
Vennicium promontory	12 50	61 20
mouth of the Vidua river	13	61
mouth of the Argita river	14 30	61 30
Rhobogdium promontory	16 20	61 30

The *Vennicni* inhabit the west coast; next to them and toward the east are the *Rhobogdi*.

A description of the west side, which borders on the Western ocean from the Boreum promontory which is in

mouth of the Ravius river	11 20	60 40
Magnata city	11 15	60 15
mouth of the Libnius river	10 30	60
mouth of the Ausoba river	10 30	59 30
mouth of the Senus river	9 30	59 30
mouth of the Duris river	9 40	58 40
mouth of the Iernus river	8	58
Southern promontory	7 40	57 45

The *Erdini* inhabit the coast next to the *Vennicni*, and between these are the *Magnatae*; then the *Autini*; and the *Gangani*; below whom are the *Vellabori*.

Description of the south coast, which adjoins the Vergionius ocean, from the southern promontory which is in

mouth of the Dabrona river	11 15	57
mouth of the Birgus river	12 30	57 30
Sacrum promontory	14	57 50

The side next to the *Vellabori* the *Hiberni* inhabit, above whom are the *Usdiae* and more towards the east are the *Brigantes*.

A description of the east side touching the ocean which is called Hibernicus, beginning at the Sacrum promontory which is in

mouth of the Modonnus river	13 40	58 40
Manapia town	13 30	58 40
mouth of the Oboca river	13 10	59
Eblana town	14	59 30
mouth of the Bubindas river	14 40	59 40
Isamnum promontory	15	60
mouth of the Vinderis river	15	60 15
mouth of the Logia river	15 20	60 40

Next to this is the Robogdium promontory.

On the side next to the *Robogdi* dwell the *Darini*, below whom are the *Volunti*; then the *Eblani*; then the *Cauci*; below whom are the *Manapi*; then the *Coriondi* who dwell above the *Brigantes*.

The following are the inland towns:

Regia	13	60 20
Rhaeba	12	59 45
Laberus	13 59	15
Macolicum	11 30	58 40
another Regia	11	59 15
Dunum	12 30	58 45
Hibernis	11	58 10

BOOK TWO — CHAPTER II

Above Hibernia are the Ebuda islands five in number, the largest of which toward the west is called Ebuda 15 62 next to this toward the east likewise is Ebuda island 15 40 62 then Rhicina 17 62 then Malaesus 17 30 62 30 then Epidium 18 30 62

Toward the east of Hibernia are these islands:

Monaeda island	17	40	61	30
Mona island	15		57	40
Adru which is barren	15		59	30
Limnu which is barren	15		59	

CHAPTER II

*Location of Albion island of Britannia
(First map of Europe)*

A DESCRIPTION of the northern coast, above which is the Duecaledonius ocean.

Novantarum peninsula, and promontory of the same name	21	61	40
Rerigonius bay	20	30	60 50
Vindogara bay	21	20	60 30
Clota estuary	22	15	59 20
Lemannonius bay	24		60
Epidium promontory	23		60 40
mouth of the Longus river	24	30	60 40
mouth of the Itis river	27		60 40
Volas bay	29		60 30
mouth of the Navarus river	30		60 30
Tarvedum or Orcas promontory	31	20	60 15

Description of the east side which borders on the Hibernian ocean and the Vergonius ocean. From the Novantian promontory

mouth of the Abravanus river	19	20	61
Iena estuary	19		60 30
mouth of the Devas river	18		60
mouth of the Novius river	18	20	59 30
Ituna estuary	18	30	58 45
Moricambe estuary	17	30	58 20
Setantiorum harbor	17	20	57 45
Belisama estuary	17	30	57 20
Seteia estuary	17		57
Caeanganorum promontory	15		56

mouth of the Toesobis river	15	40	56 20
mouth of the Stuccia river	15	20	55 30
mouth of the Tuerobis river	15		55
Octapitarum promontory	14	20	54 30
mouth of the Tobius river	15	30	54 30
mouth of the Ratostabius river	16	30	54 30
Sabrina estuary	17	20	54 30
Uxella estuary	16		53 30
Herculis promontory	14		52 45
Antivestaeum or Bolerium promontory	11	30	52 30
Damnonium or Ocrium promontory	12		51 30

Description of the south side below which is the Britannicus ocean. After the Ocrium promontory is the mouth of the Cenio river

mouth of the Tamarus river	14	51	51 45
mouth of the Iscas river	15	40	52 10
mouth of the Alaunus river	17	40	52 20
Great harbor	19		53
mouth of the Trisantonis river	20	20	53
New harbor	21		53 30
Cantium promontory	22		54

A description of the eastern and the southern side next to which is the Germanicus ocean. After the Tarvedum promontory, or Orcades, by which it is known,

Virvedrum promontory	31	60
Verubium promontory	30	30 59 40
mouth of the Ila river	30	59 40
Ripa alta (high bank)	29	59 40
Varar estuary	27	59 40
mouth of the Loxa river	27	30 59 40
Tuesis estuary	27	59
mouth of the Caelis river	27	58 45
Taezalon promontory	27	30 58 30
mouth of the Deva river	26	58 30
mouth of the Tina river	24	58 30
Boderia estuary	22	30 59
mouth of the Alaunus river	21	20 58 30
mouth of the Vedra river	20	10 58 30
Dunum bay	20	15 57 30
Gabrantuicorum bay with many harbors	21	57
Oculus promontory	21	15 56 40
mouth of the Abi river	21	56 30
Metaris estuary	20	30 55 40
mouth of the Gariennus river	20	50 55 40

PTOLEMY'S GEOGRAPHY

Promontorium	21	15	55	5
mouth of the Sidumanis				
river	20	10	55	
Tamesa estuary	20	30	54	30
Next to this the Cantium				
promontory	22		54	

The *Novantae* dwell on the side toward the north below the peninsula of this name, among whom are the following towns:

Locopibia	19		60	20
Rerigonium	20	10	60	40

Below are the *Selgovae*, among whom are the following towns:

Carbantorigum	19		59	30
Uxellum	18	30	59	20
Corda	20		59	40
Trimontium	19		59	

From these toward the east, but more northerly, are the *Damnoni*, among whom are the following towns:

Colanica	20	45	59	10
Vindogara	21	20	60	
Coria	21	30	59	20
Alauna	22	45	59	50
Lindum	23		59	30
Victoria	23	30	59	

Further south are the *Otalini*, among whom are the following towns:

Coria	20	10	59	
Alauna	23		58	40
Bremenium	21		58	45

Next to the *Damnoni*, but more toward the east near the Epidium promontory are the *Epidi* and next to these the *Cerones*; then the *Carnonacae*, and the *Caereni* but more toward the east; and in the extreme east dwell the *Cornavi*; from the Lemannonis bay as far as the Varar estuary are the *Caledoni*, and above these is the Caledonian forest, from which toward the east are the *Decantae*, and next to these the *Lugi* extending to the Cornavi boundary, and above the *Lugi* are the *Smertae*; below Caledonia are the *Vacomagi*, among whom are the following towns:

Bannatia	24		59	30
Tamia	25		59	20
Pinnata camp	27	15	59	20
Tuesis	26	45	59	10

Below these toward the west are the *Venicones*, whose town is

Orrea	24		58	45
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More toward the east are the *Taezali* and the town Devana

26		59	
----	--	----	--

Below the *Selgovae* and *Otadini* are the *Brigantes* extending to both seas, among whom are the following towns:

Epiacum	18	30	58	30
Vinovium	17	45	58	
Caturactonium	20		58	
Calatum	19		57	45
Isurium	20		57	40
Rigodunum	18		57	30
Olicana	19		57	30
Eboracum, Legio VI				
Victrix	20		57	20
Camulodunum	18		57	45

Near which on the Opportunum bay are the *Parisi* and the town

Petuaria	20	40	56	40
----------	----	----	----	----

Below these are the *Brigantes* but some distance toward the west are the *Ordovices*, among whom are the towns

Mediolanum	16	45	56	40
Brannogenium	16	45	56	15

From these toward the east are the *Cornavi* among whom are the towns

Deva, Legio XX Victrix	17	30	56	45
Viroconium	16	45	55	45

Next to these are the *Coritani*, among whom are the towns

Lindum	18	40	56	30
Ratae	18		55	30

Next are the *Catuvellauni*, among whom are the towns

Salinae	20	45	55	50
Urolanium	19	20	55	30

Next to these are the *Iceni*, whose town is called Venta

20	30	55	20
----	----	----	----

Farther eastward and near the Tamesae estuary are the *Trinovantes*, and the town Camulodunum

21		55	
----	--	----	--

Below the peoples we have mentioned, but more toward the west are the *Demetae*, whose towns are

Luentinum	15	45	55	10
Maridunum	15	30	54	40

More toward the east are the *Silures* whose town is Bullaeum

16	50	55	
----	----	----	--

Next to these are the *Dobuni*, and their town Corinium

18		54	10
----	--	----	----

then the *Atrebat* and

their town Caleva	19		54	15
-------------------	----	--	----	----

Next to these, but farther eastward, are the *Canti* among whom are the towns

Londinium	20		54	
Daruernum	21		54	
Rutupie	21	45	54	

BOOK TWO — CHAPTER III

Below the *Atrebatii*, and the *Canti* are the *Regni* and the town

Noeomagus 19 45 53 5

Below the *Dobuni* are the *Belgae* and the towns

Iscalis 16 53 40

Aquae calidae (hot springs) 17 20 53 40

Venta 18 40 53

Toward the west and south of these are the *Durotriges* whose town is

Dunium 18 52 40

Next to these, but more to the west, are the *Dumnoni* whose towns are

Voliba 14 45 52

Uxella 15 52 45

Tamara 15 52 15

Isca, where is located

Legio II Augusta 17 30 52 45

The islands which are near Albion island and the Orcades promontory are

Scetis island 32 40 60 45

Dumna island 30 61 20

Above these islands are the Orcades, about thirty in number, the middle of which is in 30 61 40

Far above these is the island Thule. The part of this which extends much toward the west is in 29 63

that which is farthest eastward is

in 31 40 63

that which is farthest northward is

in 30 20 63 15

that which is farthest southward is

in 30 20 62 40

the middle is in 30 20 63

Eastward from the Trinovantes region there are two islands

Toliapis 23 54 20

Counus island 24 54 30

Below Magnus Portus (Great harbor) is the island Vectis, the middle of which is in 19 20 52 20

CHAPTER III

Location of Baetica Hispania (Second map of Europe)

IN Hispania, which in Greek is called Iberia, there are three provinces, Baetica, Lusitania, and Tarraconensis.

The side of Baetica which is on the west and the north is terminated by Lusitania and a part of Tarraconensis.

The following is a description of this side: on the east

mouth of the Ana river 4 20 37 30

where the river turns

from the east 6 20 39

the locality where the river touches the border of Lusitania 9 39

the boundary line drawn thence along Tarraconensis, which extends as far as the Balearic sea has its terminus

in 12 37 15

the sources of the river are located

in 11 40

The southern side of Baetica is terminated by the Outer sea and the Hercules strait, and by the Inner or Iberian sea. A description of this side is the following:

From the mouth of the Ana river in the Outer sea are

the *Turdetani*

Onoba estuary 4 40 37 20

Eastern mouth of the

Baetis river 5 20 37

sources of the river 12 38 30

Estuary near Asta 6 36 45

the *Turduli*

Menesthus harbor 6 36 20

promontory, where a bay begins, and in this is the Temple of Juno 5 45 36 5

mouth of the Baelonis

river 6 10 36 10

Baelon town 6 15 36 5

The *Bastuli* who are also called *Phoenicians*

Menralia 6 30 36 5

Transducta 6 50 36 5

Barbesola town 7 15 36 10

Carteia 7 30 36 10

Calpe mountain (Gibraltar) and pillars of the inner sea 7 30 36 15

In the Iberian sea

mouth of the Barbesola

river 7 40 36 20

Suel 8 36 55

mouth of the Salduba

river 8 30 37

Malaca (Malaga) 8 50 37 30

Maenoba 9 15 37 15

Sex 9 45 37 15

Selambina 10 15 37 15

Projecting land (procursus) 10 50 37 5

Abdara 10 45 37 10

Great harbor (Portus

Magnus) 11 20 37 5

PTOLEMY'S GEOGRAPHY

Charidemi promontory 11 30 36 50
The remaining part of the province, turning from the south, is terminated on the Balearic sea by the line which runs from the mentioned Charidemi promontory to the terminal position, near which is

Baria town 11 45 37 10

The *Bastuli* inhabit the sea coast from Menralia to Baria, as we have said; above whom, in the interior, which is adjacent to Tarraconensis, the *Turduli* dwell, and their interior cities are

Setia	9	10	38	50
Ilurgis	9	30	38	40
Vogia	9		38	30
Calpurniana	9	45	38	10
Caecila	9	15	38	10
Baniana	10		38	15
Corduba	9	20	38	5
Ulia	9	30	38	
Obulcum	10	10	38	
Arcilacis	8	45	37	45
Detunda	8	40	37	25
Murgis	8	15	37	20
Salduba	8	45	37	20
Tucci	8		37	10
Salar	7	30	37	
Barla	7		36	40
Ebora	6	15	36	55
Onoba	6	10	36	20
Illipula magna (greater)	9	40	38	
Selia	9	40	37	45
Vescis	9	30	37	30
Oscua	9	50	37	30
Artigis	9	40	37	25
Callicula	10	10	37	45
Lacibis	10	15	37	30
Sacilis	10	25	37	50
Lacippo	10	15	37	20
Illiberis	11		37	40

The *Turdetani* inhabit the interior region bordering on Lusitania, whose towns are

Canaca	4	40	38	
Seria	4	40	37	45
Osca	5		37	15
Caeriana	5	10	38	15
Urium	5	40	38	20
Illipula	6		38	
Segida	6	30	37	45
Ptuci	5	30	37	30
Sala	5	40	37	30
Nabrisa	5	40	37	20
Ugia	5	30	37	10
Asta	6		37	

Corticata	6	5	38	20
Laelia	6	30	38	5
Italica	7		38	
Maxilua	6	20	37	50
Ucia	7		37	40
Carissa	6	30	37	30
Calduba	6	40	37	15
Paesula	7		37	10
Saguntia	6	30	37	5
Asindum	6	30	36	50
Nertobriga	7		38	50
Contributa	7	40	38	55
Regina	7	10	38	55
Cursu	8		38	40
Mirobriga	7		38	25
Spoletinum	7	20	38	20
Illipa magna (greater)	7	40	38	10
Hispalis	7	15	37	50
Obucola	8		37	45
Oleastrum	7	10	37	30
Ursone	7	30	37	5
Baesippo	7	15	37	5
Fornacis	8	30	38	50
Arsa	8	40	38	35
Asyla	8	35	38	25
Astigis	8	15	38	20
Carmonia	8	10	38	

Celtic Baetica

Arucci	5	50	38	50
Arunda	6	30	38	50
Curgia	6	30	38	40
Acinippo	6	30	38	25
Vama	6	15	38	25

The mountains in Baetica are called the Marianus, the central part of which is in 6 37 40

and the Illipula the central part of which is located in 7 20 37 30

There is an island adjacent to Hispanic Baetica in the Outer sea, in which is the town Gadir, the location of which is in 5 10 36 10

CHAPTER IV

Location of Lusitania Hispania (Second map of Europe)

THE south side of Lusitania, as we have indicated, is the northern boundary of Baetica; the north side borders on Tarraconensis along the western part of the Doris river, the mouth of which opens into the Outer sea in the locality 5 20 41 50

BOOK TWO — CHAPTER V

where the river first touches the borders of Lusitania is in

sources of the river are in

The eastern side also borders on Tarraconensis, and its termini as we have said, are near the Anas river and the Dorius river.

The west side, which extends along the Western ocean, is thus described:

After the mouth of the Anas river the *Turditani*

Balsa	3	40	37	45
Ossonoba	3		37	50
Sacrum (Sacred) promontory	2	30	38	15
mouth of Calipodis river	5		39	
Salacia	5	5	39	25
Caetobrix	4	55	39	30

the *Lusitani*

Barbarium promontory	4	50	39	50
Oliosipon	5	10	40	15
mouth of the Tagus river	5	30	40	30
that part of the river which touches Tarraconensis is in	9		40	30
sources of the river	11	40	40	45

Luna mountain, promontory	5		40	40
mouth of the Monda river	5	10	40	50
mouth of the Vacus river	5	10	41	20

Next is the mouth of the Dorius river in

The *Turdetani* inhabit the vicinity of the Sacred promontory, whose interior cities in Lusitania are

Pax Julia	5	20	39	
Julia Myrtilis	5	15	38	45

The *Geltici* inhabit that region which from these (towns) lies toward the interior; their cities in Lusitania are

Laccobriga	5	45	40	15
Caepiana	5	20	40	
Braetoleum	6		40	
Mirobriga	5	20	39	45
Arcobriga	5	40	39	45
Meribriga	6	10	39	40
Catralaucus	5	40	39	20
Arandis	6	10	39	5

Above these are the *Lusitani*, whose interior towns are

Lavare	5	30	41	45
Aritium	5	40	41	30
Selium	6		41	20
Elbocoris	6	30	41	15
Araducta	6	40	41	30
Verurium	7	15	41	5

Velladis	6	40	41	5
Aeminium	7	20	41	
Chretina	5	30	40	40
Arabriga	5	40	40	30
Scalabis colonia	6		40	55
Tacubis	6	20	40	45
Concordia	6	40	40	30
Talabriga	7	30	40	45
Rusticana	7	40	40	30
Mendiculeia	6	50	40	15
Caurium	6	40	40	
Turmogum	8		40	15
Burdua	7	20	40	
Colarnum	6	50	39	45
Sallaecus	6	40	39	30
Ammaea	7		39	20
Ebura	7		39	5
Norba Caesarina	7	50	39	55
Liciniana	7	20	39	40
Augusta Emerita	8		39	30
Evandria	7	20	39	15
Geraea	7	40	39	5
Caecilia Gemellina	8	40	39	30
Capasa	8	40	39	10

The *Vettones* are farthest east, whose towns are

Lancia oppidana	8	30	41	40
Cottaecobriga	8		41	30
Salmantica	8	50	41	50
Augustobriga	8		41	15
Ocelum	8	20	41	15
Capara	8	30	41	
Manliana	8	20	41	
Laconimurgi	8	20	40	45
Diobriga	8	40	40	40
Obila	8	50	40	25
Lama	8	30	40	5

Island adjacent to Lusitania

Londobris	3		41	
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CHAPTER V

Location of Tarraconensis Hispania
(*Second map of Europe*)

THE western side of Tarraconensis, which borders on the Western ocean, is thus described: after the mouth of the Dorius river, there follows

the <i>Callaici Bracares</i>				
mouth of the Avus river	5	30	42	15
Avarus promontory	5	30	42	30
mouth of the Nebis river	5	40	42	45
mouth of the Limius river	5	30	43	15

PTOLEMY'S GEOGRAPHY

mouth of the Minius river 5 20 43 40
sources of the rivers 11 30 44 15
the *Callaici Lucensi*

Orvium promontory 5 30 44
mouth of the Via river 5 40 44 20
mouth of the Tamara river 5 40 44 40
the *Artabri*

Artabri harbor 5 20 45
Nerium promontory 5 15 45 10

The north side, above which is the ocean called Cantabrius, is described as follows: after the Nerium promontory there is another promontory in which are the altars of the Sesti.

Promontory 5 40 45 30
mouth of the Virus river 6 15 45 30
next a promontory 6 30 45 30

In the Great harbor of the *Callaici Lucensi*

Flavius Brigantius 6 45 45
Lapatia Coru promontory which is called Trilecum 8 15 45 50

mouth of the Mearus river 9 45 45

mouth of the Nabius river 10 20 45 40

mouth of the Nabiala-vionis river 11 20 45 45
the *Paesici*

Flavionavia 11 45 45 25
mouth of the Naelus river 12 45 30
the *Cantabri*

Noega Ucesia 13 45 30
the *Autrigones*

mouth of the Nerva river 13 10 44 40

Flaviobriga 13 30 44 15
the *Caristi*

mouth of the Deva river 13 45 44 25
the *Varduli*

Menosca 14 20 45
the *Vascones*

Oeasso town 15 10 45 5

Oeasso promontory 15 10 45 50

The side toward the south is terminated by the Pyrenees, thence extending from the mentioned promontory on the coast of our sea, where has been erected a Temple of Venus, located in 20 20 42 20

The mountains (Pyrenees) turn slightly toward Hispania, and the middle of the bend is toward Tarraconensis

in 17 43

On the other side of Tarraconensis, that which borders on Lusitania and Baetica has been described, the remaining part which

borders on the Balearic sea and looks toward the south, is described as follows: it extends to the boundary of

Baetica in 12 37 15

On the sea coast of the *Bastitani* is

Urci 12 37 25

On the sea coast of the *Contestani* are

Lucentum 12 10 37 30

Cartaga nova (new Carthage) 12 15 37 55

Scombraria promontory 12 55 38 5

mouth of the Taberis river 12 30 38 30

Alona 12 40 38 55

mouth of the Saetabis river 13 38 45

Illicitanus harbor 13 30 38 45

mouth of the Sucronis river 14 38 50

On the sea coast of the *Edetani* are

mouth of the Pallantia 14 40 38 55

mouth of the Turis river 15 39

Dianium 15 45 39 30

On the maritime coast of the *Ilercaones* are

Tenebrius promontory 15 55 39 40

Tenebrius harbor 15 30 40

mouth of the Iberus river 16 40 30

middle of this river 14 42

sources of the river 12 30 44

On the sea coast of the *Cosetani* are

Tarraco 16 20 40 40

Subur 16 50 40 45

On the sea coast of the *Laetani* are

Barcinon 17 15 41

mouth of the Rubricatus river 17 30 41

Betulon 17 50 41 20

Lunarium promontory 18 30 41 30

Diluron 18 41 45

Blanda 18 15 42

On the sea coast of the *Indigetes*

mouth of the Sambroca river 18 30 42 10

Emporia 18 45 42 20

mouth of the Clodianus river 19 42 30

Rhode town 19 30 42 30

and then as we have said

Temple of Venus 20 20 42 20

The mountains in Tarraconensis are called the Vindius, the extremities of which are in 9 45

and 11 30 44 30

the Edulius, the extremities of which are

in 14 40 42 30

and 16 43

BOOK TWO — CHAPTER V

the Idubeda, the extremities of which are
in 14 41 30
and 14 20 39
the Ortospeda, the extremities of which are
in 12 37 40
and 14 39 40

On the Nerium promontory the *Artabri*
dwell, whose towns are

Claudiomerum 5 45 45 10
Novium 6 10 44 45

Near these are the *Callaici Lucensi*,
whose interior towns are

Burum 8 15 45 5
Olina 8 30 48 30
Vica 9 20 45 20
Libunca 10 10 45 20
Pintia 10 10 45 5
Caronium 7 44 45
Turuptiana 6 20 44 45
Glandomirum 7 44 30
Ocelum 8 20 44 25
Turriga 8 50 44 35

of the *Capori*

Iria flavia 6 25 44 30
Lucus augusti 7 25 44 25

of the *Cilini*

Aqua calida (hot spring) 6 20 44 20
of the *Lemavi*

Dactonium 7 30 44
of the *Baedyi*

Flavia lambris 7 20 44 45
of the *Seurri*

Talamina 8 30 44 30
Five Springs 8 30 45 10

Asturia joins this on the east side, and the
towns in this province are

Lucus asturum 11 45
Labernis 11 44 30
Interamnium 10 15 44 20
Argenteola 9 20 43 45
Lanciati 9 20 43 30
Maliaca 10 20 44
Gigia 11 30 43 45
Bergidum river 8 30 44 10

Interamnium river 9 44
Legio VII Germanica 9 43 30

of the *Brigaecini*

Brigaecium 10 44 50
of the *Baedunenses*

Bedunia 9 50 44 25
of the *Orniacori*

Intercatia 11 10 44 15
of the *Lungonum*

Paelontium 11 40 44 50

of the *Selini*

Nardinium 10 20 43 45

of the *Supertati*

Petavonium 9 30 43 40

of the *Amacori*

Asturica Augusta 9 30 44

of the *Tibures*

Nemetobriga 7 30 43 45

of the *Gigurri*

Forum Gigurum 8 43 45

The land between the Minius and the
Dorius rivers, near the sea, the *Callaici Bra-*
cari inhabit, whose towns are

Bracaraugusta 6 43 40

Caladunum 6 30 43 30

Pinetus 6 50 43 35

Complutica 8 20 43 25

Tuntobriga 8 30 43 25

Araducca 6 41 55

of the *Turodori*

Aqua Flavia 6 30 43 25

of the *Nemetatari*

Volobriga 6 42 35

of the *Calerinori*

Celiobriga 6 42 20

of the *Bibilori*

Forum Bibilori 7 20 43 20

of the *Limicori*

Forum Limicori 6 50 42 45

of the *Gruiori*

Tuda 8 20 42 45

of the *Luancori*

Merua 7 30 42 40

of the *Quacernori*

Aquae Quacernori 7 20 42 20

of the *Lubanori*

Cambetum 8 10 42 20

of the *Narbasori*

Forum Nabasori 8 42

Around these dwell the *Vaccaei*, whose
towns are

Bargiacis 9 45 43 25

Intercatia 10 15 43 25

Viminacium 11 43 30

Porta Augusta 9 40 43 20

Autraca 10 43 15

Lacobriga 10 20 43 20

Avia 10 20 43

Segontia Paramica 9 30 43

Gella 9 40 42 55

Albocela 9 5 42 40

Rauda 9 20 42 35

Segisama Julia 9 50 42 40

Pallantia 10 30 42 30

PTOLEMY'S GEOGRAPHY

Eldana	9	42	20
Cougium	9 40	42	25
Cauca	10	42	20
Octodurum	9 40	42	10
Pintia	10 10	42	
Sentica	9	41	55
Sarabris	9 40	41	55

Toward the east of Asturia dwell the *Cantabri*, whose inland towns are

Concana	12 10	44	55
Ottaviolca	12 40	44	45
Argenomescum	12	44	30
Vadinia	11 50	44	25
Vellica	12 30	44	15
Camarica	11 40	44	45
Juliobriga	12 10	44	
Moroeca	11 45	43	50

Below these are the *Morbogi*, whose towns are

Bravum	12	43	40
Sisaraca	11 30	43	30
Deobrigula	11 50	43	25
Ambisna	11 10	43	5
Segisamum	12	43	10

To the east of these and of Cantabria dwell the *Autrigones*, whose inland towns are

Uxama Barca	13	44	15
Segisamonculum	13	43	55
Vircesca	12 30	43	50
Antecua	13	43	40
Diobriga	13 15	43	30
Vindelia	12 40	43	15
Salionca	13	43	5

Beyond the *Murbogi* are the *Pelendones*, whose towns are

Visontium	11 40	42	50
Augustobriga	11 30	42	40
Savia	12 30	42	40

Below the *Autrigones* are the *Berones*, whose towns are

Tritium Metallum	13	42	50
Oliba	13	42	40
Varea	13 30	42	45

Below the *Pelendones* and the *Berones* are the *Arevacces*, whose towns are

Confluenta	11	42	35
Clunia colonia	11	42	
Termes	11 30	42	25
Uxama Argaela	11 30	42	
Segortia Lanca	12 30	41	40
Veluca	11 50	41	55
Tucris	12 40	42	30
Numantia	12 30	41	50

Seguvia	13 30	42	25
Nova Augusta	13 15	42	10

Back from the *Vaccae*i and the *Arevacces*, toward the south, dwell the *Carpetani*, among whom are the towns

Illurbida	9 40	41	40
Egelesta	10 30	41	40
Ilarcuris	11	41	35
Varada	11 30	41	30
Thermida	12	41	35
Titulcia	10 20	41	20
Mantua	11 40	41	15
Toletum	10	41	
Complutum	10 50	41	5
Caracca	11 20	40	50
Libora	9 25	40	45
Ispinum	10 15	40	45
Metercosa	10 20	40	35
Barnacis	11	40	30
Alternia	10 30	40	25
Paterniana	9 50	40	15
Rigusa	10 30	40	15
Laminium	10 50	39	55

Toward the east from these are the *Celtiberi*, whose towns are

Belsinum	13 40	41	55
Turiasso	13 30	41	50
Nertobriga	14	41	50
Bilbis	13 45	41	30
Arcobriga	13 5	41	25
Caesada	12 10	41	
Mediolum	13	41	
Attacum	13 30	41	5
Ergavica	12 20	40	45
Segobriga	13 30	40	40
Condabora	13 50	40	30
Bursada	12 45	40	35
Laxta	13 20	40	30
Valeria	12 30	40	25
Istonium	11 30	40	15
Alaba	12	40	20
Libana	12 20	40	10
Urcesa	11 40	39	45

Toward the south from these and from the *Carpetani* are the *Oretani*, and the towns

Salaria	9 20	40	
Sisapone	10	39	55
Oretum Germanorum	9 10	39	40
Aemiliana	10	39	40
Mirobriga	9 30	39	30
Salica	10 40	39	25
Libisosa	11 25	39	30
Castulo	9 30	39	

BOOK TWO — CHAPTER V

Lupparia	9	45	39
Mentesa	10	25	39
Cervaria	11		39 5
Biatia	10		38 45
Laccuris	10	50	38 30
Tuia	10	20	38 30

Below the eastern part of the *Celtiberi* are the *Lobetani* whose town is

Lobetum	13		40 20
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Below these and next to the *Oretani* are the *Bastitani* whose interior towns are

Pucialia	13	20	39 50
Salaria	13		39 40
Turbula	13	30	39 45
Saltiga	12		39 30
Bigerra	12	30	39 35
Abula	11	40	39 15
Asso	12		39 10
Bergula	11	20	38 55
Carca	11		38 35
Ilunum	11	30	38 40
Arcilacis	11	20	38 20
Segisa	11	30	38 30
Orcelis	11	30	38 5
Vergilia	11	30	37 35
Acci	11	45	37 35

Next to these and dwelling on the coast are the *Contestani*, and the inland towns

Menlaria	13	30	39 15
Valentia	14		39 5
Saetabis	13	10	39
Saetabicola	13	40	38 55
Ilicis	12	20	38 30
Iaspis	12	20	38 55

Toward the east of these, of the *Bastitani*, and of the *Celtiberi*, are the *Edetani*, whose inland towns are

Caesaraugusta	14	30	41 30
Bernaba	14	10	41 15
Ebora	14	40	41
Belia	14	10	40 45
Arsi	14	40	40 40
Damania	14	30	40 30
Leonica	14	40	40 15
Osicerda	14	15	40 10
Etobesa	14	20	39 45
Lassira	14	50	39 40
Edeta or Liria	14	25	39 25
Saguntum	14	35	39 20

Further toward the east of these are the *Ilercaones* and the inland towns

Carthago vetus (ancient)	15	20	41 20
Biscargis	14	55	41 10
Theava	15	15	40 40

Adeba	15	40	40 30
Tiariulia	15	30	40 25
Sigarra	15	5	40 15
Dertosa	15	15	40

In the region which is included between the Iberus and the Pyrenees adjoining the *Austrigones*, through whose territory a large river flows, are located the *Caristi* toward the east, and the inland towns are

Suestasium	13	40	44
Tullica	13	40	43 45
Velia	13	55	43 20

Below these are the *Berones* whose towns are

Trituum	13		42 50
Varra	13	30	42 40
Iliba	13		42 30

To the east of these are the *Varduli* and the inland towns are

Gebala	14		43 50
Gabalaeca	14	30	43 45
Tullonium	13	50	43 30
Alba	14	35	43 30
Seguntia Paramica	14	30	43 15
Tritium Tuboricam	13	40	43 10
Thabuca	14		42 50

Next to these are the *Vascones* whose inland towns are

Iturissa	15	25	43 55
Pompelon	15		43 45
Bituris	15	30	43 45
Andelus	15		43 30
Nemanturista	15	35	43 25
Curnonium	14	50	43 15
Iacca	15	30	43 15
Gracuris	15		43
Calagorina	14	40	42 55
Cascantum	15		42 45
Ergavica	14	30	42 35
Tarraga	14	45	42 30
Muscaria	14	20	42 25
Setia	14	40	42 15
Alavona	14	40	41 55

And next beyond these are the *Ilergetes*, whose interior towns are

Bergusia	16	30	43
Celsa	16		42 45
Bergidum	15	30	42 30
Eraga	16	10	42 30
Succosa	15	10	42 30
Osca	16		42 30
Burtina	15	10	41 55
Gallica Flavia	15	30	41 40

Orgia	15	41	30
Ilerda	15	35	41 25

Below these, but toward the east, are the *Ceretaii* whose town is

Julia Libica	17	20	42 45
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The *Ausetani* are on the west of these, and the towns are

Aquae Calidae (hot springs)	16	40	42 30
Ausa	16	10	42 10
Bacula	17		42 15
Gerunda	17	55	42 15

And next to these are the *Castellani* whose interior towns are

Sebendunum	16	40	42 10
Bassi	17	55	42 5
Egosa	17	10	41 55
Beseda	17	30	41 50

To the west of these are the *Iaccetani* whose towns are

Lesa	16	20	42
Udura	16	30	41 45
Ascerris	16		41 40
Setelsis	16	40	41 45
Telobis	16		41 30
Ceresus	15	40	41 20
Bacasis	16	45	41 25
Iessus	15	30	41
Anabis	16	20	41
Cinna	15	50	40 50

The interior towns of the *Indegetari* are

Deciana	18	40	42 35
Iuncaria	18	30	42 20

and the interior town of the *Laetanori* is

Rubricata	17	20	41 25
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The islands adjacent to Tarraconensis, in the Cantabrian ocean are three peaks which are called the Trileuci, the middle of which is in

In the Western ocean are the Cassiterides islands, ten in number, the middle of which is in

and two islands which are called the Islands of the Gods in

In the Balearic sea are the Pityusa islands the lesser of which is called

Ophiusis

	14	50	38 20
--	----	----	-------

the greater of which is called Ebyssus, with a town of the same name

	14		38 5
--	----	--	------

And the two Balearic islands, called in Greek the Gymnesia, in the larger of which are two towns

Palma	16	10	39 15
Polentia	16	45	39 15

In the lesser of these islands are the towns			
Iamna	17	10	39 30
Mago	17	30	39 30

CHAPTER VI

Location of Aquitania Gallia (Third map of Europe)

GALLIA is divided into four provinces, Aquitania, Lugdunensis, Belgica, and Narbonensis, and the places along its coast follow in this order: after the western promontory, terminating the Pyrenees, which is located in

	15		45 50
--	----	--	-------

mouth of the Aturis river

	16	45	44 30
--	----	----	-------

mouth of the Sigmatis river

	17		45 20
--	----	--	-------

Curianum promontory

	16	30	46
--	----	----	----

mouth of the Garumna

	17	30	46 30
--	----	----	-------

the middle of its course

	18		45 20
--	----	--	-------

source of the river

	19	30	44 15
--	----	----	-------

Santonum harbor

	16	30	46 45
--	----	----	-------

Santonum promontory

	16		47 15
--	----	--	-------

mouth of the Canentelus river

	17	15	47 45
--	----	----	-------

Pictonium promontory

	17		48
--	----	--	----

Sicor harbor

	17	30	48 15
--	----	----	-------

mouth of the Liger river

	17	40	48 30
--	----	----	-------

On the north it is bounded by that part of the Lugdunensis province which is along the river we call the Liger (Loire) as far as that locality where it turns southward in

	20		48 30
--	----	--	-------

The eastern boundary is the Lugdunensis province running along the river Liger as far as its source in

	20		44 30
--	----	--	-------

The south is bounded in part by the Pyrenees, and extends along Narbonensis from the source of the Liger river to that terminus in the Pyrenees to which we have referred, then along that part of the Pyrenees which extends to the Oeasso promontory.

The *Pictones* inhabit that part of Aquitania farthest north along the river and the sea, whose towns are

Ratiatum	17	50	48 20
Limonum	18		47 50

Below these are the *Santones*, and the interior town is

Mediolanium	17	40	46 45
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Below these are the *Bituriges Vibisci* whose towns are

Noviomagus	17	40	46 15
Burdigala	18		45 30

BOOK TWO — CHAPTER VII

Below these extending as far as the Pyrenees are the *Tarbeli* and their town is
Aquae Agustae 17 44 40

Inland below the *Pictones* are the *Limo-*
vici and the town

Augustoritum 19 40 47 45

Below these are the *Cadurci* and the town

Dueona 18 47 15

Below these are the *Petrocori* and the town

Vesuna 19 50 46 50

The *Bituriges Cubi* extend along the eastern border of those we have named and touch the region located across the Liger river whose town is

Avaricum 20 15 46 40

Below the *Petrocori* are the *Nitiobriges* and the town

Aginnum 19 30 46 20

Below these are the *Vassari* and the town
Cossium 18 30 46

Below whom are the *Gabali* and the town

Anderedum 19 45 45 30

Below the *Gabali* are the *Dati* and the town

Tasta 19 45 15

Below these are the *Ausci* and the town
Augusta 18 45

From these toward the east are a part of the *Averni* among whom is the town

Augustonemetum 20 45

Below the *Ausci* are the *Velauni* whose town is

Ruessium 18 44 30

Below these are the *Rutani* and the town
Segodunum 17 45 44 10

Bordering on the Pyrenees are the *Con-*
venae and the town

Lugdunum colonia 17 44

CHAPTER VII

Location of Lugdunensis Gallia *(Third map of Europe)*

THE borders of Lugdunensis which touch Aquitania have been described; and that which looks toward the ocean is described in the following order, after the mouth of the Liger river:

Brivates harbor 17 40 48 45
mouth of the Herius river 17 49 15

Vidana harbor 16 30 49 40
Gabaeum promontory 15 15 49 45

The north side which borders on the Britannic ocean is thus described: after the *Gabaeum promontory*

Saliocanus harbor 16 30 50

mouth of the Titus river 17 20 50 20
the *Biducasi*

Aregenua 18 50 30
the *Venelli*

Crociatonnum 18 50 50 30

mouth of the Olina river 18 45 51
the *Lexubi*

Noeomagus 19 30 51 10

mouth of the Sequana river 20 51 30

The eastern border is common with Belgica running along the Sequana river, the middle part of which border is located in 24 47 20

from this point it extends direct as far as the terminus in 25 45 30

The southern side is terminated by that part of Narbonensis which extends as far as the terminus in the indicated confines of Aquitania near the Cemmeni mountains, the middle part of which is in 20 20 44 30

The *Caletae* inhabit the north coast from the Sequana river, whose town is

Iuliobana 20 15 51 20

Next to these are the *Lexubi*, then the *Venelli*, after these the *Biducasi* and the *Osismi* extending as far as the *Gabaeum promontory*, whose town is

Vorganium 17 40 50 10

The *Veneti* occupy the western coast below the *Osismi*, whose town is

Darioritum 17 20 49 15

Below these are the *Samnites* who extend as far as the Liger river

In the interior toward the east from the *Veneti* are the *Aulircii Diablitae*, whose town is

Noeodunum 18 50

After these are the *Arvi* and the town
Vagoritum 18 40 50

After these, extending as far as the Sequana, are the *Veneliocasi*, whose town is
Ratomagus 20 10 50 20

And back from the *Samnites* toward the east are the *Andicavae*, whose town is

Iuliomagus 18 50 49

After these toward the east are the *Aulirei Cenomani*, whose town is

Vindinum 20 45 49 20

After these are the *Namnetae*, whose town is

Condivincum 21 15 50

Extending to the river Sequana are the *Abrincatui*, and their town is

Ingenua 21 45 50 45

The *Aulirci Eburaici* extend below those we have mentioned, from the river Liger to the Sequana whose town is

Mediolanum 20 40 48

Below these on the banks of the river Liger are the *Rhedones*, whose town is

Condate 20 40 47 20

And toward the east from these are the *Senones*, whose town is

Agedicum 21 15 47 10

Near the Sequana are the *Carnutae*, and the towns

Autricum 21 40 48 15

Cenabum 22 47 50

Below these are the *Parisi*, and the town

Lucotecia 23 30 48 45

Below these are the *Tricasi* and the town

Augustobona 23 30 47 45

Below these races which we have mentioned near the Liger river, are the *Turoni*, and their town is

Caesarodunum 20 45 46 30

Below these on the border of the *Averni* who inhabit the Cemmenos mountains are the *Segusiavi* and their towns are

Rhodumna 20 15 45 50

Forum Segusianorum 20 50 45 30

Toward the east, from those we have mentioned, are the *Meldae* and the town

Latinum 23 47 30

Next to these toward Belgica are the *Vadicasii* and the town

Noeomagus 24 20 46 30

Toward the east from the *Averni* extending as far as the river which flows from the north into the Rhone river, is the race of the *Aedui*, and the towns

Augustodunum 23 40 46 30

Cabylunum 23 50 45 20

Lugdunum metropolis 23 15 45 20

CHAPTER VIII

Location of Belgica Gallia (Third map of Europe)

THE western border of Belgica Gallia, which is near Lugdunensis, we have described; the north which is on the Britan-

nic ocean is thus described: after the mouth of the Sequana river

mouth of the Phrudis river 21 45 52 20

Itium promontory 22 15 52 30

Gesoriacum naval station of the

Morini 22 30 53 30

mouth of the Tabula river 23 30 53 30

mouth of the Mosa river

(Mosel) 24 40 53 30

Lugdunum of the Batavi 26 30 53 20

Western mouth of the

Rhine 26 45 53 30

Central mouth of the

river 27 53 10

Eastern mouth of the river 27 20 54

The border which looks toward the east along Germania Magna, is terminated by the Rhine river, the source of which is in

29 20 46

that locality where the river Obrincas flows into this from the west

29 20 46

and near the mountains which are called the Adulas, coming from the source of the river

29 30 45 15

Jurassus mountains

26 15 46

The south side connects with a part of Gallia Narbonensis, and extends from the common boundary of Lugdunensis and Narbonensis as far as the common terminus of the Alps and the Adulas

29 30 45 15

The *Atribati* inhabit the sea coast, near the Sequana river, whose town is

Metacum 22 51

Next toward the east are the *Bellovaci*, whose town is

Caesaromagus 22 50 51 20

Next to these in that region are the *Am-
biani*, and their town is

Samarobriva 22 15 52 10

Next to these are the *Morini*, whose interior town is

Tarvanna 23 20 52 50

Next beyond the Tabulam river are the *Tungri* and the town

Atuatucum 24 30 52 50

Next to the Mosa river are the *Menapii*, and their town

Castellum 25 52 15

Below these are the *Nervi* a race to which we have referred, extending northward, whose town is

Bagacum 25 15 51 40

BOOK TWO — CHAPTER IX

Below these are the *Subanecti*, whose town is located on the eastern bank of the Sequana river

Ratomagus	22 30 50
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Next to these are the *Viromandues* and the town

Augusta Viromandeu	25 30 50
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Below these are the *Vessones*, whose town located toward the east of the Sequana river is

Augusta Vessoum	23 30 38 45
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Next to these near the river are the *Remi*, and their town

Durocotto	23 45 48 30
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Toward the east from the *Remi*, and extending northward, are the *Treveri* whose town is

Augusta Treverorum	26 48 10
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Toward the south of these are the *Mediomatrices*, whose town is

Dividurum	25 30 47 20
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And below these and the *Remi* are the *Leuci*, and their towns

Tullium	26 30 47
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Nasium	24 50 46 40
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The other part of the region near the Rhine from the sea to the Obruncus river is called Lower Germania, in which on the west of the Rhine river is the town in the interior of Batavia

Batavodurum	27 15 52 30
-------------	-------------

Below which are

Veterra	27 30 51 50
---------	-------------

Legio XXX Ulpia

Agrippinensis	27 40 51 10
---------------	-------------

Bonna (Bonn)	27 40 50 50
--------------	-------------

Legio I Minervia

Trajana Legio XXII	27 30 50 35
--------------------	-------------

Mocontiacum	27 20 50 15
-------------	-------------

Another part toward the south from the Obrincas river is called Upper Germania, in which are the towns

of the *Nemetes*

Neomagus	27 40 49 50
----------	-------------

Rufiniana	27 40 49 30
-----------	-------------

of the *Vangiones*

Borbetomagus	27 50 49 20
--------------	-------------

Argentoratum	27 50 48 45
--------------	-------------

Legio VIII Augusta
of the *Tribocci*

Breucomagus	27 50 48 20
-------------	-------------

Helcebus	28 48
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of the *Raurici*

Augusta Rauricorum	28 47 30
--------------------	----------

Argentovaria	27 50 47 20
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Extending below these and the *Leuci* dwell the *Longones* whose town is

Andomatunnum	26 15 46 20
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And after the mountains which are below these, and which are called the Jurassus, are the *Helveti* near the Rhine river, whose towns are

Ganodurum	28 30 46 30
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Forum Tiberii	28 46
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The *Sequani* are below these and the towns

Dittatium	25 10 45 40
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Visentium	26 46
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Equestris	27 45 40
-----------	----------

Aventicum	28 45 30
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CHAPTER IX

Location of Narbonensis Gallia (Third map of Europe)

THE borders of Narbonensis are contiguous with the neighboring provincial tribes, which have been described; from the remaining (parts), those which are on the east, are terminated by the western part of the Alps from the Adulas mountains to the mouth of the Varus river, the location of which is in

27 30 43

The south is terminated by the remaining part of the Pyrenees mountains extending from the boundary of Aquitania as far as the summit of the mountains at the inner sea, where there is a Temple of Venus, and by the Gallic sea to the mouth of the Varus river. The shores of this sea are thus described:

after the Temple of Venus	20 20 42 20
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mouth of the Illeris river	21 42 40
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mouth of the Ruscionis river	21 15 42 45
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mouth of the Atagis river	21 30 42 45
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mouth of the Orobis river	21 45 42 45
---------------------------	-------------

mouth of the Araurus river	22 42 50
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Agatha town	22 15 42 50
-------------	-------------

Setius mountain	22 30 42 30
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Mariana Trenches	22 40 42 40
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mouth of the Rhodanus (Rhône) river toward the west	22 50 42 40
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eastern mouth of the Rhône river	23 42 50
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Where below Lugdunum the river turns toward the Alps	23 45 15
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That part of it near the lake which is called Lemanus is in 27 15 45 15
the source of the river 28 20 44 20

Of the rivers which unite with this, in that part which is toward the north from Lugdunum are the Arar and the Dubis, the sources of the Arar flowing from the Alps are located in 28 40 44 40
the Dubis river below this is in 28 30 44 30

These rivers flow toward the north from the Alps, then turn toward the west, and the junction is in 25 20 45 30
they flow into the Rhone river in 24 45 30

In that part, which is south of the town Vienna, are the Isar river and the Druentia river, coming from the Alps; the sources of the Isar river are in 28 44
the source of the Druentia is in 28 43 45

The junction of the Isar with the Rhone is in 22 40 44
and with the Druentia is in 22 40 43 50

On the sea, next to Rhodanum are the *Avatici*
Maritime city, colonia 23 30 43 5
mouth of the Caenus river 23 45 43
the *Comani*
Massilia city 24 30 43 5
Tauroentium 24 50 42 50
Citharistes promontory 25 42 30
Olbia town 25 10 42 45
mouth of the Argentus river 25 40 42 45
Forum Julii colonia 26 30 42 50
the *Deciati*
Antipolis 27 43
mouth of the Varus river 27 30 43

The *Volcae Tectosages* inhabit the extreme west of Narbonensis, whose island towns are

Illiberis 19 45 43 15
Ruscinon 20 43 30
Tolosa colonia 20 10 44 15
Cessero 21 15 44
Carcaso 21 43 15
Baetirae 21 30 43 30
Narbon colonia 21 30 43 15

Next to these, extending as far as the Rhone river, are the *Volcae Arecomi*, whose inland towns are

Vindomagus 21 30 44 30
Nemausum colonia 22 44 30

To the east of the Rhone, and in the extreme north, are the *Allobroges* below the Medulli whose town is

Vienna 23 45

Below these toward the west are the Segallauni, whose town is

Velentia colonia 23 44 30

Toward the east are the *Tricastini* whose town is

Noeomagus 26 30 45

Then below the *Segallauni* are the *Cavari*, whose towns are

Acusion colonia 23 44 15

Avennion colonia 23 44

Arausion 24 44 30

Cabellion colonia 24 44

Below these are the *Salyes* whose towns are

Taruscon 23 43 40

Glanum 23 30 43 30

Arelatum colonia 22 45 43 20

Aqua Sextia colonia 24 30 43 20

Ernaginum 24 43 30

Below the *Tricastini* are the *Voconti*, whose town is

Vasion 26 44 30

Below these are the *Memini*, and their town is

Forum Neronis 25 40 44 15

Below these are the *Elycoci*, and their town is

Albaugusta 26 43 20

Toward the east of the Voconti and Memini are the *Senti*, whose town is

Dinia 27 10 44 20

Below Narbonensis are islands, the Agatha, in the region near the city of this name which is located in 22 30 42 10
and next to this Blasco in 22 30 42 20

The Stoechades, five in number, are below Citharistes the middle of which is in 25 42 15

Below the Varus river is the island Lerone 27 45 42 15

CHAPTER X

Location of Greater Germany (Fourth map of Europe)

THE Rhine river terminates the west side of Germania, the Germanic ocean terminates the north side; a description of these borders is the following:

Next to the mouth of the Rhine			
mouth of Vidrus river	27 30	54 45	
Marnamanis harbor	28	54 15	
mouth of the Amisius river	29	55	
river sources	32	53	
mouth of the Visurgis river	31	55	
river sources	34	52 30	
mouth of the Albis river	31	36 15	
river sources	39	50	

Cimbrian peninsula

After the Albis river a prominence			
in	32	56 50	
next a prominence in	35	58 20	
next further north	38 40	59 30	
first after the turning	39 20	59 20	
part farthest east	40 15	58 30	
next below this	37	57	
turning toward the east	35	56	
mouth of the Chalusus river	37	56	
mouth of the Suevus river	39 30	56	
mouth of the Viadus river	42 30	56	
mouth of the Vistula river	45	56	
source of the river	44	52 30	
a river, the source of which is toward the west, flows into the Albis in	40 10	52 40	

A part of the western Danube terminates the south side, of which the following locations are noted:

source of the river	30	46 20	
locality where the first river which comes from Germania flows into this	32	47 15	
locality on the south side where a river flows into this which is called Aenus	34	47 20	
where a second on the north side, coming from the Gabreta forest region, flows into this	36	46 40	
where the next river flowing through the Luna forest from the north empties into this	39 20	47 20	
the bend following, whence the Danube turns toward the south	40 40	47 50	
where a river from the south empties into this, which is called Arabon	41	47 40	
bend near Curtam	42	47	
bend near Carpin which of all is farthest north	42 30	48	

The east side is terminated by the space which is between this bend and the Sarmatian mountains which are above it, the

southern terminus of which is

located in	42 30	48 30	
the northern side is in	43 30	50 30	

then follows the space between these mountains and the source of the Vistula, which we have referred to above, thence following that river as far as the sea.

The most noted of the mountains which extend into Germania, are those which we have mentioned, and which properly are called the Sarmatian, and those known as the Alps above the source of the Danube, the extreme parts of which

are in	29	47	
and	33	48 30	
and those which are called the Abnoba, the extreme parts of which are	31	49	
and	31	52	
and Melibocus, the extreme parts of which are in	33	52 30	
and	57	52 30	
below which is the Semanus forest; and the Asciburgius mountains, the extreme limits of which are in	39	54	
and	44	52 30	
and the mountains which are called the Sudeti, the extremities of which are	34	50	
and	40	50	

below which is the Gabreta forest, and between which and the Sarmatian mountains is the Orcynius forest.

Moreover, if we approach from the north, we find the lesser *Bructeri* and the *Sygambri* who inhabit Germania near the Rhine river, below whom are the *Suevi Langobardi*, then the *Tencteri* and the *Ingriones* between the Rhine and the Abnobaei mountains, and then the *Intuerigi*, the *Vargiones*, and the *Caritini*, below whom are the *Vispi* and the waste land of the *Helvetians*, as far as those mountains which we call the Alps.

The *Fresians* inhabit the coast near the ocean above the *Bructeri*, as far as the river Amissis (Ems); next to these are the *Lesser Cauchi* extending as far as the river Visurgis; then the *Greater Cauchi* extending as far as the river Albis; thence the *Saxons* through the palisades of the Cimbrian peninsula; in the same peninsula above the *Saxons* on the west are the *Sigulones*, then the *Sabalingi*, then the *Cobandi*, above them

the *Chali*, and above these to the west are the *Fundusi*, and to the east the *Charudes*.

Of all these the *Cimbri* are farthest north; then next to the *Saxons*, from the Chalusus river to the Suevus river are the *Pharodini*, then the *Sidini* as far as the river Viadus, and next are the *Ruticli* extending as far as the river Vistula.

Of the races dwelling in the interior the greatest are the races of the *Suevi Angili*, who are to the east of the *Longobardi* extending toward the north as far as the middle part of the Albis river, and the *Suevi Semnonnes* whose boundaries extend beyond the Albis toward the east as far as that part, as we have said, which touches the Suevus river, and the *Buguntae*, who occupy the region as far as the Vistula.

Moreover the lesser races which are between the lesser *Cauchi* and the *Suevi* are the greater *Bructeri*, below whom are the *Chaemae*; between the greater *Cauchi* and the *Suevi* are the *Angrivari*, then the *Laccobardi*, below whom are the *Dulgumni*; between the *Saxons* and the *Suevi* are the *Teutonoari* and the *Viruni*; between the *Pharodini* and the *Suevi* are the *Teutones* and *Avarpi*; between the *Rugiclei* and the *Burguntae* are the *Aelvaeones*.

Below the *Semnonnes* the *Silingae* have their abodes, and below the *Burguntae* are the *Lugi Omani*; below these are the *Lugi Diduni* extending as far as the Asciburgius mountains, and below the *Silingae* are the *Calucones* on both banks of the river Albis; below whom are the *Chaerusci* and the *Camavi* extending as far as Melibocus mountain, from whom toward the east along the Albis river are the *Banochaemae*; above whom are the *Batini*, and above these, but below the Asciburgius mountains are the *Corconti* and the *Lugi Buri* extending as far as the source of the Vistula river; first below these are the *Sidones*, then the *Gotini*, then the *Visburgi* above the Orcynium forest.

Toward the east from the Abnobaes mountains the *Casuari*, but below the *Suevi*, have their abodes, then the *Nertereanes*, then the *Danduti*, below these the *Turoni* and the *Marvingi*; below the *Camavi* are the *Chattae* and the *Tubanti*, and above the Sudeti mountains are the *Teuriochaemae*, but below the mountains are the *Varisti*;

next is the Gabreta forest; and below the *Marvingi* are the *Curiones*, then the *Chae-tuori*, and then the *Parmaecampi* extending as far as the Danube; below the Gabreta forest are the *Marcomani*, below whom are the *Sudini*, then extending to the Danube river are the *Adrabaecampi*; below the Orcynium forest are the *Quadi*, and below these are the iron mines and the Luna forest, below which is the great race of the *Baemi* extending as far as the Danube, and the *Racatrinae* bordering them on the river, and the *Racatae* near the bending of the river.

The towns located in Germania in the northern clima are

Phleum	28	45	54	45
Siatuanda	29	20	54	20
Tecelia	31		55	
Fabrianum	31	30	55	20
Treva	33		55	40
Leufana	34	15	54	40
Lirimiris	34	30	55	30
Marionis	34	30	54	50
another Marionis	36		55	50
Coenoenum	36	20	55	30
Cistua	37	20	54	30
Alisus	38		55	
Laciburgium	39		56	
Bunitium	39	30	55	30
Virunum	40	30	55	
Viritium	41		54	30
Rugium	42	30	54	40
Scurgum	43		55	
Ascaucalis	44		54	15

Towns located in the clima below this are

Asciburgium	27	30	52	30
Navalia	27	20	54	
Mediolanium	28	45	53	50
Teuderium	29	30	53	20
Bogadium	30	15	52	
Stereontium	31		52	10
Amisia	31	30	51	30
Munitium	31	40	52	30
Tulifurdum	32		54	
Ascalingium	32	30	53	45
Tulisurgium	32	40	53	20
Pheugarum	32	40	52	15
Canduum	33		51	50
Tropaea Drusi	33	45	52	45
Luppia	34	30	52	45
Mersovium	35	30	53	50
Aregelia	36	30	52	20
Galaegia	37	30	52	20
Lupfurdum	38	10	51	40

BOOK TWO — CHAPTER XI

Susudata	38	30	53	50
Colancorum	39		53	30
Lugidunum	39	30	52	30
Stragona	39	40	52	20
Limis lucus	41		53	30
Budorigum	41		52	40
Leucaristus	41	45	52	40
Arsonium	43	30	52	20
Calisia	43	45	52	50
Setidava	44		53	30

In the region below this are the following towns:

Alisum	28		51	30
Budoris	28		51	
Mattiacum	30		50	50
Arctaunum	30	10	50	
Novaesium	31	30	51	10
Melocabus	31	30	50	40
Gravionarium	31	30	50	10
Locoritum	31	30	49	20
Segodunum	31	30	49	
Devona	32	30	48	45
Bergium	33		49	30
Menosgada	34		49	30
Bicurgium	34	30	51	15
Marobudum	35		49	
Redintuinum	38	30	50	30
Nomisterium	39		51	
Meliodunum	39		49	
Casurgis	39	15	50	10
Strevinta	39	15	49	30
Hegetmatia	39	40	51	
Budorgis	40		50	30
Eburum	41		49	30
Arsicua	41	40	49	
Parienna	42		49	20
Setovia	42	30	50	
Carrodunum	42	40	51	30
Asanca	43		50	20

Towns in the remaining region near the Danube river are

Tarodunum	28	20	47	50
Arae Flaviae (Flavian Altars)	30	40	48	
Riusiava	31		47	30
Alcimoennis	32	30	47	30
Cantioebis	32	40	48	20
Bibacum	33		48	
Brodentia	33	45	48	
Setuacotum	34		48	20
Usbium	35		47	
Abilunum	35	20	47	20
Furgisatis	36		48	
Coridorgis	37	15	48	30

Mediolanium	38		47	10
Felicia	39		48	30
Eburodunum	39		48	
Anduaetium	40	30	47	40
Celamantia	41		47	40
Singone	41	30	48	15
Anavum	41	20	47	30

The islands above Germania near the mouth of the Albis are called the three Saxonum islands, the middle of which is in 31 57 20

Above the Cimbrian peninsula are three other islands which are called the Alociae Islands, the middle of which is in 37 59 20

Toward the east of the Cimbrian peninsula are four islands which are called Scandia, three of which are small, the middle of which is in 41 30 58

the larger one is further east and near the mouth of the Vistula river; the extreme parts of this are,

on the west	43		58	
on the east	46		58	
on the north	44	30	58	30
on the south	45		57	40

This one is properly called Scandia, and the western parts of it the *Chaedini* inhabit, the eastern parts the *Favonae* and the *Firaesi* occupy, the northern parts the *Finni*, the southern parts the *Gutae* and the *Dauciones*, the central part the *Levoni*.

CHAPTER XI

Location of Raetia and Vindelicia (Fifth map of Europe)

RAETIA and Vindelicia are terminated on the west by the Adula mountains and by that tract which lies between the source of the Rhine and that of the Danube river; on the north by the part of the Danube river from its source to the place where the Aenus river empties into

it 34 47 20
on the east by the same Aenus river, the extreme part of its boundary toward the south being in 34 45 15
and on the south by the Alps mountains which extend above Italy, of which those parts near Graecas have the position 30 45 20
which moreover are called the Penine Alps near the source of the Licia river which

empties into the Danube, separating Raetia from Vindelicia in 31 30 45 30 and which is not far from the Ocra mountains in 33 30 45 30

The *Brixantae* inhabit Raetia in the north; in the south part are the *Suanetae* and the *Riguscae*, and between these regions are the *Calucones* and the *Vennontes*.

Their towns below the Danube are

Bragodurum	30	46	40
Dracuina	30 20	46	40
Viana	31	46	40
Phaeniana	31 45	46	50

Near the source of the Rhine river,

Taxgaetium	29 20	46	15
Brigantium	30	46	

Next to these,

Vicus	30 15	45	50
Ebodurum	30 40	45	50
Ectodurum	31 20	45	40
Drusomagus	31 30	46	5

Vindelicia

The northern parts of Vindelicia are inhabited by the *Runicatae*; below these are the *Leuni* and *Consuantae*, then the *Bellauni*, the *Breuni*, and the *Licati* near the Licati river.

The towns in Vindelicia near the Danube river are

Artobriga	32 15	47	10
Boiodorum	33 50	47	15
and below these			
Augusta Vindelicorum	32 30	46	50
Carrodunum	33 50	46	45
Abudiacum	33 30	46	15
Cambodunum	32 50	46	
Medullum	33 50	45	40
Inutrium	32 50	45	30

CHAPTER XII

Location of Noricum
(Fifth map of Europe)

NORICUM is bounded on the west by the Aenus river, on the north by a part of the Danube river and a part of the Aenus river as far as the Cetius mountains, the location of which is in 37 30 46 50 on the east by the Cetius mountains, and on the south by that part of Upper Pannonia which is below the Cetius mountains, the extreme western part of which is terminated in 36 45 20 and by the mountains which are above Istria

and which are called Carvancas, the central part of which is in 35 45 20

The western parts of the province, beginning at the north the *Sevaces*, the *Alauni*, and the *Ambisontii* inhabit; the eastern part the *Norici*, the *Ambidravi*, and the *Ambilici*.

The towns which are in this province and which are below the Danube are

Arelate	35	47	
Claudivium Juvantum	36	46	40
and below this			
Gamavodurum	34 40	46	40
Gesodunum	35 40	46	30
Bedaum	34 15	46	15
Aguntum	36 30	46	10
Vacorium	36	45	45
Poedicum	37	46	
Virunum	36 40	45	45
Teurnia	34 40	45	40
Idunum	35 10	45	30
Sianticum	36	45	30
Celeia	37	45	30

Between Italia and Noricum

Julium Carnicum	34 40	45	15
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CHAPTER XIII

Location of Upper Pannonia
(Fifth map of Europe)

UPPER Pannonia is bounded on the west by the Cetius mountains and in part by the Carvancas, on the south by a part of Istria and Illyria along the parallel which extends from the terminus in the west, as we have said, through the Albanian mountains as far as the Bebios mountains, and the confines of Lower Pannonia, which is located in 41 30 45 20

It is bounded on the north by the confines of Noricum, as indicated, thence along the Cetius mountains to that part of the Danube where the Arabun river empties into it, the position of which terminus is in 41 47 40

It is bounded on the east by Lower Pannonia along the line running between the two.

The *Azali* inhabit the northern part of this province, toward the west, and the *Cytni* the part toward the east; to the south are the *Latobici* below Noricum, and the *Varciani* are toward the east; the central region the *Boii* occupy, and the *Golaetiani*

are in the west below them, also the *Iassi* but more toward the east, and below these are the *Oseriates*.

Below the Danube river are the towns			
Vindobona	37	45	46 50
Legio X Germanica			
Carnus	39		47
Phlexum	40		47 15
Legio XIV Germanica			
Chertobalus	40	30	47 30
Brigaetium	41		47 40
Legio I adiutrix			

Towns that are remote from the river are			
Sala	38	20	46 15
Potovio	37	20	45 30
Savaria	38	20	46 40
Rispia	38	40	46 30
Vinundria	38	10	45 20
Bononia	38	40	45 40
Andautonium	38	10	45 30
Novidunum	37	50	45 20
Scarbantia	39	30	47
Muroella	39	15	46 10
Lentudum	39	10	45 45
Carrodunum	39	40	46
Siscia	39		45 20
Olimacum	39	20	45 30
Valina	40	30	46 45
Bolentium	40	30	46
Siroga	40	10	46
Sisopa	40		45 45
Visontium	40	45	45 25
Praetorium	40	45	46 15
Magniana	41		46

Between Italia and Pannonia and below Noricum is
Emona 36 30 45 20

CHAPTER XIV

Location of Lower Pannonia (Fifth map of Europe)

LOWER Pannonia is terminated on the west by Upper Pannonia from that point where the Arabus river flows into the Danube, forming those borders to which we have referred; on the south by Illyria which extends from the indicated terminus as far as the bend in the Danube near which the Save river empties into it, the location of which is in 45 44 30

It is bounded on the north by that eastern part of the Danube river which is near the mouth of the Arabus and which flows into

it, and as far as the mouth of the Save river, the description of this part of which is the following: after the Arabus river the bend near Curtain 42 47
the bend of the Danube river farthest north 42 30 48
where a river empties into it, which flowing toward the east through both Pannonias, takes its rise in two rivers coming down from the Cetius mountains which unite near Carrodunum, the more northern is the Savarias, the southern is called the

Drave	44	20	45 40
there is a bend in the Danube river near			
Cornacum	44	20	45 15
a bend near Acumincum	45		45 20
a bend near Rittium	45	30	45
where the Save river flows into the Danube, coming from the Cetius mountains running through both Pannonias first northward then eastward			
	45		44 30

The western parts of this province toward the north the *Amantini* inhabit, below these are the *Hercuniates*, then the *Andiantes*, then the *Breuci*; the eastern part toward the north the *Aravisci* inhabit, and toward the south are the *Scordisci*.

Below the Danube river are the towns			
Curta	42		47
Solva	42	30	47 30
Carpis	42	30	47 50
Aquincum	43		47 30
Salinum	43	30	47
Lussonium	43	45	46 45
Lugionum	44		46 30
Teutoburgium	44	15	45 40
Cornacum	44	20	45 15
Acumineum, legio	45		45 20
Rittium	45	30	45
Taururum	45		44 30

Remote from the river are			
Berbis	42		46
Serbinum	41	20	46 30
Jouballum	42	20	46
Certissa	42	20	45 20
Mursella	43		46
Cibalis	43		45 30
Marsonia	43		45
Vacontium	43	30	46 30
Mursia colonia	43	30	45 45
Sallis	44		44 40
Bassiana	44	30	44 50
Tarsium	44	30	44 35
Sirmium	44	50	45

CHAPTER XV

*Location of Illyria or Liburnia, and of
Dalmatia
(Fifth map of Europe)*

ILLIRIA is terminated on the north by both Pannonias along those borders which we have referred to above; on the west by Istria along that line, one terminus of which is toward Upper Pannonia

in 36 30 45 10

the other on the Adriatic

in 36 30 44 50

It is bounded on the east by Upper Moesia along the line which leads from the indicated entrance of the Save into the Danube as far as the Scardus mountains, the terminal position of which is in 47 41 40

It is bounded on the south by the part of Macedonia along that line which runs from the indicated terminus to the Adriatic bay, the other terminus of which is

in 45 41

and then by the coast of the Adriatic to the indicated terminus near Istria. The several parts of its boundaries are in the following order: after Istria then the land of Italia in Illyria

The maritime shore of Liburnia

Alvona	36	50	45
Flanona	37		44 50
Tarsatica	37	40	44 45
mouth of the Oeneus river	38		44 45
Volcera	38	30	44 45
Senia	39		44 40
Lopsica	39	15	44 40
mouth of the Tedanius			
river	39	20	44 30
Ortopla	40		44 30
Vegia	40	20	44 30
Argyrunum	40	45	44 10
Corinium	41	10	44
Aenona	41	30	44
Iader colonia	42		43 45
mouth of the Titus river	42	20	43 10
Scardona	42	40	43 30

Maritime shore of Dalmatia

Sicum	43		43 20
Salonae colonia	43	20	43 10
Epetium	43	40	43
Pituntium	44		42 45
Onaeum	44		42 30
mouth of the Naronus river	44	30	42 20

Epidaurus	44	40	42 20
Rhisium	44	40	42 15
Acruvium	44	45	42
Rhizonicus bay	45		42
Butua	45		41 45
Ulcinium	45		41 30
mouth of the Drilo river	45		41 20
Lissus	45		41 10

The river Drilo flows from the Scardus mountains and from that other mountain which is near the middle of Upper Moesia, the location of which is in 45 40 42 40

From this another river, the Drinus, joining the Save river, empties into it on the west of the town Tauruno.

The *Ispydes*, the *Hyllaei*, and the *Bulimenses* inhabit this Istrian province bordering on the sea coast; above these in Liburnia toward the west are the *Mazaei*, then the *Derriopes* and the *Derri*, and above the *Derriopes* are the *Dindari*, above these are the *Ditiones*, and above the *Derri* are the *Cerauni*; in Dalmatia are the *Daursi*, below whom are the *Melcomenii* and the *Vardaei*, below these are the *Narensi* and the *Sardiotae* and below these are the *Siculotae*, the *Docleatae*, the *Pirustae*, and the *Scirtones* near Macedonia.

The inland towns of Liburnia are

Tediastum	39		44 50
Aruccia	39	30	44 45
Ardotium	40		44 50
Stulpi	39	30	44 40
Curcum	40	30	44 30
Ausancali	41	30	44 45
Varvaria	41	10	44 10
Salvia	41	20	44 40
Adra	42	30	44 40
Arauzona	42	30	44 20
Assesia	42	15	44 20
Burnum	42	45	44 20
Sidrona	43	30	44 30
Blanona	42	10	44
Ouporum	43		44
Nedinum	44	30	44 15

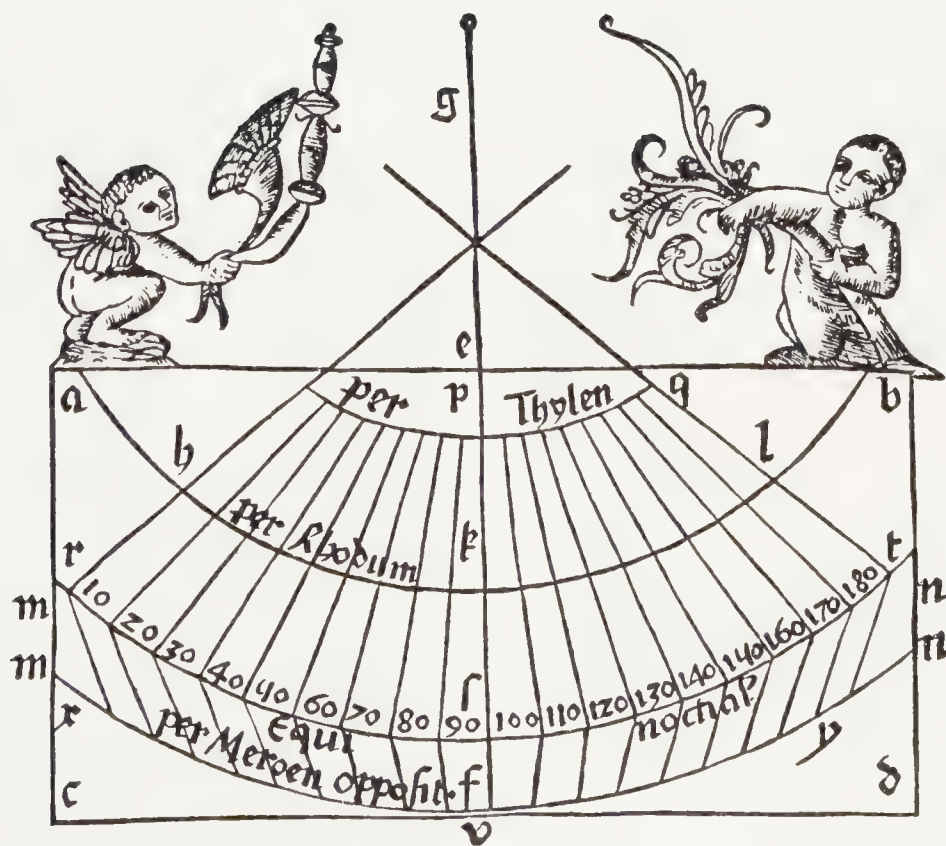
The inland towns of Dalmatia are

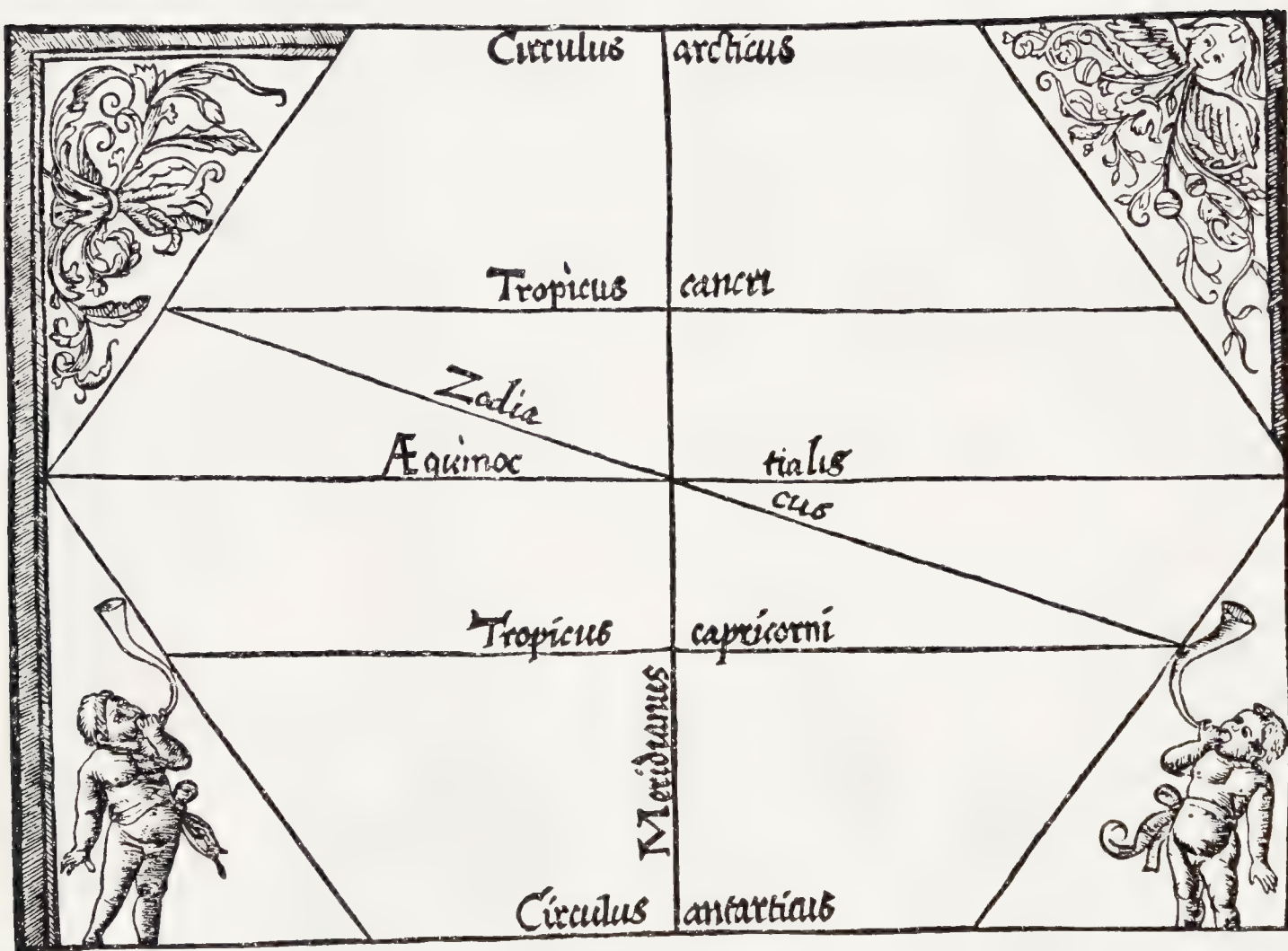
Andecrium	43	30	43 30
Aleta	44		43 10
Herona	44	20	43 45
Delminium	44	40	43 20
Aequum colonia	44	30	43 20
Saloniana	45		43 20
Narona colonia	44	20	42 45

BOOK TWO — CHAPTER XV

Enderum	45	30	42	50	and Curicta, in which are two towns				
Chinna	45	40	42	30	Fulfinium	38	10	44	20
Doclea	45	20	42	15	Curicum	38	20	44	15
Rhizana	45	15	42		and the island Scardona, in which are two				
Scodra	45	30	41	30	towns				
Thermidava	46		41	45	Arba	40	40	43	40
Siparuntum	46	30	42	10	Collentum	41	40	43	30
Epicaria	45	30	41	15	Near Dalmatia are the islands				
Iminacium	46		41	20	Issa and the town	42	20	43	
The islands near Liburnia are Apsorrus,					Tragurium and town	43		42	15
in which are two towns					Pharia and town	42		42	20
Crepsa	36	40	44	30	Corcyra Nigra	44		41	45
Apsorrus	36	50	44	30	Melita island	44	10	41	20

END OF BOOK TWO





BOOK THREE



*The following descriptions are contained
in Book Three:*

*The provinces and prefectures found in that
part of Europe which lies toward the east
are described herein*

1. All Italy	Map VI
2. Corsica island	
3. Sardinia island	Map VII
4. Sicily island	
5. Sarmatian Europe	Map VIII
6. Tauric peninsula	
7. Iazyges Metanastae	Map IX
8. Dacia	
9. Upper Moesia	
10. Lower Moesia	
11. Thracia and the Peninsula	
12. Macedonia	Map X
13. Epirus	
14. Achaia	
15. Crete island	
Provinces, XV	
Maps, V	

CHAPTER I

*Location of Italy
(Sixth map of Europe)*

ITALY is terminated on the west by the Alps mountains along that line, which runs, as is set down, from the Adula mountains as far as the mouth of the Varus river, the location of which is in 27 30 43 then from the shore of the Tyrrhenum sea to Naples and to the Leucopetra promontory; on the north by the Alps mountains, which are below Raetia, and by the Caravancas mountains, which are below Noricum, the location of which has been indicated above, and likewise by the shore of the Adriatic bay which extends from the Tilaventus river to the Garganus mountains; on the east by that maritime coast which extends from Garganus mountains as far as Hydruntum; on the south by the shore of the Adriatic bay (sea?) which extends from the Tilaventus river as far as the confines of Illyria, and by that coast of the Tyrrhenum

and of the Ligusticum sea, which extends from the mouth of the Varus river as far as Naples, then along the maritime coast from Leucopetra as far as Hydruntum.

The entire line of the maritime coast is thus described from the mouth of the Varus river on the Ligusticum sea:

On the coast of Massiliensium

Nicaea	28	43	5
Herculis harbor	28	15	42 45
Tropaea Augusti	28	30	42 30
Monoeci harbor	28	40	42 40

of Liguria, which in Greek is called Ligustice, near the Ligusticum sea

Albintimilium	29	10	42 45
Albingaunum	29	30	42 45
Genua	30		42 50
mouth of the Entella river	30	30	42 50
Tigullia	30	35	42 55
mouth of the Macralla	31	50	42 45

where the Boacias flows into

it	31	30	43
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of the *Tusci* who in Greek are called *Tyrrhini*, near the Tyrrhenum sea are

Luna	32		42 45
Luna promontory	32		42 40
Temple of Hercules	32	40	42 45
mouth of the Arnus river	33	20	42 40
Populonium town	33	30	42
Populonium promontory	33	30	42
Traianus harbor	34		42 10
Telamon promontory	34	15	42
mouth of the Osa river	34	30	42
Cossae	35		41 55
Graviscæ	35	20	41 45
Castrum Novum	35	40	41 40
Pyrgi	36		41 40
Alsium	36	15	41 40

of the *Latini* on the Tyrrhenum sea

mouth of the Tiber river	36	30	41 30
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where the river turns toward the

west	36	30	42
Ostia	33	30	41 30
Antium	36	50	41 20
Clostra	37	10	41 20
Circaeum promontory	37	30	41 10
Tarracinae	37	45	41 15
Formiae	38	10	41 15

PTOLEMY'S GEOGRAPHY

of the <i>Campani</i> , on the Tyrrhenum sea			
mouth of the Liris river	38 20	41 15	
Sinuessa	38 30	41 20	
Volturnum	38 45	41 5	
Literum	39 10	41 10	
Cumae	39 20	41 10	
Misenum	39 30	41	
Puteoli	39 50	41	
Neapolis	40	40 55	
of the <i>Picentini</i> , on the Tyrrhenum sea			
mouth of the Sarnus river	40 5	40 55	
Surrentum	40	40 40	
Salernum	40	40 30	
of the <i>Lucani</i> , on the Tyrrhenum sea			
mouth of the Silarus river	40 5	40 15	
Paestum	40 10	40	
Buxentum	40	39 30	
of the <i>Brutti</i> , on the Tyrrhenum sea			
mouth of the Laus river	40	39 15	
Tempsa town	40	39	
Taurianus cliff	40 10	48 15	
Hipponiates bay	40 20	39 45	
Scyllaeum promontory	39 50	38 15	
Rhegium Julium	39 50	39 15	
Leucopetra promontory	39 50	38	
of Magna Graecia, on the Adriatic sea			
Zephyrium promontory	40 45	39 5	
Locri town	40 50	38 25	
mouth of the Locani river	40 55	38 35	
on Scylacius bay			
Scylacium town	40 45	39 40	
Innermost part of Scylacium bay	40 45	39 45	
Lacinium promontory	41 30	38 45	
on Tarentinus bay			
Croton town	41 30	39 10	
Thurium	40 55	39 30	
Metapontium	40 55	39 55	
Tarentum	41 30	40	
of the <i>Salentini</i>			
Iapygium promontory or			
Salentinum	42 20	38 45	
of Calabria, on the Ionian sea			
Hydruntum	43	39 5	
Lusipiae	42 40	39 15	
Brundisium	42 30	39 40	
of the <i>Apuli Peucenti</i> , on the Ionian sea			
Egnatia	42 30	39 50	
Barium	42 30	40 5	
mouth of the Aufidus river	42 30	40 15	
of the <i>Apuli Dauni</i> , on the Ionian sea			
Salapia	42 20	40 20	
Sipuntum	42 20	40 30	

Apenestae	42 20	40 45	
Garganus mountain	42 40	41	
and near the Adriatic bay			
Hyrium	42 30	41 15	
of the <i>Frentani</i> on this bay			
mouth of the Tifernus			
river	42	41 30	
Buca	41 40	41 40	
Istonium	41 30	41 45	
of the <i>Paeligni</i> on the same (bay)			
mouth of the Sarus river	41 20	42	
Ortona	40 45	42 15	
of the <i>Maurrucini</i> on the same bay			
mouth of the Aternus river	40 30	42 30	
mouth of the Matrinus			
river	39 20	42 45	
of the <i>Piceni</i> on the same bay			
Castrum	38 30	43	
Cupra Maritima	38	43 10	
mouth of the Truentini			
river	37 40	43 20	
Potentia	37 15	43 30	
Numana	36 50	43 40	
Ancona	36 30	43 40	
of the <i>Semnonnes</i> on the same bay			
mouth of the Aesis river	36 20	43 40	
Sena Gallica	36	43 40	
Temple of Fortune (Fanum			
Fortunae)	35 40	43 45	
Pisaurum	35 20	43 45	
Ariminum	35	43 50	
of the <i>Boii Galli</i> on the same bay			
mouth of the Rubicon river	34 55	43 55	
Ravenna	34 40	44	
mouth of the Po river	34 45	44	
where a river flows from			
Lario lake	29 20	44 45	
where it forms one with the Dorias			
river	30 40	43 45	
where the Dorias river flows from the			
Poenus lake	28 45	43 45	
where a river flows into the Po rising in			
Baenacus lake	31 45	43 30	
position of this lake	30 30	45	

Above the mouth of the Po river, on the coast of Venetia			
mouth of the Atrianus			
river	34	44 10	
of the <i>Carni</i> on the Adriatic at the innermost bend of the sea			
mouth of Tilaventus river	33	44 50	
mouth of the Natisonis			
river	34	44 50	

BOOK THREE — CHAPTER I

Istria where next to the innermost bend of the sea are

Tergestrum colonia 34 30 44 55
mouth of the Formionis river

Parentium 35 20 44 55

Pola 36 44 40

Nesactum 36 15 44 55

The interior towns of Istria

Pacinum 34 45 45

Piquentum 35 30 45 5

Alvum 36 45

Interior towns of the *Carni*

Forum Julium colonia 32 50 44 55

Concordia colonia 33 15 44 55

Aquileia colonia 34 45

Interior towns of Venetia

Vicentia 32 10 44 30

Belunum 32 30 44 40

Acelum 32 30 44 30

Opitergium 32 40 44 45

Ateste 32 40 44 15

Patavium 32 50 44 30

Altinum 33 15 44 25

Atria 34 10 44 5

Towns of the *Genomani* who are below

Venetia

Bergomum 32 44 20

Forum Jutuntorum 31 45 44

Brixia 32 30 44 10

Cremona colonia 32 43 40

Verona 33 44

Mantua 32 45 43 40

Tridente 33 40 43 45

Butrium 34 43 50

Towns of the *Beluni*, who are toward the west of Venetia

Vaunia 31 44 40

Carraca 31 20 44 40

Bretina 31 40 44 45

Anaunium 31 30 44 30

Towns of the *Insubres*, who are toward the west from the *Genomani*

Nobaria 30 30 44 30

Mediolanium 30 40 44 15

Comum 31 44 20

Ticinum 31 44

Towns of the *Salassi*, who are below the *Insubres*

Augusta Praetoria colonia 30 44

Eporedia 33 15 43 50

Towns of the *Taurini* who are below the *Salassi*

Augusta Taurinorum 30 30 43 40

Augusta Bagiennorum 29 30 43 20

Iria 30 43 20

Dertona 30 30 43 20

Towns of the *Libici*, who are below the

Insubres

Vercellae 30 45 43 50

Laumellum 31 30 43 40

Towns of the *Ceutrones* in the Graian Alps

Forum Claudii 29 44 55

Axima 29 45 44 55

Town of the *Leponti*, which is in the Cottian Alps

Oscela 29 44 40

Town of the *Caturiges* in the Graian Alps

Eburodunum 29 40 44 30

Towns of the *Segusiani* in the Graian Alps

Segusium 28 30 43 55

Brigantium 29 44 5

Town of the *Nerusi* in the Maritime Alps

Vintium 28 30 43 40

Town of the *Suetri* in the Maritime Alps

Salinae 28 30 43 20

Towns of the *Vedianti* in the Maritime Alps

Cemenelum 28 30 43 5

Sanitium 28 30 42 50

The Apennine mountains are located not far above Liguria beginning at the Alps, and from Liguria extending as far as Ancona, then turning they approach the Adriatic, an extend as far as the Garganus mountains, then turning they extend toward the south to Leucopetra promontory.

Liguria, which is located below the Apennine mountains, has the following interior towns:

Sabata 29 20 43

Pollentia 29 40 43

Astam colonia 30 20 43 5

Albam Pompeiam 30 40 43 10

Libarnam 31 43 10

Gallia Togata is located above those mountains, extending as far as Ravenna, and it has these towns:

Placentia 31 20 43 30

Fidentiam 31 40 43 30

Brixellum 32 43 20

Parmam (colonia) 32 43 30

Rhegium Lepidum (colonia)

32 30 43 30

Nuceriam 32 30 43 20

PTOLEMY'S GEOGRAPHY

Tanetum	33	20	43	40
Mutinam	33		43	40
Bononiam	33	30	43	30
Claterna	33	50	43	30
Forum Cornelii	34	15	43	30
Caesenam	34	40	43	40
Faventiam	34	20	43	45

Towns of the *Tusci* in the interior

Biracellum	31	45	43	10
Fossae Papiriane	32		42	50
Bondelia	32	30	42	50
Luca	33		43	10
Lucus Feroniae colonia	32	25	42	55
Pistoria	33	20	43	
Florentia	33	50	43	
Pisae colonia	33	30	42	45
Volaterrae	33	45	42	40
Rusellae	33	30	42	20
Faesulae	34		43	
Perusia	35	20	43	30
Arretium	34	40	42	45
Cortona	35	42	40	
Aculea	34	40	43	
Biturgia	35		42	55
Manliana	34	30	42	40
Vetulonium	34		42	30
Sena	34	20	42	30
Suana	34	50	42	25
Saturniana colonia	34		42	20
Eba	34	30	42	15
Volci	34	40	42	10
Clusium	34	40	42	20
Volsinium	35		42	20
Sudernum	35	30	42	5
Ferentia	35	30	42	20
Sutrium	36		42	10
Tarquinia	35	15	42	
Blera	35	40	41	55
Forum Clodii	35	55	41	55
Nepeta	36		41	50
Falerium	36	30	41	55
Caere	36	20	41	50

Towns of the *Semnonēs* in the interior

Suasa	35	30	43	40
Ostra	36		43	30

Towns of the *Piceni*, in the interior

Treja	36	30	42	25
Urbs Salvia	36	55	43	20
Septempeda	36	50	43	30
Cupra Montana	37	30	43	10
Firmium	37	30	42	55
Asculum	38	20	42	50
Adria	38	45	42	50

Towns of the *Umbri*, who are above the *Tusci* (Etruscans)

Pitinum	34	40	43	15
Tifernum	34	40	43	25
Forum Sempronii	34	50	43	30
Iguvium	35		43	5
Aesis	35	20	43	20
Tuficum	35	30	43	5
Sentinum	36	30	42	50
Aesisium	35	20	42	45
Camerinum	36		43	
Nuceria colonia	35	50	42	40

Towns of the *Umbri* who are toward the east of the *Tusci*

Arna	35	30	42	40
Hispellum	35	40	42	30
Tuder	35	50	42	20
Forum Flaminii	36		42	40
Spoletium	36	20	42	45
Mevania	36	15	42	30
Ameria	36	30	42	15
Narnia	36	30	42	30
Ocriculum	36	45	42	10

Town of the *Sabini*, who are toward the east of the *Umbri*,

Nursia	36	45	42	50
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Towns of the *Aequiculi*, who are east of the *Sabini*

Cliternum	37	30	42	40
Carsioli	37	20	42	20

Towns of the *Marsi*, who are toward the east from *Aequiculi*

Aex	37	40	42	30
Alba Fucinis	38		42	20

Towns of the *Praetuti*, who are toward the east from the *Marsi*

Beregra	38	30	42	30
Interamnia	38	20	42	20

Towns of the *Vestini*, who are toward the east from the *Praetuti*

Pinna	39		42	40
Avia	39		42	25
Amiternum	39		42	15
Angulus	39	30	42	30

Town of the *Marucini* in the interior

Teatea	39	45	42	30
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Towns of the *Latini* in the interior

Rome	36	40	41	40
Tibur	36	50	42	
Praeneste	37	30	41	55
Tusculum	36	50	41	45
Aricia	37		41	40
Ardea	36	45	41	30
Nomentum	37	30	42	5

BOOK THREE — CHAPTER I

Treba	37	30	41	45
Anagnia	37	20	41	40
Velitra	37	30	41	30
Lanuvium	37	15	41	25
Atina	38	15	42	
Fidenae	38		41	55
Frusino	37	50	41	45
Ferentinum	38		41	40
Privernum	37	45	41	35
Setia	38		41	30
Aquinum	38	50	41	55
Sora	38	20	41	40
Minturna colonia	38	20	41	25
Fundi	38	10	41	30
Towns of the <i>Peligni</i> in the interior				
Corfinium	40		42	20
Sulmo	40	30	42	
Towns of the <i>Frentani</i> in the interior				
Anxanum	41	10	41	55
Larinum	41	30	41	30
Town of the <i>Caraceni</i> , who are below the <i>Frentani</i>				
Aufidena	40	40	41	45
Towns of the <i>Samnites</i> , who are below the <i>Peligni</i> and the <i>Caraceni</i>				
Bovianum	39	5	42	
Aesernia	39		41	40
Saepinum	39	40	41	50
Allifa	40		41	45
Tuticum	40	10	41	40
Telesia	40	30	41	20
Beneventum	41		41	20
Caudium	41	20	41	5
Towns of the <i>Campani</i> in the interior				
Venafrum	38	40	41	40
Teanum	39		41	30
Suessa	38	40	41	25
Cales	39	20	41	30
Casilinum	39	15	41	20
Trebula	39	35	41	30
Forum Pompilii	39	45	41	15
Capua	40		41	10
Abella	40	20	41	10
Atella	40	10	41	5
Towns of the <i>Picentini</i> in the interior				
Nola	40	15	40	45
Nuceria colonia	40	30	40	40
Towns of the <i>Lucani</i> in the interior				
Ulci	40	40	40	30
Compsa	40	30	40	20
Potentia	40	40	40	15
Blanda	40	20	40	10
Grumentum	40	35	39	45

Towns of the *Irpini*, who are toward the east from the *Picentini* and the *Lucani*

Aquilonia	41		41	5
Abellinum	40	50	40	45
Aeculanum	41	20	40	45
Fratuolum	41		40	20

Towns of the *Apuli Dauni* in the interior

Teanum	40	41	41	25
Nuceria Apulorum (Apuli)	41	30	41	
Vibarna	42		41	
Arpi	41	40	41	15
Erdonia	41	40	40	40
Canusium	42	5	40	30

Towns of the *Apuli Peuciti* in the interior

Venusia	41	40	40	25
Celia	42	10	40	

Towns of the *Bruti* in the interior

Numistro	40	20	39	10
Consentia	40	40	39	10
Vibo Valentia	40	15	38	55

Towns of Magna Graecia in the interior

Petelia	40	45	39	
Abrystum	40	45	39	25

Towns of the *Salentini* in the interior

Rudia	41	50	39	45
Neretum	42		39	35
Aletium	42		39	20
Bausta	42	15	39	15
Exentum	42		39	10
Veretum	42	20	39	

Towns of Calabria in the interior

Sturni	42	30	39	20
Uretum	42	30	39	10

Islands which are near Italy in the Ligusticum sea

Aethale island	30	40	42	
Capraria island	32		42	
Ilva island	33		42	

These are the islands in the Tyrrhenum sea

Planasia island	34		41	
Pontia island	37	20	40	45
Pandataria island	37	50	40	45
Partenope island	38	20	40	45
Prochyte island	38	45	40	40
Pitheculsa island	39	20	40	30
Caprea island	39	20	40	10
Sirenussae islands	39	30	39	55

In the Ionian sea there are five islands which are called Diomedae located

in	43	40	40	20
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CHAPTER II

*Location of Corsica island
(Seventh map of Europe)*

CYRNUM island, which is also called Corsica, is surrounded on the west and the north by the Ligusticum sea, on the east by the Tyrrhenum sea, and on the south by that sea which lies between it and the Sardinian island.

The maritime coast of this island, if we begin in the middle on the north side, is described in this order

mouth of Volerius river	30	40	41
Caesia coast	30	30	41 10
Tilox promontory	30		41 30

Description of the west coast

Attii promontory	30		41 10
Casalus bay	30	15	40 25
Viriballum promontory	30	10	40 30
mouth of the Circidius river	30	10	40 25
Rhoetius mountains	30		40 20
Rhium promontory	30		40 15
Urcinium town	30	10	40 10
Arenosum coast	30	15	40
mouth of the Locra river	30	10	39 55
Pauca town	30	15	39 45
mouth of the Ticarius river	30	15	39 40
Titianus harbor	30	10	39 35

Description of the south coast

Ficaria town	30	30	39 30
mouth of the Pitane river	30	45	39 20
Marianum promontory and town	31		39 10

Description of the east coast

Palla town	31	20	39 20
Syracusanus harbor	31	20	39 25
Rubra town	31	20	39 30
Granianum promontory	31	30	39 40
Alista town	31	20	39 45
Philonii harbor	31	30	39 55
mouth of the Sacer river	31	30	40
Aleria colonia	31	30	40 5
mouth of the Rotanus river	31	30	40 10
Diana harbor	31	20	40 20
Tutela altar	31	30	40 30
mouth of the Guola river	31	30	40 35
Mariana town	31	40	40 40
Vagum promontory	31	30	40 45
Mantinon town	31	20	41
Clunium town	31	20	41 10

Description of the northeast coast:

Sacrum promontory	31	30	41 35
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Centurinum town	31	15	41 30
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Canelata town	31		41 20
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The native races inhabiting the island are the following: the *Cervini*, occupying the western part above the Aureus mountains and the location is

30	45	40	45
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Below these are the *Tarabeni*; then the *Titiani*; next the *Balatini*; more to the north are the *Vanacini*; below whom are the *Celebenses*; then the *Licmini* and the *Macrini*; below whom are the *Opini*; then the *Symrbi* and the *Coymaseni*; below these but more toward the south are the *Subasani*.

The towns in the interior are

Ropicum	30	15	41
Cersunum	30	30	41
Palanta	30	20	40 45
Lurinum	31		40 45
Aluca	30	20	40 30
Osincum	30	30	40 30
Sermigium	30	20	40 20
Talcinum	30	45	40 30
Venicium	30	50	40 20
Cenestum	31		40 15
Opinum	31	20	40 25
Mora	30	30	40
Matisa	30	45	39 35
Albiana	31		39 30

CHAPTER III

*Location of Sardinia island
(Seventh map of Europe)*

THE island of Sardinia is bordered on the east by the Tyrrhenum sea, on the south by the Africum sea, on the west by the Sardus sea, on the north by that sea which is between it and Cyrnum (Corsica) island.

The maritime coast of this island is thus described:

Description of the west coast

Gorditanum promontory	29	50	38 45
Tilium town	30		38 40
Nymphaeus harbor	30	10	38 30
Hermaeum promontory	30		38 15
mouth of the Temus river	30	15	38
Coracodes harbor	30	20	37 35
Tarrae town	30	20	37 20
mouth of the Thyrsus river	30	30	37 10
Usellis town, colonia	30	30	36 55
mouth of the Sacer river	30	30	36 40
Osaea town	30	30	36 30
Sardopatoris temple	30	30	36 20

BOOK THREE — CHAPTER IV

Neapolis	30 40	36 30
Crassum promontory	30 40	36
Description of the southern side		
Pupulum town	30 50	35 40
Solci town	31 10	35 50
Solci harbor	31 15	35 50
Chersonesus	31 30	35 45
Bioea harbor	31 40	35 50
Bioea town	31 45	35 50
Herculis harbor	32	35 50
Nora town	32	35 55
Resounding coast	32 5	35 55
Cuniocharium promontory	32 15	35 55

Description of the eastern side

Caralis town and promontory	32 30	36
Caralitanus bay	32 10	36 20
Susaleos village	31 55	36 40
mouth of the Saeprus river	32	37
Supicius harbor	31 50	37 30
mouth of the Caedris river	32	38
Feronia town	31 45	38 10
Olbia town	31 40	38 30
Olbianus harbor	31 40	38 45
Columbarium promontory	31 45	39
Ursi promontory	31 45	39 10

Description of the northeast coast

Errebantium promontory	31 30	39 20
Pluvium town	31 30	39 5
Juliola town	30 10	39
Tibula town	30 40	38 50
Turris Libisonis, town	30 15	38 50

The *Tibulati* and the *Corsi* inhabit the parts of the island farthest north; below whom are the *Coracenses*; then the *Carenses* and the *Cunusitani*; below whom are the *Salcitani* and the *Lucuidonenses*; then the *Aesaronenses*; below whom are the *Cor-nenses* or *Aechilenses*; then the *Rucensi*; below whom are the *Celsitani* and the *Gor-picenses*; then the *Scapitani* and the *Siculensi*; below whom are the *Neapolitani* and the *Valentini*; and farthest south are the *Solcitani* and the *Noritani*.

The towns in the interior are

Erycinum	31	38 40
Heraeum	31 30	38 40
Gurulis ancient	30 30	38 30
Bosa	30 30	38 15
Macopsisa	31 15	38 15

Below these towns are the Insani mountains

Gurulis nova	30 30	37 50
Saralapis	31 15	37 45

Cornus	30 30	37 45
Aqua Hypsitanae	30 40	37 15
Aquae Lesitanae	31 30	36 45
Lesa	31 30	36 35
Aquae Neapolitanae	31 45	36 10
Valentia town	31 55	36 30
The islands around Sardinia are		
Phintonis island	30 40	39 15
Ilva island	30 30	39 20
Nymphaea island	29 45	38 30
Herculis island	29 20	39
Diabate island	29 30	38 45
Accipitrum island	30	35 45
Plumbaria island	30 30	35 30
Ficaria island	33	39
Hermaea island	33	37 20

CHAPTER IV

Location of Sicily island (Seventh map of Europe)

SICILY is surrounded on the west and the north by the Tyrrhenum sea, on the south by the Africum, on the east by the Adriatic sea. The maritime shore of this island is thus described: the central part of the north side, which, terminating in a point, and more toward the north, is called

Pelorus promontory 39 40 38 35

A description of the west side on the Tyrrhenum sea

Phalacrum promontory	39 10	38 30
Mylae	39 38	30
mouth of the Helicon river	38 50	38 25
Tyndarium	38 30	38 20
mouth of the Thymethus river	39 20	38 20
Agathyrnum	38	38 15
Alontium	37 50	38 10
mouth of the Chyda river	37 45	38 5
Calacta	37 40	37 55
Alaesa	37 40	37 45
mouth of the Monalus	37 30	37 45
Cephaloedis	37 20	37 40
mouth of the Himera river	37 15	37 20
town of Therma Himera	37 5	37 15
Solus town	37	37 20
mouth of the Eleutherus	37	37 5
Panormus	37	37
Cetaria	37	36 45
mouth of the Bathis river	37	36 40
Emporium Segestanum	37	36 30
Drepanum	36 55	36 30
Aegitharsus promontory	36 50	36 15

PTOLEMY'S GEOGRAPHY

Description of the southern side toward the Africum sea

Lilybaeum city and promontory	37	36
mouth of the Acithius river	37 10	36 5
mouth of the Mazaras river	37 20	36 15
mouth of the Selinuntis river	27 30	36 15
Pintia	37 40	36 20
mouth of the Sossius river	37 50	36 20
mouth of the Isburus river	38 5	36 25
Heraclea	38 20	36 25
mouth of the Hypsa river	38 30	36 25
Agrigentum emporium	38 50	36 25
mouth of the Himera river	39	36 20
mouth of the Hipparus river	39 15	36 20
Bruca promontory	39 20	36 20
Caucana harbor	39 30	36 15
mouth of the Motycanus river	39 40	36 20
Ulixia promontory	39 50	36 15

Description of the eastern shore on the Adriatic sea

Pachynus promontory	40	36 20
Phoenicus harbor	39 45	36 30
mouth of the Erinous river	39 45	36 40
Longum promontory	39 50	36 45
Chersonesus	39 40	36 55
Syracusa colonia	36 30	37
mouth of the Alabus river	39 25	37 20
Taurus promontory	39 30	37 30
mouth of the Pantacius river	39 25	37 35
mouth of the Symaethus river	39 35	37 40
Catana colonia	39 30	37 45
Argennum promontory	39 30	37 50
Tauromenium colonia	39 30	38 10
Messena in the strait	39 30	38 30

The mountains in this island, which are well known, are

Aetna	39	38
Cratos	37 40	36 40

The *Messenii* occupy the northern part of this island, the *Herbitae* and *Catanei* the middle, and the southern part the *Segestani* and *Syracusani* inhabit.

The inland towns of Sicily are

Capytium	38 20	38 15
Abacaena	39	38 15
Imachara	38 30	38
Tissa	38 50	38

Aleta	37 50	37 50
Centuripa	38 30	37 50
Dymethus	38 50	37 50
Aetna	39 25	37 45
Agurium	38 15	37 40
Herbita	37 40	37 30
Sergentium (Ergetium)	38 30	37 30
Hydia	38 45	37 30
Leontium	39	37 30
Erbessus	37 50	37 20
Neetum	38 20	37 25
Menae	38 50	37 25
Paciorus	37 20	37 10
Assorus	37 40	37 20
Enna	38 5	37 15
Megara	39 15	37 15
Petra	38 40	37 5
Hybla	38 20	37
Engyum	39	37
Cotyrga	38 20	36 50
Macyrum	38 40	36 50
Acrae	39 15	36 40
Macella	37 15	36 40
Schera	37 30	36 50
Triocala	38	36 45
Agrigentum	38 30	36 40
Motyca	39 25	36 40
Segesta	37 5	36 30
Letum	37 30	36 30
Entella	37 45	36 30
Ancrina	38 10	36 35
Phthinthia	38 40	36 30
Gela	39	36 30
Camarina	39 20	36 25
Elorus	39 40	36 30
Ina	39 30	36 25
Helcethium	37 15	36 15

And the islands located around Sicily and near it are

Didyme island	39	39
Hicesia island	39 30	39
Ericodes island	38 20	38 45
Phoenicodes island	38 30	38 50
Vulcani island	38 50	38 35
Lipara island and town	39	38 45
Euonymos island	39 10	38 45
Strongyle island	39 30	38 45
Ustica island and town	37 30	38 45
Osteodes island	36 15	37
Phorbantia island	36	36 20
Aegusa island	36 15	36 5
Hiera island	36	36
Paconia island	36 30	35 50
Aeoli island	37	39

CHAPTER V

*Location of European Sarmatia
(Eighth map of Europe)*

EUROPEAN Sarmatia is terminated on the north by the Sarmatian ocean adjoining the Venedicus bay and by a part of the unknown land, a description of which is the following:

mouth of the Chronus river	50	56
mouth of the Rubonis river	53	57
mouth of the Turuntus river	56	58 30
mouth of the Chesinus river	58 30	59 30

The terminus of its maritime coast is located on that parallel extending through Thule, which parallel is the terminus of the known sea

62 63

The terminus of Sarmatia, which extends southward through the sources of the Tanais river is

64 63

It is terminated in the west by the Vistula river and by that part of Germania lying between its source and the Sarmatian mountains but not by the mountains themselves the position of which has been indicated; on the south by Iazyges Metanastae then from the southern terminus of the Sarmatian mountains to the beginning of the Carpathian mountains which is in

46 48 30

and by the following part of Dacia along that parallel up to the mouth of the Borysthenes river, and the shore of Pontus which is near the Carcinitus river; then along the maritime coast is

mouth of the Borysthenes river	57 30	48 30
mouth of the Hypanis river	58	48 30
Hecates forest, promontory	58 30	47 45
Isthmus of Cursus Achilles	59	47 40

The western promontory of the Isthmus of Achilles is called

Sacred promontory	57 50	47 30
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The eastern promontory is called

Mysaris promontory	59 45	47 30
Cephalonensus	59 45	47 50
Pulcher harbor	59 30	47 45
Tamyrace	59 20	48 30
mouth of the Carcinitus river	59 40	48 30

Next is the isthmus separating the Tauric peninsula, the terminus of which is on the Carcinitus bay in the

position	60 20	48 20
which is near Byce lake	60 30	48 30

On the east Sarmatia is bounded by the isthmus which is near the Carcinitus river, which is near Byce lake

60 30 48 30

Maeotis which extends as far as the Tanais river, then by the Tanais river, and by the line which extends from the sources of the Tanais river toward the unknown land as far as the indicated terminus.

This side is thus described from the isthmus which is near the Carcinitus river and along Maeotis lake:

Neontichus	60 30	48 40
mouth of the Pasiacus river	60 20	49 30
Lianum town	60	49 15
mouth of the Byce river	60 20	49 30
Acra town	60 30	49 40
mouth of the Gerrhus river	61	49 50
Cnema town	62 30	49 45
Agarum promontory	63	49 40
mouth of the Agarum river	62 30	50 30
Dark woodland, Piscatura Dei	62 40	51 15
mouth of the Lycus river	63	51 30
Hygres town	63 30	52 30
mouth of the Poritus river	64 30	53
Caroca village	65	53 30
western mouth of the Tanais river	66 20	54 20
Eastern mouth	67	54 30
Bend of the river	72 30	56
Source of the river	64	58

Above this the terminus, which I have mentioned, near the unknown land, the location of which is

64 63

Sarmatia is divided by other mountains, which are called

Peuce mountains	51	51
Amadoci mountains	55	51
Bodinus mountains	58	55
Alanus mountains	62 30	55
Carpathian mountains as we call them	46	48 30
Venedici mountains	47 30	55
Ripaei, the middle of which is in	63	57 30

The part of the Borysthenes river which is near Amodoca lake is in

53 30 50 20

The source of the Borysthenes river more toward the north is in

52 53

Of the rivers which are below the Borysthenes the Tyras separates parts of Dacia

and Sarmatia at the bend which is located in 53 48 30

The Axiaces river flows through Sarmatia not far above Dacia, and from the Carpathian mountains.

The *Greater Venedae* races inhabit Sarmatia along the entire Venedicus bay; and above Dacia are the *Peucini* and the *Basternae*; and along the entire coast of *Maeotis* are the *Iazyges* and the *Rhoxolani*; more toward the interior from these are the *Amaxobi* and the *Scythian Alani*.

Lesser races inhabit Sarmatia near the Vistula river.

Below the *Venedae* are the *Gythones*, then the *Finni*, then the *Sulones*; below whom are the *Phrungundiones*; then the *Avarini* near the source of the Vistula river; below these are the *Ombrones*, then the *Anartophracti*, then the *Burgiones*, then the *Arsietae*, then the *Saboci*, then the *Piengitae* and the *Biessi* near the Carpathian mountains.

Among those we have named to the east: below the *Venedae* are the *Galindae*, the *Sudini*, and the *Stavani*, extending as far as the *Alauni*; below these are the *Igylliones*, then the *Coestoboci* and the *Transmontani* extending as far as the *Peuca* mountains.

Back from the Ocean, near the Venedicus bay, the *Veltae* dwell, above whom are the *Ossi*; then more toward the north the *Carbones* and toward the east are *Careotae* and the *Sali*; below whom are the *Gelones*, the *Hippopodes* and the *Melanchlaeni*; below these are the *Agathyrsi*; then the *Aorsi* and the *Pagyritae*; then the *Savari* and the *Borusci* to the Ripaeos mountains; then the *Acibi* and the *Nasci*; below whom are the *Vibiones* and the *Idrae*; and below the *Vibiones* bordering on the *Alauni* are the *Sturmi*, and between the *Alauni* and the *Amaxobios* are the *Cariones* and the *Sargati*; near the bend of the Tanis river are the *Ophlones* and then the *Tanaitae*; below whom are the *Osili* extending as far as *Rhoxolanis*; between the *Amaxobi* and the *Rhoxolani* are the *Rheucanali* and the *Exobygitae*; and between the *Peucini* and the *Basternae* are the *Carpiani*, above whom are the *Gevini*, then the *Bodini*; between the *Basternae* and the *Rhoxolani* are the *Chuni*, and below the mountains named from these are the *Amaxodoci* and the *Navari*.

Near Byce lake dwell the *Toreccadae*, and near Achilles Cursus the *Tauroscythae*; below the *Basternae* near Dacia are the *Tigri* and below these are the *Tyrangitae*.

Below the bend of the Tanais river are located:

the Alexandri Arae (Altars)	63	57
and the Caesar Arae (Altars)	68	56 30
and on the shore of the river is Tanais town	67	54 40

The inland towns in the river regions around the Carcinitus river are

Carcina town	59 30	48 45
Torocca	58 30	49
Pasyris	58 30	49 10
Ercabum	58 30	49 15
Tracana	58 30	49 45
Navarum	58 30	50

Along the Borysthenes river are

Azagarium	56	50 40
Amadoca	56	50 30
Sarum	56	50 15
Serimum	57	50
Metropolis	56 30	49 30
Olbia or Borysthenes	57	49

above the Axiaces river

Ordessus	57	48 30
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And near the river which flows into the Borysthenes:

Leinum town	54	50 15
Sarbacum	55	50
Niossum	56	49 40

Above the Tyras river near Dacia

Carrodunum	49 30	48 40
Maetonium	51	48 30
Clepidava	52 30	48 40
Vibantavarium	53 30	48 40
Eractum	53 50	48 40

The island located near the mouth of the Tanais river is Alopecia or Tanais island 66 30 53 30

CHAPTER VI

Location of the Tauric peninsula (Eighth map of Europe)

THE Tauric peninsula is bounded by the isthmus which extends from the Carcenites bay to Byce lake, then by the coast of Pontus Euxinus, of the Bosphorus

BOOK THREE — CHAPTER VII

Cimmerius, and of Lake Maeotus, a description of which coasts is the following:

Next, after the isthmus, which is near the Carcenites river flowing into the Pontus

Eupatoria town	60	45	47	40
Dandace	60	45	47	20
Symbolon harbor	61		47	15
Parthenium promontory	60	40	47	
Chersonesus	61		47	
Ctenus harbor	61	15	47	10
Criumetopon promontory	62		46	40
Charax	62		46	50
Lagyra	62	30	47	
Corax promontory	63		47	
mouth of the Istrianus				
river	63	10	47	10
Theodosia	63	20	47	20
Nymphaeum	63	45	47	30

On the Cimmerius Bosphorus

Tyriactace	63	30	47	40
Panticapaea	64		47	55
Myrmecium promontory	64		48	30

On Lake Maeotis

Parthenium	63	45	48	30
Zenonis Chersonesus	63		48	45
Heracleum	62		48	30

Inland towns which are in the Tauric peninsula

Taphrus	60	40	48	15
Tarona	62	20	48	15
Postigia	63		48	15
Parosta	61	30	48	10
Cimmerium	62		48	
Portacra	61	50	47	40
Boeon	62	50	47	45
Iluratum	63	20	47	45
Satarche	61	15	47	20
Badatium	61	30	47	30
Cytaeum	62	15	47	30
Tazus	62	40	47	30
Argoda	61	45	47	15
Tabana	62	20	47	15

CHAPTER VII

*Location of Iazyges Metanastae
(Ninth map of Europe)*

THE region of Iazyges Metanastae is terminated on the north by the indicated boundary line of European Sarmatia beginning near the southern part of the Sarmatian mountains and extending to the Carpathian mountains; on the west by the indicated part of Germania which extends

from the Sarmatian mountains to the Danube river near the Carpis bend, thence following that river to the mouth of the Tibiscus river, which, flowing from the north, empties into it. The position of its mouth is

46 44 15

On the east it is terminated by Dacia along that river Tibiscus which rises in the Carpathian mountains. The location of these mountains is

46 48 30

The towns in this Iazyges Metanastae region are

Uscenum	43	15	48	20
Bormanum	43	40	48	15
Abieta	43	40	48	
Trissum	44	10	47	45
Parca	43	30	47	40
Candanum	44		47	20
Pessium	44	40	47	
Partiscum	45		46	40

CHAPTER VIII

*Location of Dacia
(Ninth map of Europe)*

DACIA is bounded on the north by that part of European Sarmatia, which extends from the Carpathian mountains to that terminus where, as we have shown, the Tyras river is deflected in its course

in

53 48 30

on the west by Iazyges Metanastae along the Tibiscus river; on the south by that part of the Danube river between the mouth of the Tibiscus river and Axiopolis, from which town as far as the Pontus and the mouth of the Danube it is called the Ister; the several sections of this southern boundary are:

After the mouth of the Tibiscus river the first turn which is west-southwest is

47 20 44 45

then a bend near the entrance of the Rabon river which flows from Dacia

in

49 43 30

and a bend at the entrance of the Ciabrus river which is in

49 30 43 45

a bend near the entrance of the Alutas river which comes from the north in

Dacia

50 15 44

a bend near Oescus

51 44

a bend near Axiopolim

54 20 44 45

thence the Danube river to its mouth is called the Ister as we have said.

On the east Dacia is bounded by the Ister river near the bend close to the town Dinogetia, the location of which is in 53 46 40 then by the river Hierasus, which near Dinogetia flows into the Ister from the north, and turning eastward extends as far as the indicated bend of the Tyras river.

The *Anarti*, the *Teurisci* and the *Goestoboci* inhabit Dacia in the northern part, beginning from the west; below these are the *Praedavenses*, the *Rhatacenses*, and the *Caucoenses*; below these, in this order, are the *Biephi*, the *Burideenses*, and the *Cotenses*, and below these are the *Albocenses*, the *Potulatenses*, and the *Senses*; below these, in the southern region, are the *Saldenses*, the *Ciagisi*, and the *Piephigi*.

The most important towns of Dacia are these:

Rucconium	46	30	48	10
Docidava	47	20	48	
Porolissum	49		48	
Arcobadara	50	40	48	
Triphulum	52	15	48	15
Patridava	53		48	10
Carsidava	53	20	48	15
Petrodava	53	45	47	40
Ulpianum	47	30	47	30
Napuca	49		47	40
Patruissa	49		47	20
Salinae	49	15	47	10
Praetoria Augusta	50	30	47	
Sandava	51	30	47	30
Angustia	52	15	47	15
Utidava	53	10	47	40
Marcodava	49	30	47	
Ziridava	45	30	46	20
Singidava	48		46	20
Apulum	49	15	46	40
Zermizirga	49	30	46	15
Comidava	51	30	46	40
Ramidava	51	50	46	30
Pirum	51	15	46	
Zusidava	52	40	46	15
Polonda	53		47	
Zurobara	45	40	45	40
Lizisis	46	15	45	20
Argidava	46	30	45	15
Tibiscum	48	30	45	15
Zarmizegethusa regia	47	50	45	15
Aquae	49	30	45	20
Netindava	52	45	45	30
Tiasum	52		45	30

Zeugma	46	40	44	40
Tibiscum	46	40	44	50
Dierna	47	15	44	30
Acmonia	48		45	
Drubetis	47	45	44	30
Frateria	49	30	44	30
Arcinna	49		44	45
Pinum	50	30	44	40
Amutrium	50		44	45
Sornum	51	30	45	

CHAPTER IX

Location of Upper Moesia (Ninth map of Europe)

UPPER Moesia is terminated on the west by Dalmatia along that line to which we have referred, leading from the mouth of the river Savus to the Scardus mountains; on the south by a part of Macedonia on a line extending along the Orbelus mountains as far as the terminus, the position of which is in 49 42 20 on the east by that part of Thrace which extends from the indicated terminus as far as the Ciabrus river the location of which is in 50 43 and by the Ciabrus river along Lower Moesia to the junction of the Danube and the Ciabrus which is in 49 30 43 45 on the north by a part of the Danube river as far as the Savus river.

The *Tricornenses* inhabit the parts of this province near Dalmatia, the *Moesi* are along the Ciabrus river, and between them are the *Picenses*, and near Macedonia are the *Dardani*.

The towns on the Danube river are Singidunum 45 30 44 30 Legio IV Flavia Tricornium 46 44 10 near which the Margus river flows into it (the Danube)

Viminacium legion	46	30	44	20
Tanatis	47		44	
Egeta	47	15	43	40
Dorticum	48		43	30
Rhatiaria Moesorum	49		43	20

Other towns remote from the Danube river are

Orrhea	46	45	43	30
Timacum	47	30	43	
Vendenis	48		42	50

Velanis	49	42	45
and the four towns of Dardania			
Naessum	47	20	42 30
Arribantium	47	30	42
Ulpianum	48	30	42 40
Scupi	48	30	42 30

CHAPTER X

Location of Lower Moesia
(*Ninth map of Europe*)

LOWER Moesia is bounded on the west by that part of the Ciabrus river to which we have referred; on the south by that part of Thrace which extends from the Ciabrus river north of the Haemus mountains to the terminus on the Pontus located in 55 44 40 on the north by that part of the Danube we have before mentioned, which extends from the Ciabrus river to Axiopolis, and by the remaining part of the Danube which is called the Ister, and from the bend of this river toward the Pontus at the town Dinogetia located, as we have said in 53 46 40

The following is the order of the mouths of the Danube: the first of these mouths, which is near the town Noviodunum, has the location 54 50 46 30 then the one, farther north, surrounding the island which is called the Peuce, but on the Pontine coast is called Sacrum or Peuce, and is located in 56 46 15 the one yet further north is divided and is located in 55 46 45 the part of this section of the river which is toward the north is divided in 55 30 47

then a part of the southern section divides its course shortly before it flows into the Pontus; the part toward the north flows through a swamp which is called Thiagola located in 55 40 47 15 it flows into the Pontus from the coast which is called Thiagola or Tenue located in 56 15 47

The other part of this river section toward the south is divided in 55 20 46 45 and the part which is toward the south from this section flows into the Pontus, through that coast which is called Boreum, in the location 56 20 46 50

and this southern part is divided in 55 40 46 30

The part toward the south of this section flows into the Pontus through the coast which is called Naracium, the location of which is 56 10 46 20 the northern part is divided in the location 56 46 40 and the part from this section toward the north flows through the Pseudostomus coast, the location of which is in 56 15 46 40 the southern part flows through the coast which is called Pulcrum, the location of which is 56 15 46 30

The side of Moesia on the east is terminated by that part of the coast of the Pontus south of the mouth (of the Danube) at the indicated terminus in the confines of Thrace in 55 44 40

A description of this eastern side of Moesia after the Sacrum mouth of the Ister is the following:

Pterum promontory	56	20	46
Istrus town	55	40	46
Tomi	55		45 50
Callatis	54	40	45 30
Dionysopolis	54	20	45 15
Tiristis promontory	55		45 10
Odessus	54	50	45
mouth of the Panysus river	54	45	44 50
Mesembria	55		44 40

The *Triballi* inhabit the western parts of Lower Moesia; toward the east are the *Troglodytes* who are below the Peuce mouth of the Danube; at the mouth are the *Peucini*, and the *Crobyzi* who dwell on the coast of the Pontus, and south of these are the *Oetenses* and the *Obulenses*; moreover in the section between the *Triballi* and the *Crobizi* are the *Dimenses* and the *Piarenenses*.

The towns on the Danube river are the following:

Regianum	50		43 40
Oescus Triballorum	51		44
Diacum	51	20	44 20
Novae (Legio I Italica)	52		44 40
Trimannium	52	20	44 50
Prista town	52	40	45 10
Tramarisca	53	15	45 15
Durostolum legio	53	30	45 30
Legio (XI Claudia)			
Sucidava	54		45 40
Axiopolis	54	20	45 45
Carsum	54	10	45 50

Troesmis	54	46	20
Legio V Macedonica			
Dinogetia	53	10	46 40
Noviodunum	54	40	46 30
Sitioenta	55		46 30

Between the river and the Haemus mountains are these towns:

Dausdava	53	44	40
Tibisca	55	46	20

The *Harpi* inhabit the maritime coast from that mouth of the Ister, which is farthest north, even to the mouth of the Borysthenes river, and the interior region to the Hierasus river below the Sarmatian Tyrgetas, and here also are the *Britolagae* above the *Peucini*. The following is a description of this coast:

south of the mouth of the Borysthenes river which we have mentioned as being located in	57	30	48 30
mouth of the Axiaces river	57		48
Physca town	56	40	47 40
mouth of the Tyras river	56	20	47 40
Hermonactis village	56	15	47 30
Harpis town	56		47 15

The island towns in this region, and those near the Hierasus river are:

Zargidava	54	40	47 45
Tamasidava	54	20	47 30
Piroboridava	54		47
between the Hierasus and the Tyras rivers			
Niconium	56	20	48 10
Ophiussa	56		48
Tyras town	56		47 40

The islands adjacent to Lower Moesia in this part which we have described are the island which is called

Borysthenes	57	15	47 40
and Achillis or Leuce island	57	30	47 40

CHAPTER XI

*Location of Thrace
(Ninth map of Europe)*

THRACE is bounded on the north by Lower Moesia along the line above indicated; on the west by Upper Moesia and a part of Macedonia, from the Orbelus mountains, as we have said to the terminus, the location of which is in 49 41 45. It is bounded on the south by that part of Macedonia extending from the indicated terminus to the mouth of the Nestus river, through the Pangaeus mountains, and by

the coast which runs along the Aegean sea, and by a part of the Melas bay which leads from this bay separating the peninsula from the continent; the localities along this side are

mouth of the Nestus river	51	45	41 45
Abdera	52	10	41 45
Maronea	52	40	41 40
mouth of the Hebrus river	53		41 30
Aenus town	53	10	41 30
in the Melas bay			
mouth of the Melas river	53	30	41 30
terminus of the peninsula which is in the Melas bay	53	50	41 30
the Propontis terminus of the peninsula	54	20	41 30

On the east, Thrace is terminated by the Propontis and by the Pontine coast which is called the Thracian Bosphorus, thence along the coast of Pontus to the terminus on the confines of Lower Moesia, which is located in 55 44 40

The following is a description from this terminus: after the city Mesembria of Moesia

Anchialus	54	45	44 30
Apollonia	54	50	44 20
Tonzus	55		44 10
Peronticum	55	10	44
Thynias promontory	55	40	44
Salmydessus, shore	55	40	43 40
Philia promontory	55	30	43 30
Phinopolis	55	30	42 20

and on the Pontine coast

Byzantium	56		43 5
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Then along the Propontis

mouth of the Rathynius river	55	30	43
mouth of the Athyra river	55	30	42 55
Selymbria	55		42 30
Perinthus	54	50	42 20
mouth of the Arzus river	54	50	42 10
Bisanthe	54	50	42
Macron Tichos	54	50	41 50
Pactye	54	30	41 45

and next to the terminus of the peninsula to which I have referred.

Of the mountains in Thrace which are important, are the Haemus mountains which extend along the confines of Upper Moesia, and the Rhodope mountains above the Nestus and the Hebrus river, between which rivers almost in the middle near the

sea is a lake, which is called Bistonis lake, the position of which is in 52 30 41 50

The prefectures in this province bordering on both Moesias, and extending along the Haemus mountains, beginning on the west, are Dantheletica, Sardica, Usdicesica, and Selletica; those bordering on Macedonia and the Aegean sea in the following order, are Maedica, Drosica, Coeletica, Sapaica, Corpillica, and Caenica; above Maedica is Bessica; below which is Bennica, and next is Samaica; along the shore, which extends from the town Perinthus to Apollonia, is the Astica prefecture.

The inland towns of Thrace are

Praesidium	51	20	43	10
Nicopolis near Haemum	52		43	45
Ostaphus	52	30	43	30
Valla	52	40	42	43
Opisena	53	20	44	
Develtus colonia	54	20	44	15
Orcelis	54	20	43	40
Carpudaemum	54		43	5
Bizye	54	50	43	45
Sardica	50	10	43	
Terta	51	40	43	5
Philippopolis	52	30	42	45
Arzus	53	15	43	10
Tonzus	54	30	43	20
Cabyle	54	50	43	15
Bergule	54	30	43	
Pautalia	50		43	30
Nicopolis near Nestum	51	45	42	20
Topiris	51	20	42	
Pergamum	52		42	30
Traianopolis	53		42	15
Plotinopolis	53	40	42	40
Drusipara	54	30	42	40
Dyme	52	50	41	45
Cypsella	53	5	41	40
Aphrodisias	53	55	41	40
Apri colonia	54		42	
Heraclea	54	20	41	50
Lysimachia	54	10	41	30

The island which is near Thrace above the Bosphorus to eastward is

Cyanea	56	20	43	20
in the Propontis is the island				
Proconnesus	55	30	42	

Islands in the Aegean sea are

Thasos island and town	51	45	41	30
Samothrace island and town	52	30	41	15
Imbros island	53	20	41	15

The peninsula is bordered on the north by that line which we have said is the boundary of Thrace, by the Melas bay to the Propontis, and by that part of Propontis which is near Callipolim, the location of which is in 55 41 30

on the west by the remaining part of Melas bay, on which is

Cardia city	54	41	5
and the Mastusia promontory	54	30	40 40

on the south by the Aegean sea, on which is the town Elaeus 54 30 40 45

and which is near the promontory

in	54	40	40 45
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on the east by the Hellespontus, on which are these towns:

Coela	54	55	41
Sestus	54	55	41 15

then, as we have said, the town

Callipolis	55	41	30
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CHAPTER XII

Location of Macedonia (Tenth map of Europe)

MACEDONIA is terminated on the north by the boundary line of Dalmatia, of Upper Moesia and of Thrace, the locations of which we have indicated; on the west by the Ionian sea from Dyrrachium to the river Celydnus, a description of its boundary regions is the following:

In Taulanti

Dyrrachium	45	40	55
mouth of the Panyassus river	45	40	40
mouth of the Apsi river	45	5	40 30
Apollonia	45	5	40 10
mouth of the Laus river	45	40	
Aulon town and naval station	44	50	39 55

In Elimiotis

Bullis	45	39	45
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In Orestis

Amantia	44	55	39 50
mouth of the Celydnus river	45	39	20

on the south it is bounded by that line which runs along Epirus to the terminus, the location of which is 47 40 38 45 along this line extends the Pindus mountain through that region, the central part of which is in 47 40 38 45

and then along Achaia to the terminus in the Maliacus bay, the location of which is

51 38 25
on this line is the Oeta mountains, the central part of which is in 50 30 28 35

In the east it is terminated by that part of Thrace to which we have referred and by the bays of the Aegean sea, which extend from the Nestos river to that which we have indicated as the terminus of the Maliacus bay, of which bay the following is a description: after the Nestos river, by which Thrace is terminated, and the mouths of which are located in 51 45 41 45

In the Strymonic bay on the maritime shores of Edonis

Neapolis 51 15 41 45
Oesyne 50 50 41 45
mouth of the Strymon river 50 15 41 25

In Amphaxitis

Arethusa 50 10 41 20
Stagira 50 20 41 10

In Chalcidice

Panormus harbor and town 50 40 41
Mount Athos 51 41 10
Athos promontory and town 51 15 41 15
Central part of the mountain 51 10 41
Nymphaeum promontory 51 10 40 45

On the Singiticus bay

Stratonice 50 55 40 55
Acanthus 50 40 40 55
Singus 50 30 40 40

In Paraetia

Ampelus promontory 51 15 40 30
Derris promontory 51 15 40 20
Torone 50 45 40 25
Toronaicus bay, innermost recess 50 40 40 25

Pallenes on the narrow part of peninsula 51 40 5
Canastreaum promontory 51 15 39 55
Cassandra 51 5 40

On the Thermaicus bay
mouth of the Chabris

river 50 40 40 5
Gigonis promontory 50 30 40 5

In Amphaxitis

Thessalonice 49 50 49 20
mouth of the Echedorus river 49 45 40 15
mouth of the Axios river 49 40 40 10

In Pieria

mouth of the Lydias river 49 30 40
Pydna 49 40 39 45
mouth of the Haliacmon river 49 50 39 40
Dium colonia 50 39 35
mouth of the Baphyras river 50 10 39 30
mouth of the Peneus river 50 30 39 25

In Pelasgiota

Magnesium promontory 51 40 39 30
Sepias promontory 51 45 39 15
Aeanteum 51 40 39 15
Iolcus 51 30 39 15

In Phthiotis on the Pelasgian bay

Pagasae 50 50 38 55
Demetrias 50 30 38 55
Posidium promontory 51 30 38 50
Larissa 51 20 38 45
Echinus 51 10 38 45
Sperchea 51 38 40
Thebae Phthiotidis 51 38 35
mouth of the Spercheus river 51 38 35

The Strymon river rises in the mountains on the confines of Thrace and Macedonia, the sources of which are in 48 40 42 and the Axios river rises in the Scardus mountains in the location 47 41 40 and in the mountains, which are below Dalmatia, the position of which is 46 41 15

the sources of this river unite in 49 15 40 15
the river Haliacmon rises in the Candavius mountains in 46 40 40 10
the river Peneus flows from the Pindus mountains in 47 30 39
and the Spercheus river in 48 30 39 40

Among the mountains which have received a name the central position of Bertisus is in 49 10 41 15
of the Bermius mountains is 48 30 39 50
of the Cercetius mountains 46 40 39 40
of the Titarius mountains 48 40 39 30
of Mount Olympus 50 39 20
of Mount Ossa 50 40 39 20
of Mount Pelius 51 10 39 20
of the Othrys mountains 50 38 40

The inland towns of Macedonia are

In Taulanti

Arnissa 45 20 40 40

In Elimiotis

Elimia 45 40 39 40

BOOK THREE — CHAPTER XII

In Orestis				Apollonia	49	30	40	30	
Amantia	46		39	20	Lete	49	20	40	20
In Albani				In Chalcidice					
Albanopolis	46		41	5	Aegae	50	15	40	40
In Almopes				In Paractia					
Horma	46	45	41	30	Clitae	50	20	40	20
Europus	46	30	41	20	Moryllus	50	30	40	15
Apsalus	46	20	41	5	Antigonia or Psaphara	50	45	40	10
In Orbelia				In Emathia					
Garescus	47	50	41	40	Europus	47	20	40	20
In Eordaei				Tyrisa	47	30	39	55	
Scampis	45	45	40	20	Scydra	47	40	40	20
Dibolia	45	45	40	10	Mieza	48		39	45
Daulia	45	30	40		Cyrrhus	48	10	40	40
In Aestraei				Idomene	48	30	40	50	
Astracum	46	20	40	50	Gordynia	48	40	40	15
In Paconia				Edessa	48	45	40	20	
Doberus	46	40	40	45	Beroea	48	45	39	50
Alorus	47	15	41	10	Aegaea	48	40	39	40
In Iori				Pella	49	20	40	5	
Iorum	47	45	41	15	In Pieria				
In Sintica				Phylace	49	20	39	30	
Tristolus	48		41	30	Vallae	49	40	39	30
Perthicopolis	48	40	41	40	In Parauaei				
Heraclea Sintica	49	10	41	40	Eriboea	46	40	39	45
				In Pelasgiota					
In Odomantica and Edonis				Doliche	47	30	39	40	
Scotussa	49	30	41	50	Azorium	47	45	39	30
Berga	49	50	41	40	Pythium	47	50	39	30
Gasorus	50	15	41	55	Gonnus	48	5	39	35
Amphipolis	50		41	30	Atrax	48	30	39	25
Philippi	50	45	41	55	Iletium	49	5	39	25
In Desareti				Scotussa	49	30	39	10	
Evia	46	5	40	15	Larissa	50		39	10
Lychnidus	46	50	40	20	Pherae	50	30	39	10
In Lyncestis				In Tymphaea					
Heraclea	47	40	40	40	Gyrtone	46	50	39	30
In Pelagonia				In Hestiaeota					
Audaristus	48		40	55	Phaestus	47	15	39	20
Stobi	48	50	41	20	Gomphi	47	40	39	10
In Bisaltia				Aeginium	48		39	20	
Arrolus	49	10	41	20	Tricca	48	5	39	
Euporia	49	20	41	10	Ctimenae	48	45	39	10
Calliterae	49	30	41	10	Chyretiae	49		39	
Ossa	49	45	41		Metropolis	49	20	39	
In Mygdonia				In Thessali					
Antigonia	48	40	41	10	Hypata	47	50	38	50
Calindoea	48	40	40	50	Sosthenis	48	15	38	50
Baerus	48	55	40	40	Homilae	48	40	38	40
Physcae	49		41		Cypaera	49		38	40
Terpyllus	49	10	40	50	Phalanthia	49	30	38	45
Carrabia	49	5	40	30	In Phthiotis				
Xylopolis	49	20	41		Narthacium	50	10	38	45
Asserus	49	30	40	40	Coronea	50	30	38	50

PTOLEMY'S GEOGRAPHY

Melitaea	50	40	39
Eretria	50	15	38 50
Lamia	50	30	38 35
Heraclea	50	50	38 30
Islands adjacent to Macedonia in the			
Ionian sea			
Saso island	41	10	39 30
in the Aegean sea			
Lemnos island, in which are two towns			
Myrina	52	20	40 55
and Hephaestia, inland	52	30	41
Sciathos island and town	52	10	39 15
Peparethos islands and town			
(Scopelus)	52	30	39 20
Scyros island and town	54		39

CHAPTER XIII

Location of Epirus (Tenth map of Europe)

THE northern side of Epirus is bounded by the part of Macedonia along the line we have before mentioned; the eastern side by that line which extends along Achaia to the mouth of the Achelous river, the location of which is in 48 25 37 50 the western side is bounded by the Ionian sea which is near the Acroceraunos mountains, a description of which coast is the following:

In Chaonia

Oricum	45		39 15
Summit of Acroceraunos			
mountains	44	25	39 10
Panormus harbor	45		38 40
Onchesmus harbor	45	20	38 35
Cassiope harbor	45	30	38 25

The south side is bound by the Adriatic from the western terminus to the river Achelous; a description of this coast is the following:

In Thesprotia

Posidium promontory	45	45	38 10
Pelodes harbor	46	10	38 20
Thyamis promontory	46	10	38
Thyamis river mouth	46	15	38 5
Syбота harbor	46	45	38
Torone	46	50	38

mouth of the Acherontos river

Elaeae harbor	47	15	37 55
Nicopolis near the Ampracius bay	47	35	37 55

In Acarnanum

mouth of the Arachthus	47	50	38 15
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Ampracia	48		38 20
Actium	47	40	37 45
Leucas promontory	47	50	37 20
Alyzea	48	20	37 25
mouth of the Achelous river			
	48	25	37 30

Towns in the interior of Epirus

In Chaonia

Antigonia	45	15	39 10
Phoenixe	45	20	38 45
Hecatompodon Dodonaeorum			
	45	40	39
Omphalium	45	40	38 40
Elaeus	45	40	38 30

In Cassopea, above which are the *Dolopes*

Cassopea	47		38 20
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The *Amphiloci*, from whom toward the east are the *Athamanes*

Argos	48	20	38 30
the <i>Acarnani</i>			

Astacus	48	15	37 45
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Islands adjacent to Epirus are Corcyra, which is large, and the following is the description:

Cassiope town and promon-

tory	45	5	38 15
Ptychia	45	30	38
Corcyra town	45	40	37 50
Leucimma promontory	46	20	37 45
Amphipyrgus promontory	45	30	37 40
Phalacrum promontory	45		38

and Cephalenia island, in which a town of this name is located

	47	40	37 10
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on the north is a promon-

tory	47	40	37 30
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on the south a promontory

	47	45	36 40
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the island Ericusa

	44	40	38
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the island Scopulus

	45		37 55
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the Leucas island

	47	45	37 35
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Echinades island

	48	10	37 20
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Ithaca island with town of this

name	48		37 10
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Letoia island

	47		36 45
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Zacynthus island with town of this

name	47	30	30 30
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CHAPTER XIV

Location of Achaia (Tenth map of Europe)

THAT part of Achaia, which we have said is contiguous to the provinces in the Peloponnesus, extends to the isthmus which they call Hellas. It is terminated by

BOOK THREE — CHAPTER XIV

Epirus on the west, by Macedonia on the north, the border of which region we have described, and by a part of the Aegean sea; on the east by the part of the Aegean sea nearest Sunium as far as the promontory; on the south by the Adriatic sea, the coast of the Gulf of Corinth beginning at the Achelous river, then from the isthmus and the Cretian sea to the Sunium promontory. A description of the shores of this sea is the following:

After the Achelous river, which is the terminus of Epirus, on the Adriatic sea

In Aetolia

Chersonesus (promontory) 48 30 37 25
mouth of the Evenus river 49 37 30

In Locri Ozolae

Molycria 49 15 37 30
Antirrhium promontory 49 20 37 25
Naupactus 49 30 37 35
Evanthia 49 45 37 45
Chalaeum 49 55 37 50

In Phocis

Cirrha 50 37 30
Crisa 50 15 37 30
Anticyra 50 30 37 30

In Boeotia

Siphae 51 5 37 35
Creusa 51 15 37 30

In Megaris

Pegae 51 25 37 25
and Nisaea located across the
isthmus 52 37 20

In Attica

Eleusis 52 20 37 15
Piraeus 52 45 37 10
mouth of the Ilissus river 52 50 37 5
Munychia harbor 53 10 37 5
Hyphormus harbor 53 30 36 50
Sunium promontory 53 35 36 45

On the eastern shore of the Aegean sea

Panormus harbor 53 40 37
Diana temple 53 40 37 5
Cynosura promontory 53 50 37 20
mouth of Asopus river 53 30 37 25
Chersonesus promontory 53 30 37 30
Oropus 53 20 37 40

In Boeotia

Aulis 53 15 37 45
mouth of the Ismenus river 53 10 37 50
Salganeus 53 38
Anthedon 53 38 5
Phocae 52 40 38 10

In Locri Opunti

recess of Opunti bay 52 15 38 10

Cynus 52 38 30

In Locri Epicnemidi

Cnemides 52 10 38 25
mouth of the Boagrius river 51 30 38 25
Scarphaea 51 15 38 25

The mountains in the northern part of Achaia are the Callidromus, the middle part of which is in

49 38 15
Corax mountains 49 20 38
Mount Parnassus 50 20 38
Mount Helicon 51 37 45
Mount Cithaeron 51 40 37 30
Mount Hymettus 52 30 37 20

The Achelous river has its sources in the Pindus mountains, the Evenus in the Callidromus mountains, running first toward the east near the Cephissus river, which, flowing from the mountains in Boeotia unites with the Asopus river and with the Ismeno river in

The inland towns in Hellas are

Interior of Aetolia

Chalcis 49 38 5
Arachthus 48 50 37 55
Pleuron 48 35 37 40
Olenus 49 37 50
Calydon 49 37 40

In Doris

Erineus 49 38 25
Cytinium 49 20 38 20
Boeum 49 30 38 15
Lilaea 50 5 38 15

In the interior of Locri Ozolari

Amphissa 49 30 37 50

In the interior of Locri Epicnemidii

Thronium 51 15 38 15

In the interior of Phocis

Pythia 50 10 37 45
Delphi 50 37 40
Daulis 50 20 37 50
Elatea 51 38
Aegosthenia 50 45 37 45
Bulia 50 30 37 35

Inland town of Oputi

Opus 52 38 10

Inland towns of Boeotia

Thisbe 51 37 40
Thespieae 51 5 37 50
Orchomenus 51 20 37 55
Coronea 51 20 37 45
Hyampolis 51 30 37 55
Chaeronea 51 30 37 50
Lebadea 51 45 37 55
Copae 51 50 38 5

PTOLEMY'S GEOGRAPHY

Haliartus	51	55	37	45
Plataea	52	15	37	40
Acraephia	52	20	38	5
Tanagra	52	30	37	55
Thebae Boeotia	52	40	37	55
Delium	53		37	45

In the interior of Megara

Megara	52		37	25
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In the interior of Attica

Oenoe	52	20	37	30
Athenae	52	45	37	15
Rhamnus	53	15	37	30
Marathon	53	15	37	20
Anaphlystus	53	30	37	10

Achaean islands in the Aegean sea near the large island Euboea, of which the following is a description:

Cenaeum promontory	52	20	38	35
Atlante small island	52	30	38	30
Aedepsus	52	40	38	25
Chalcis near Euripum	53	10	38	
Eretria	53	50	37	50
Amarynthus	54	5	37	45
Leo promontory	54	15	37	20
Pulchrum Littus (coast)	54	30	37	30
Carystus	54	30	37	40
Geraestus harbor	54	40	37	45
Caphereum promontory	55		37	50
Cava Euboea	54	25	37	50
Chersonesus promontory	54	30	38	10
mouth of the Budorus river	54		38	10
Cerinthus	53	50	38	10
Diana temple	53	40	38	20
Phalacria promontory	53	20	38	30
Oreus	53	10	38	25
Divum promontory	53		38	35

Near Attica and below Euboea are these islands:

Thera island, in which are two towns

Eleusin	53	50	36	25
Oea	54		36	25

Cea island, in which are three towns

Coressus	54	25	37	
Iulis	54	20	37	
Carthaea	54	15	36	45
town of the Ios island	54	20	36	35
Polyaegos a desert island	54	20	36	15
Therasia island town	54	45	36	20

At some distance from Cyclades are the island towns which are called

Naval station of Andros island	55		37	30
town of Andros island	54	50	37	25
town of Tenos island	55	5	37	30

town of Scyros island	54	45	37	15
town of Delos island	55	25	37	20
Oliarus	55	20	36	30
Cythnus	54	55	37	
Rhene	55	5	37	10

Myconos islands

Phorbia promontory	55	45	37	10
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Myconos town	55	40	37	10
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town of Naxos island	55	40	37	
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town of Paros island	55	30	36	50
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Sunium promontory	55	40	36	55
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town of Siphnos island	55	15	36	45
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and central parts

Seriphos	55		36	50
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Pholecandros	55		36	30
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Sicinos	54	50	36	35
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Location of Peloponnesus

The boundaries of Peloponnesus on the north are the Corinthian gulf, the isthmus, and the Cretan sea, on the west and south the Adriatic sea, on the east the Cretan sea. The sea coast is described in this order:

Next to Pegas, a town of the Megara region, which is on the Corinthian bay of Achaia as we have stated, and

in	51	25	37	25
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In Corinth

Corinthian temple of Juno	51	15	37	15
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Lechaeum naval station	51	20	37	
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mouth of the Asopus river	51	5	37	5
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In Sicyonia

mouth of Suos river	50	40	37	
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In Achaia

Aegira	50	15	36	55
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Aegium	49	45	36	55
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Erineus harbor	49	30	36	55
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Rhium promontory or

Drepanum	49	20	37	10
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Neptune temple	49	15	37	
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Patrae	49		36	50
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Olenus	48	50	36	45
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Dyme	48	40	36	40
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Araxus promontory	48	30	36	45
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In Elea

Cyllene naval station	48	30	36	30
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mouth of Peneus river	48	20	36	30
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Chelonites promontory	48		36	20
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Chelonites bay	48	20	36	15
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Ichthys promontory	48	5	36	
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mouth of the Alpheus river	48	20	35	55
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river source	49	50	36	30
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In Messenia

Cyparissia city	48	35	35	45
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Cyparissium promontory	48	25	35	40
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BOOK THREE — CHAPTER XIV

mouth of the Sela river	48	30	35	35	Bucephalus harbor	51	25	36	45
Pylus	48	35	35	30	In Corinth				
Coryphasium promontory	48	30	35	25	Cenchreae naval station	51	25	36	55
Mothone	48	35	35	20	Schoenus harbor	51	40	37	
Colone	48	45	35	15	The mountains in Peloponnesus are:				
Acritas promontory	48	45	35		Pholoe mountains	49	15	36	40
On the Messenian bay					Stymphalus mountain	50	10	36	30
Asine	48	50	35		Minthe mountain	49		35	30
Corone	49		35	5	Taygetus mountain	49	40	35	15
Messene	49	15	35	15	Cronius mountain	50	30	35	45
mouth of the Pamisus river	49	20	35	15	Zarex mountain	51		35	20
its junction with the Alpheus					Towns in the interior of Achaia which				
river	49		35	55	are especially mentioned are the following:				
Phera	49	30	35	15	Pherae	49	15	36	45
Abia	49	45	35	10	Helice	49	50	36	45
In Laconia					Bura	50		36	50
Leuctra	49	55	34	40	Pellene	50	20	36	45
Taenarus promontory	50		34	20	Inland towns of Sicyonia				
On the Laconian bay					Phlius	50	50	36	40
Taenarus	50		34	45	Sicyon	51		36	50
Caene	50	5	34	50	Interior town of Corinth				
Teuthrone	50	10	34	55	Corinth	51	15	36	55
Las	50	15	35		In the interior of Elia				
Gythium	50	20	35	5	Elis	49		36	25
Trinasus naval station	50	25	35	10	Olympia Pisa	48	40	36	15
mouth of the Eurotus river	50	30	35	10	Coryne	48	30	36	10
river source	50	30	35	45	Hypanea	49	10	36	
Acria	50	35	35	10	Lepreum	48	50	35	55
Biandyna	50	45	35	10	Typanea	49	10	36	10
Asopus	50	50	35	5	In Arcadia				
Onugnathos promontory	51		35		Heraea	49	20	36	
Boeae	51	5	35	5	Phialia	49	20	36	
Malea promontory	51	20	35		Tegea	49	50	36	20
On the Argolus bay of Laconia					Psophis	49	40	36	5
Minoa harbor	51	10	35	10	Lysias	49	50	36	
Jovis Servator harbor	51	10	35	15	Antigonea or Mantinea	49	40	35	45
Epidaurus	51	5	35	30	Stymphalus	50	20	36	20
Zarex	51		35	40	Clitor	50	25	36	
Cyphanta harbor	51	10	35	45	Dipaea	50	50	36	20
Prasia	51	20	35	50	Megalopolis	50	40	36	10
In Argolis					Inland towns of Argolis				
Astrum	51	30	35	45	Nemea	51	5	36	25
mouth of the Inachus river	51	30	35	50	Cleonae	51	10	36	25
source of the river	51		36	30	Argos	51	20	36	15
Nauplia naval station	51	35	36		Mycenae	51	45	36	10
Phlius	51	45	35	55	Asine	51	35	36	15
Hermione	52		36		Inland towns of Messinia				
Scyllaeum promontory	52	30	36	5	Haliartus	48	50	35	45
On the Saronicus bay in Argolis					Ithome	48	50	35	25
Troezen	52	20	36	5	Troezen	49	10	35	25
Methone chersonesus	52	10	36	20	Inland towns of Laconia				
Epidaurus	51	50	36	25	Cardamyle	50		35	25
Spiraeum promontory	51	45	36	35	Lacedaemon	50	15	35	30
Atheniensium harbor	51	30	36	35	Cyphanta	51		35	45

PTOLEMY'S GEOGRAPHY

Lerne	51	15	35	55
Thurium	50	15	35	20
Blemina	50	40	35	45
Thalame	50	15	35	10
Gerania	50	10	35	20
Oenoe	50	40	35	20
Bityla	50		35	
Islands near Peloponnesus				
Strophades, two islands	47	20	30	
Prote island	47	50	35	30
Sphagia island	48		35	
Theganusa island	48	30	34	40
Cythera island town	51	10	34	40
Aegila island	51	45	34	40
Salamis island	52		37	15
Aegina island town	52	20	36	45

CHAPTER XV

Location of the island Crete (Tenth map of Europe)

THE island Crete is surrounded as follows: on the west by the Adriatic sea; on the north by the Cretan sea; on the south by the Libyan sea; on the east by the Carpathian sea. Its maritime coasts are thus described:

Description of the west coast				
Corycus promontory and town	52	5	34	40
Phalasarna	52	20	34	40
Chersonesus	52	30	34	35
Rhamnus harbor	52	30	34	30
Ina chorium	52	35	34	20
Criumetopon promontory	52	35	34	10
Description of the south coast				
Lissus	52	40	34	5
Tarrha	52	50	34	20
Poesilasium	53		34	30
Hermaeum promontory	53	15	34	25
Phoenicus harbor	53	30	34	50
Phoenix town	53	35	34	45
mouth of the Messalia river	53	45	34	40
Psychium	54		34	45
mouth of the Electra river	54	10	34	45
Matalia	54	25	34	30
Leo promontory	54	35	34	45
Lebena	54	35	34	50
mouth of the Catarrhactus river	54	45	34	50
mouth of the Letheus river	54	50	34	55
Inatus town	55		34	55
Sacer mountain	55	10	35	

Hierapytna	55	15	35	5
Erythraeum promontory	55	20	35	5
Ampelus promontory	55	30	35	10
Itanus town	55	40	35	15
Description of the east side				
Sammonium promontory	55	50	35	25
Minoa harbor	55	20	35	15
Camara town	55	10	35	20
Olus	55		35	20
Chersonesus	54	55	35	20
Zephyrium promontory	54	45	35	30
Description of north side				
Heracleum	54	30	35	20
Panormus	54	20	35	15
Apollonia	54	10	35	15
Cytaeum	54		35	15
Divum promontory	53	50	35	10
Pantomatrium	53	45	35	5
Rithymna	53	30	35	5
Amphimales bay	53	15	35	
Drepanum promontory	53	10	35	10
Minoa	53		35	
mouth of the Pycnus river	52	50	35	
Cydonia	52	45	35	
Cisamum promontory	52	30	35	
Dictannum	52	25	34	55
Psacum promontory	52	20	34	50
Cisamus town	52	25	34	45
The important mountains in Crete are called				
Albi	52	40	34	40
Ida mountain	54		35	
Dicte mountain	55	30	35	15
Towns in the Cretan interior				
Polyrrhenia	52	20	34	45
Aptera	53	34	55	
Hyrtacina	53	5	34	45
Lappa	53	15	34	55
Subrita	53	40	34	40
Elautherae	53	45	35	
Gortyna	54	15	34	50
Pannona	54	40	35	10
Cnosus	54	45	35	10
Lyctus	55		35	10
Islands near Crete are				
Claudus island, in which is a town	53	30	34	
Leota island	54	30	34	10
Dia island	54	30	35	40
Cimolis island, in which is a town	54	20	35	30
Melus island, in which is a town	54		35	30

END OF BOOK THREE

BOOK FOUR



The Fourth Book contains the following descriptions:

A description of entire Libya following in order the provinces or prefectures

1. Mauritania Tingitana Map I
2. Mauritania Caesariensis
3. Numidia. Africa Map II
4. Cyrenaica Map III
5. Marmarica, which is properly called Libya. Entire Egypt both Lower and Upper.
6. Libya Interior Map IV
7. Ethiopia which is below Egypt
8. Ethiopia which is in the interior below this.

Provinces XII

Maps IV

CHAPTER I

*Location of Mauritania Tingitana
(First map of Libya)*

THE western side of Mauritania Tingitana is bounded by a part of the Outer sea, which we call the Western ocean, it extends from the Hercules strait to the Greater Atlas mountains, and is thus described:

Cotes promontory	6	35	55
mouth of the Zilias river	6	35	40
mouth of the Lix river	6	20	35 15
mouth of the Subur river	6	20	34 20
Emporicus bay	6	20	34 10
mouth of the Sala river	6	10	33 50
Sala city	6	20	33 50
mouth of the Duas river	6	10	33 20
Lesser Atlas mountains	6	33	10
mouth of the Cusa river	6	40	32 45
Rusibis port	6	40	32 10
mouth of the Asana river	7	32	
mouth of the Diur river	7	20	31 20
Solis mountains	6	45	31 15
Mysocaras harbor	7	20	30 50
mouth of the Phuth river	7	30	30 30
Hercules promontory	7	30	30
Tamusiga	8	29	55
Ussadium promontory	7	30	29 15
Suriga	8	29	

mouth of the Una river	8	28	30
mouth of the Agna river	8	30	27 50
mouth of the Sala river	8	40	27 20
Greater Atlas mountains	8	26	30

The northern side is terminated by the strait, on which, after the promontory are the following:

Tingis Caesarea	6	30	35 55
mouth of the Valon river	7		35 50
Exilissa city	7	30	35 55
Septem Fratres mountains	7	40	35 50

and by the Ibericum sea coast on which are the following:

Abila columna	7	50	35 40
Phoebe promontory	8		35 30
Iagath promontory	8	20	35 5
mouth of the Thaluda river	8	30	35
Oleastrum promontory	8	50	35 10
Acrath	9		34 55
Taenia Longa	9	30	35 45
Sestiaria promontory	10		35
Rissadirum	10		34 45
Metagonites promontory	10	30	34 55
mouth of the Molochath river	10	45	34 45

mouth of the Malva river	11	10	34 50
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The eastern side is bordered by Mauritania Caesariensis which extends southward from the mouth of the Malva river to a terminus which is in 11 40 26

the south side moreover is terminated by the bordering races of Interior Libya along the line joining the termini, which we have mentioned.

The *Metagonitae* inhabit the parts of this province which extend along the strait; the *Socossi* the parts which extend along the Ibericum sea, and below these are the *Verves*; then below the Metagonites region are the *Mazices*; then the *Verbices*, below whom are the *Salinsae* and the *Cauni*; then the *Bacuatae*; below whom are the *Macanitae*; below the *Verves* are the *Volubiliani*; then the *Iangaucani*; below whom are the *Nectiberes*; and next is Campus Rufus, which is located in 9 30 30 below these are the *Zegrenses*; then the *Baniubae* and the *Vacuatae*. Moreover the

Maurenses and a part of the *Herpeditani* inhabit the entire east side.

The noted mountains in this land are those which are called the Diur, the central part of which is in 8 30 34 then the Phocra mountains which extend from the Lesser Atlas to the Ussadium promontory along the coast, and the western part of the Durdus located in 10 29 30

The following towns are in the interior region of Mauritania Tingitana:

Zilia	6	10	35	30
Lix	6	45	34	55
Oppinum	7	30	35	20
Subur	6	50	34	20
Banasa	7	30	34	20
Tamusida	7		34	15
Silda (Gilda)	7	50	33	55
Gontiana	7	40	34	30
Baba	8	10	34	20
Pisciana	9		34	20
Vobrix	9	20	34	15
Volubilis	8	15	33	40
Herpis	10	20	33	45
Tocolosida	8	10	33	30
Trisidis	9		33	10
Molochath	10	10	33	5
Benta	9	30	32	50
Galapha	11		32	40
Oecath	8	30	32	30
Dorath	9		31	15
Boccana specula	9	20	29	30
Vala	8	10	28	15

The islands adjacent to this province toward the west in the Outer ocean are

Paena island	5	32
Erythia island	6	29

CHAPTER II

Location of Mauritania Caesariensis (First map of Libya)

MAURITANIA Caesariensis is terminated on the west by the east side of Mauritania Tingitana as we have said above; on the north by the Sardoum sea from the mouth of the Malva river to the mouth of the Ampsaga river, of which the following is a description:

After the mouth of the Malva river			
Magnum promontory	11	30	35
Gypsaria harbor	11	50	34 45
Siga city, colonia	12		34 40

mouth of the Siga river	12	15	34	40
mouth of the Assarath river	12	30	34	30
Portus Magnus	12	45	34	30
mouth of the Chylimath river	13		34	
Quiza colonia	13	20	34	
Deorum harbor	13	30	33	45
Arsenaria colonia	13	50	33	50
mouth of the Cartennus river	14	15	33	40
Cartenna	14	30	33	40
Carepula	14	50	33	40
Iar vicus	15	10	33	30
Lagnouton colonia	15	30	33	30
Apollinis promontory	15	50	33	40
Castra Germanorum	15	50	33	35
Canucis	16	30	33	30
mouth of the Chinalaph river	16	40	33	20
Iol Caesarea colonia	17		33	20
Tipasa	17	30	33	20
Via	17	40	33	
Icosium	18		33	
mouth of the Savus river	18	10	33	
Rustonium	18	30	32	45
Rusicibar	18	45	32	50
Modunga	19	10	32	55
mouth of the Serbetis river	19	30	32	50
Cissa	19	45	32	50
Addyme	20		32	50
Rusuccoru	20	15	32	45
Iomnium	20	30	32	45
Rusubirsir	20	45	32	40
Rusazus	21		32	40
Vabar	21	30	32	30
Saldae colonia	22		32	30
mouth of the Nasabath river	22	10	32	30
Chobath	22	40	32	20
mouth of the Sisar river	23		32	15
Iarsath	23	20	32	5
Audum promontory	23	40	32	15
and in Numidicus bay				
mouth of the Audus river	23	50	32	
Igilgili	24		32	
mouth of the Gulus river	24	40	31	50
Assarath	25	10	31	45
mouth of the Ampsagas river	26	15	31	45
river sources	26		26	

It is bounded on the east by Africa along the Ampsagas river to that point which is in 26 20 26 on the south side by the *Libyan* races along

the line, which above Gaetulia joins the southern termini.

The mountains in this province most celebrated are the Durdus mountains, the eastern parts of which are in 15 29 30 the western, as stated, in 10 29 30 the Zalacus mountains in 16 31 40 the Garaphi mountains in 16 28 40 the Madethubadus mountains the limits of which are in 13 26 40 and 17 30 26 the Cinnaba mountains 19 30 36 the Beryn mountains 20 30 31 the Phruraesus mountains, the limits of which are in 18 30 28 40 and 21 26 the Garas mountains 23 28 the Valva mountains 22 26 the western part of the Buzara located in 25 25

The *Herpeditani* inhabit the western parts of this province which are above the iron mines; below whom are the *Taladusi*; then the *Sorae*, to the south of whom are the *Masaesyli*; and below these are the *Dryitae*; then near the Durdus mountains are the *Eluli* and the *Tolotae* and also the *Nacmusi* extending to the Garaphi mountains; from the *Taladusi* toward the east extending as far as the mouth of the river Chinalaph are the *Machus*, below whom are the Zalacus mountains and beyond this are the *Mazices*; then the *Banturari*; and beyond the Garaphi mountains are the *Aquenses*, the *Myceni*, and the *Maccurae*; and above the Cinnaba mountains are the *Enabasi*; to the east from the Zalacus mountains on the sea coast are the *Machurebi* below whom are the *Tulenses*; then the *Baniuri* below whom are the *Machures*; then the *Salassi*, the *Malchubi* and the *Montani*; then toward the east from the *Tulenses* dwell the *Mucuni* and the *Chituae* to the river Ampsagas, below these moreover are the *Goedamus*; then the *Toducae* next to the sources of the river Ampsaga.

The inland towns in this province are

Vasbaria	12	30	34
Celama	12	10	33 30
Urbara	12	50	33 30
Lanigara	12		33
Villa vicus	12	40	32
Atoa	12	30	31 10
Mina	12	50	33

Timici	13		33 10
Astacilis	13	20	33 10
Arina	13	30	30 50
Aripa	14		30 50
Victoria	14	10	33
Giglui	14	30	32 30
Bunogora	14	30	31 30
Vagae	15	15	30 45
Manliana	15	50	28 50
Apphar	16	20	33 15
Oppidum Novum colonia (new city)	16		32 40
Burca	16	50	30 45
Tarrum	16	15	30
Garra	16	30	32 50
Zuchabbari	16	50	32 40
Irath	17		32
Tenissa	17	50	31 10
Lamida	18	30	32 20
Vasana	18	20	31 40
Casmara	18	10	30 50
Binsitta	18	30	30 40
Pegava	18	50	30 30
Nigilgia	18	15	30 15
Thisizima	18	30	29 30
Choezala	18	40	32 30
Aquae Calidae, colonia	18		32 10
Floria	19	20	31 40
Oppidium	19	10	31 10
Labdia	19	50	29 50
Tucca	20		31 30
Badea	20		30 45
Gasmara	18		32 40
Bida colonia	18	30	32 30
Symoetha	20	20	32 15
Thibinia	21		31 10
Izatha	21		30 20
Auximis	21		29 30

also near the sources of the Rhoemius river, which flows into the Savum river,

Suburgia	21		28 20
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Then again beginning in another part, the towns are

Thudaca	19	10	32 20
Tigis	19	30	32 30
Turaphilum	21	20	31 45
Sudava	22	20	32
Tusiatath	22	20	31 30
Ussara	22		30 40
Vazagada	22	30	30 10
Auzia	22	10	29 40
Tubusuptus	23	45	31 40
Robonda	23	20	31 20
Ausum	23		30 40

PTOLEMY'S GEOGRAPHY

Zaratha	23	30	30	30
Nababurum	23		30	
Vitaca	23	45	29	30
Thubuna	23	50	28	30
Thamaritha	23	10	27	15
Augala	24	50	31	20
Suptu	24	20	30	45
Hippu	24	50	30	30
Vamicaeda	25	10	30	
Sitiphi colonia	26		29	20
Tumarra	26		29	
Germiana	26		28	30
Paepia	24	50	28	15
Vescethra	24	30	27	30
Aegaea	26		27	10
Taruda	25	45	26	30

An island is near the famous town Iol Caesarea, which is called Iol Caesarea island, in which island is a town of this same name located in

17 10 33 40

CHAPTER III

Location of Africa (Second map of Libya)

THE west side of Africa is terminated by Mauritania Caesariensis on the line established by the Ampsagas river; the northern side is terminated by that part of the African sea which extends from the Ampsagas river to the Syrtis Major; of this northern side the following is a description:

After the mouth of the Ampsagas river

Numidicus harbor interior	27		31	45
Greater Collops or Chullu	27	20	32	20
Tretum promontory	27	40	32	45
Rusicada	27	45	32	30
Uzicath	28	10	32	30
Holcochites harbor	28	40	32	
Tacatye	29		32	30
Lesser Collops	29	20	32	35
Siur port	29	40	32	40
Hippo promontory	30		32	45
Stoborrurn promontory	30	10	32	40
Aphrodisium	30		32	30
Hippo Regius colonia	30	20	32	15
mouth of the Rubricatus river	30	45	32	15
Thabraca colonia	31	15	32	20
Apollo Temple	31	40	32	50
Neptun Altar	32		32	45
Hippo Diarrhytus colonia	32	30	32	45
Thinisa	33		32	30

Apollo promontory	33	30	33	15
Utica	33	20	32	45
Cornelia Camp	33	40	32	30
mouth of the Bagradas river	34		32	40
Carthage, a large city	34	50	32	40
mouth of the Catadas river	34	50	32	30
Maxula colonia	35		32	40
Carpis colonia	35		33	
Misua	35		33	15
Clypea colonia	35		33	20
Hermaea promontory	35		33	30
Aspis colonia	35	15	33	20
Curubis colonia	35	30	33	10
Neapolis colonia	35	45	33	
Siagul	36		32	50
Aphrodisium	36	15	32	40
Adrumetus colonia	36	40	32	40
Ruspina	36	50	32	40
Leptis Minor colonia	37	10	32	30
Thapsus	37	30	32	30
Acholla	37	45	32	30
Rhuspena	38		32	20
Brachodes promontory	38	30	32	20
Usilla	38	30	32	10
Taphrura	38	30	32	
Syrtis Minor				
Theaenae	38	30	31	40
Macomada	38	30	31	15
mouth of the Triton river	38	40	30	30
Tacape	38	50	30	30
Gichthis	39	20	30	50
Hedaphtha	40	10	31	15
Zeitha promontory	40	40	31	40
Sabathra	41		31	30
Pisindon harbor	41	15	31	30
Heoa	41	30	31	40
Garapha harbor	41	45	31	40
Neapolis or Leptis Magna	42		31	40
mouth of the Cinyphus river	42	15	31	30
Cisterna	42	50	31	20
Barathra	42	20	31	30
Triceron promontory	43	15	31	20
Syrtis Major				
Cisternae	43	15	31	
Macomala village	43	30	30	50
Aspis	43	40	30	20
Sacazama village	43	50	30	
Tower of Euphranta	44	10	29	40
Charax village	44	30	29	
Hippo promontory	46	45	29	
Oesporis village	45		29	
Philaeni village	46		29	

Below which altars of the same name terminate Africa.

The eastern side, beginning at the bend in the Syrtis, is bounded by the line which runs southward along Cyrenaica to the terminus which is in 47 25 the southern line, which extends along Gaetulia and the desert of Libya unites the two termini.

In this province are many celebrated mountains, and the eastern part of the Buzara mountains, the position of which is 28 27

Audus mountains 28 30 29 30
Thammes mountains the extreme limits of which are in 29 30 27 30
and 32 28 30
from these mountains the Rubricatus river flows

mountains which are called

Cirna 33 30
from which run swamps connecting with the Hipponitis lake 32 40 32 30
and the Sisara lake 33 31

Mampsarus mountains, the extreme parts of which are located in 33 27 30
and 36 30 26 15
from which mountains the Bagradas river flows;

mountains which are called

Jovis 37 30 31 15
Usalaetus mountains the extreme limits of which are located in 37 38
and 39 30 26 30
from which mountains the Triton river flows, its sources are in

Tritonitis lake 38 40 29 40
Pallas lake 38 30 29 15

and that which is called the

Libyan lake 38 30 28 15
Giglius mountains 40 30 29 30
Thizibi mountains 44 15 28

Zuchabbari mountains the extreme limits of which are located in 40 26 15
and 43 30 26 40
from which mountains the Cinypus river flows from, a source, which is located in 45 15 26 10

The *Cirtesi* and the *Nabathrae* dwell in the western parts of Africa near the ocean; next, toward the east, are the *Ionti* in Numidia or the New Province extending as far as Thabraca; then the *Mideni* and the peoples dwelling in the Carthaginian region below

whom are the *Libyphoenices*; then the *Machyni* to the Syrtes Minor; and below these are *Cinithi*, and the *Nigitimi* extending toward the east as far as the *Cinyphus* river and along the same river are the *Lotophagi*; then the *Samamyci* next to the Syrtes Major and near these the *Nyepi*, below whom are the *Elaeones*. Next toward the south from Cirtesiis and Numidia, below the Audus mountains are the *Musulami*, below whom are the *Nattabutes*, then the *Nisibes*, and below the *Mideni* the *Mididi*, below whom are the *Musuni*; then below the Thammes mountains are the *Saburbures*, below whom are the *Haliardi* and the *Campus Sittaphius*. From Libyphoenicia toward the south is the region of the *Bazaciti* below which the *Zutae*, then the *Cerophaei* and the *Mampsari* above the Mampsarus mountains, and below these mountains are the *Motuturi*. Below the *Machyni* are the *Machryes*, then the *Gephes*, next to these the *Mimaces*, and below the Usalaetus mountains the *Uzalae* where the Libyan desert begins. Below the *Cinithi* are the *Ogiplosi*, then the *Achaemenes*, then the *Muturgures*; below these the *Muchthusi*; below the *Nigitimi* are the *Astacures*, and below the *Lotophagi* the *Eropaei*, and next the *Dolopes*, below whom are the *Erebidae*; and below the *Samamuci* are the *Damensi* and then the *Nygbeni*, below whom are the *Nycpi*; then below the *Cinyphi* and the *Elaeones* is Macae Syrtitae and the Libyan desert.

The towns in this interior province between the Ampsagas river and the city Thabracam are

In Cirtesii

Cirta Julia colonia	26	50	31	20
Mireum	26	40	31	20
Vaga	28		31	40
Lares	27	30	30	40
Apari	27	40	29	40
Azama	27	30	27	50

In Numidia

Culcua colonia	28	30	31	15
Thunudromum colonia	28	20	30	30
Aspucca	29	30	32	20
Simisthu colonia	29		31	20
Thuburnica	30		31	40
Tucca	29	30	31	20
Thieba	29	30	30	45
Thubursica colonia	29	20	30	30

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Ucibi	30	29 45	Ticelia	34 40	29
Gausaufna	29 15	31	Sasura	36	29 40
Lambaesa	29	30	Cilma	35 30	29 10
Legio III Augusta			Vepillium	36 15	29
Thubutis	29 30	28 20	Thabba	35 20	28 40
Bulla Regia	30 40	31 30	Tichasa	36	28 40
Sicca Veneria colonia	30 30	30 50	Negenta	36	27 50
Assurus colonia	30 50	30 30	Bunthum	36 15	27 20
Naraggara	30	30 10	Below the town Adrumetum		
Theveste	30 30	29 45	Almaena	35 15	33
Thunusda	31 20	32	Uticna	35 40	32 45
Madurus colonia	32	31 30	Chrausa	36	32 40
Ammaedara	32 10	30 30	Turza	35 40	31 50
Gazagupala	31 10	30 10	Ulizibirra	36	31 20
Sedne	31 40	28 45	Orbita	36 20	32 20
Between the town Thabraca and the			Uzita	36 50	32 20
Bagradas river			Gisira	36 20	31 45
Canopisi	32 15	32 30	Zurmentum	37	31 50
Meltida	32 40	32 30	Zalapa	36 45	31 45
Uzan	33 15	32 20	Augustum	36 20	30 40
Thisica	33 15	32	Leae	36 20	30 40
Cipipa	34	31 45	Avidus	36 40	30
Theudali	33 20	31 40	Ubata	36 45	29 20
Avitta	33 30	31 30	Tisurus	36 50	28 40
Tobrus	34	30 30	Thysdrus	37 15	32 10
Iilica	34 30	30 20	Uzecia	37 45	32 10
Tucca	34	29 50	Setiensis	37 45	31 30
Dabia	33	29 45	Lasica	37 10	31 20
Bendena	34 30	29 20	Byzacina	37 50	30 45
Vazua	33 20	29 10	Targarum	37 15	30 30
Nensa	34 10	29 10	Bararus	37	30 20
Aquae calidae	33 40	28 15	Capsa	37 30	29 45
Zigira	33 10	27 50	Putea	37 45	29 10
Thasia	33	27 45	Thennephis	38 20	31
Thunuba	33 20	27 30	Caraga	38 10	31 40
Musta	33 40	27 30	Murvis	38 10	30 45
Themisua	34 40	28 40	Zugar	38	30 30
Zama major	34 20	28	Between the two Sirtis are these towns:		
Timica	34 50	27 40	Chuzis	39 30	30
Tuscubis	35 30	28 10	Sumucis	40 20	30 30
Between the river Bagradas and the river			Pisinda	41	31 10
Triton, and below Carthago are			Sabrata	41 15	30 50
Maxula ancient	34 10	32 30	Syddenis	41 40	31 10
Vol	34 45	32 30	Azuis	42 45	31 10
Thimisa	35	32 10	Gerisa	43	30 50
Cuina colonia	35 30	31 30	Iscina	43 20	30 30
Uthina	34 15	31 20	Ammonis	42	30 40
Abdira	34 30	30 50	Amuncla	42 40	30 10
Mediccara	35 30	31 10	Mousta village	42 20	28 40
Thuburbo	35	30 10	Butta	42 40	28 30
Tucma	35 30	30 10	Tege	42 40	27 30
Bulla Mensa	34 20	30	Durga	43	26 30
Cerbica	36	30	Sycapha	43 30	30
Nuroli	34 20	29 30	Uddita	43 20	28 40

BOOK FOUR — CHAPTER IV

Galybe	43	40	29	30
Thagulis	44	10	29	
Islands along the coast of Africa, and which are near the coast				
Hydras island	28		33	
Calathe island	31		33	40
Dracontia island	33	15	33	15
Aegimius island	34	15	33	30
two islands of Larunesia	37		33	30
Anemusa	39		33	20
Lopadusa island	39		33	20
Aethusa island	39	30	33	20
Cercinna island and town	39		32	15
Lotophagitis islands in which are these towns:				
Girra city	39	15	31	15
Meninx city	39	30	31	20
Misynus island	44	40	30	40
Pontia island	45	20	20	15
Gaia island	46		29	40
In the high seas are the African islands:				
Cossyra the island and town	37	20	34	20
Glaucanis island and town	38	20	34	40
Melita island	38	45	34	40
Melita city and peninsula	38	40	34	45
Temple of Juno	39		34	40
Temple of Hercules	38	45	34	35

CHAPTER IV

The position of Cyrenaica (Third map of Libya)

THE province of Cyrenaica is terminated on the west by the Syrtis Major and by Africa along the line running from Philaeni village toward the south to the terminus, which line extends from

from	46	45	29	
to	47		25	
on the north by the Libyan sea along the maritime coast from the inner angle of the Syrtis to Darnis city, which is thus described:				
Next after the Philaeni village				
Automalax fortification	47	15	29	10
Drepanum promontory	47	15	29	20
Hyphali naval station	47	20	29	40
Diarrhoea harbor	47	15	30	
Hercules tower	47	20	30	30
Diachersis fortification	47	20	30	50
Boreum promontory, end of				
Syrtis	47	15	31	10
Bryon shore	47	30	31	10

In Pentapolis				
Berenice or Hesperides	47	45	31	20
mouth of the Lathon river	48	15	31	20
Arsinoe or Teuchira	48	40	31	20
Ptolemais	49	5	31	10
Ausigda	49	30	31	30
Autuchi temple	49	30	31	40
Phycus promontory and				
Castle	50		31	50
Apollonia	50	10	31	40
Naustathmum harbor	50	20	31	40
Erythrum	50	30	31	30
Chersis village	50	45	31	20
Zephyrium promontory	51		31	20
Darnis	51	15	31	15

On the east it is bounded by a part of Mar-
marica along the line leading from Darnis
southward to the terminus which is located
in 51 15 25
on the south by the Libyan desert along that
line which joins the two mentioned termini.

Here are the provinces and the moun-
tains which are called the Mounds of Her-
cules, the center of which is located

in	47	40	30	50
Velpi mountains	47	40	29	30
Baecolicus mountains	51		26	30

Maritime lake, that is the lake formed by
the Lathon river, the central part of which
is located in 47 45 31 10
and the lake below Paliurus, in which there
are shell fish 52 31 10

The *Barcitae* inhabit the parts of this re-
gion below Pentapolis toward the east from
the Garden of the Hesperides, from which
toward the east are the *Ararauceles*; below
the Garden of the Hesperides are the
Mounds of Hercules, and from these toward
the east the *Asbytae*; next to Africa above
the Velpi mountains are the *Macatutae*, and
next are the caves of the *Lasanicori*, and
toward the east from these are the *Psylli*,
thence a place filled with wild beasts, and
then the Silphiofera region.

The inland towns of the province are the
following:

Cyrene	50		31	20
Archile	50	30	31	15
Chaerecla	48	30	31	
Neapolis	49		31	
Artamis village	49	45	31	10
Zemythus	49	50	31	30
Barce	49	15	30	45
Eraga	49	40	31	

PTOLEMY'S GEOGRAPHY

Celida	50	30	30	40
Hydrax	55	50	30	30
Alibaca	49	10	30	10
Thintis	50		30	15
Caenopolis	50	15	30	40
Phalacra	49	45	30	30
Marabina	48		30	15
Auritina	49	45	29	50
Acabis	50	30	29	40
Maranthi village	47	30	29	20
Agdan village	47	45	29	
Echinus village	49	30	28	40
Philonis village	51		28	40
Arimantis village	51		28	55
The islands near this region are				
Myrmex island	48	40	31	50
Laea or Venus island	50	10	31	50

CHAPTER V

*Embracing all of Marmarica, Libya,
and Egypt
(Third map of Libya)*

MARMARICA with Libya and Egypt is terminated on the west by Cyrenaica along that line which as is known runs from the town of Darnis southward, and by the part of Interior Libya along that meridian, to the end, the position of which is 51 15 23 on the north by the Egyptian sea. This maritime coast is thus described:

In the provinces of Marmarica are:

Azilis village	51	40	31	15
Greater Chersonesus	52		31	40
Phthia harbor	52	10	31	15
Paliurus	52	15	31	15
Batrachus harbor	52	30	31	15
Petras Minor harbor	52	45	31	15
Antipyrgos harbor	53	20	31	15
Scythranis harbor	53	30	31	10
Cathaeonium promontory	53	45	31	15
Ardanis promontory	54		31	15
Petras Major harbor	54	10	31	10

In the Libyan provinces on the sea coast:

Panormus harbor	54	20	31	10
Catabathmus Major	54	30	31	15
Aenesiphyra harbor	55		31	10
Zygris village	55	15	31	10
Chettaea village	55	30	31	10
Zagylis village	55	45	31	10
Selenis harbor	56		31	10
Trisarchi village	56	20	31	5
Apis	56	40	31	5

Paraetonium	57		31	10
Pythis promontory	57	10	31	10
Graeae Genu, harbor	57	10	31	5
Callias promontory	57	30	31	10
Zygis harbor	57	40	31	5
Leuce shore	57	50	31	10
Hermæum promontory	58		31	15
Phoenicus harbor	58	20	31	10
Antiphra village	58	40	31	5
Derris promontory	58	50	31	10
Leucaspis harbor	59		31	5
Glaucum promontory	59	10	31	10

On the maritime coast of Mareotæ province:

Chimo village	59	30	31	5
Plinthine	59	45	31	
Lesser Chersonesus harbor	60		31	5
Alexandria the metropolis of all Egypt	60	30	31	
Canobus the metropolis of Menelaitæ	60	45	31	5

The seven mouths of the Nile:

The Heracleoticum mouth or

Canobicum	60	50	31	5
the Bolbitinum mouth	61	15	31	5
the Sebennyiticum mouth	61	30	31	5
the Pineptimi false mouth	61	45	31	5
Diolcus false mouth	62	10	31	10
Pathmitcum mouth	62	30	31	10
Mendesium mouth	62	45	31	10
Taniticum mouth	63		31	15
Pelusiæcum mouth	63	15	31	10
Pelusium city	63	15	31	10
Gerrum terminus	63	30	31	10

Cassiotis

Casium	63	45	31	15
Outlet of Sirbonis swamps	63	50	31	10
Ostracine	64	15	31	10
Rhinocorura	64	40	31	50

It is terminated on the east by a part of Judæa which runs from the city Anthedon to the terminus which is in 64 15 30 40 and then by Arabia Petraea as far as the recess in the Arabian bay near the city Heroum which is located

in 63 30 29 50 and by a part of the Arabian bay. The coast is thus described:

Next to the turn of the bay which we

have said is located in	63	30	29	50
Arsinoe	63	20	28	50
Clysina castle	63	20	28	50
Drepanum promontory	64		27	50
Philotera harbor	64	5	27	50

BOOK FOUR — CHAPTER V

Myoshormus	64	15	26	45
Aeas mountains	64	20	26	10
Albus harbor	64	30	26	
Acabe mountains	64	30	25	45
Nechesia	64	30	25	30
Samaragdus mountains	64	50	25	
Lepte acra	64	40	(23)	40
Berenice	64	5	23	50
Pentadactylus mountains	64	45	23	30
Bazium promontory	65		23	

The boundary on the south extends to the indicated terminus of Interior Libya adjacent to which line is Aethiopia below Egypt.

The Bascisi mountains run through this province, the middle of which is

in	52	20	30
also the Aganombri mountains	54		27 30
the Asyphus mountains	55		30 30
the Aspis mountains	57	30	30 40
the Ogdamus mountains	58		29 30
the Thinodes mountains	58	30	26 40
the Azar mountains, the extreme parts of which are in	51	30	23 30
and	53		23 30
and the mountains of Libya to the west of the Nile river, the extreme parts of which are in	61		29
and	60	10	23 30

The lakes are

Cleartus lake	52		26 20
Lacci lake	55	30	26 40
Lycomedis lake	57		24
Solis spring	58	15	28
Marea lake	60	15	30 50
Moeridis lake	60	20	29 20
Sirbonis lake	64	15	31

The *Libyarchae*, the *Aniritae*, and the *Bassachitae* dwell in the north of the Marmarica province, below whom are the *Apotomitae*; and next to these, but more toward the south, are the *Augilae*, who are located in

after these are the <i>Nasamones</i> and the <i>Bacatae</i> ; then the <i>Auschitae</i> and the <i>Tapanitae</i> , and next are the <i>Sentites</i> , the <i>Oebillae</i> and the <i>Aezari</i> .	52	30	28
In the Libyan province, which is near the sea, dwell the <i>Zygritae</i> , the <i>Chattani</i> and the <i>Zygenses</i> ; toward the south are the <i>Buzenses</i> and the <i>Ogdaemi</i> , next to these the <i>Adyrmachidae</i> and next is the Ammoniaca region which is located in	55	30	28

next are the *Anagombri*, the *Iobacchi*, and the *Ruaditae*.

The maritime region of the Mareota province is called Taenia; in the interior dwell the *Goniatae* and the *Prosoditae*, next is the Sciathica region which is located

in	60	40	30 20
The <i>Mastitae</i> , the <i>Nitriotae</i> , and the <i>Oasitae</i> occupy the parts toward the south which are located in	59	30	29 30
next to these are the <i>Libyaegypti</i> . The Arenosa and the Sitibunda regions extend along the entire south side of Marmarica and Libya. The <i>Arabaegypti Ichthyophagi</i> occupy the entire maritime coast along the Arabian bay in which are mountain ridges			
Troici stone mountains	62	40	29 15
the Alabastrites mountains	63		28
the Porphyrites mountains	63		26 40
the Nigri stone mountains	63		24 40
the Basanites stone mountains	64		23 30

The interior villages of Marmarica are

Leucoe	51	20	30 45
Moccheris	52	20	31
Albi Camini	53	10	30 50
Menelaus	53	40	31
Gaphara	54		30 25
Masuchis	53	30	30 40
Masadalis	51	20	30 30
Abathuba	51	30	30
Albi Clivi	52	30	30 15
Tacaphoris	53	50	30 10
Dioscurorum	52	30	28 50
Migo	53	30	28 30
Saragina	53	15	28
Alo	53	15	28 30
Mazacila	54	20	26 30
Billa	54	30	25 40

and in Augilae and Nasamones

Augila	52	30	28
Magri place	54	20	27 50

The villages of the Libyan provinces are

Tachorsa	54	30	30 50
Azicis	55		31
Nemesium	55	30	30 50
Tisarchi	55	50	30 50
Philonis	55	50	30 30
Sophanis	56	30	30 50
Bibliaphorium	56	20	30 40
Scope	56	40	30 30
Calliae	57		30 50
Leodamantium	57	30	31
Catabathmus minor	58		30 50

Pedonia	58	20	31
Pnigeus	58	30	30 30
Glaucum	59		30 30
Tuccitora	55	10	30 15
Thanuthis	55	40	29 45
Pednopum	57	15	29 40
Climax	57	40	30 10
Siropum	56	20	28 45
Mareotis	58		28 20

and in the Ammoniaca region

Alexandri Castra	56	30	28 10
and the town Ammon	55	30	28

The towns and villages of Mareota province are

Monocaminum	59	10	30 50
Halmyrae	59	40	30 50
Taposiris	59	50	30 50
Cobii	59	10	30 30
Antiphili	59	30	30 20
Hierax	59	40	30 40
Phamotis	60		30 40
Ancient Marea village	60		30 10

and in the Sciathica land

Sciathica	60	40	30 20
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Near the Moeris lake are

Bacchis	60	30	29 40
Dionysias	60	30	29

and in Oasitae are

Oasis Minor	60	15	28 45
Oasis Major	59	30	26 55

The provinces which are along the Nile have important towns.

That is called the Great Delta which begins where, from the Great river, the Agathodaemon is diverted and flows through the Heracleoticum mouth; that which is called Bubasticus flows through the Pelusiaticum mouth, and the branching where the delta is formed is located

in 62 30

It is called the Little Delta where the river Busiricus branches from the river Bubastico which flows through the Pathmiticum mouth. This Little Delta is located in 62 40 30 20

A third delta can also be mentioned located between that which we generally call the Middle Delta where a river branches from the Bubastico, which flows through the town Athribis and the Pineptimi mouth. This third delta is located

in 62 15 30 5

In the Great Delta two rivers are diverted toward the north from the river Agatho-

daemon, one of which is called the Therenuthiacus river which flows through the Sebennyiticum mouth; its branching is located in 61 30 30 15

the other which is called the Taly river flows through the Bolbitinum mouth, and the branching of this Taly river is located in 61 30 50

The Buticus river which runs along at a nearly equal (even) distance from the maritime coast joins the Therenuthiacum, the Athribiticum, the Busiricum and the Bubasticum, from which others springing from adjacent marshes and lakes flow into the sea through the remaining mouths, some of which are connected, as we have said, with the Great river.

That is commonly called a low region around these rivers, in which are provinces and important cities.

In the nome and metropolis of Alexandria

Hermopolis Parva	61		30 50
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In the nome and metropolis of Andropolites

Andron city	61	20	30 20
-------------	----	----	-------

In the nome and metropolis of Letopolites

Interior Latona city	61	30	30 5
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Between the Great river and the river Taly (from the Great river toward the east)

Metelites the nome and metropolis

Metelis	61		31
---------	----	--	----

Between the Great river and the Therenuthiacum river are the towns:

Phthenetu nome and metropolis

Butus	61	20	30 45
-------	----	----	-------

Cabasites nome and metropolis

Cabasa	61	30	30 40
--------	----	----	-------

Saites nome and metropolis

Sais	61	30	30 30
------	----	----	-------

and on the Great river toward the east

Naucratis town	61	15	30 30
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Prosopites nome and metropolis on the east bank of the Great river

Niciae	61	30	30 20
--------	----	----	-------

Between the Therenuthiacum and the Athribiticum rivers are

Sebennytes nome in a low region and its metropolis

Pachnamunis	61	40	31
-------------	----	----	----

Xoites nome and metropolis

Xois	61	40	30 35
------	----	----	-------

Phthemphuthi nome and metropolis

Tava	61	40	30 25
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BOOK FOUR — CHAPTER V

Between the Athribiticum and the Busiriticum rivers

Onuphites nome and metropolis
Onuphis 62 5 30 40

Athribites nome and metropolis
Athribis 62 30 30

Mendesius nome and metropolis
Thumuis 62 20 30 50

Upper Sebennytes nome and metropolis
Sebennytus 62 20 30 20

Busirites nome and metropolis
Busiris 62 30 30 15

Leontopolites nome and metropolis
Leontopolis 62 15 30 35

Between the river Busiricus and the river
Bubasticus is

Nesyt nome and metropolis
Panephysis 62 40 31 5

Tanites nome and metropolis
Tanis 62 45 32 50

Pharbaethites nome and metropolis
Pharbaethus 62 45 32 30

To the east of the Bubasticus river is
Sethroites nome and metropolis

Herculis lesser city 63 20 31
Arabia nome and metropolis

Phacusa 63 10 30 50
Bubastites nome and metropolis

Bubastus 63 5 30 40
Heliopolites nome and metropolis

Oniu 62 30 30 10
and on the border of Arabia and Aphroditopolis

Babylon 62 15 30
Heliopolis 62 30 29 50

Heroum city 63 10 30
through which and the city Babylon flows

the mountain stream Traianus

The following tribes are toward the south from the Great Delta and the Lower region and are called the Seven tribes, the first is the tribe *Memphites* and the metropolis on the east bank of the river

Memphis 61 50 29 50

And then to the east of the river in the interior, the town

Acanthon 61 40 29 40

In which part the river separates, forming an island Heracleopoliten by name 62 29 45

and in this island
Nilopolis 62 29 30

and the metropolis to the west of the river is
Herculis city 61 50 29 10

Arsinoites nome and metropolis in the interior

Arsinoe 61 40 29 30
and the naval station

Ptolemais 61 40 29 20
To the east of this island

Aphroditopolites nome and metropolis of the name Aphroditopoles 62 15 29 40
then also to the east of the island

Ancuron city 62 20 29 20
The rivers unite which form an island

in 62 28 45
Next, to the west of the river is the nome

Oxyrynchites and the metropolis in the interior

Oxyrynchus 61 40 28 50
then the nome Cynopolites and the metropolis on the east river bank

Co 61 50 28 40
opposite which is an island

Canum city 62 10 28 40
then on the east bank of the river is

Acoris 62 28 30
in the interior

Alabastron 62 30 28 20
The nome and metropolis Hermopolites

to the west of the river inland is
Hermopolis the great 61 40 28 25

and next on the west bank of the river is
Phylacae 61 50 28 15

The nome toward the east of the river
Antinoites and the metropolis

Antinoi city 62 5 28 10
to which nome are to be added the two

Oasitae

Those which are toward the south from the Seven Nomes are called Thebais and the Upper Region. Then toward the west of the river are the Lycopolites nome and metropolis in the interior

Lycopolis 61 45 28

Hypselites nome and metropolis
Hypsele 62 27 50

Aphroditopolites nome and metropolis in the interior are

Aphroditopoles 61 20 27 40
Crocodilorum city 61 40 27 20

Thinities nome and metropolis
Ptolemais Hermiae 61 50 27 10

then inland toward the west from the river
Abydos 61 40 26 50

Diopolites nome of the upper region and metropolis

Jovis a small town 61 50 26 40

Tentyrites nome and metropolis			
Tentyra	61	50	26 10
and a village in the interior			
Pampanis	61	30	25 45
Here is Memnon and in the interior the village			
Pathyris	61	30	25 30
Hermonthites nome and metropolis			
Hermonthis	61	50	25 20
and then Laton town	61	45	25
Apollinopolis greater city	61	50	24 40
then the inland village			
Phonthis	61	40	24 20
and the island Elephantine	61	30	23 55
Toward the east of the river			
Antaeopolites nome and metropolis			
Antaei in the interior	62	20	27 40
and next Passalus	62	10	27 30
Panopolites nome and metropolis			
Panopolis	62		27 20
next Lepidotorum town	62		26 50
then Chenoboscia	62		26 30
next Caene town	62	10	26 20
Copties nome and metropolis in the interior			
Coptos town	62	30	26
next Apollinopolis lesser city	62	30	25 55
Thebarum nome and metropolis			
Jovis greater town	62		25 30
then Tuphium	62		25 20
then Chnubis	62		25
then Ilithyiae town	62	5	24 45
then Toum inland	62	15	24 20
then Ombi	62		24 5
then Syene	62		23 50
then Dodecaschoenus, from which toward the east are the <i>Arabes Adaei</i> ; among whom on the east bank of the river after the Lesser Cataract which is located in are	61	50	23 45
Hiera Sycaminos	61	45	23 40
Philae	61	40	23 30
Metacompso	61	40	23 5
in which region on the west bank of the river is			
Pselcis	61	30	23 5
The islands near Libya and Egypt in the Egyptian sea are			
Aedonis island	52	40	31 50
Tyndarii three cliffs	55	50	31 30
Aenesippa island	56	30	31 40
Phocussae two islands	56	50	31 30

Pedonia island	58	30	31 30
Didymae two islands	60		31 30
Pharos island	60	20	31 5
In the Arabian bay are these islands			
Sapphirine island	64	50	28
Veneris island	65	15	25
Agathonis island	65	15	23 40

CHAPTER VI

The location of Interior Libya (Fourth map of Libya)

INTERIOR Libya is bounded on the north by Mauritania, Africa, and Cyrenaica along those lines which we have mentioned as their southern limits; on the east by a part of Marmarica along the meridian passing through the town Darnis and extending as far as the mentioned terminus of Marmarica, then by Aethiopia located below Egypt along the same meridian to the terminus which is located in 51 15 south 3 10

It is terminated on the south by Interior Aethiopia, in which is the Agisymba region, and along that line which we have said runs in the western direction to the bay in the Outer sea which is called Hesperius or the Great bay located in 14 4 on the west by the Western ocean, from the bay which we have mentioned, to the terminus of Mauritania Tingitana, its maritime coast being thus described:

From the terminus of Mauritania Tingitana			
mouth of the Subus river	9		25
mouth of the Salathus river	9	40	22
Salathus town	9	40	22
mouth of the Chusar river	10		21 40
Ganaria promontory	9	30	20 30
mouth of the Ophidis river	10		20
Bagaza town	11		19
mouth of the Nuius river	10		18 20
Soloentia promontory	9	30	17 30
Massa river mouth	10	30	16 30
Iarzitha town	10		15 30
Daras river mouth	10		15
Magnus Portus	10		14
Baba town	10	30	13
Arsinarium promontory	8		12
Rysadium promontory	8	30	11 30
then in Hesperius bay			
Stachir river mouth	9	30	11
Periosius harbor	11		10 30

BOOK FOUR — CHAPTER VI

Catharum promontory	12	30	9	30
Nias river mouth	13	30	9	
Hesperu Cornu promontory	13		8	
Masitholus river mouth	14		6	40
Hypodromus Aethiopia	14		5	15

The important mountains in this Libya are the Mandrus mountains, from which the Salathus and other rivers up to the Massa river flow; the middle of these mountains is in

14 19

the mountains which are called Sagapola from which the Subus river flows; the middle of these mountains is in

20 20 22

the Rysadius mountains, in which the Stachir river takes its rise flowing through the Caeonia lake not far from the mountains and the Nias river; the middle of the mountain range is in

17 11

Theon which are also called Ochema mountains from which flows the river Masitholus, the middle of this mountain range is in

19 5

and the Caphas mountain range from which the river Daras flows: the middle of the range is located in

17 10

and that which is called the Usargala mountain range from which the river Bagradas flows; the middle part of the range is located in

33 20 30

the river Bagradas flowing through Africa empties into the sea in

34 32 40

then the Girgiri mountains from which the river Cinyps flows, rising from two sources which are located in

40 21

45 21

These two rivers unite in

42 25

The Thala mountain range, the middle part of which is located in

38 10

and the Garamantica defile

50 10

the Arualtes mountains

33 3

the Arancas mountains

47 30 1 30

There are two great rivers in the interior; one of these is the Gir uniting, as it were, the Garamantica defile and the Usargala mountains. There is a turning of the river in

42 16

Into the Gir a river empties flowing from the Chelonitides marshes, the middle of which is in

49 20

Moreover joining the Gir, ceasing as they say, but running under ground, is another river, the western terminus of which is in

46 16

the eastern terminus of which forms the Nuba lake the position of which

is 50 15

The other large river is the Niger flowing from the Mandrus mountains and the Thala mountains which form the Nigritis lake which is in

15 18

from the north two rivers flow into the same from the Sagapola and the Usargala mountains; a deflection toward the east forms the Libyan lake the location of which is in

35 16 30

and toward the south moreover there is a turn toward the Daradus river but in two locations

21 17

and

21 13 30

Gaetulia is located below Mauritania, the Desert of Libya below Africa and Cyreniaca. The great races which inhabit Libya are the *Garamantes* extending from the sources of the Bagradas river to the Nubas lake, and the race of the *Melanogaetuli*, who occupy the land which is between the Sagapola mountains and the Usargala mountains, and the *Aethiopian* race of the *Girei* who dwell toward the south from the Gir river, and the *Aethiopian* race of the *Nigritae* who are north of the Nigir river, and the *Daradi* who dwell along the river of that name (Daradas) where it empties into the sea, and the *Perorsi* who are more to eastward and more remote from the sea as far as the mountains which are called Theon Ochema, and the land of the *Aethiopian Odrangidiai* located between the Caphas and the Thala mountains, and the *Mamaces* who are below the Thala mountains, and the *Nubae* dwelling on the western side of the Garamantica defile, and the *Derbiccae* who are toward the west from the Arancas mountains.

These are the minor races: the *Sirangae*, the *Mausoli*, the *Autolalae* occupying the region which is on the sea below Gaetulia extending as far as the Mandrus mountains; next to the same mountains are the *Babi*, the *Malcoae* and the *Mandori* extending as far as the *Daradi*; next to these are the *Sophucae*, and below the Rysadius mountains are the *Leucaethiopes*, between whom and Perorsi stretches the Campus Rufus; then from the Sagapola mountains toward the north are the *Pharusi*; from the Usargala mountains toward the north are the *Natem-*

bes, and along the Girgiri mountains are the *Lynxamatae* and the *Samamyci*, and between the Mandrus mountains and the Sagapola mountain are the *Salathi* and the *Daphnitaie*, also the *Zamazi*, the *Aroccae*, the *Cetiani* extending as far as the *Nigritas Aethiopes*; below the Usargala mountains are the *Suburpores*, and below the Girgiri mountains toward the *Geramantes* are the *Maccoi*, the *Dauchitae*, and the *Caletae* extending as far as the Nuba lake; then from the *Daradi* toward the east are the *Machurebi*, and next to the *Sophucaeis* are the *Solenti*; from these toward the east are the *Anaticoli* or *Pharausi*, the *Churitae* and the *Stachirae* extending as far as the Caphas mountains, between whom and Theon Ochema mountains are the *Orphes*; below these are the *Tarualtae*, the *Climatitae*, also the *Africerones* a great race; and back from *Odrangides Aethiopes* but toward the south are the *Achaemae*, and south of the *Mimaces* are the *Gongalae*; next to these are the *Nanosbes* then the *Nabathrae* extending as far as the Arualtes mountains; and between the Libyan lake and the Thala mountains are the *Alitambi* and the *Maurali*; between these and Nuba lake are the *Harmiae*, the *Thalae*, the *Dolopes*, also the *Astacuri* up to the Garamantica defile; and the *Aroccae* to the north from the Aranca mountains, the *Asaracae* to the east; between the *Derbiecenses* and the *Arualtes* mountains are the *Dermones*; and below the *Africerones* almost to the south wind are the *Aganginae Aethiopes*; to the east of these below the same Arualten mountains, up to the Arancas mountains are the *Xylicces Aethiopes*, and next to these the *Achalicces Aethiopes*.

The towns in this region along the coast are

Autolala	10	23	50
Thuilath	11	30	21 40
Tagana	12	30	20 15
Magura	12	30	15
Ubrix	14	20	13 20
Iarzitha	16	20	12 15

Above the Nigir river but more remote from it are the towns

Talubath	18	40	22 40
Malachath	20	20	20 15
Tucabath	18		19 30
Byntha	24		21

and below the river, this town:

Anygath	20	30	14
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Near this river, on its north bank

Pesside	19		18
Thige	21		17 30
Cuphe	23	15	18
Nigira metropolis	25	40	17 40
Vellegia	28	30	17 40
Tagama	30		17
Panagra	31		16 40

On the south bank of the river are

Thupae	16	30	16 40
Punse	18		17
Saluce	19	30	17
Thamondocana	23		17
Durdum	31		15

Near the source of the Bagradas river

Silice	29		24 30
Buthuris	31		24
Anygath	33		24
Thabudis	33		22
Siccathorium	34		23
Capsa	34		21 30

And near the sources of the Cinyps river

Gelanus	40		24 30
Vanias	41		22 40
Sabae	43		23
Buata	39		21 30
Bedirum	41		21 40
Garama metropolis	43		21 30
Thumelitha	41		19

below the river Gir

Gira metropolis	36		18
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And on the north bank of this river

Thycimath	38		19 40
Geva	39		19
Badiath	40		17
Ischeri	41	30	16 30
Turcumuda	41	30	15
Thuspa	43		17 40
Artagara	44		18
Rubune	46		19
Lynxama	48	30	20 40

The islands near Libya in the Western ocean are

Cerne island	5		25 40
Junonia island or Autolala	8		23 50

and the six Beatorum islands:

Inaccessa island	0		16
Iunonia island	1		15 15
Pluvialia island	0		14 15
Capraria island	0		12 30
Canaria island	1		11
Ninguaria island	0		10 30

CHAPTER VII

*Position of Aethiopia below Egypt
(Fourth map of Libya)*

AETHIOPIA, which is below Egypt, is terminated, as we have indicated on the north, by Libya and Egypt; on the west by a part of Interior Libya along the meridian extending from Darnis to the southern terminus of Libya which is located in

51 15 south 3 10 on the south by the line leading from this terminus along the remaining part of Aethiopian Interior to the Rhaptum promontory, which is located in 73 50 south 8 25

It is terminated on the east by a part of the Bay of Arabia and the Red sea, and the Barbaricus sea to the Rhaptum promontory, the description of which is the following:

After the Bazium promontory referred to above:

Prionotus mountains	65	22	30
Chersonesus	65	22	
Mnemeum promontory	65 30	21	30
Isius mountains	65 30	21	20
Profundus harbor	65	21	10
Dioscuror harbor	65	21	
Cereris Speculae promontory	65 20	20	15
Aspis promontory	65 30	19	45
Diogenis promontory	65 40	19	40
Satyron mountains	65 40	19	
Monodactylus mountains	65 30	18	30
Taurus mountains	65 40	18	
Harbor Deorum Tutorum (protecting deities)	65 30	17	30
Evangelon harbor	65 45	17	
Ptolemais Venationum (hunting preserve)	66	16	25
Ara Eratonis promontory	66 30	16	
Sabasticum mouth	67	15	
Magnum Littus (great coast)	66	14	15
Colobon promontory	68	13	40
Sabat town	68	12	30
and in the Aduliticus bay			
Montuosa Chersonesus	68	12	10
Adulis	67	11	40
Saturni promontory	68	11	40
Antiphili harbor	72	10	15
Mandaith village	73 15	10	20
Arsinoe	73 45	10	40

After the strait in the Red sea

Dire town in the promon-

tory 74 30 11

Then in Avalites bay

Avalites market place	74	8	25
Malao market place	75	6	30
Mondu market place	78	7	
Mosylum promontory and market place	79	9	
Cobe market place	80	8	
Elephas mountains	81	7	30
Acanna market place	82	7	
Aromata promontory and market place	83	6	

In the Barbaricus bay

Pano village	82	5	
Opone market place	81	4	15
Zingis promontory	81	3	30
Phalangis mountains	80	3	30
Apocopa	70	3	

Austri Cornu prom-

ontory	79	north	1
Parvum Littus	78	south	1
Magnum Littus	76	south	2
Essina	73 30	south	3 30
Sarapionis station and emporium	74	south	3
Tonice market place	73	south	4 15
mouth of the Rhaptus river	72 30	south	7

Rhapta metropolis of Barbaria a short distance from the sea 71 south 7

Rhaptum promontory 73 50 south 8 25

The remaining part of the Nile, after the Great Cataract, is described as follows through the names of the villages adjacent to it:

After Pselcis and the Lesser Cataract the location of which is in 60 30 22 30 on the west bank of the river are the villages

Tasitia	60 30	22	
Boon	62	21	40
Autoba	61 30	21	30
Phthruai	61 15	21	20
Pistre	61	20	40
Ptemithis	61	20	15
Abuncis	59 30	20	
Cambyasis Aerarium (granary)	59	18	
Erchoas	59 30	18	
Satachtha	60 30	18	
Moru	61 30	18	40
Nacis	62	19	30
Tathis	61	17	

On the east bank of the river are the villages

Pnups	62	22	
Berethis	62	21	30
Gerbo	62	21	
Pataeta	61	40	20 30
Pontyris	61	20	
Primis Minor	60	19	30
Arbis	60	30	18 30
Napata	63	20	15
Sacole	63	19	30
Sandace	63	18	30
Orbadaru	62	40	18
Primis Major	62	17	

Here the Nile river on the west and the Astaboras on the east form the Meroe island region, in which island are the following towns:

Meroe	61	30	16 25
Sacolche	61	40	15 15
Eser	61	40	13 30
Daron village	62		12 30

The junction of the river Nile and the river Astapus 61 12
then the junction of the river Astaboras and the Astapus 62 30 11 30

Where the Nile river becomes one through the union of rivers which flow from two lakes 60 2
Western lake 57 south 6
Eastern lake 65 south 7
Coloe lake, from which flows the Astapus river 69 equator

The towns remote from the river in the interior are Axume where is the king's palace 65 11
Coloe town 69 north 4 15
Maste town 65 south 4 15

The mountains in this region toward the west of the Nile river, extending along the entire Nile which are commonly called the Aethiopian mountains are celebrated, the position of which is 55 23
and 55 8 30
the mountains to the east of the Nile are called the Garbatum the middle of which is in 69 6
and the Elephas mountains 78 5 30
and those near the lake, are called the Pylaei mountains 65 equator
the Maste mountains 68 south 5

The land which is near the Arabian bay and the Aualites gulf, along the sea is called

Troglodytica as far as Elephantas mountains, in which region are the *Adulitae*, and the *Aualitae* near a bay of this name, and the *Mosyli* above the promontory with a market place of this name. The entire maritime coast to the Rhaptum promontory is called Azania; the interior region is called Barbaria, in which there are many elephants.

The *Colobi* occupy that part of the region toward the east from the river which is near the Bazium promontory; next to these toward the south are the *Tabieni*; then the *Sirtibes*; next to these are the *Attiri*; then the *Babylleni* and the *Rhizophagi*; then the *Axumitae* and the *Sobridae*; next the *Molibae*, the *Megabardi*, and the *Nubae* toward the west from the *Aualitae*; then below the *Molibae* are the *Blemyes*; below whom are the *Dedacae*, and the *Pechini* between the river Astapus and the Garbatum mountains; from whom toward the west are the *Strathophagi Aethiopes*; toward the south from the mountain are the *Catadrae* and the *Myrrhifera* the land stretching up to the Coloe lake, after which are the *Mastitae* to the lake of the Nile.

To the west, from this part of the Nile river, those occupy the land after the greater cataract, who pasture the Triacontaschaenus region between the Aethiopian mountains and the Nile river, after these toward the south are the *Euonymitae*; then Aethiopia Media and the *Sebridae*; these races also inhabit the island of Meroe, and below them are the *Gapachi*; below these the *Ptoemphanae*, and below these the *Cadupi*; next to these are the *Elephantophagi Aethiopes*; below these the *Pesendarae*, and beyond the lake the Cinnamomifera land; moreover between the Nile and the Astapus river, toward the island of Meroe, are the *Memnones* and more to the south are the *Sapaei*. In the remaining parts of the land toward the west from the Aethiopian mountains next to the sandy and dry region dwell the *Phazaniae* and the *Bacalitides* races; then the *Scenitae* and the *Tralletae*, after these the race of the *Daradi*; then the *Orypaei Venatores* next to these the *Nygbenitae Aethiopians*.

The following islands are near Aethiopia below Egypt in the Arabian bay:

Astarta island	66	22 30
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BOOK FOUR — CHAPTER VIII

Ara Minervae island	66	10	21	30
Gypsitis island	67		19	40
two islands of Gomadean	67	30	19	
Myronis island	67		18	
Catathra or Chelonitides islands, two in number	68		17	30
Orisitides two islands	67	30	17	
Magorum island	68		16	
Daphnine island	68	30	15	20
Acanthine island	68	30	15	
Macaria island	68	30	14	
Avium island	69		14	
Bacchi and Antibacchi	69	30	13	15
Panis island	68	40	12	
Diodori island	70		12	30
Isidis island	70		11	30

In the Bay of Avalites is the				
Mondi island	77		8	30
next to Aromata are these islands				
Amici island	85		4	
the two Menae islands	84		2	30
Myrice island	83	30	1	

Then to the east of these islands is the sea called Hippalum near which is the Indian sea.

CHAPTER VIII

*Location of Interior Aethiopia
(Fourth map of Libya)*

AETHIOPIA, which is below this land and entire Libya, is terminated toward the north by the indicated southern boundary lines of the land which we have treated, which extends from the Great bay of the Outer sea to Rhaptum promontory as we have said, and is located in 73 50 south 8 25 then by a part of the Western ocean which is near the Great bay; by the unknown land toward the west and the south; toward the east by the Barbaricus bay, which near the shallow sea is called Breve, from the Rhaptum promontory even to the Prasm

ontory and the unknown land. Prasm promontory moreover is located in 80 south 15

Near this is an island toward the east, the name of which is

Menuthias; it is located in 85 south 12 30

Around this bay the *Anthropophagi Aethiopians* dwell, and from these toward the west are the Mountains of the Moon from which the lakes of the Nile receive snow water; they are located at the extreme limits of the Mountains of the Moon.

57 south 12 30
and 67 south 12 30

Moreover above these are the *Rhapsi Aethiopians*: the *Ichthyophagi Aethiopians* dwell in the Great bay toward the Western ocean, and toward the south of this to the unknown land are those who are commonly called the *Hesperii Aethiopians*; toward the east are the *Athaca Aethiopians*; and more toward the east, adjoining the entire Libyan country is much Aethiopian land in which elephants are born entirely white, and rhinoceroses and tigers; next to the unknown land of Aethiopia is a region of wide expanse called Agisymba.

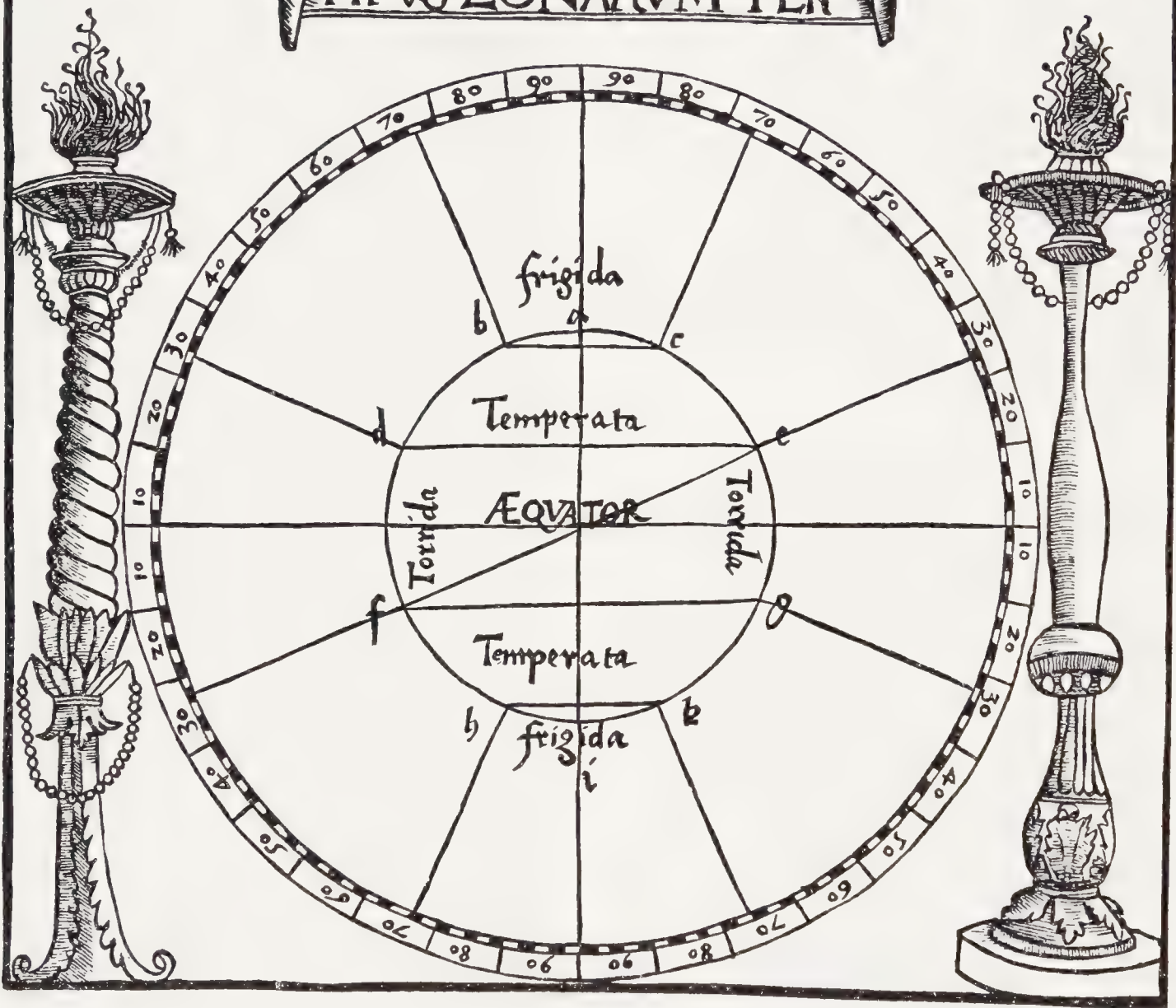
This region has many and high mountains near the unknown land, the majority of which are without name, but those which bear names are:

Dauchis mountains, the middle of which is in 15 south 13
Ion mountains, the middle of which is in 10 south 8 25
Zipha mountains, the middle of which is in 25 south 8 25
Mesche mountains, the middle of which is in 25 south 13
Barditus mountains, the middle of which is in 45 south 6

(Toward the south from the inhabited land to the south pole the degrees are not definitely known 73 35 or full 74.)

END OF BOOK FOUR

TIPVS ZONARVM TER.



BOOK FIVE



*The following descriptions are contained
in Book Five:*

Description of the first part of Greater Asia

1. Pontus and Bithynia	Map I
2. Asia which is properly so called	
3. Lycia	
4. Pamphylia	
5. Galatia	
6. Cappadocia	
7. Cilicia	
8. Asiatic Sarmatia	Map II
9. Colchis	Map III
10. Iberia	
11. Albania	
12. Greater Armenia	
13. Cypris island	Map IV
14. Syria	
15. Palestina	
16. Arabia Petraea	
17. Mesopotamia	
18. Arabia Deserta	
19. Babylonia	
Provinces XIX	
Maps IV	

CHAPTER I

Location of Pontus and Bithynia (First map of Asia)

THE Pontus and Bithynia province is terminated on the west by the mouth of the Pontus and by Thracia which is called the Bosphorus, and by a part of the Propon-tis. The maritime coast is thus described:

The promontory of Bithynia which is at the mouth of the Pontus, in which are

Temple of Diana	56	25	43	20
Chalcedon	56	5	43	5
Acritas promontory	56	30	42	55
Trarium	56	54	42	45
Nicomedia	57	30	42	30
Astacus	57	20	42	30
Olbia	57		42	30
Posidium promontory	56	10	42	25
mouth of the Acanius river	56	45	42	15
Ascania lake	56	45	42	

Prusias	56	40	42	5
Apamea	56	40	41	55
Dascylium	56	35	41	55
mouth of the Rhyndacus				
river	56	20	41	45
river sources	57		40	30

On the north it is bounded by a part of Pontus Euxine, which is thus described: after the mouth of the Pontus and the Temple of Diana

Bythinias promontory	56	45	43	20
Artane castle	57		43	5
mouth of the Calpas river	57	40	43	5
mouth of the Sangarius				
river	58		42	45
first bend of the river	57	30	42	
second turning	61	20	42	
third turning	58	45	41	
river sources	60	50	40	50
mouth of the Hyspius river	58	40	42	45
mouth of the Elata river	58	50	43	
Diospolis (Iovis oppidum)	58	45	43	20
Heraclea on the Pontus	59		43	30
Psyllium	59	30	43	30
Tium	60		43	30
mouth of the Parthenius				
river	60	15	43	30
river sources	62	30	43	30
Cromna	60	35	43	35
Cytorum	60	45	43	35

On the south it is bounded by that which properly is called the confines of Asia, along the line leading from the Rhyndacus river to the terminus which is in

	61		41	15
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On the east it is bounded by Galatia next to Paphlagonia along the line leading from the mentioned terminus near the town Cytorum on the Pontus.

The most noted mountains in this region are the Orminius the central part of which is located in

	59	40	42	40
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and the Mysian Olympus

mountain

	57		41	30
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The *Chalcedoni* occupy the maritime coast from the mouth of the Pontus to the river Hyspius, the *Mariandyni* from Hera-clea as far as the town Cytorum; beyond the

mountain Orminius are the *Caucones*, and the Timonitis region is below the *Chalcedoni*, and below this Bogdomanis region, from which toward the east is Zygiana.

The following are the inland towns:

Libyssa	57	15	42	45
Eriboea	57	10	42	20
Gallica	57	45	42	25
Tatavium	57	45	42	
Prusa on the Hypius river	58	30	42	35
Dedacana	59		42	25
Protomacra	58	45	42	
Claudiopolis or Bithynia	59	20	42	45
Flaviopolis or Cratea	60		43	
Timaea	59	45	42	20
Clitae	60	30	43	
Laganea	60	35	42	30
Nicaea	57		41	55
Caesarea or Myrleana	56	40	41	40
Prusa near Mount Olympus	57		41	40
Agrilium	57	30	41	40
Dables	58	40	41	40
Dadastana	59	30	41	45
Juliopolis	60	10	42	
the islands near this region are				
Cyanea	56	30	43	25
Thynias and Daphnusia	57	40	43	20
Erythinus crags, islands	58	30	43	15

CHAPTER II

*Location of Asia properly so called
(First map of Asia)*

ASIA, properly so called, is bounded on the north by Bithynia along the line we have designated; on the west by the remaining part of the Propontis and the Hellespont and by the Aegean, the Icarian, and the Myrtoum seas; a description of its maritime shores is the following: on the Propontis

Mysia Minor Hellespontica

Cyzicus	56		41	30
mouth of the Aesepus river	56		41	20
mouth of the Granicus river	55	50	41	30
Parium	55	35	41	25
Lampsacus	55	20	41	25
on the Hellespont				
Abydus	55	20	41	15
mouth of the Simoentus river	55	20	41	10
Dardanum	55	15	41	5

mouth of the Scamander river

	55	15	41
Sigeum promontory on the Aegean sea	55	10	41

Phrygia Minor or Troas

Alexandria Troas	55	25	40	40
Lectum promontory	55	25	40	25
Assus	56		40	15

Mysia Major

Gargarum	56	10	40	20
Palaeseptis	56	15	40	30
Antandrus	56	30	40	20
Adramyttium	56	30	40	
Poroselene	56	30	39	45

In Aeolis

Cane promontory	56	15	39	30
Pitane	56	10	39	45
mouth of the Caicus river	56	30	39	35
river sources	58	30	40	30
Elaea	57		39	25
Myrina	57	15	39	15
Hydra promontory	57		39	5
Cyme	57	20	39	
Phocaea	57	10	38	50
mouth of the Hermus river	57	30	38	45
where the Hermus and the Pactolus rivers unite	58	10	39	20
sources of the Hermus river	60		40	
sources of the Pactolus river	59		39	

In Ionia

Smyrna	57	40	38	35
Clazomenae	57		38	35
Erythre	56	40	38	35
Argennum promontory on the Icarian sea	56	30	38	25
Teos	57	10	38	25
Lebedus	57	30	38	20
Colophon	57	40	38	
mouth of the Cayster river	57	45	37	50
river sources	60	15	39	20
Ephesus	57	40	37	40
Trogilium promontory	57	10	37	40
mouth of the Maeander river	57	40	37	30
where the Lycus river unites with this	59		38	40
sources of the Maeander river	62	30	39	30
sources of the Lycus river	60		37	45

In Caria on the Myrtoum sea

Pyrra	57	50	37	10
Heraclea	58		37	10

BOOK FIVE — CHAPTER II

Miletus	58	37	
Iasus	57	50	36 50
Bargylia	57	50	36 40
Myndus	57	40	36 25
In Doris			
Scopias promontory	57	20	36 25
Halicarnassus	57	50	36 10
Ceramus	57		36
Cnidus town and promontory	56	15	36

On the south it is terminated by the Rhodian sea, on which is

Onugnathos promontory	56	40	35 50
Loryma	57	20	35 35
Cressa harbor	57	40	36
Phoenix castle	58		36 10
Physca	58	15	36 10
mouth of the Calbis river	58	45	36 5
Caunus	59	10	36

On the east is the border of Lycia, from the terminus located near Cannus which is in

On the south it is terminated by the Mil-
yade region of Lycia which is located in

and by Phamphyilia along that line leading from the indicated terminus to that which is located in

and on the east by Galatia along the line which is the boundary of Bithynia, the middle of which turns toward the east; the location of this bend is in

Very important mountains are in Asia of which the central localities are:

Ida mountain	56		41
Cillaeus mountains	56		40 40
Temnus mountains	57	40	40 30
western part of Dindymus	61		40 40
Sipylos mountains	59		39 10
Tmolus mountains	58	30	38 30
Mimas mountains	57	10	38 30
Mesogis mountains	58	40	38 10
Mycale mountains	58		37 40
Cadmus mountains	59	20	37 40
Phoenix mountains	58		36 20

The interior towns of Mysia Minor in Hellespontica are

Scepsis	56	30	41
Sacra Germa	56	15	41 15

The inland town of Phrygia Minor or Troas is

Ilium	55	20	41
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Towns in the interior of Mysia Major are

Daguta	57	30	41 20
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Apollonia on the Rhyndacus river	57		41 15
Traianopolis	56	40	40 15
Alydda	57	30	40 15
Prepenissus	56	50	40 25
Pergamus	57	25	39 45
the <i>Olympeni</i> people are in the north, the <i>Grimenothuritae</i> in the west, whose town is Traianopolis; in the south are the <i>Pentademitae</i> ; and the people in the middle between these are the <i>Mysomacedones</i> .			

Towns in Lydia

Perpera	57	50	40
Mosteni	58		39 55
Hierocaesarea	57	15	39 30
Nacrassa	58	20	39 30
Thyatira	58		39 20
Magnesia near the Sipylos	58	40	39 10
Juliogordus	59		39 55
Aegara	57	50	38 50
Hypaepa	58		38 25
Sardes	58	20	38 45
Philadelphia	59		38 50
Dioshieron	59	40	38 55
Metropolis	58		38

In Caria

Tripolis	59	30	38 30
Laodicea on the Lycus	59	45	38 20
Antiochia on the Meander	59	10	38 30
Itoana	59	15	38 25
Trapezopolis	59	30	38 15
Nysa	59		38 15
Aphrodisia	59	20	38 10
Tralles	58	40	38 5
Magnesia on the Meander	58	30	38 5
Apollonia	59	25	37 55
Heraclea	59	30	37 55
Priene	58		37 25
Harpasa	58	25	37 35
Orthosia	59		37 35
Neapolis	59	25	37 35
Bargaza	58	20	37 25
Amyzon	58	15	37 10
Alabanda	58	40	37 20
Stratonice	59		37 10
Alinda	59	10	36 50
Badessus	58		36 15
Mylasa	58	20	36 30
Hydissa	58	30	36 30
Idymus	59		36 35
Thera	59		36 15
Pystus	59		36 25

the *Erizeni* a people near Phrygia.

In Maeonia on the confines of Mysia, of Lydia and of Phrygia

Saittae	58	10	40	15
Dadales	58		40	20
Cadi	58	30	40	25
Towns of Greater Phrygia				
Synnaus	58		41	15
Dorylaeum	58	15	41	20
Midaium	59	30	41	20
Tricomia	60		41	10
Ancyra	58	20	41	10
Nacolea	59		41	
Tribanta	59	40	40	35
Dioclea	60		40	55
Amorium	60	30	41	15
Abrostola	60	30	40	50
Cotiaium	58	40	40	40
Aezani	59		40	20
Conna	59	15	40	30
Lysias	59	50	40	30
Cercopia	59	25	40	15
Eucarpia	60		40	5
Prymnesia	60	20	40	20
Docimaeum	60	15	40	30
Synnada	60	50	40	5
Gammausa	61	15	40	40
Melitara	61	30	40	20
Juliopolis	61	30	40	10
Acmonia	59	50	39	20
Eumenia	60	10	39	50
Druzon	60	20	39	55
Tiberiopolis	60	15	39	30
Bleandrus	60	30	39	10
Stectorium	61		39	15
Silbium	61	40	39	15
Philomelium	62	15	39	20
Pelta	61	20	39	10
Metropolis	61	15	39	25
Apamea Cibotos	61	10	38	55
Hierapolis	60		38	15
Cibyra	60	30	(37)	55
Diocaesarea	61		38	15
Sanis	61		38	30
Themisonium	60	10	38	10
Phylacaeum	60	20	38	20
Sala	60	15	38	20
Gazena	60	40	38	

The peoples near Lycia are the *Lycaones* and the *Themisoni*; near Bithynia are the *Moccadeni* and the *Cydisses*; below these are the *Pelteni*; then the *Moxiani*; then the *Phylacenses*, below whom are the *Hierapolitae*.

The island near Asia, and which is near the Hellespont is

Tenedos island and town	55		40	55
Island in the Aegean sea				
Lesbos, an Aeolian island, around which are				
Sigrium promontory	55		40	
Eressus	55	15	39	40
Pyrrha	55	25	39	30
Malia promontory	56		39	25
Mytilene	55	40	39	40
Argennum promontory	55	40	39	50
Methymna	55	25	40	25
Antissa	55	15	40	10
Islands in the Icarian sea are				
Icarus island	56	45	37	20
Chios island and town	56	20	38	35
Phanaea promontory	56	20	38	15
Posidium promontory	56	25	38	25
town of Samos island	57		37	35
Ampelos promontory	56	30	37	30
Islands in the Myrtoum sea, and towns of Amorgus island are				
Arcesine	56		37	
Aegialus	56	10	36	50
Minoa	55	50	36	50
town of Cos island	55	40	36	25
town of Astypalaea island	55	40	36	25
Islands in the Rhodian and Carpathian seas				
Syme island	56	40	35	40
town of Casus island	56	30	35	15
Around the Carpathian island				
Thoantium promontory	57		35	20
Ephialtium promontory	57	20	35	20
Posidium town	57	20	35	25
Around the Rhodian island				
Panos promontory	58		35	55
Camiros	58	20	35	15
Lindos	58	40	36	
Ielyssos	58	20	36	

CHAPTER III

Location of Lycia
(First map of Asia)

LYCIA is terminated on the west and the north by Asia along the boundary which we have mentioned above; on the east by a part of Pamphylia along the line leading from the terminus on the confines of Asia through the Masicytus mountains, as far as the sea in 61 50 36 30 on the south by the Lycium sea, of the coast

of which the following is a description: after

Cannus			
Calinda	59 20	35 55	
Chlyda	59 40	35 55	
Carya	59 50	35 55	
Daedala	60	35 55	
Telmissus	60 10	35 55	
mouth of the Xanthus river	60 20	36	
river sources	60	37 40	
Patara	60 30	36	
Antiphellus	60 30	36 20	
Andriaca	61	36 20	
Aperlae	61	36 25	
mouth of the Limyrus river	61 10	36 25	
Aperroe	61 20	36 20	
Sacred promontory	61 30	36 15	
Olympus town	61 40	36 20	
Phaselis	61 50	36 25	
Cragus mountains, the location of the middle part of which is in	60	36 40	

The inland towns in Lycia near the Cragus mountains are

Cydna	59 30	37 10
Symbra	59 40	36 50
Octapolis	59 35	36 35
Comba	59 50	36 30
Sidyra	59 50	36 40
Pinara	59 50	36 25
Araxa	59 50	36 5
Tlos	60 15	36 30
Xanthos	60 15	36 10

and near the Masicytus mountains are the towns

Corydalla	60 15	36 50
Sagalassos	60 40	36 55
Rhodia	61	36 45
Trebenda	61 10	37 15
Phellos	60 35	36 30
Myra	61	36 40
Limyra	61 5	36 35

In Mylias

Podalia	60	37 30
Nysa	60	37 15
Choma	60 20	37 20
Candyba	60 40	37 10

In the Cabalia region

Bubon	60 20	37 40
Oenoanda	61	37 40
Balbura	60 40	37 30

Islands adjacent to Lycia are

Megiste island	60 40	35 45
Dolchiste island	61 15	35 45
Chelidonia, V cliffs	61 30	36

CHAPTER IV

Location of Galatia (First map of Asia)

GALATIA is terminated on the west by Bithynia and a part of Asia along the boundary to which we have referred above; on the south by Pamphylia from the terminus indicated on the border of Asia to the other bay on this same parallel located in

on the east by the part of Cappadocia which extends from this terminus to that on the shore of Pontus, in
on the north by a part of Pontus, of which the following is a description: from the maritime city Cytorum

Climax castle	61 10	43 50
Teuthrania	61 30	44
Carambis promontory	61 20	44 25
Callistratia	61 30	44 15
Zephyrium	61 45	44 5
Abonitichos	62	44
Cinolis	62 30	44
Stephane village	62 55	43 55
Armene	63 20	43 55
Sinope	63 50	44
Cyptasia	63 40	43 40
Zagorum	64	43 30
mouth of the Zalecus river	64 15	43 20
mouth of the Halys river	64 30	43 10
bend in the river	64 15	40 15
Amisus	65	43 5

The mountains in Galatia worthily celebrated are the Olgassys the middle of which is in

and the eastern parts of the Dindymus mountains

and that which is called the hill of Celenum, the middle of which is in

The *Paphlagonian* race occupies the maritime coast, whose towns and villages inland are

Zagira	61 40	43 40
Plegra	62 30	43 30
Sacora	63 20	43 40
Helvia	61 40	43
Tobata	62 20	43
Germanicopolis	63	43
Gelaca	63 40	43 15
Zoaca	63 15	43 15
Dacasye	61 40	42 40
Mosium	61 5	42 20

PTOLEMY'S GEOGRAPHY

Sacorsa	62	42	15
Pompeiopolis	62	30	42 15
Conica	62	45	42 30
Andrapa or new			
Claudiopolis	63	15	42 20
Sabanis	63	50	42 20
Titua	64	15	42 30
Eusene	60	40	42 40

In the interior of Paphlagonia toward the west are the *Tolistobogi*, whose towns are

Germa colonia	61	30	42
Pessinus	61	10	41 30
Vindia	61	40	41 40
Andrus	61	30	41 20
Tolastachora	61	15	40 55
Vetistum	62	20	40 40

Next to these toward the east are the *Tectosagae* whose towns are

Ancyra metropolis	62	40	42
Olenus	62	15	42
Corbeuntos	62	40	41 40
Agrizama	62		41 30
Vinzela	62	30	41 20
Rosologia	63		41 25
Sarmalia	63	20	41 25
Dictis	62	40	40 50
Carima	63		40 40
Landosia	63	40	40 45

From these toward the east are the *Trocmi*, whose towns are

Tavium	63	55	41 40
Lascoria	63	15	42
Androsia	64	20	42 5
Claudiopolis	63	50	42
Carissa	64	40	41 40
Phubatina	64	10	41 30
Dudusa	63	50	41 20
Saralus	64	30	41 20
Ucaena	64	10	40 55
Rastia	64	30	41

Below these races, as we have said, are the *Prosilemmenitae* adjoining those with whom they have relations, and below these are the *Bizeni* in part of Lycaonia, among whom are the towns

Petenessos	62	15	40 30
Ecdaumava	63	20	40 25
Sivata	64	15	40 25
Ardistama	64		40 10
Cinna	63	20	40
Congustos	62	40	39 50
Tyriaeum	63		39 30
Laodicea combusta	63	40	39 40

Vasada	64	39	25
Perta	64	20	39 30

Then below these to the west is a part of the Pisidia region, and the towns

Apollonia	62		39
Antiochia Pisidiae	62	30	39
Amblada	61	50	38 50
Neapolis	62	40	48 45

Eastward is Isauria and towns

Sabatra	64	20	39 15
Lystra	64		39
Isaura	63	50	38 40

Among these is the race of the *Orondicori* and the towns

Misthium	63		39 15
Pappa	63	20	38 50

CHAPTER V

Location of Pamphylia (First map of Asia)

PAMPHYLIA is terminated on the west by Lycia and a part of Asia along the boundaries to which we have referred; by Galatia on the north along the indicated border of Galatia; on the east by Cilicia and part of Cappadocia to the line leading from the terminus near Galatia to the Pamphylian sea, the terminus of this line at the sea is in

63 50 36 45
on the south by the same Pamphylian sea, a description of the shores of which is the following after Phaselis the town of Lycia:

The shore of Pamphylia

Olbia	62		36 55
Attalia	62	15	36 30
mouth of the river			
Cataractes	62	15	36 35
Magydos	62	40	36 30
mouth of Cestrus river	62	50	36 30
mouth of river Eurymedon	63		36 35
Side	63	5	36 40

Cilicia Aspera maritime towns

Melas river	63	10	36 40
Coracesium	63	35	36 40
Syedra	63	50	36 45

The towns in the interior province of

Phrygia Pisidia are			
Seleucia Pisidia	62		38 30
Ancient Beudos	61	30	38 10
Baris	61	50	38 25
Conane	61	50	38 5
Lysinia	61	15	38 15
Cormasa	61	10	37 55

BOOK FIVE — CHAPTER VI

In Cabalia			
Creteopolis	61	15	37 30
Pogla	61	40	37 40
Menedemium	61	20	37 40
Uranopolis	61	40	37 20
Pisinda	61	40	37 10
Ariassus	62	5	37 10
Milyas	62	30	37 25
Termessos	62	10	37 15
Corbasa	62	20	37 5
Inland towns of Pamphylia			
Perge	62	15	36 50
Sileum	62	25	36 50
Aspendus	62	15	36 45
The inland towns of Pisidia			
Prostama	62	15	38 20
Adada	62	55	38 15
Olbasa	62	40	38
Dyrzela	63	10	38 20
Orbanassa	63	20	38
Talbonda	63	45	38
Cremna colonia	63		37 50
Conmacum	62	50	37 40
Pednelissos	63	30	37 50
Unzela	63	15	37 30
Selge	63		37 20
Inland towns of Cilicia Aspera			
Laerte	63	40	37 25
Casae	63	50	37 30
Lyrbe	63	45	37 5
Colobrassus	63	20	37 10
Cibyra	63	15	36 45
Islands adjacent to Pamphylia			
Crambusa	62	30	35 50
Apelbusa	63	15	35 50

CHAPTER VI

Location of Cappadocia (First map of Asia)

CAPPADOCIA is bordered on the west by Galatia and a part of Pamphylia along the line which we have noted leading from Pontus to the terminus, the position of which is in 64 37 40 on the south by Cilicia along the line extending through the Taurus mountains as far as the Amanus mountains to the terminus in 70 37 20 and by a part of Syria through the Amanus mountains to the Euphrates river, the location of which is in 71 20 38 on the east by the indicated section of Greater Armenia along the Euphrates river

to that point where, coming from the north, it is then deflected from the east, the location of which is in 71 42 30 then along the line of the Moschicos mountains and to the terminal in 73 44 30 thence running to the indicated terminus on the coast.

On the north it is terminated by a part of Pontus Euxine from the city Amisus of Galatia to the terminus which is located in 72 20 44 45

The maritime coast of this region is described in this order:

Leucosyri			
Ancon	65	40	43 20
mouth of the Iris river	66		43
First bend of the river	67	15	41 20
Second bend of the river	66		41 20
river sources	68		41
In the country of Pontus Galaticus which is called Phanaroea			
Themiscyra	66	20	43 5
Herculis promontory	66	50	43 20
Pontus Polemoniacus			
mouth of the Thermodontos river	67		43 15
river sources	68	30	42 45
Polemonium	67	15	43 5
Iasionum promontory	67	30	43 15
Cotyora	67	35	43 15
Hermonassa	67	50	43 15
Pontus Cappadocia in the Sidene region			
Ischopolis	68	20	43 20
Cerasus	68	50	43 20
Pharnacia	69	20	43 5
Hyssi harbor	70	45	43 20
Trapezus	70	50	43 5

and in Cissios

Ophius	71		43 25
Rhizus harbor	71	10	43 35
Athenarum promontory	71		43 45
Chordyle	71	20	43 45
Morthula	71	40	43 45
mouth of the Archabis river	72		44
Xyline	72	5	44 10
mouth of the Cissa river	72	10	44 20
Apsorrus	72	20	44 30
mouth of the Apsorrus river	72	20	44 40
where the Glaucus river and the Lycus river flow into this	72	30	43 45
sources of the Glaucus river	72	45	43
sources of the Lycus	71	15	43
Sebastopolis	72	20	44 45

Noted mountains running through Cappadocia are the Argeus, the extreme parts of which are in 65 30 40 30 and 66 30 39 40 from which a river flows called Melas and empties into the river Euphrates in 71 39 20 and the mountain Antitaurus extending from the Taurus mountains to the Euphrates river; the part along the Taurus mountains is located in 65 30 38 30 and 67 15 39 15 that which is along the Euphrates is in 67 30 39 40 and 71 30 41 15 and the Scordiscus mountains the extreme parts of which are located in 68 41 and 69 42 30

The following are the interior towns and villages of Cappadocia below Leucosyros, which are on the borders of Galatia:

In the interior of Pontus Galaticus
 Boenasa 65 30 42 45
 Sebastopolis 66 41 20
 Tebenda 66 40 42 10
 Amasia 65 30 42
 Choloe 66 42
 Etonia 65 41 30
 Piala 65 45 41 40
 Pleuramis 65 15 41 20
 Pida 66 40 41 45
 Sermusa 66 20 41 25
 Comana Pontica 67 41 30
 In the interior of Pontus Polemoniacus
 Gozalena 66 30 42 40
 Eudiphus 67 20 42 10
 Carvanis 67 40 42 10
 Barbanissa 68 42 20
 Ablata 68 20 42
 Neocaesarea 67 20 41 50
 Saurania 68 42
 Megalula 67 40 41 40
 Zela 67 30 41 20
 Danae 68 41
 Sebastia 68 40 40
 Mesoroma 68 30 41 45
 Sabalia 68 20 41 40
 Megalossus 68 10 41 20
 In Pontus Cappadocia inland
 Zephyrium 68 20 43
 Aza 69 42 30
 Cocalia 69 30 42 45

Trapezusa 70 30 43 5
 Asiba 71 20 43 15
 Mardara 71 30 43 40
 Camuresarbum 72 43 30
 In the Chamanene prefecture
 Zama 65 40 40 45
 Andraca 65 40 20
 Gadasena 65 45 40 55
 Vadata 65 20 40
 Sarvena 65 40 40 30
 Odoga 66 40 20
 In the Sargaurasena prefecture
 Phiara 67 41
 Sadagena 66 20 40 45
 Gauraena 67 40 30
 Sabalassus 66 30 40 25
 Ariarathira 67 20 40 45
 Maroga 67 30 40 30
 In the Garsauritis prefecture
 Phreata 65 40
 Archelais 64 45 39 40
 Nanassus 65 30 39 45
 Diocaesarea 65 30 39 30
 Salambriae 65 15 39 20
 Tetrapyrgia 60 39 20
 In the Cilicia prefecture
 Mustilia 66 15 40 20
 Siva 66 30 40 5
 Campae 66 15 39 45
 Mazaca or Caesarea 66 30 39 30
 Cyzistra 67 39 20
 Euagina 67 10 40 15
 Archalla 67 30 40
 Sobara 67 10 39 40
 In Lycaonia
 Adopissus 64 40 39 15
 Canna 64 45 39
 Iconium 64 30 38 45
 Paralais 64 45 38 45
 Corna 65 38 25
 Chasbia 65 10 38 45
 Barattha 65 30 38 30
 In the Antiochiana prefecture
 Derbe 64 20 38 15
 Laranda 64 45 38 5
 Olbasa 65 20 38 10
 Musbanda 64 50 37 50
 In the Tyanitiis prefecture
 Dratae 65 30 39
 Tyana 66 38 55
 Bazis 66 15 38 55
 Siala 66 30 38 55
 The part of Armenia Minor farthest north is called Orbalisene, below this Aetu-

BOOK FIVE — CHAPTER VII

lane, then Haeretica and below this Orsene and further south after Orsene is Orbisene, the towns on the Euphrates are

Sinibra	71	42	30
Aziris	71	42	
Ladana	71	41	40
Sismara	71	30	41 25
Zimara	71	30	40 40
Dascusa	71	40	25

In the interior within the mountainous region are

Satala	69	30	42 10
Domana	70		42 5
Tapura	70	30	42 10
Nicopolis	69		41 40
Chorsabia	69	40	41 45
Charax	70	30	41 45
Dagona	68	40	41 20
Seleoberea	69	30	41
Caltiorissa	69	50	41 15
Analibla	70	20	41 10
Pisingara	68	30	40 55
Godasa	69		40 45
Eudoxata	68	15	40 25
Carape	71	20	41
Casara	70	30	40 40
Oromandus	69	40	40 30
Ispa	70	30	40 20
Phuphena	69		40 15
Arane	69	45	40 10
Phuphagena	68	30	39 50
Mardara	69	5	39 45
Varpasa	67	50	39 30
Orsa	68	30	39 30

In Melitene on the river Euphrates

Dagusa	71		40 5
Siniscolon	71		39 45
Melitene	71		39 30

toward the interior from this

Zoparissus	70		40
Titarissus	69	45	39 45
Cianica	69	20	39 30
Phusipara	70	30	39 40
Eusimara	70	10	39 30
Iassus	69		39 30
Ciacis	69	30	39 15
Leugaesa	70	15	39 10
Carmala	70	40	39 20
Semissus	70	30	39 20
Ladoeneris	69	30	38 50

In the Cataonia prefecture

Cabassus	67	15	38 35
Tynna	66	50	38 30

Tirallis	67		38 20
Cybistra	66		38 15
Claudiopolis	65	40	37 50
Dalisandus	66	20	37 50
Podyandus	67		38
Comana Cappadocia	68		38
Mopsucrene	67	20	37 30
Tanadaris	68	20	37 45
Leandis	68	40	37 40

In the Murimena prefecture

Sindita	67	30	39 10
Cotaena	68	15	39 10
Zoropassus	69	20	39
Nyssa	68	20	38 40
Arasaxa	67	30	38 30
Carnalis	68	45	38 30
Garnaca	68	30	38 10

In the Laviansena prefecture on the Euphrates river

Corne	71		39 15
Metita	71		39
Claudias	71		38 45

In the interior from these

Caparcelis	70	10	39
Zizoatra	70		38 45
Pasarne	70	30	38 30
Cizara	69	20	38 30
Sabagena	68	50	38 10
Nosalene	69	50	38 20
Laugasa	69	20	37 50

In the Arauene prefecture near the Euphrates river

Juliopolis	71		38 25
Barzalo	71		38 10

Toward the interior from this

Serastere	70	40	38 15
Lacriassus	70	15	38 10
Entelea	70		37 45
Adattha	69	30	37 30

CHAPTER VII

*Location of Cilicia
(First map of Asia)*

CILICIA is terminated on the west by that part of Pamphylia to which we have referred above; on the east by that part of Syria extending along the Amanus mountains; from the terminus located near Cappadocia, to the Issicus bay and Amanicae port; the location of this terminus is 69 30 36 20 on the north by the part of Cappadocia which extends along the Taurus mountains;

on the south by Cilicius strait and the Issicus bay, which coast is thus described: from Syedra a town of Pamphylia on the maritime coast are the following:

In Selinitis in rugged Cilicia

Iotape	64	36	45
Selinus	64 20	36	45
Antiochia near the mountains	64 40	36	50
Nephelis	64 50	36	35

In Cetidis

Anemurium	65 10	36	50
mouth of the Orymagdus river	65 20	36	50
Arsinoe	65 30	36	50
Celenderis	65 45	36	50
Aphrodisias	66	36	50
Sarpedon promontory	66 10	36	45
mouth of the Calycadnus river	66 20	36	50
Zephyrium promontory	66 20	36	40

In the Cilicia lowlands

Corycus	66 30	36	50
Sebaste	66 45	36	45
mouth of the Lamus river	67	36	45
Pompeiopolis or Soli	67 15	36	40
Zephyrium	67 10	36	20
mouth of the Cydnus river	67 45	36	40
river sources	66	38	30
mouth of the Sarus river	68	36	30
mouth of the Pyramus river	68 15	36	30
river sources	68 30	38	
Mallus	68 30	36	30
Serretillis	68 45	36	30
Aegae	69	36	30
Issus	69 20	36	25

The interior towns in Cilicia and in rugged Selinitis are

Caystros	64 45	37	10
Domitiopolis	65 25	37	5
Philadelphia	66	37	25
Seleucia	66 10	36	50
Dioscaesarea	66 10	37	10

In Cetidis

Olbasa	64 30	37	30
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In Lalassidis

Ninica	65 30	37	30
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In Characena

Flaviopolis	66 20	37	30
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In Lamotidis

Lamus	67	37	
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In Lacanitidis

Irenopolis	67 50	37	20
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In Bryelica

Augusta	68 30	37	30
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Interior towns of the Cilician lowlands

Tarsus	67 40	36	50
Adana	68 15	36	45
Caesarea	68 30	37	
Mopsuestia	68 50	36	45
Castabala	69	37	
Nicopolis	69 30	37	15
Epiphania	69 30	36	40
Amanicae port	69 30	36	20

CHAPTER VIII

Location of Asiatic Sarmatia (Second map of Asia)

ASIATIC Sarmatia is terminated on the north by unknown land; on the west by European Sarmatia from the sources of the Tanais river along the Tanais to its outlet in the Maeotis lake, and by the eastern part of this lake from the mouth of the Tanais river to the Cimmerius Bosphorus, along which part are the following:

From the mouth of the Tanais river

Paniardis	67 30	53	30
mouth of the Marubius river	68	53	
Patarue	68	52	30
mouth of the greater Rhombites river	68 30	52	
mouth of the Theophanius river	68 30	51	40
Azara town	68 30	51	20
mouth of the lesser Rhombites river	69	50	30
Azarabitis Taenia	68	50	
Tyrambae	69 40	49	50
mouth of the Anticites river	70	49	20
Gerusa town	70	49	
mouth of the Psathis river	69 30	48	45
Mateta	69	48	30
mouth of the Vardanes river	68	48	20
Cimmerium promontory	66 30	48	30
Apaturus	66 20	48	15
Achilleum at the mouth of the Bosphorus	64 30	48	30
and in the Cimmerian Bosphorus			
Phanagoria	64 30	47	50
Corocondame	64 15	47	30

It is terminated on the south by a part of the Pontus Euxine thence as far as the Coras

river and the line limiting Colchis, Iberia and Albania, thence extending to the Hyrcanium or the Caspian sea; a description of this boundary is the following: after Corcondame on the Pontus

Hermonassa	65	47	30
Sindice harbor	65	30	47 50
Sinda village	66		48
Bata harbor	66	30	47 40
Bata village	66	20	47 30
mouth of the Psychrus river	66	40	47 30
Achaia village	67		47 30
Cercetidis bay	67	30	47 20
Tazos town	68		47 30
Toreticum promontory	68		47
Ampsalis town	68	30	47 15
mouth of the Burcas river	69		47 15
Oenanthia	69	40	47 15
mouth of the Thessyris river	69	40	47
Carterontichos	70		46 50
mouth of the Corax river	70	30	47
the terminus on the side of Colchis is in	75		47
thence it extends along the border of Iberia in which are the Sarmatian passes	77		47
then along Albania to the terminus on the Hyrcanium sea at the mouth of the Soanas river	86		47

On the east it is terminated by a part of the Hyrcanium sea beginning at the point next to the mouth of the Soanas river, the location of which has been indicated.

mouth of the Alontas river	86	30	47 40
mouth of the Udon river	87		48 20
mouth of the Rha river	87	30	48 50
and partly by Scythia along the Rha river to the bend which is in	85		54
then along the meridian leading into the unknown country.			

There is another turning of the Rha river which is near the bend of the Tanais river in the locality	74		56
above which two rivers unite coming from the Hyperborean mountains, the position of which junction is in	79		58 30
the source of that river which is from the west is in	70		61
the source of that which is from the east is in	90		61

Of the mountains running through Sarmatia, among those which are named, are

the famous Hippici, the Cerauni, the Corax, and those running along Colchis and Iberia which are called the Caucasus; and a branch of these also runs toward the Hyrcanium sea, the name of which is also Caucasus.

The extreme parts of the Hippici mountains are in	74		54
and	81		52
of the Cerauni	82	30	49 30
and	84		52
of the Corax	69		48
and	75		48
and of the Caucasus	75		47
and	85		48

which are near			
Alexandri Colomnae	80		51 30
Sarmatian pass	81		48 30
Albanian pass	80		47

Its cattle feed in the Sarmatian meadow lands in the region near the unknown land of Hyperborean Sarmatia; and below these are the *Basilici Sarmatians*; and the *Modoca* race; and the *Hippophagi Sarmatians*; and below these are the *Zacatae Sarmatians*, the *Suardeni* and the *Asaei*; then next to the northern bend of the Tanais river are the *Perierbidi*, a great race near the southern race of the *Iaxamatae*.

The towns on the Tanais are			
Hexapolis	72		55 40
Navaris	70		55
Tanais	67		54 20

Below the *Suardeni* are the *Chaenides*, and toward the east from the Rha river are the *Phthirophagi*, the *Materi* and the land of the *Nesioti*; then below *Iaxamatas* are the *Siraceni* and between the Maentim swamp and the Hippici mountains next to the *Siraceni* are the *Psessi*; then the *Thatemeotae*, below whom are the *Tyrambae*; then the *Aspurgiani*, and near the Corax mountains are the *Arichi* and the *Zinchi*; and above the Corax mountains are the *Gonapseni*, the *Metibi*, and the *Agoritae*.

Between the Rha river and the Hippici mountains is the Mithridatis region; below which are *Melanchlani*, then the *Amazones*; and between the Hippici mountains and the Cerauni mountains are the *Suani* and the *Sacani*; moreover between the Cerauni mountains and the Rha river are the *Orinei*, the *Vali*, and the *Serbi*; between the Caucasus mountains and the Cerauni

mountains are the *Tusci*, and the *Diduri*; and near the Caspian sea are the *Udae*, the *Alontae*, the *Isondae*, and the *Gerri*; below the mountain ridge are the *Bosporani*, and on both sides of the *Bosporani* are the *Cimmeri*; on the sea coast of the Pontus are the *Achaei*, the *Cercitae*, the *Heniochi*, and the *Suanocolchi*; then above Albania the *Senaraei*.

The towns and villages on the lesser Rhombitus river are

Axaraba	70	50	30
on the Psathis river			
Auchis	70	40	49 40
on the Vardanus river			
Scopelus	68	48	
Suruba	72	48	20
Corusia	73	40	48 30
Ebriapa	75	20	48 30
Seraca	77	48	40
on the Burcas river			
Cucunda	70	47	45
on the Thessyris river			
Batrache	71	47	30
and on the Corax river			
Naana	73	30	47 15
Towns in the highest mountains			
Abunis	73	48	
Nasunia	74	48	
Halmia	75	48	

CHAPTER IX

Location of Colchis
(Third map of Asia)

COLCHIS is terminated on the north by a part of Sarmatia as we have said; on the west by a part of the Pontus Euxine which extends from the Corax river to the bend, where the Phasis empties into the sea, which part is thus described:

Dioscurias	71	10	46 45
mouth of the Hippius river	71	46	30
mouth of the Cyaneus river	71	30	46 10
Neapolis	71	30	46 15
mouth of the Cyaneus river	71	30	46 10
Siganeum	71	30	45 45
Aea town	72	45	30
mouth of the Chariustus river	72	45	15
mouth of the Phasis river	72	30	45
Phasis town	72	30	44 45

It is bounded on the south by the Pontus, thence extending along Cappadocia to the

line we have mentioned; thence by a part of Armenia Major along that boundary to the terminus which is located in 74 47

on the eastern border is Iberia along the line as far as the Caucasus 75 47

The *Lazi* occupy the maritime coast of Colchis; the bordering region the *Manrali* inhabit, and the races which are in the Ecritica section.

In the interior region the towns and villages are

Mechlessus	74	30	46 45
Madia	74	15	46 15
Sarace	73	45	
Surium	73	20	44 40
Zadris	74	44	40

CHAPTER X

Location of Iberia
(Third map of Asia)

IBERIA is bounded on the north by the part of Sarmatia which we have mentioned; on the west by Colchis along that line to which we have referred; on the south by a part of Armenia Major, which extends from the terminus in the confines of Colchis to a terminus the location of which is in 77 47

The following are the towns and villages in this country:

Lubium village	75	40	46 50
Aginna	75	46	30
Vasaeda	76	46	20
Varica	75	20	46
Sura	75	45	20
Artanissa	75	40	46
Mestleta	74	40	45
Zalissa	76	44	40
Harmastica	75	44	30

CHAPTER XI

Location of Albania
(Third map of Asia)

THE Albanian border on the north extends along the part of Sarmatia which we have described; on the west it is bounded by Iberia along the line designated; on the south by a part of Armenia Major which extends from the terminus near the border of Iberia to the Hyrcanium sea where the Cyrus river empties into it, which is in 79 40 44 30 on the east by the Hyrcanium sea extend-

ing to the Soana river, which coast is thus described: next to the mouth of the Soana river which is in 86 47
Telaeba city 85 46 40
mouth of the Gerrhus river 84 30 46 30
Gelda town 83 46 30
mouth of the Casius river 82 30 46
Albana town 81 40 45 50
mouth of the Albanus river 80 30 45 30
Gaetara town 79 30 45
after which is the mouth of the Cyrus river 79 40 44 30

Between Iberia and the Albanus river, which, flowing from the Caucasus, empties into the Cyrus running along entire Iberia and Albania and separating Armenia from both, are the towns and villages,

Tagada 77 30 46 50
Bacchia 77 46 30
Sanua 77 40 46 40
Deglane 77 20 45 45
Niga 77 20 45 15

Moreover between that river (Cyrus) and the Albanus river which flows from the Caucasus are

Mosega 79 47
Samunis 79 46 40
Iobula 78 46 20
Iuna 79 46
Embolaeum 78 30 45 40
Adiabla 79 45 30
Ablana 78 45 15
Mamechia 79 45 45 40
Osica 77 30 44 45
Sioda 78 15 44 40
Baruca 79 20 44 40

The location of the Albanian passes, as we have said is in 80 47

Between the Albanus river and the Casius river are

Chabala 80 47
Chobota 80 30 46 45
Boziata 80 46 20
Misia 81 46 20
Chadacha 81 46
Alamus 82 46 15

between the Casius river and the Gerrhus river are

Thiauna 84 15 46 40
Thabilaca 82 45 46 50
between the Gerrhus river and the Soana river is
Thilbis 84 15 46 50

There are two marshy islands near Albania, the middle of which is in 80 30 45

CHAPTER XII

Location of Armenia Major (Third map of Asia)

ARMENIA is terminated on the north by a part of Colchis, by Iberia, and Albania on the line which we have indicated as running along the Cyrus river; on the west by Cappadocia along the accessible part of the Euphrates and the part of Pontus Cappadocia which extends as far as the Colchis border after passing through the Mosechius mountains; on the east by a part of the Hyrcanium sea from the mouth of the Cyrus river to the terminus the location of which is in 79 45 43 20 and by Media on the line leading to the Caspius mountains and along these mountains, the termini of which are located

in 79 42 30
and 80 30 40

on the south it is terminated by Mesopotamia along the line of the Taurus mountains which begins at the Euphrates river, the location of which is 71 30 38 and extends to the Tigris river

in 75 30 38 30
then by Assyria on a line extending along the Niphates mountains, that line which we have said continues in a direct line as far as the indicated terminus of the Caspius mountains.

The noted mountains of Armenia are the Moschici extending along that part of Pontus Cappadocia, which is above them, and the Paryardes mountains, the terminal positions of which are 75 43 20

and 77 42

and the Udacespes mountains the central part of which is in 80 30 40

and a part of the Antitaurus mountains located on this side of the Euphrates, the middle of which is 72 41 40

and that which is called the Abas mountains the middle part of which is

in 77 41 10

and the Gordyaei mountains, the middle of which is located in 75 39 40

The rivers which flow through this land are the Araxes river, the mouth of which is

in the Hyrcanium sea in the
location 79 45 43 50
the sources of which moreover are
in 76 30 42 30
increasing toward the east as far as the Cas-
pius mountains, then turning toward the
north, one part empties into the Hyrcanium
sea, another joins with the Cyrus
in 78 30 44 30
and a part of the Euphrates river from that
turning, which is from the east, as we have
said, to the sources which are
in 75 40 42 40

And there is another noted river which
empties into the Euphrates river, the ter-
minus of which, where it joins with the
Euphrates is 71 30 40 30
and the terminus near the source
is 77 41

then that part of the Tigris river which is
within the region of Armenia from the en-
trance on the south border to the sources of
the river, the location of which is

in 74 40 39 40
forming there the lake which is called
Thospitis. There are other lakes, one of
which is called Lychnitis, the middle of
which is in 78 43 15
and the Arsesa lake the middle of which
is 78 30 40 45

In the region of Armenia which is in-
cluded between the Euphrates river, the
Cyrus and the Araxes, is Cotarzena which is
near the Moschici mountains above that
which is called Bochaë near the Cyrus river,
and Tobarena and Totene near the Araxes
river and Colthene, and Soducene which are
below this; then along the Paryardes moun-
tains is Siracene and Sacapene; the towns in
this section are

Sala	73	20	44	20
Ascura	74		44	10
Baraza	75	20	44	10
Lala	76	10	44	
Santuta	77	20	44	20
Santaphara	78		44	20
Toga	78	50	43	20
Vathura	73		43	
Azata	73	45	43	15
Cholua	74		43	10
Sedala	74	40	43	45
Surta	74	30	43	40
Tastina	74	40	43	
Cozala	75	20	43	30

Cotomana	75	15	43	40
Batinna	76	10	43	40
Dizaca	76	50	43	10
Ptusa	77		43	45
Glisma	78	20	43	40
Choluata	78	45	43	40
Sacalbina	79	10	43	15
Arsarata	79	30	43	15
along the Euphrates river				
Bressus	72		42	15
Elegia	73	20	42	45
Chasira	74		42	40
Chorsa	74	40	42	50
Thalina	75	20	42	45
Harmaviria	76	40	42	45
Artaxata	78		42	40
Naxuana	78	50	42	45

In the section which is below this up to
that river which flows into the Euphrates in
the northern country are the regions, com-
mencing in the west, Basilisene, Bolbene
and Arsesa, below these Acilisene and
Astaunitis and Sophene near the same bend
of the river. The towns in this section are

Athua	71	30	42	30
Tinissa	73	30	42	30
Zoriga	71	30	42	
Sana	73	30	42	
Brizaca	74	50	42	30
Daranissa	76		42	20
Zogocara	77	15	42	20
Cubina	78	30	42	20
Codana	71	30	41	40
Cachura	72		41	20
Cholua	73	30	41	
Sogocara	74		41	
Phausya	74	15	41	45
Phandalia	74	50	41	30
Zaruana	75	40	41	45
Citamum	76		41	30
Anarium	76	50	41	30
Sigua	77		41	
Terua	78		41	50
Zurzua	78	30	41	40
Matustana	78		41	40
Astacana	78		41	
Tarina	72	20	41	
Balisbiga	73	40	40	40
Babila	74	20	40	45
Sagauana	75	15	40	45
Azara	76	10	40	50

In the remaining section located toward
the south between the Euphrates and the
sources of the Tigris, but below this is Anzi-

BOOK FIVE — CHAPTER XIII

tene, and Thospitis region; then Coriaea; and the towns in this section are

Elegerda	72	15	40	15
Mazara	71	20	39	50
Anzeta	72		39	30
Soita	72	50	39	30
Belcania	73	30	39	20
Seltia	74		40	
Thospia	74	20	39	50
Colchis	75	30	39	
Siauana	71	30	38	20
Arsamosata	73		38	20
Corrha	74	30	38	40

Moreover toward the east from the sources of the Tigris river is Bagranandene, and Gordyene which is below this, from which to the east is Cotaea and below this Mardi. The towns which are in these parts are

Tasca	75	30	40	10
Phora	76		40	10
Maepa	76	10	40	40
Buana	76	45	40	
Cholimma	77	45	40	40
Terebia	77	40	40	55
Daudyana	77	40	40	20
Caputa	79	20	40	30
Artemita	78	40	40	20
Thelbalane	76	15	39	50
Siae	75	45	39	40
Pherendis	74	40	39	20
Tagranocerta	76	45	39	40
Sardeva	75	50	39	10
Colsa	78		39	50
Tigranoama	79	45	40	
Artagigarta	75	20	38	45

CHAPTER XIII

*Location of Cyprus island
(Fourth map of Asia)*

CYPRUS, is surrounded on all sides by the sea, on the west alone by the Pamphylum sea, which side is thus described:

Acamas promontory	64	10	35	30
Paphus Nova (new)	64	20	35	10
Zephyrium promontory	64	10	35	5
Paphus Vetus (ancient)	64	30	35	
Drepanum promontory	64	30	34	45

On the south by the Egyptian sea and the Syriacum sea, which side is thus described: after the Drepanum promontory

Phrurium promontory	64	45	34	50
Curium town	65		35	

mouth of the Lycus river	65	20	35	5
Curias promontory	65	30	34	45
Amathus	65	45	35	
mouth of the Tetius river	66	10	35	
Citium town	66	15	35	
Dades promontory	66	30	35	
Throni town and promontory	66	45	35	

On the east alone by the Syriacum sea, which coast is thus described: after the Thronos promontory

Pedalium promontory	67		35	10
mouth of the Pediacus river	66	50	35	20
Salamis	66	40	35	20
Elaea promontory	67		35	40
Clides promontory	67	30	35	50

On the north by the Cilicius strait, which side is thus described:

Carpasia	66	50	35	50
Achaeorum Acte	66	40	35	50
Aphrodisium	66	30	35	40
Macaria	66		35	45
Cerynia	65	40	35	45
mouth of the Lapethus river	65	30	35	50
Lapethus town	65	20	35	50
Crommyon promontory	65	10	36	10
Soli	65		36	
Callinusa promontory	64	40	35	45
Arsinoe	64	40	35	35

In the eastern part of the island is Salamina, in the western Paphia; in those parts which are between these in the south are Amathusia and the Olympus mountains; in the north Lapethia.

The towns in the interior are

Chytrus	66	10	35	35
Tremithus	66	25	35	25
Tamassus	66	40	35	25

The islands near this are called the Clides, the middle part of which is

in	67	35	35	45
and the middle of the Carpasian islands is	67	5	35	45

CHAPTER XIV

*Location of Syria
(Fourth map of Asia)*

SYRIA is terminated on the north by Cilicia and the part of Cappadocia along that line which we have indicated running through the Amanus mountains;

on the west by the Syriacum sea, which side, in the following order, is thus described, after Issus and Cilicia Harbor:

Syria			
Alexandria near Issus	69	30	36 10
Myriandrus	69	30	35 50
Rhosus	69	20	35 40
Rhosis rocks	69		35 40
Seleucia Pieria	68	35	35 15
mouth of the Orontes river	68	30	35 30
river sources	70		33 20
Posidium	68	30	35 10
Heraclea	68	30	35 10
Laodicea	68	30	35 5
Gabala	68	20	34 55
Paltus	68	20	35 45
Balanea	68	20	34 35

Phoenices			
mouth of Eleutherus			
river	68		34 25
Simyra	67	50	34 20
Orthosia	67	40	34 20
Tripolis	67	30	34 20
Theuprosopon promontory	67	20	34 20
Botrys	67	30	34 5
Byblus	67	40	33 55
mouth of the Adonis river	67	40	33 45
Berytus	67	30	33 40
mouth of the Leonis river	67	30	33 35
Sidon	67	10	33 30
Tyrus	67		33 20
Ecdippa	67	10	33 15
Ptolemais	66	50	33
Sycaminon	66	50	32 55
Carmelus mountains	66	25	32 55
Dora	66	30	32 40
mouth of the Chorseas			
river	66	20	32 35

On the south moreover the border line of Judaea extends to the eastward, then to southward in the locality 67 10 32 20 and terminating in 68 31 and a part of Arabia Petraea along the line which, as we have said, leads to the terminus at Arabia Deserta the position of which is 70 30 31 50

On the east the border is terminated by the line which extends along Arabia Deserta to the Euphrates river near Thapsacus which position is in 73 20 35 5 thence along the Euphrates river near Mesopotamia, to the terminus on this river, which is on the border of Cappadocia and in the locality 71 20 38

The important mountains in Syria are the Pieria the central part of which is

in 69 40 35 40
and the Casius mountains, the central part of which is in 68 45 34 45
and the Libanus mountains, the terminal positions of which are in 68 45 34
and 70 33 15
and the Antilibanus mountains, the limits of which are in 68 33 20
and 69 40 32 30
and near Arabia Deserta are the Alsdamus mountains, the middle part of which is in 71 33

Near Judaea moreover are the Hippus mountains, the middle of which is in 68 10 32

The river which flows through this land, is that near which is Palmyra, the terminals of which are in 71 15 34
and 71 40 33 40
then the river Chrysorrhoas by name which flows by Damascus, the terminal positions of which are in 69 15 34
and 69 45 32
and part of the Jordan river which is near Lake Gennesaret, the middle position of which is 67 20 32 20
then the river which is called Singas, flowing down from the Pieria mountains on the north then turning to the east, in the position 71 37 30
it joins the Euphrates river in the location 72 37 20

The towns in the Syrian interior beginning on the north, are

In Commagene			
Areca	70	50	37 40
Antiochia near the Taurus			
mountains	70	15	37 20
Singa	71		37 30
Germanicia	70		37
Catamana	70	40	37
Doliche	70	40	36 40
Deba	70	20	36 30
Chaonia	70	30	36 20
and near the Euphrates river			
Cholmadara	71	15	37 50
Samosata Legio (xvi)			
Flavia	71	30	37 35

The towns in Pieria are

Pinara	69	50	36 30
Pagrae	70		36 5
and the Syrian pass	69	40	36 15

BOOK FIVE — CHAPTER XIV

The towns in Cyrrhestica are

Ariseria	71	37
Rhegia	71 15	36 50
Ruba	71 20	36 40
Heraclea	71	36 30
Niara	70 50	36 10
Hierapolis	71 15	30 15
Cyrrhus	70 10	36
Beroea	70 30	36
Batna	70 50	36
Paphara	71 30	36

The towns on the Euphrates are

Urima	71 45	37 30
Arudis	71 55	37 15
Zeugma	72	37
Europus	72	36 50
Caecilia	71 55	36 40
Bethammaria	71 50	36 30
Gerrhe	71 50	36 5
Arimara	72 10	36
Eragiza	71 50	36

The towns in Seleucis are

Gephyra	69 30	35 30
Gindarus	70	35 40
Imma	69 50	35 25

The towns in Casiotis are

Antiochia on the Orontes river	69	35 30
Daphne	69	35 25
Bacatailli	69	35
Lydia	69 30	35
Seleucia near Belum	69 30	34 45
Larissa	69 40	34 35
Epiphanea	69 35	34 25
Raphanea, Third Legion	69 15	34 15
Antaradus	68 15	34 15
Marathus	68 40	34 25
Mariame	69 20	34
Mamuga	69 20	33 45

The towns in Chalybonitis are

Thema	71 30	35 30
Acoraba	71 15	35 15
Derrhima	72	35
Chalybon	71 20	35
Spelunca	71 40	35 15

and on the Euphrates river

Barbarissus	71 55	35 45
Athis	72	35 30

The towns in Chalcidica are

Chalcis	70 30	35 40
Asaphidama	70 30	34 50
Tolmidessa	70 25	34 30
Maronia	71 10	34 30
Coara	70 50	34 10

The towns in Apamene are

Nazama	70 30	34 5
and toward the east from the Orontes river		
Thelmenissus	69 40	35
Apamea	70	34 45
Emisa	69 40	34

Towns in Laodicene

Scabiosa Laodicea	69 40	33 45
Paradisus	69 45	33 35
Iabruda	70	33 30

The inland towns in Phoenicia are

Arca	68	34
Palaeobyblus	67 45	34
Gabala	67 15	33
Caesarea Panias	67 40	33

The towns in Coelesyria and Decapolis are

Heliopolis	68 40	33 40
Abila which is called		
Lysinia	68 45	33 20
Saana	69 20	33 25
Ina	68 30	33
Damascus	69	33
Samulis	67 30	32 30
Abida	68 15	32 45
Hippus	68	32 30
Capitolias	68 45	32 30
Gadara	68	32 10
Adra	68 40	32 10
Scythopolis	67 40	31 55
Gerasa	68 15	31 45
Pella	67 40	31 40
Dium	67 50	31 50
Gadora	67 45	31 30
Philadelphia	68	31 20
Canatha	68 50	31 45

The towns in Palmurene are

Rhesapha	72 15	34 45
Cholle	71 45	34 30
Oriza	72 15	34 30
Putea	71 20	34 30
Adada	71 20	34 15
Palmyra	71 30	34
Adacha	72	34
Danaba	70 50	33 50
Goaria	70 30	33 30
Aueria	71 30	33 40
Casama	70 40	33 20
Odmana	70 10	33 10
Atera	71 10	33 15

The towns near the Euphrates are

Alalis	72 20	35 15
Sura	72 40	35 20
Alamatha	73	35 5

In the Bathanaea region from which toward the east is the Saccaea region, and below the Alsadamus mountains are the *Trachonitae Arabes*

Gerrha	70	32	50
Elera	70	32	40
Nelaxa	70	10	32 30
Adrama	69	10	31 30
Islands near Syria			
Aradus	68	34	30
Tyrus near the continent	67	33	20

CHAPTER XV

Location of Palestina or Judaea (Fourth map of Asia)

THE border of Palestina or Judaea on the north and the east is Syria along the line referred to above; on the south it is bordered by Arabia Petraea along a line drawn from the eastern terminus in the confines of Syria to the terminus in the confines of Egypt, the location of which terminus is 64 15 30 40 on the west by that part of Egypt which has been referred to, and continues on to the sea, and along that sea to the border of Syria, which coast is thus described:

After the mouth of the Chorseas river

Caesarea Stratonis	60	15	32 30
Apollonia	66		32 15
Iope	65	40	32 5
Iamnitarum harbor	65	30	32
Azotus	65	15	31 55
Ascalon	65		31 40
Anthedon	64	50	31 40
Gazaecorum harbor	65	45	31 30

Part of the Jordan river flows through Judaea toward the Dead sea, the middle position of which is in 66 50 31 10

The interior towns are

In Galilaea

Sapphuri	66	40	32 25
Caparcotni	66	50	32 5
Iulias	67	5	32 15
Tiberias	67	15	32 5

In Samaria

Neapolis	66	50	31 50
Thena	67	5	31 45

In Judaea toward the west of the river

Jordan			
Raphia	65		31 10
Gaza	65	25	31 45
Iamnia	65	40	32

Lydda	66		32
Antipatris	66	20	32
Drusias	66	30	31 55
Sebaste	66	40	32 10
Baetogabri	65	30	31 30
Sebus	65	40	31 25
Emmaus	65	45	31 50
Guphna	66	10	31 45
Archelais	66	30	31 45
Phaselis	66	55	31 35
Hiericus	66	45	31 25
Hierosolyma which now is called			
Aelia Capitolia	66		31 40
Thamna	66	15	31 30
Engadda	66	30	31 15
Bedoro	66	30	31
Thamaro	66	20	30 50

Toward the Orontes from the Jordan river

Cosmus	67	15	31 35
Livias	67	10	31 25
Callirrhoe	67	5	31 10
Gazorus	67	30	31 15
Epicaerus	67		31

In Idumaea all of which is west of the Jordan river

Berzaba	64	50	31 15
Caparorsa	65	30	31 15
Gemmaruris	65	50	31 10
Elusa	65	10	30 50
Mapsis	65	40	30 50

CHAPTER XVI

Location of Arabia Petraea (Fourth map of Asia)

ARABIA Petraea is terminated on the west by that part of Egypt to which we have referred; on the north by Palestina or Judaea and the part of Syria along the line which we have indicated as its southern border; on the south by the bend of the Arabian bay and by the Heroopolites bay to the terminus as indicated on the confines of Egypt near the Pharan promontory, which is located in 65 28 30 and by the bay, which is the Elanite, to its turn which is in 66 29 the position of the village Pharan is 65 28 40 The village Elana, which is located in the angle of a bay of this name, has this position 65 50 29 15 on the east its boundary is the line leading

to the eastern terminus of Syria, as we have indicated, and very near Arabia Felix, to the part of this line which is in 70 30 30 along the Arabia Deserta and the remaining part of the line.

The mountains in this land called Melanes (Niger) extend from that angle of the bay which is near Pharan, toward Judaea.

From these mountains toward the west along Egypt is Saracene; below this Munychiatis; below which on the bay is the Pharanita region; near the mountains of Arabia Felix are the *Raitheni*.

The towns and villages in the interior are

Eboda	65	15	30	30
Maliattha	65	45	30	30
Calguia	66	20	30	30
Lysa	65	50	30	15
Gubba	65	50	30	
Gypsaria	65	40	29	45
Gerasa	65	30	29	30
Petra	66	45	30	20
Characmoba	66	10	30	
Auara	66	10	29	40
Zanaatha	66	45	29	50
Adru	67		29	55
Zoara	67	20	30	30
Thoana	67	30	30	30
Necla	67	30	30	15
Cletharrho	67	50	30	20
Moca	67	50	30	10
Esbuta	68	30	31	
Ziza	68	45	31	
Maguza	68		30	45
Medaba	68	30	30	45
Lydia	69		30	40
Rabathmoba	68	30	30	30
Anitha	68	40	30	15
Surattha	69	15	31	10
Bostra legion III Cyreniac	69	45	31	30
Mesada	69	20	30	30
Adra	69	40	30	40
Corace	68		30	5

CHAPTER XVII

Location of Mesopotamia (Fourth map of Asia)

MESOPOTAMIA is terminated on the north by the part of Armenia Major which we have described; on the west by the part of the Euphrates river which, as we have stated, runs along the Syrian border; on the east by that part of the Tigris river,

which is near Assyria, from the confines of Armenia to the Hercules Altars, which location is in 80 34 20

On the south by the remaining part of the Euphrates river, along Arabia Deserta to the terminus, which position

is 76 15 33 20 and along Babylonia to its junction with the Tigris near that point which we call the Altars; the position of this junction is 80 34 20

There are mountains in Mesopotamia renowned by name as the Masius mountains the central part of which is

in 74 37 20 the Singaras mountains the central position of which is in 76 40 36 15

Moreover the rivers flowing through this land from the mountains which we have named, is that which is called the Chaboras the sources of which are in 74 37 15 it joins with the Euphrates river

in 74 35 10 and that which is called the Saocoras river the sources of which are in 75 37 30 it joins with the Euphrates river in 75 45 33 55

Anthemusia is the part of this region near Armenia, below which is the Calchitis region; below this the Gauzanitis and near the Tigris river is Acabene; below Gauzanitis region is the Ingene region and nearer the Euphrates is Ancobaritis.

The towns and villages in Mesopotamia near the Euphrates are

Porsica	72		37	30
Aniana	72	20	36	40
Baisampse	72	20	36	15
Sarnuca	72	10	35	50
Bersiba	72	20	35	50
Maubae	72	50	35	20
Nicephorium	73	5	35	20
Maguda	73	15	35	10
Chabora	74		35	10
Thelda	74	15	34	45
Apphadana	74	30	34	35
Banace	74	45	34	25
Zitha	75	10	34	20
Bethauna	76		34	15
Rescipha	76		34	
Agamana	76	30	33	30
Eudrapa	77	10	33	40
Addaea	77	15	34	
Pacoria	77	20	34	45

Tiridata	77	30	35	20
Naarda	77	40	35	30
Sipphara	78	15	35	40

The position of the Euphrates where it divides into that which flows through Babylonia, and that which flows through Seleucia called the Regius river is

in	79		35	40
Seleucia town	79	20	35	40

On the banks of the Tigris river there are the following towns:

Dorbeta	76		38	
Sapphe	76		37	40
Deba	76		37	20
Singara	76		37	
Betoun	77		36	45
Lambana	77	50	36	30
Birtha	78	45	36	20
Carthara	79		36	15
Manchane	79	10	36	15

and below Seleucia

Scaphe	79	45	34	30
Apamea	79	50	34	20

below which is the junction of the Regius river and the Tigris

In the interior are the following towns:

Bithias	72	20	37	40
Edessa	72	30	37	30
Ombræa	73		37	10
Ammaea	73	20	37	50
Suma	73	30	37	40
Rhisina	73	30	37	30
Olibera	73	30	37	
Sarrara	74		38	15
Sacane	74	20	37	45
Arxama	74	40	37	15
Gizama	74	20	37	15
Sinna	74	15	37	30
Mambuta	74	45	37	25
Nisibis	75	10	37	30
Bithiga	75	10	37	45
Baxala	75	30	37	
Auladis	73		36	40
Ballatha	73	45	36	40
Carrae	73	15	36	10
Tirittha	73	50	36	15
Thengubis	74	40	36	30
Orthaga	74	40	36	
Eleia	75	40	36	45
Zama	75	30	36	20
Sinna	76	20	36	40
Gorbatha	77		36	15
Dabausa	76		36	
Bariana	77	40	36	

Acraba	73	10	35	50
Apphadana	74		35	30
Rhesaena	74	40	35	40
Peliala	75	45	35	50
Aluanis	74	15	35	20
Bimatra	76	15	35	20
Daremma	76	20	35	

CHAPTER XVIII

Location of the Arabia Deserta (Fourth map of Asia)

ARABIA Deserta is terminated on the north by that part of Mesopotamia which borders on the Euphrates river as we have noted; on the west by a part of Syria and of Arabia Petraea; on the east by Babylonia separated by those mountains which begin at the terminus as we have indicated, near the Euphrates river extending to the interior bend of the Persian gulf near the bay, the location of which terminus is

in	79		30	10
and that part of the Persian gulf to a terminus, the location of which is	79		29	

on the south moreover by Arabia Felix terminating in the confines of Arabia Petraea which we have indicated as being near the Persian gulf.

The *Cauchabeni* inhabit the parts of Arabia Deserta which are near the Euphrates river, the *Batanaei* the parts near Syria, the *Agubeni* the parts which are near Arabia Felix, next to these are the *Rhaabeni*, and the *Orcheni* on the shore of the Persian gulf; the *Aesitæ* inhabit the parts near Babylonia and the parts which are below the *Cauchabeni*, and above the *Rhaabeni* the *Masani* (inhabit); in the interior moreover are the *Agræi* near the *Batanaei*, and the *Marteni* near Babylonia.

The towns and villages in this land and in that near the Euphrates river are

Thapsacus	73	30	35	5
Birtha	73	40	35	
Gadirtha	73	50	34	45
Auzara	74	5	34	30
Audattha	74	15	34	20
Addara	74	20	34	10
Balagæa	75		34	
Pharga	75	40	34	
Colarina	75	30	33	40
Belgynæa	76		33	30

In the parts near the Persian gulf are the towns

Ammaea	79	30	10
Idicara	79	29	30
Iucara	79	29	15

The inland towns are

Barathena	73	20	33
Save	73		33
Choce	72	30	32 30
Gauara	73	40	32 40
Aurana	73	15	32 20
Rhegana	75	40	33 20
Alata	72	30	32
Erupa	72	30	31 15
Themme	75		31 40
Luma	75	40	31
Thauba	72	45	30 30
Sevia	73	30	30 30
Dapha	74	15	30 30
Sora	75		30 20
Odagana	76	15	30 40
Tedium	77		30 30
Zagmais	76	30	30 10
Arrade	71	30	30 15
Obaera	71		30 45
Artemita	72	15	30 10
Banatha	73	15	29 40
Dumaetha	75		29 40
Alata	75	40	29 30
Bere	76	40	29 30
Calathua	77	30	29 30
Salma	78	20	29 30

CHAPTER XIX

*Location of Babylon
(Fourth map of Asia)*

BABYLONIA is terminated on the north by Mesopotamia along the parts of the Euphrates river we have described; on the west by Arabia Deserta, next to which are the mountains which we have described; on the east by Susiana along the remaining parts of the Tigris river as far as its eastern mouth which opens into the Persian gulf in 80 30 31 on the south by a part of the Persian gulf as far as the terminus located on the border of the Arabia Deserta.

The river flowing through this land, is a large river, and running through Babylonia,

is called the Macarsares; it unites with the Euphrates in 78 20 35 40 flowing into Babylonia in 79 34 20 these rivers form the arm of the lake and the swamp, the middle part of which is in 78 30 32 30

Moreover the region adjoining the Euphrates is called the Auranitis region, and that adjoining Arabia Deserta is called Chaldaea; surrounding the marshes is Amardocaea; below which are the habitations of those who are called the *Strophades*.

The towns and villages in Babylonia on the Tigris river to the sea below the city Apameam are

Bible	79	45	34
Didigua	79	30	33 40
Punda	79	40	33
Batracharta	79	40	32 40
Thalatha	80		32 10
Altha	79	30	31 15

Between the mouths of the Tigris river, that is, that which is toward the east

in	80	30	31
and that to the west	79	30	30 15
Teredon	80		31 10

In the region near the Euphrates river

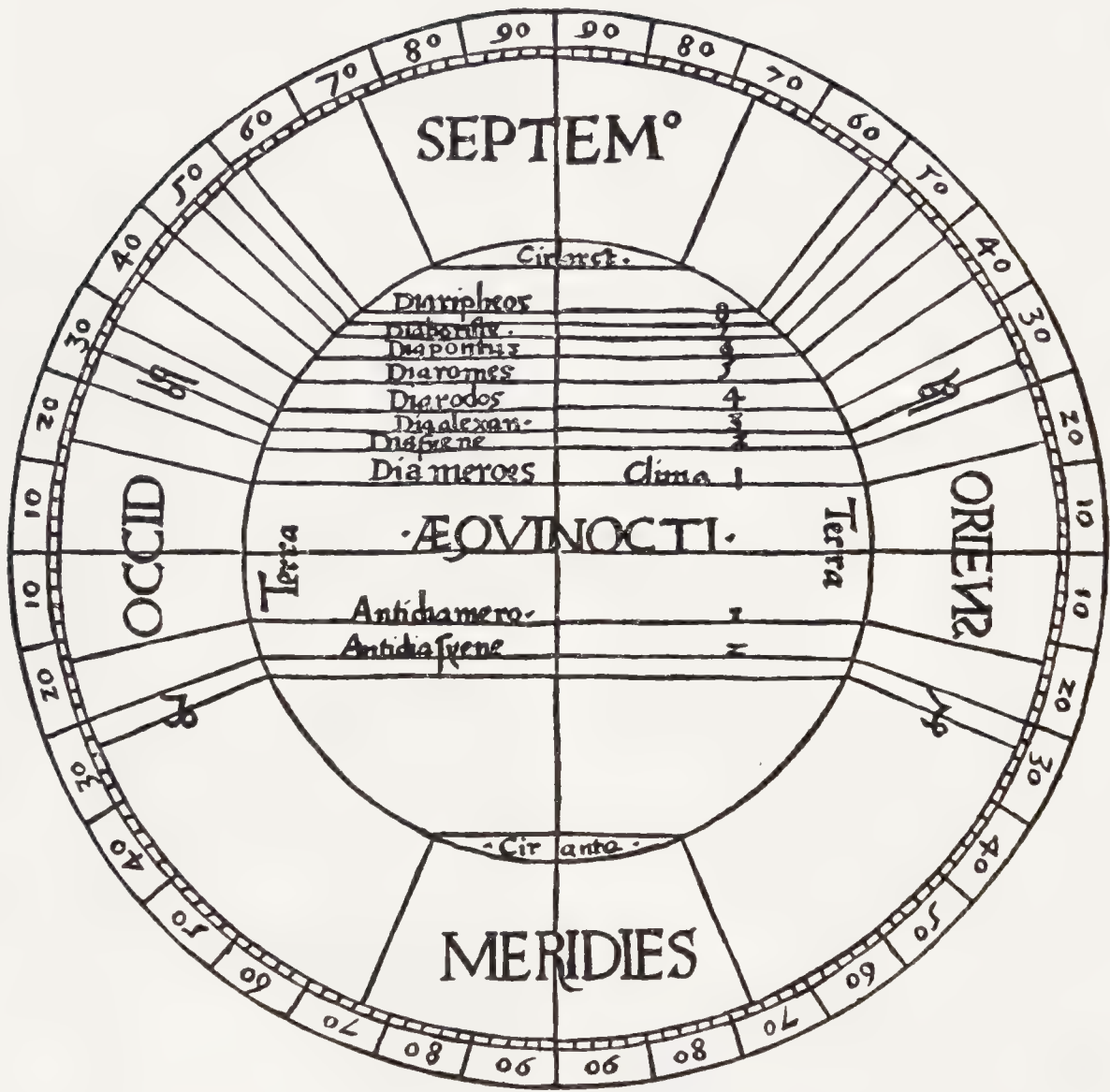
Idicara	77		33 20
Duraba	77	40	34
Thaccona	77	45	34 30
Thelbencane	78	30	35 30

On the river flowing through Babylonia

Babylon	79		35
On the Macarsares river			
Volgaesia	78	20	34 30
Barsita	78	45	34 20

Below these near the swamps and Arabia

Deserta			
Beona	79		32 40
Chuduca	78		33 20
Chumana	79		33 10
Caesa	76	40	32 50
Birande	77	30	32 30
Orchoe	78	30	32 40
Bethana	79		32 55
Thelme	76	40	32
Sorthida	77		32 30
Iamba	78		31 20
Rhagia	78	40	31 20
Chiriphe	79	15	31 10
Rhatta	79	15	30 50



BOOK SIX



*The following descriptions are contained
in Book Six:*

Description of the regions in Asia Major.

1. Assyria	Map V
2. Media	
3. Susiana	
4. Persia	
5. Parthia	
6. Carmania Desert	
7. Arabia Felix	Map VI
8. Carmania	
9. Hyrcania	Map VII
10. Margiana	
11. Bactriana	
12. Sogdiana	
13. Sacae	
14. Scythia this side the Imaus mountains	
15. Scythia beyond the Imaus mountains	Map VIII
16. Serica	
17. Aria	Map IX
18. Parapanisades	
19. Drangiana	
20. Arachosa	
21. Gedrosia	

Provinces XXI

Maps V

CHAPTER I

*Location of Assyria
(Fifth map of Asia)*

ASSYRIA is terminated on the north by the part of Armenia Major, as we have said, next to the Naphates mountains; on the west alone by Mesopotamia along the designated part of the Tigris river; on the south by Susiana to the boundary which runs along the Tigris river to the terminus, the location of which is in 84 36 on the east by the part of Media extending along the boundary joining those two termini, which we have named, along which boundary are the Choathras mountains, the terminal locations of which are 80 39 30 and 83 38

The part of this land which is near Armenia is called Arrapachitis; that which is near Susiana is called Sittacena; between these the *Garamaei* dwell; near these between Arrapachitis and the *Garamaei* is Adiadena; that which is between the *Garamaei* and Sittacena is called Apollonitas, and the race of the *Sambatae* is above this; above Adiadena is located Calacena and above the *Garamaei* is the Arbelitis region.

Rivers flowing through this land empty into the Tigris river, as the Lycus, the sources of which rivers are

in	78	39
the Lycus unites with the Tigris		
in	79	36 20
and the Gorgos river, the sources of which are in	83	38
unites with the Tigris in	80	35 40

The towns and villages of Assyria and in that part near the Tigris are

Marde	76	38 15
Savara	76	37 15
Bessara	77	37 20
Belciana	77 30	37
Ninus	78	36 40
Sacada	78 30	36 30
Oroba	79 20	36 20
Thelde	80	36
Ctesiphon	80	35
in the remaining interior region		
Birhaba	77 40	38 40
Dartha	78 30	38 45
Zigira	79 40	38 45
Darna	80 30	39 30
Obana	81	39
Thesara	81 15	38 20
Corcura	78 20	38 10
Oroba	79 20	38 10
Degia	80 45	38 10
Comopolis	81 30	38 10
Dosa	79	37 45
Gaugamela	79 30	37 15
Sarbina	79	37
Arbela	80	37 15
Gomara	81 20	37 30
Phusiana	82 10	37 40
Isona	82 30	37 30

Sura	83	36	40
Chatracharta	80	30	36 10
Appolonia	81	30	36 30
Thebura	83	20	36 45
Arrapa	82		36 30
Cinna	83	20	36 10
Artemita	81	15	36
Sittace	82		35 30

CHAPTER II

*Location of Media
(Fifth map of Asia)*

MEDIA is terminated on the north by a part of the Hyrcanium sea, which is thus described: after the terminus indicated on the border of Armenia are

Sanina	80	43	
mouth of the Cambysis			
river	81	42	45
river sources	80	41	
Taxina	81	40	42 30
Sabaea Altars	82	30	42 30
mouth of the Cyrus river	84	42	15
river sources	82	39	30
Cadusiorum fortification	84	40	42
Cyropolis	85	30	41 30
mouth of the Amardus			
river	86	30	41 30
river sources	85	38	30
these rivers flow through a lake which is called Margiana located in the interior	82	30	39 20
Amana	87	30	40 40
Acola	88	15	40 15
mouth of the Stratonis			
river	90	20	40
river sources	88	38	30
Mandagarsis	92	40	
mouth of the Charinda			
river	93	40	30
the terminus located on the confines of Hyrcania is in	94	40	30
on the west the border is Armenia Major and Assyria along their eastern confines as we have indicated; on the south the border is Persia to the line beginning at the terminus near Assyria and Susiana thence leading from that position to that which is located in	94	34	30

This border is the western part of the Parchoathras mountains; on the east is Hyrcania and Parthia to the southern line, joining the indicated termini, which runs

along Hyrcania and Parthia, the position is in 94 39

The most important mountains of Media are the Zagros, the middle part of which is in 85 38 the Orontes, the middle part of which is in 88 30 38 the Iasonius, the middle part of which is in 90 30 36 and the western part of the Coroni, the western terminus of which is in 92 38

The *Caspi* dwell in the western part near Armenia, below whom is Margiana extending along the entire side of Assyria; near the sea moreover are the *Cadusi*, the *Geli*, and the *Dribyces*, next to whom, extending into the interior, are the *Amariacae* and the *Mardi*. The *Carduchi* inhabit the regions which are near the land of the *Cadusi*; the *Marundae* to Lake Margiana; then the *Margasi* who are below the *Geli*; after these is Propatena extending as far as Amariaca; and then the *Sagarti* toward the east of the Zagros mountains, after which is the Choromithrena region which extends even to Parthia; on the north of which is Helymais, from which to the source of the Charindas river are the regions the *Tapuri* inhabit; moreover toward the south from Choromithrena is Sidica, Sigrianica and Rhagianana, and from these below the Iasonius mountains is the region of the *Vadassi* and the *Dariti*; the Syromedia region runs along the entire boundary of Persia.

Moreover the Zagri pass is located in 84 30 37 and the Caspian Gates in 94 37

The towns and villages in the interior of Media are

Scabina	79	30	42
Gabale	80		42
Uca	80	40	42 30
Varna	81		42
Candys	83	30	42
Gabris	80	20	41 15
Sazoa	80	50	41 10
Tonzarma	81	30	41 30
Azaga	81	15	41 10
Morunda	82	20	41 10
Tigrana	82	40	41 30
Pharambara	84	10	41 20
Tachasara	84	20	41
Zalace	86	15	41

BOOK SIX — CHAPTER III

Aluaca	80	40	40	30
Gauzania	82		40	40
Phazaba	82	30	40	10
Pharaspa	85	30	40	30
Curna	86	15	40	30
Phanaspa	86	30	40	
Gabris	87	40	40	20
Nande	81	40	39	40
Zazaca	83	40	39	30
Saraca	85	15	39	20
Mandagara	87	45	39	30
Aganzana	89		39	30
Galla	90	10	39	15
Oracana	91		39	30
Alicadra	93		39	
Phanaca	93	20	39	30
Nazada	83		38	10
Arsisaca	85		38	40
Alinza or Horosa	84		38	
Alisdaca	86	40	38	45
Dariausa	87	30	38	30
Sincar	88		38	30
Batina	89		38	40
Vesaspa	89	40	38	40
Niguza	90	15	38	
Sanais	92		38	20
Razunda	93	20	38	40
Veneca	93	20	38	15
Bithia	85	30	37	40
Alinza	86	10	37	45
Zaranis	86		37	
Gabena	87		37	30
Larasa	87	10	37	10
Ecbatana	88		37	45
Choastra	89		37	40
Niphavanda	88	50	37	10
Guriauna	91		37	20
Choana	92		37	15
Trauaxa	93		37	40
Auradis	93	40	37	15
Thebarga	84	15	36	40
Carine	85	10	36	20
Caberasa	86		36	30
Parachana	87	40	36	
Arsacia	88		36	30
Gauna	88	45	36	30
Heraclea	89		36	40
Zania	90	15	36	50
Aruzis	91		36	20
Zarama	92	20	36	30
Tautice	93	20	36	15
Europus	93	40	36	40
Abacaena	93		36	
Cigbina	87		35	30

Dottha	88		35	25
Geresa	89	40	35	20
Rapsa	90	10	35	40
Andriaca	91		35	10
Cluaca	92	40	35	10
Argarausdaca	93	20	35	20
Canatha	93	30	35	45
Aradriphe	93	20	34	45

CHAPTER III

Location of Susiana (Fifth map of Asia)

SUSIANA is bounded on the north by that side of Assyria, the termini of which boundary we have indicated above; on the west by Babylonia along the designated part of the Tigris river to its termination on the sea coast; on the east by Persia along the boundary from the indicated terminus in the confines of Assyria and Media to the mouth of the Orontes river emptying into the Persian gulf, that is, from the Tigris to the mouth of the Orontes river, the location of which is 86 30 30 30

this coast is thus described:
after the other mouth of the Tigris river which is toward the east through which it flows into the sea 80 30 31

Charax Pasini 80 40 31
mouth of the Mosaeus river 82 30 40
river sources 82 30 33

Pelodes (Cenosus) bay 83 31
mouth of the Eulaeus river 84 30 30 40

The sources of the river which are in Susiana are in 83 35

The sources of the river in Media are in 86 38

Vadum arenosus 84 30 30 30
mouth of the Oroatis river 86 30 30 30
river sources 88 30 34 40

The *Elymaei* dwell on the maritime coast of Susiana, the *Cossaei* in the country on the border of Assyria; the region which is near the Tigris bank is called Melitene, that which is next to Persia (is called) Cabandene, that above Characena (is called) Characene; above the *Elymaei* is Cissia, above this Chaltapitis, between which and Cissia is the Decra country.

There are towns and villages in Susiana, and on the banks of the Tigris river next to the Herculis Altar, the locations of which are 80 34 5

Agra	80	30	33	45
Aracca	80	10	32	40
Asia	80	10	31	40
The towns in the interior are				
Palinza	83	45	35	30
Sacrone	82	45	35	
Bergan	84	15	34	45
Susa	84		34	15
Saura	85		34	
Dera	81	30	33	40
Agarra	83	40	33	20
Abina	85	10	33	10
Tariana	82		32	30
Sele	84		32	30
Graan	82		31	30
Anuchta	83	30	31	40
Urzan	84	40	31	40
The island adjacent to Susiana is				
Taxiana	84		29	20

CHAPTER IV

Location of Persia (Fifth map of Asia)

ON the north the border of Persia is Media along the line running through the Parchoathras mountains; on the west is Susiana, the eastern line of which territory we have indicated; on the east it is bordered by Carmania to the southern line near the terminus in the border of Media and Parthia running to the mouth of the Bagradus river in the Persian gulf in 94 29 15 on the south by the Persian gulf from the mouth of the Oroatis river to the mouth of the Bagradas river, which coast is described as follows: next to the mouth of the Oroatis river

Taoce promontory	87	30	30	10
mouth of the Rhogomanis river	88	30	30	
river sources	92		35	
Chersonesus promontory	89	40	29	30
Ionaca town	90		29	45
mouth of the Brisoana river	92		29	40
river sources	93		34	30
Ausinza	93		29	20
mouth of the Bagradas river	94		29	15
river sources	94		35	15

The region of Persia which is near Media is called Paraetacene, from which toward the south are the *Mesabatae* and the *Rapsi*,

below whom is Misdia, and as far as the sea Mardycena and Taocena, and the *Hippophagi* and *Suzaei*; also below Mardycena are the *Megores*, above the *Suzaei* more-over the *Gabaei*.

The towns and villages in the interior of Persia are

Ozoa	85	45	35	20
Tanagra	86		34	30
Marrasium	92	30	34	30
Aspadana	86		33	50
Axima	87	45	33	50
Poryospana	89		33	50
Persepolis	90	15	33	20
Niserge	91		34	
Sicta	91	30	34	
Arbua	92	15	33	
Cotamba	93	30	33	40
Poticara	87	15	32	15
Ardea	88		32	30
Cauphiaca	89		32	30
Batthina	90		32	20
Cinna	92	20	32	20
Paradona	93	50	32	15
Taepa	87		31	45
Tragonice	87	40	31	40
Maetona	89	10	31	45
Chorodna	90		31	15
Corra	91	20	31	40
Gabra	92	15	31	30
Orobatis town	87		30	50
Taocae	89		30	20
Parta	90		30	20
Mammida	91		30	20
Usia	91	40	30	
Pasarracha	93		30	30
Gabe	93	40	30	10

Islands adjacent to Persia

Tabiana	87		29	15
Sophtha	88		29	20
Alexandria or Aracia	90		29	

CHAPTER V

Location of Parthia (Fifth map of Asia)

PARTHIA is bordered on the west by a part of Media, as we have set forth; on the north by the line extending along the Hyrcanian region and through the Coronus mountains to the terminal position in the same, the location of which is in 101 39 on the east by the boundary line of Aria from

the terminus, which we have mentioned, leading through the Masdoranus mountains to the end in 102 30 33 20 on the south by the border line of the Carmania Deserta, which runs through the Parchoathras mountains.

The part of Parthia which joins Hyrcinia is called Comisena, below which is Parthyena; next is Chorana and Partauticena, after this is Tabicena near Carmania, then Sobide.

The towns and villages of Parthia are the following:

Ambrodax	94	30	38	20
Oeminia	95		38	40
Caripraca	97	15	38	40
Rhoara	78	30	38	20
Suphtha	100		38	30
Araciana	94	15	38	
Dordomana	94	15	37	40
Hecatompylon regia	96		37	50
Sindaga	96	10	37	
Parbara	98	50	37	30
Mysia	100	30	37	30
Charax	94	15	36	40
Apamia	94	15	36	
Semina	96		36	40
Marriche	98		36	40
Tastache	99		36	20
Armiana	101	20	36	10
Choana	95	15	35	30
Pasacartia	94	15	35	15
Rhuda	95		35	
Simpsimida	96	30	35	40
Artacana	96		34	30
Appha	98	30	35	20
Rhagaea	98	20	34	20

CHAPTER VI

Location of Carmania Deserta (Fifth map of Asia)

THE Carmanian desert is bordered on the west by that part of Persia which is terminated by the Bagradas river thence to the terminus in the Parcoathras mountains the location of which is in 94 31 on the north by Parthia the border of which runs through the Parcoathras mountains; on the east by a part of Aria along the line which we have indicated, to the terminus which is located in 104 28 50 on the south by the border line of Carmania

Pars uniting the indicated termini. The regions of the *Isatichae* and *Chuthi* are used as pasture lands in the southern parts; in the interior are the *Gadanopydres*; the region in the north and the east is called Modomastica.

CHAPTER VII

Location of Arabia Felix (Sixth map of Asia)

ARABIA Felix is terminated on the north by the designated border of Arabia Petraea and of Arabia Deserta; on the northeast by a part of the Persian gulf; on the west by the Arabian gulf; on the south by the Red sea; on the east by that part of the Persian gulf and the sea, which extends from the entrance to this gulf as far as the Syagros promontory.

The maritime coast of this region is thus described: from the terminus of the Arabian gulf near the Elanite bay:

The Arabian gulf

Omne	66	20	28	50
Modiana	66	40	27	45
Hippos mountains	66	30	27	20
Hippos village	67		26	40
Phoenicum village	67	20	26	20
Raunathi village	67	15	25	40
Chersonesus promontory	67		25	40
Iambia village	68		24	

The *Thamyditae* inhabit the upper shore of this gulf, and then the *Sideni*; then the *Darrae*; next to these the *Banubari*; then the *Arsae*.

Cinaedocolpите region

Copar village	68	30	23	15
Arga village	69		22	40
Zabram region	69	20	22	
Centos village	69	20	21	30
Thebe town	69	40	21	
mouth of Betius river	69	30	20	40
river sources	76		24	30

Cassanita region

Badeo regia	70		20	15
Amba town	70	40	19	30
Mamala village	71	45	18	10
Adedi village	72	15	17	10

Elesara region

Pudni town	72	30	16	30
Eli village	73	30	16	30
Napegus village	73	30	15	
Sacatia town	74	15	14	30

PTOLEMY'S GEOGRAPHY

Muza market town	74	30	14	Persian gulf			
Sosippi port	74	45	13	In the widely extended bay of the <i>Ichthy-</i>			
Pseudocelis	75		12 30	<i>ophagi</i> near which toward the interior, are			
Ocelis market town	75		12	the <i>Macae</i> ; then the towns of the <i>Anaritae</i>			
Palindromus promontory	74	30	11 40	Rhegama town	88	23	10
on the strait entering the Red sea				Sacrum Sun promontory	87	20	23 30
Posidium promontory	75		11 30	mouth of the Laris river	86	30	23 30
Sanina town	75	30	11 45	river sources	81		18
Cabubathra mountains	76	15	11 15	Capsina town	86		23 10
Homerita region				Cauana town	85		23
Modocae town	77		11 45	then of the <i>Egei</i>			
Mardacha town	78		11 45	Sarcoa town	84	15	23
Lees village	78	40	11 30	Carada town	83	40	23 30
Ammonium promontory	79	20	11 10	Atta village	82		23 15
Arabia market town	80		11 30	then of the <i>Gerraei</i>			
Agmanispha village	80	40	11 45	Magindanata town	81		23 20
Niger mountains	81	30	11 45	Gerra town	80		23 20
Atramita region				Bilbana town	80		24 10
Abisama town	82		11 45	then of the <i>Thaemi</i>			
Magnum coast (littus)	82	30	11 30	Ithar town	80		25
Mada village	83		11 30	Magorum bay	80		25 20
Eristha town	83	30	11 45	Istriana town	80		25 40
Parvum coast (littus)	83	40	11 30	then of the <i>Laenitae</i>			
Canamarket town and				Mallada town	80	10	26 10
promontory	84		11 30	Chersonesus promontory	80	20	26 30
Trulla harbor	84		12 40	Leanites bay	79	15	27
Maethath village	84	20	13	Itamos harbor	79	40	27 40
Prionotus mountains	84	40	13	Adari town	79	15	27 40
mouth of the Prionis river	85		13 30	then of the <i>Abucei</i>			
river sources	82		17 30	Sacer bay	78	15	28 15
Embolium village	85	30	13 20	Coromanis town	79		28 45
Pretos harbor	86	20	13 45	next the terminus on the confines of the			
Thialemath village	87		14	desert and the Mesanites			
Mosoha harbor	88	30	14	bay	79		30 10
Syagros promontory	90		14	The noted mountains of this land are			
Sachalitarum in Sachalite bay				those which we have mentioned toward the			
Metacum village	88		16	interior which are called the Zames, the			
Ausara village	87	20	16 45	middle part of which is located			
Anga village	87	30	17 30	in	76		25
Astoa village	88	30	18 30	the Marithi mountains	80		21 10
Neogilla naval station	89		19	the Climax mountains	76	30	16
mouth of the Hormanus				near which mountains is the fountain of the			
river	89	30	20 30	Stygian waters	78		15
Didyma mountains	90	15	19 20	other mountains wanting names			
Coseude town	91		20	above Cinaedocolpitaie	71		25
Oracle of Diana	91	40	20	above Cassanitae	73		20
Abissa town	92	20	20 15	below the Marithos moun-			
Corodamum promontory	93		20 15	tains	84	30	17 40
At the entrance to the Persian gulf				and above the Asabon moun-			
Cryptus harbor	92	40	21 30	tains	88		22 30
Melanes mountains which are called Asa-				The <i>Scenitae</i> dwell in the interior near			
bon, the middle part of which is located near				that part toward the north which is entirely			
the sea	93		22	mountainous; above are the <i>Oaditae</i> ; to-			
Asabon promontory	92	30	23 30	ward the south from these are the <i>Saraceni</i>			

and the *Thamydeni*; then around the Zames mountains and toward the west from this are the *Apataei* and the *Atritae*, and near these the *Mesamanes* and the *Udeni*; toward the east are the *Laeeni*, the *Asapeni* and the *Iolysitae*; to the south are the *Catanitae*, then the *Thanuitae*; from these toward the west the *Manitae*, above whom are the *Alapeni*, and near Cinaedopolita the *Malichae*. And below the *Manitae* is the Smyrnofera interior region; then the *Minaei*, a numerous race, below whom are the *Doreni* and the *Mocritae*; then the *Sabaei* and the *Anchitae* above the Climax mountains; around the Marithos mountains are the *Malangitae* to the north, and the *Dachareni*, the *Zeiritae*, then to the south the *Bliulaei* and the *Omamitae*, from whom to the river source are the *Cottabani* as far as the Asabon mountains, below whom is the Libanotofera region; then near the Sachalita region are the *Iobaritae*; below the *Gerraei* are the *Alumaeotae*, then the *Sophanitae* and the *Cithibanitae*, and extending as far as Climax mountains the *Arabانيتae*; below all these the *Chatramonitae* from the Climax mountains even to Sachalitas; toward the south from the Climax are the *Masonitae*; then the *Asaritae*, and near Homerita the *Sappharitae* and the *Ratheni*, above whom are the *Maphoritae*, thence to the beginning near the *Chatramonitae* is the Smyrnofera exterior region; near Syagrum as far as the sea are the *Ascitae*.

The towns and villages which are in Arabia Felix in the interior are the following:

Aramava	67	30	29	10
Ostama	69	30	29	
Thapava	71	40	29	
Macna	67		28	45
Angala	68	15	28	45
Madiama	68		28	15
Achrona	70		28	15
Obraca	71	30	28	20
Rhadi village	73	30	28	30
Pharatha	73	40	28	40
Satula	77	30	28	10
Laba	68	10	27	40
Thaema	71		27	
Gea town	71	15	27	20
Aina	75	40	27	20
Lugana	76	30	27	15
Gaesa	78	40	27	15

Soaca	68		26	15
Egra	70	30	26	
Salma	74	30	26	
Arra village	75	40	26	10
Digema	77		26	30
Saptha	78	15	26	20
Phigea	79		26	
Badais	68	30	25	30
Ausara	71		25	30
Iabri	74	30	25	
Alata	77	20	25	30
Mochura	69	40	24	30
Thumna	71	10	24	50
Alvara	71		24	15
Phalbinum	73	15	24	
Salma	73	20	24	20
Gorda	76	10	24	30
Marata	79	20	24	20
Ibirtha	79	40	24	40
Lathrippa	71	40	23	20
Carna	73	30	23	15
Biavanna	76	30	23	
Goeratha	77	40	23	
Catara	79	30	23	20
Baeba	71	30	22	30
Macoraba	73	20	22	
Sata	81	10	22	20
Masthala	81	45	22	30
Domana	82	20	22	30
Atia	85		22	15
Ravana regia	87		22	
Chabuata	89	15	22	
Thumata	74	20	21	20
Olaphia	77	40	21	45
Inapha	79	10	21	40
Tiagar	85		21	20
Aspa	91		21	
Agdamum	73	30	20	20
Carman regia	75	15	20	15
Irala	80	20	20	15
Maocosmus metropolis	81	15	20	40
Labris	82		20	15
Lattha	83	20	20	15
Accipitrum village	84	30	20	30
Albana	71	30	19	15
Chargatha	73	10	19	15
Laththa	75	20	19	20
Omanum market town	87	40	19	45
Marasdu	74	30	18	30
Mara metropolis	76		18	40
Amara	78	30	18	40
Nagara metropolis	81	45	18	40
Iula	85	20	18	15
Magulaba	75	30	17	

PTOLEMY'S GEOGRAPHY

Sileum	76	40	17
Mariama	78	10	17 10
Thumna	79		17 15
Vodona	80		17 20
Marimatha	85	10	17 40
Saba	73	40	16 55
Menambis	75	45	16 30
Thauba	78	40	16 10
Saudatha metropolis	77		16 30
Madasara	81	45	16 20
Gorda	82	30	16
Thabane	85	40	16 20
Miba	74	20	15 20
Source of Stygia water	78		15
Draga	79	10	15 15
Sarvon	80	40	15 15
Maepha metropolis	83	15	15
Saraca	75	30	14 30
Sapphar metropolis	78		14
Ara regia	80	30	14 30
Rhaeda	83	40	14 10
Baenun	84	30	14 15
Thuris	75	15	13
Lachchera	77	30	13 20
Hyacla	79		13 50
Maccala	81		13 45
Sachla	82	40	13 20
Sava regia	76		12
Deva	77	40	12 45
Sochchor	78	30	12 40
Bana	80	20	12 40
Dela	82		12 40
Coa	83	30	12 30

Islands adjacent to this region and those which are in the Arabian gulf are

Aeni	65	45	27 20
Timagenis	66		25 45
Zygena	66	15	24 20
Daemonum	66	45	23 15
Polybii	67	40	27 40
Accipitrum	69	30	19
Socratis	70		16 40
Cardamine	71		16
Are	71	30	15 20
Combusta	70	30	14 30
Malicha II	71	40	14
Adani duae	72	30	12 30

in the Red sea

Agathoclis II	81	20	10
Cocconati III the middle of which	83		9
town of Dioscordi island	86	40	9 30
terminus of the western island	85		10 30

Trete	86	30	12
and near Sachalites bay, the islands the middle of which is	91		16 30
Organa	92		19
Sarapidis, in which is a temple in the Persian gulf	94		17 30
Apphana island	81	20	28 40
Ichara	82		25
Tharo	85	15	24 45
Tylus	90		24 40
Arathos	91	40	24 40

CHAPTER VIII

Location of Carmania (Sixth map of Asia)

CARMANIA is terminated on the north by the line which we have referred to as extending along the side of Carmania Deserta: on the east by Gedrosia along the Persian mountains, and running through these to the southern boundary as far as the confines of the desert located near the Indian sea, which terminus is

in 104 20 on the west by a part of Persia to the terminus on the border of Carmania Deserta, at the mouth of the Bagradas river, and where it is called the Carmanicus bay, a description of the coast of which is the following:

After the mouth of the Bagradas river mouth of the Daris river 95 15 28 40 mouth of the Cathrapius river 95 30 27 40 mouth of the Corius river 96 26 mouth of the Achindanus river 96 40 26 mouth of the Andanis river 96 25 mouth of the Saganus river 95 40 24 30 Armuca 94 30 23 30 Armozon promontory 94 23 40 Carpella promontory 94 22 10 on the south by that part of the Indian sea which extends to the indicated terminus; of this part the following is a description:

From the Carpella promontory in the Paragonicus bay Canthatis town 96 22 30 Agris 96 30 23 Commana 97 30 23 Rhogana 98 15 22 30

BOOK SIX — CHAPTER IX

mouth of the Salaris river	98	10	22	40
Masin	99		22	40
Samydaca	99	10	22	40
mouth of the Samydaches river	100	30	22	20
river sources	104	30	25	
Tesa	101	10	22	
mouth of the Caudriacis river	101	15	21	40
Bagia promontory	101		21	
Cuiza harbor	101	15	20	40
Alambater promontory	101		20	

Thus far the bay is called Paragonicus; after this are

Deranoebila	101	30	20	10
Cophanta harbor	101	30	20	
mouth of the Zoromba river	102	30	20	

Badara	103		20	10
Musarna	103	15	20	10
next after this terminus, as we have said, is the Indian sea	104		20	

Mountains are in this land near those which we have said are next to Gedrosia, which are called Semiramidis or Strongylus, so called from the round figure, the middle part of which is in

	94	30	23	
Others are an equal distance from Persia from which the rivers run westward as the Samydaches, the middle of which is in	99		26	

The *Camelobosci*, who are also called *Sozotae* inhabit parts of this land near the desert; below these is Rhudiana and Agdenitis extending to the sea; then Paraepaphitis, below which are the *Arae* and the *Caradrae* races; then Cabadena and Canthonice, and along the sea the *Pasargadae* and the *Chelonophagi*.

The towns and villages that are known in the interior of Carmania are

Portospania	96		28	45
Carmana metropolis	100		29	
Thaspis	98		27	40
Nipista	97	30	26	
Chodda	101	30	25	
Taruana	96		24	30
Alexandria	99		24	20
Sabis	97	30	24	10
Throasca	99	40	23	40
Ora	103	20	23	40
Cophanta	102	15	23	

The islands adjacent to Carmania and those which are in the Persian gulf

Sagdana in which is Cinnabar	94		27	15
Vorochtha	94	20	25	30
in the Indian ocean				
Polla	98		19	
Carminna	102		18	
Liba island	104		19	

CHAPTER IX

*Location of Hyrcania
(Seventh map of Asia)*

HYRCANIA is terminated on the north by that part of the Hyrcanium sea which extends from a terminus in the confines of Media to the mouth of the Oxus river located in

	100		43	
in which region are				
Saramanne town	94	15	40	30
mouth of the Maxera river	97	20	41	30
river sources	98		38	40
Socana town	97	20	42	
mouth of the Oxus river	100		43	6

On the west by a part of Media, as we have stated, which extends as far as the Cronus mountains, the middle of which is in

	94		39	
On the south by Parthia along the border running through the Cronus mountains, as we have noted; on the east by the line running through the Cronus mountains, as the designated terminus.				

The *Maxerae* and the *Astaveni* pasture their flocks in Hyrcania, being located near the maritime coast; below the *Maxerae* are the *Chrindi*; next to these is the region of Arsitis along the Cronus mountains, and below the *Astaveni* is Siracene.

The interior towns are

Barange	99		42	
Adrapsa	98	30	41	30
Casape	95	30	40	20
Abarbena	97	30	40	10
Sarba	98		40	30
Sinica	100		40	30
Amarusa	95		40	
Hyrcania metropolis	98	30	40	
Sace	94	15	39	30
Asmurna	98	15	39	30
Maesoca	98	30	39	30
and the island in this region near the shore is Talca	95		43	5

CHAPTER X

*Location of Margiana
(Seventh map of Asia)*

ON the west Margiana is bounded by Hyrcania along the side to which we have referred; on the north, by a part of Scythia which is near the mouth of the Oxus river and along the section of this river on the confines of Bactria, the location of which is in 103 44 on the south by a part of Aria along the line marking the confines of Hyrcania and Parthia, through the Sariphos mountains to the terminus which is located in 109 39 on the east by the Bactrian mountains in which are the indicated termini.

An excellent river flows through this land which is known as the Margus, the sources of which are located in 105 20 39 and its junction with the Oxus 102 40 43 30

The *Derbiccae* dwell in this region near the Oxus river, and below these are the *Masagetae*, next to these are the *Parni* and the *Dahae*; below whom is a desert land, and from this toward the east are the *Tapuri*.

Its towns are

Ariaca	103	43	10
Sena	102	30	42 20
Aratha	103	30	42 30
Argadina	101	20	41 40
Iasonium	103	30	41 30
near which another river flows into the Margus coming from the Sariphis mountains, the sources of which are			
in	103	39	
Rhea	102	40	30
Antiochia Margiana	106	40	40
Guriana	104	40	10
Nigaea	105	15	39 10

CHAPTER XI

*Location of Bactriana
(Seventh map of Asia)*

ON the west Bactriana is bounded by Margiana; on the north and also on the east by Sogdiana and a part of the Oxus river; on the south by the part of Aria which

extends from the terminus in the confines of Margiana to the terminus

in 111 30 39

and along the parallel of Paropanisadus an equal distance through the mountains to the sources of the Oxus which are located

in 119 30 39

Rivers flow through Bactria which rivers empty into the Oxus, and the Oxus river, the sources of which are in 110 39

the Dargamanis, the sources of which are in 116 30 36 40

the Zariaspes the sources of which are in 113 39

the Artamis the sources of which are

in 114 39

the Dargoedus the sources of which are

in 116 39

it flows into the Oxus in 116 30 44

the others are the Artamis and the Zariaspes which, after uniting their waters

in 113 40

they flow into the Oxus

in 112 30 44

the Dargamanis moreover after uniting with the rivers in the

location 109 40 10

flows into the Oxus 109 44 20

The *Salaterae* and the *Zariaspa* inhabit northern Bactria along the Oxus river; toward the south below the *Salaterae* are the *Chomari*; below whom are the *Comi*, then the *Acinacae*, then the *Tambyzi*; below *Zariaspa* are the *Tochari* a great race; below these are the *Marycae*, the *Scordae* and the *Varni*, and below these are the *Sabadi*; and next below *Sabadi* are the *Orsipi* and the *Amarispi*.

The Bactrian towns in that part near the

Oxus are

Charracharta 110 44 10

Zarispā 115 44

Choana 117 42

Suragana 117 30 40 30

Phratrua 119 39 20

near the other rivers

Alicodra 107 30 43 30

Chomara 106 30 42 30

Curiandra 109 30 12 10

Cavaris 111 20 43

Astacana 112 43 20

Evusmi regia 108 20 41 10

Menapia 113 41 20

Eucratidia 115 42

BOOK SIX — CHAPTER XII

Bactra regia	116	41
Estobara	109 30	39 40
Maracanda	112	39 15
Maracodra	115 40	39 40

CHAPTER XII

Location of Sogdiana (Seventh map of Asia)

THE boundary of Sogdiana on the west is a part of Scythia near the section of the Oxus river which runs along the confines of Bactria and Margiana, then through the Oxius mountains near the Jaxartes river in 110 49 on the north by a part of Scythia along the Jaxartes river where it bends near the terminus which is in 120 48 30 on the east alone by the Sacara region along the Jaxartes river where it bends from the sources in 125 43 and along a direct line to the terminus which is located in 125 38 30 on the south and the west by Bactriana along the Oxus, which section we have noted, and near the Caucasus mountains which are called the mountains of India, to the line which connects the indicated terminus and the sources of the Oxus river 119 30 39

The mountains between the rivers of Sogdiana have their termini in 111 47 and 122 46 30 one of its rivers flows from the Oxia lake, the middle of which is located in 111 45 and there are other rivers flowing from these mountains called the Comedarum from which the Jaxartes flows, and into which river they empty; another is called the Dymus, the sources of which are in 124 43 where it joins with the Jaxartes 123 47 another of these rivers is called the Bascatis, the sources of which are in 123 43 and where it unites with the Jaxartes 121 47 30

In parts of the region near the Oxius mountains the *Pasicae* dwell, near the section of Jaxartes on the north dwell the *Iati* and the *Tachori*, below whom are the *Au-*

gali; then next to the Sogdios mountains are the *Oxydrancae*, the *Drybactae* and the *Candari*, and below the mountains are the *Mardyeni*; and near the Oxius are the *Oxiani* and the *Chorasmi*; in the parts which are near these toward the east dwell the *Drepsiani* bordering both of the rivers; and near these but more toward the source are the *Aristenses* near the Jaxartes, the *Cirrodaces* near the Oxus; and between the Caucasus mountains and Imaus mountains the region is called Vandabanda.

The mountain towns of Sogdiana near the banks of the Jaxartes are

Cyrescha	125	46	20
and near the Oxus			
Oxiana	117 30	44	40
Maruca	117 15	43	40
Cholbisina	117 40	41	
between the rivers and more remote			
Trybactra	112 15	45	30
Alexandria Oxiana	113	44	40
Indicomordana	115	44	40
Drepsa metropolis	120	45	
Alexandria ultima	122	41	

CHAPTER XIII

Location of Sacara (Seventh map of Asia)

THE boundary of Sacara on the west is Sogdiana on the side of which as we have before mentioned, is this country's eastern boundary. The northern boundary looks toward Scythia, the boundary line running along the bend of the Jaxartes river extends to a terminus in 130 49 on the east moreover it is bounded by Scythia along the line running through the Ascantacas mountains to the Imaus mountains 140 43 extending through the Imaus mountains northward, terminating in 145 35 on the south Sacara is bounded by the Imaus mountains along the line uniting the mentioned termini.

The mountains in Sacara, as we have said, are the Comedarum, which extend along Sogdiana 125 43 near the pass of the Comedarum 130 39 here is the Stone Tower in 135 43

Nomads occupy the land of Sacara; but the towns are without caves or forests. Those who are near the Jaxartes are the *Caratae* and the *Comari*; those along the mountain region are the *Comediae*, and the *Massagetae*, who are along the Ascatanca mountains; next, between these are the *Grynaei*, the *Scythae* and the *Toornae*, below whom near the Imaus mountains are the *Byltae*.

CHAPTER XIV

*Location of Scythia within the
Imaus mountains
(Seventh map of Asia)*

SCYTHIA within the Imaus mountains is terminated on the west by the side of Asiatic Sarmatia, as we have said; on the north by Terra Incognita (unknown land); on the east alone by the Imaus mountains running toward the north along the meridian line which, as we have stated, extends to the Terra Incognita; on the south by eastern Sogdiana and Margiana and along their indicated boundary to the mouth of the Oxus river which flows into the Hyrcanium sea, and by a part of the Hyrcanium sea as far as the Rha river, a description of the coast of which is the following:

Next to the mouth of the Rha river		
mouth of the Rhymmus		
river	91	48 15
mouth of the Daix river	94	48 15
mouth of the Jaxartes		
river	97	48
mouth of the Istaos river	100	47 20
mouth of the Polytimetus		
river	103	45 30
Aspabota town	102	44

Next to this the mouth of the Oxus river

	100	43
The important mountains of Scythia which are between the Imaus and the eastern parts of the northern mountains are called the Alani, the termini of which are in	105	59 30
and	118	59 30
Rhymmici mountains the termini of which are in	90	54
and	99	57 10
from which the Rhymmus and other rivers flow into the Rha river, and some into the Daix river; Norossus mountains, the termini of which are in	97	53

and	106	52 30
Aspasio mountains, the extreme parts of which are located in	111	55 30
and	117	52 30
from these also a number of rivers empty into the Iaxartis		
Tapuri mountains, the terminal positions of which are in	120	56
and	125	49
from which also a number of rivers flow into the Iaxartes.		

Next to these mountains are those which are in the Imaus region, also the Syebi mountains, the terminal locations of which are in	121	58
and	132	62
mountains which are called the Anaraei, the termini of which are in	130	56
and	137	50

After this is a bend of the Imaus mountains toward the north. Those who inhabit Scythia toward the north along the Terra Incognita are called *Alani-Scythae*, *Suobeni*, and *Alanorsi*. The part which is below these is held by the *Satiani*, the *Massaei*, and the *Syebi*. Near the Imaus mountains are the *Tectosaces*. Near the eastern sources of the Rha river are the *Rhobosci*; below these are the *Asmani*, and next the *Paniardi*; below whom along the river is the Canodipsa region; below this are the *Coraxi*, then the *Orgasi*, next to this along the coast the *Erymmi*, from which region toward the east are the *Asiotae*, next the *Aorsi*, then the *Iaxartae*, a great race having the same name as the river and extending as far as the bend of Tapuros mountains. Below the *Setiani* are the *Mologeni*; below these, up to the Rhymmicos mountains, are the *Samnitae*; below the *Massaei* and the Alani mountains are the *Zaratae* and the *Sasones*, and more to the east are the *Tybiacae*. Next below the *Zaratae* are the *Tabieni* and the *Iastae*; then the *Machetegi* near the mountains; below these are the *Norobenses* and the *Norossi*, and below these the *Cachagae Scythae* along the Iaxartes; to the west of the Aspasiis mountains are the *Aspasi Scythae* or *Aspasii*; and to eastward are the *Galactophagi*; and eastward from the Tapuris mountains and the *Scymbi Scythae* are the *Tapurei*. The *Ascotancae* are between the Anariae mountains and the mountains having the same name, also the *Scythae*. The *Anaraei* are be-

low the *Alanorsis*. The *Ascotancae* are near the Tapuris mountains and inhabit the region up to the Imaus mountains. Between the Oxus mountains and the region which is near the mouth of the Iaxartes and along the coast which lies between two rivers dwell the *Ariacae*; below them are the *Namastae*; next are the *Sagaraucæ* and near the river Oxus are the Rhibii, in which region is the city

Dauaba 104 45

CHAPTER XV

*Location of Scythia beyond the
Imaus mountains
(Eighth map of Asia)*

SCYTHIA beyond the Imaus mountains is terminated on the west by Scythia within the mountains and next to Sacæ, the mountain range separating it running northward; on the north is unknown land; on the east it is bounded by Serica along a direct line which terminates in 150 63 and 160 35 on the south by the part of India beyond the Ganges river as far as the line which unites the designated termini; a part of the western section of the Auzaciis mountains is in Scythia, the terminus of which is

in 149 49
and a part of the Casii mountains, as they are called, the terminus of which is in 152 41
and an equal part of the western section of the Emodus mountains, the terminus of which is in 153 36

In the Auzaciis mountains is the source of the Oechardis river which is located

in 153 51

The *Scythian Abii* inhabit the northern parts of this Scythia, and below these are the *Scythian Hippophagi*; next to these is the Auzacitis region; below this is the region which they call Casia, and below this are the *Scythian Chatae*; then the Achassa region and below this next to the Emodus mountains the *Scythian Chauranaei*.

The towns in this region are

Auzacia	144	49	40
Issedon Scythia	150	48	30
Chaurana	150	37	15
Sotta	145	35	20

CHAPTER XVI

*Location of Serica
(Eighth map of Asia)*

SERICA is terminated on the west by Scythia beyond the Imaus mountains along the line which we have mentioned; on the north is unknown land to that parallel which extends through Thule; which unknown land extends to the meridian line, the termini of which are located

in 180 63

and 180 35

on the south by the remaining part of India beyond the Ganges and along that parallel line to the terminus, the location of which is in 173 35

and beyond Sinis leading direct along that line to the terminus which is near the unknown land we have mentioned.

The mountains running into Serica, and which are called Annibi, terminate

in 153 60

and 171 56

the eastern part of Auzacis mountains the terminus of which is located

in 165 54

and the mountains of Asmiræi which are located in 167 47 30

and 174 47 30

the eastern part of Casius, the terminus of which is in 162 44

the Thagurus mountains, the central part of which is located in 170 43

the Emodi, the eastern part of which is called Serici, the terminus of which is

in 165 36

and that which is called the Ottorocoras, the termini of which are located

in 169 36

and 176 39

Two rivers flow through the greater part of Serica: the Oechardes, a source of which in the Auzaciis mountains has been described, and another in the Asmiræis mountains in 174 47 30

one from the Casius mountains flows into it in 160 49 30

the source of which in these mountains is in 161 44 15

and the river Bautisus, as it is called, the source of which is in the Casius mountains,

in 160 43

another which rises in the
 Ottorocoras 176 39
 one from the Emodus which flows into
 this 168 39
 the source of which in these mountains
 is 160 37

In the northern parts of Serica the races of the *Anthropophagi* pasture their flocks, below whom the race of the *Annibi* reside in the mountains of this name; between these and the *Auzacios* is the *Sizyges* race, below whom are the *Damnae*; then the *Pialae* on the Oechardes river, and below this the *Oechardae* of this same name. Toward the east from the *Annibi* are the *Garinaei* and the *Rhabbanae*, and below these the Asmiraea region above the mountains of this name; below these mountains of Casius the great race of the *Issedones* dwell, and near the beginning of these mountains are the *Throani*; below these toward the east are the *Thaguri*, near the mountains of this name; below the *Issedones* are the *Aspacarae*, and below these the *Batae*, and further southward, next to the Emodi and Serici mountains are the *Ottorocorae*.

These are the important towns of Serica

Damna	156	51	40
Piale	160	49	40
Asmiraea	170	48	20
Throana	174	40	47 40
Issedon Serica	162	45	
Aspacarea	162	30	41 40
Drosache	167	40	42 30
Palliana	162	30	41
Thogara	171	20	39 40
Abragana	163	30	39 30
Daxata	174	39	40
Orosana	162	37	30
Ottorocora	165	37	15
Solana	169	37	30
Sera metropolis	177	15	38 35

CHAPTER XVII

Location of Aria (Ninth map of Asia)

ARIA is terminated on the north by Margiana and by a part of Bactriana, the south boundary of which we have mentioned; on the west by Parthia and Carmania Deserta along the eastern lines of these as we have also mentioned; on the south by Drangiana along the line which be-

ginning at this terminus near Carmania, as we have indicated, turns toward the north running thence through the Bagous mountains to the point where it turns toward the terminus, the location of which is

in	III	30	34
this mountains bends into that direction			
in	105	32	
on the east the boundaries of Aria are Paropanisades along the meridian line which joins the mentioned termini in the western part of Paropanisades. The position of Paropanisades is defined by the three points			
on the south	III	36	
on the north	III	30	39
on the farthest east	119	30	39

An important river flows through this land which is called the Arius, the sources of which are in the Paropanisus mountains in

in	III	38	15
and in the Sariphos	103	38	40

at the terminus it flows into a lake which is formed by it; this lake is called Aria 108 40 36
 The *Nisaei* and the *Astabeni* inhabit the northern parts of Aria; the *Masdorani* are near Parthia and the Carmanian desert; the *Cesirotae* are near Drangiana, and next to Paropanisades are the *Parutae*, below whom are the *Obares*, and the parts which lie between these the *Drachamae* inhabit, below whom are the *Etymandri*, then the *Borgi*, and below these is the Scorpiofera region.

The towns and villages in Aria are these

Dista	102	30	38	45
Namaris	105	40	38	50
Tava	109		38	45
Augara	102		38	
Bitaxa	103	40	38	
Sarmagana	105	20	38	10
Siphara	107	15	38	15
Rhaugara	109	30	38	10
Zamuchana	102		37	
Ambrodax	103	30	37	50
Bogadia	104	15	37	40
Varpna	105	30	37	
Godana	110	30	37	30
Phorava	110		37	
Chatrischa	103		36	20
Chaurina	104	20	36	20
Orthiana	105	15	36	20
Tauciana	106	10	36	
Astanda	107	40	36	

BOOK SIX — CHAPTER XVIII

Articaudna	109	20	36	10
Alexandria in Aria	110		36	
Babarsana	103	20	35	20
Capotana	104	30	35	30
Aria town	105		35	
Casta	107	20	35	20
Sotira	108	40	35	10
Orbitane	109	20	35	30
Nisibis	111		35	20
Paracanaca	105	30	34	20
Sariga	106	40	34	40
Darcama	111		34	40
Cotaca	107	30	33	40
Tribazina	106		33	
Astasana	108		33	
Zimyra	109	30	34	

CHAPTER XVIII

Location of Paropanisades (Ninth map of Asia)

PAROPANISADES is bounded on the west by the eastern side of Aria as we have indicated above; on the north by the part of Bactria which we have mentioned; on the east by the part of India joining the meridian line, which extends from the sources of the Oxus river through the Caucasus mountains to the terminus, the location of which is in 119 32 40 on the south moreover it is terminated by the northern border of Arachosia along the line which runs through the Parvetis mountains.

Rivers flow from this land; one the Gardamanis into Bactria, the sources of which are indicated above; another joins with the Coa river in the Goryaea region, the sources of which are in 115 34 30

The *Bolitae* inhabit the northern parts of this land, the *Aristophyli* the west, and below these are the *Parsii*, in the south the *Parsietae*, in the east the *Ambatae*.

The towns and villages in Paropanisades are

Parsiana	118	30	38	45
Barzaura	114		37	30
Artoarta	116	30	37	30
Baborana	118		37	20
Catisa	118	40	37	30
Niphanda	119		37	
Drastoca	116	30	36	30
Gazaca	118	30	36	15
Naulibis	117		35	30

Parsia	113	30	35	
Locharna	118		35	
Daroacana	118	45	34	45
Cabura or Ortospana	118		34	
Tarbacana	114	20	33	40
Bagarda	116	40	33	40
Arguda	118	45	33	30

CHAPTER XIX

Location of Drangiana (Ninth map of Asia)

THE border of Drangiana on the west and also on the north is Aria along the line which we have said passes through Bagous mountains; on the east the boundary is the meridian line of Arachosia to the terminus which is in the confines of Aria and Paropanisades running in a straight line, the position of which is in 111 30 28 on the south it is bounded by the part of Gedrosia along the line which connects the termini in the Baetius mountains.

The river which flows through this land empties into the Arbis, the sources of which are located in 109 32 30

The *Darandae* inhabit the part near Aria; next are the *Batri* near Arachosia; the region which lies between is called *Tatacena*.

The towns and villages said to be in Drangiana are

Prophthasia	110		32	20
Ruda	106	30	31	30
Inna	109		31	30
Aricada	110	20	31	20
Asta	107	30	30	40
Xarxiare	106	20	29	15
Nostana	108		29	40
Pharazana	110		30	
Bigis	111		29	20
Ariaspa	108	40	28	40
Arana	111		28	15

CHAPTER XX

Location of Arachosia (Ninth map of Asia)

ARACHOSIA is bordered on the west by Drangiana; on the north by that side of Paropanisades which we have mentioned; on the east by a part of India along the meridian line, the terminus of which is

on the confines of Paropanisades, thence to a terminus which is located

in 119 28
on the south it is terminated by the part of Gedrosia along the line which connects the mentioned limits through the Betius mountains.

The river which flows from this land emptying into the Indus river has its source in 114 32 30
and joins it in 122 30 27 30
in which locality it empties into a lake which it forms, and which lake is called the Arachotus 115 29 40

The parts of the land which are called the northern the *Pargietae* inhabit, those below them are the *Sydri*, and next to these are the *Roplutae* and the *Eoritae*.

The towns and villages of Arachosia they say are

Azola	114	15	32	15
Phoclis	118	15	32	10
Alexandria	114		31	
Rhizana	115		31	10
Arbaca	118	20	31	20
Sigara	113	15	30	
Choaspa	115	15	30	10
Arachotos	118		30	20
Asiaca	112	20	29	20
Gammaca	116	20	29	20
Maliana	118		29	20
Dammana	113		28	40

CHAPTER XXI

Location of Gedrosia (Ninth map of Asia)

GEDROSIA is terminated on the west by Carmania along the meridian, leading as we have stated above, as far as the sea coast; on the north by Drangiana and Arachosia as mentioned; on the east by the part of India next to the Indus river along the line leading from the terminus in the confines of Arachosia to the terminus which

is located on the shore of the

sea 109 20
on the south by that part of the Indian sea, which is described in the following manner: after the terminus located in the confines of Carmania

mouth of the Arbis river 105 20 15
river sources 110 27 30
where the river rising in Drangiana flows into it 107 40 25
Rhagiava town 106 20
Mulierum harbor 107 20 15
Coeamba 108 20
Rhizana 108 40 20 15
after which is the indicated terminus near the sea.

The mountains which extend through Gedrosia are called the Arbiti, the termini of which are 107 22
and 113 26 30
from which rivers flow into the Indus, the source of one of which is

in 111 25 30
in like manner one flowing from the Baetis mountains runs through Gedrosia

On the maritime shores of the land are the *Arbitari* villages; in the direction toward Carmania dwell the *Parsirae*; near Arachosia the *Musarnaei*; all of the intermediate region is called Paradene and below this Parisine; after this near the Indus dwell the *Rhamnae*.

The towns and villages of Gedrosia are

Cuni	110	27
Badara	113	27
Musarna	115	27 30
Cottobara	108	25 30
Soxistra	112 30	25 45
Oscana	115	26
Parsis metropolis	106 30	23 30
Omiza	110	23 30
Arbis town	105 20	20 30

Islands adjacent to Gedrosia

Asthea	105	18
Codane	107 30	17

BOOK SEVEN



Book Seven contains the following:

Description of the remote parts of Greater Asia according to the provinces and prefectures

1. India this side of the Ganges
2. India beyond the Ganges
3. Location of Sinae
4. Island of Taprobana and those islands which surround it
5. Descriptive summary of the maps of the world
6. Description of the Armillary Sphere in which is represented the inhabited earth
7. General summary

CHAPTER I

Location of India this side the Ganges (Tenth map of Asia)

INDIA this side the Ganges is bounded on the west by Paropanisades, Arachosia, and Gedrosia along their eastern side; on the north by the Imaus mountains near Sogdiana and Sacae; on the east by the Ganges river; on the south and west by a part of the Indian ocean, the shore of which is thus described:

On the bay which is called Canthicolpus Syrastrina region

Canthinaustathmus station 109 45 20

Western mouth of the Indus river which is called

Sagapa 110 20 19 50

the second mouth is called

Sinthum 110 40 19 50

the third is called

Aureum 111 20 19 50

the fourth is called

Cariphi 111 40 19 50

the fifth is called

Sapara 112 30 20 15

the sixth is called

Sabalassa 113 20 15

the seventh is called

Lonibare 113 20 20 15

Bardaxima city 113 40 20 40

Syrastra village 114 19 30

Monoglossum emporium 114 10 18 40

Larica region

mouth of the Mophidis river 114 18 20

Pacidara village 113 45 17 50

mouth of the Namadus river 112 17 45

Baleon promontory 111 17 30

On Barigazenus bay

Camanes 112 17

Nusaripa 112 30 16 30

Pulipula 112 30 16 20

Ariaca region

Suppara 112 30 15 50

mouth of the Gaoris river 112 15 15 10

Dunga 111 30 15

mouth of the Byda river 111 30 15

Symilla emporium and promontory 110 14 45

Balepatna 111 14 20

Hippocura 111 45 14 10

Viripyra

Mandagora 113 14 10

Byzantium 113 40 14 40

Chersonesus 114 30 14 30

mouth of the Nanagunna river 114 30 13 45

Harmagara 115 14 20

Nitra emporium 115 30 14 40

Lymirica region

Tindis city 116 14 30

Bramagara 116 45 14 20

Calecarte promontory 116 40 14

Muziris emporium 117 14

mouth of the Pseudostomus river 117 20 14

Podoperura 117 40 14 15

Semna 118 14 20

Cerevra 118 40 14 20

Bacare 119 30 14 30

mouth of the Baris river 120 14 20

Aii region

Melcynda 120 20 14 20

Elancor emporium 120 40 14

Cottiara metropolis 121 14 30

PTOLEMY'S GEOGRAPHY

Bambala	121	20	14
Commara promontory	121	45	13 30
On the bay of Colchicus in which are pigeons			
Carei region			
Sosicuri	122		14 30
Colchi emporium	123		15
mouth of the Solenis river	124		14 45
On the Argaricus bay			
Cory promontory also called Calligicum on the Argaricus bay in the Pandiones region			
	125	40	13 20
Argari city	125	15	14 20
Salur emporium	125	20	15 10
Batii region			
Nigamma metropolis	126		16
Thelchyr	127		16 10
Curula city	128		16

In that which is called Paralia or the coast of Soretarum

Chaberis city	128	20	15 45
mouth of the Chaberus river			
	129		15 20
Sobura emporium	130		14 30
Aruarni region			
Poduca emporium	130	15	14 45
Melanga emporium	131		14 20
mouth of Tyna river	131	40	12 45
Cottis	132	20	12 30
Maliarpha emporium	133	10	12

Mesoli region			
mouth of the Maesolus river			
	134		11 30
Contacossyla emporium	134	30	11 30
Coddura	135		11 20
Alosygni emporium	135	40	11 10
port whence those set sail who navigate the bay			
	136	20	11

On the Gangeticus bay

Palura city	136	40	11 30
Nanigaena	136	20	12
Caticardama	136	20	12 50
Cannagara	136	30	13 30
mouth of the Manda river			
	137		14
Cottobara	137	15	14 40
Sippara	137	50	15 30
mouth of the Tyndis river			
	138	30	16
Mapura	139		16 30
Minagara	140		17 15
mouth of the Dosaron river			
	141		17 40
Cocala	142		18

mouth of the Adamas river			
	142	50	18
Cosamba	143	30	18 15
Western mouth of the Ganges river which is called			
Cambysum	144	30	18 15
Palura city	145		18 30
second mouth which is called			
Magnum	145	40	18 30
third mouth which is called			
Camberycum	146	30	18 40
Tilogrammum city	147		18 30
fourth mouth which is called			
Pseudostomum	147	50	18 30
fifth mouth which is called			
Antibola	148	30	18 15

Important mountains in the accessible parts of India; Apocopis mountains, which are called the Vengeance of the

Gods	116		23
and	124		26
Sardonix mountains, in which is stone of this name, the middle of which is			
in	117	30	21
Vindius mountains, which are			
in	127		27
and	135		27
Bettigo mountains, the limits of which are			
in	123		21
and	130		20
Adisathrus mountains, the middle of which is in			
	132		23
Uxentus mountains, the limits of which are			
in	136		22
and	143		24
Orudii mountains, the limits of which are			
in	138		18
and	133		16

The rivers in India flowing from the Imaus mountains are the following:

Coa river sources	120		37
Suastus river sources	122	30	36
Indus river sources	125		37
Sidaspus river sources	127	30	35
Sandabalis river sources	129		36
Adris river sources	130	30	37
the turning of the Coa river near Paropanisades			
	121	30	33
the junction of the Coa and the Suatus rivers			
	122	30	31 40
the junction of the Coa and the Indus rivers			
	124	30	31

the junction of the Sidaspus and the Sandabalis rivers	126	40	32	40
the junction of the Sidaspus and the Zuadris rivers	126	30	31	30
junction of the Zuadris and the Bibassis rivers	131		34	
the junction of the Bibassis and the Zaradrus rivers	126		30	15
the junction of the Zaradrus and the Indus rivers	124		30	
the bending of the Indus near the Vindius mountains	122		29	30
the bending of the Indus near Arachosia	122	30	27	30
various river sources in	111		25	30
various river sources in	127		27	
a source of the Indus in the Arbetis mountains	117		25	
bending of the Indus near the mouth of the Sagapa river	113	40	23	15
branching into the Sagapa and the Sinthum rivers	111		21	30
branching of the Indus into the Aureum river	112	30	22	
into the Sapara and Cariphi rivers	113	30	22	20
into the Cariphi near the mouth of the Sabalassa river	113		21	20
branching from the Cariphi river into the Lonebare river	113	20	21	40

A list of the rivers which flow into the Ganges

Diamona river sources	134	30	36	
sources of the Ganges river	136		37	
sources of the Sarabis river	140		36	
union of the Diamona and the Ganges	136		34	
union of the Sarabis and the Ganges	136	30	32	30

Flowing into the Ganges from the Vindius mountains

Soas river	136	20	31	30
river sources	131		28	
deflection of the Ganges near the Uxentus mountains	142		28	
source of its branch from the Uxentus	137		23	
branching of the Ganges into the Cambusum mouth	146		22	
branching from the Cambusum into the Magnum mouth	145		20	

branching from the Magnum to the Camberichum mouth	145	30	19	30
branching of the Ganges into the Pseudostomum	146	30	20	
branching of the Ganges into the Antibola mouth	146	30	21	
and of other rivers there are				
Namadus river, sources of which are in the Vindius mountains	127		26	30
bend of this river near Siripalla	116	30	22	
near this it unites with the Mophidis river	115		18	30
sources of the Nanaguna river in the Vindius mountains	122		26	30
where it divides into the Gaoris and the Bynda	114		16	
sources of the Pseudostomus river in the Bittigo mountains	123		21	
bend of the river	124		18	
sources of the Chaberus river in the Adisathrus mountains	132		22	
sources of the Tyna river in the Orudi mountains	133		17	
sources of the Maesolus river in the same mountains	134	30	17	30
sources of the Manda river in the same mountains	136	30	16	30
sources of the Tyndis in the Uxentus mountains	137		22	30
sources of the Dosaronus river in the same mountains	140		24	
sources of the Adamas river in the same mountains	142		24	

A list of the provinces and towns which are in this region is the following: below the sources of the Coa river is Lambata, and its mountains extend as far as the mountains of Comedorum. Below the sources of the Suastus river is Sustena. Below the sources of the Indus are the *Duradrae* and their mountains above. Below the sources of the Bidaspus, of the Sandabalis and of the Adris, is the Caspiria region. Below the Bibasis sources, and those of the Zaradrus, is the Diamona region, and below the sources of the Ganges is Cylindrina, and below Lambata and Suastena is Goryaea.

The cities are

Carnasa	120		34	15
Barborana	120	15	33	40
Gorya	122		34	15

Nagara, which also is called

Dionysopolis	121	30	32	30
Drastoca	120	30	32	30

Between the Suastus and the Indus rivers is the Gandarae region, and the cities are

Poclais	123		33	
Naulibi	124	20	33	20

Between the Indus and the Bidaspus rivers, next to the Indus, is the Varsa region, and the cities are

Ithagurus	125	40	33	20
Taxiala	125		33	15

Along the Bidaspus river is the Pandouorum region, in which are the following cities:

Labaca	127	30	34	15
Sagala, which is also called				
Euthymedia	126	40	32	
Bucephala	125	30	30	20
Iomusa	124	15	30	

And those who are toward the east as far as the Vindius mountains are the *Caspiraei*, and among them are the following cities:

Salagisa	129	30	31	30
Astrassus	131	15	31	15
Labocla	128		33	20
Batanagra	130		33	20
Arispara	130		32	50
Amacatis	128	15	32	20
Ostabalassara	129		32	
Caspira	127		31	15
Pasicana	128	30	31	15
Daedala	128		30	30
Ardona	126	15	30	10
Indabara	127	15	30	
Liganira	125	30	29	
Chonnamagara	129		29	20
Gagasmira	126	40	27	30
Hararassa metropolis	123		26	
Modura or Deorum	125		27	10
Connbanda	124		26	

Farther to eastward are the *Gymnosophistae*, and near these along the Ganges but more to southward are the *Daetychae*, among whom are the following cities:

Conta	133	30	34	20
Margara	135		34	
Batancaesara	132	40	33	20
and east of the river				
Passala	137		34	15
Orza	136		33	20

Below these are the *Manichae*, among whom are the cities

Persacra	134		32	44
Sannaba	135		32	30

and east of the river

Toana	136	30	32	
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Below this is Prasiaca and the following cities:

Sambalaca	132	15	31	50
Adisdara	136		31	30
Canagora	135		30	40
Cindia	137		30	30
Sagala	139		30	20

and east of the river

Aninacha	137	20	31	50
Coanca	138	40	31	30

Below this are the *Saudrabati*, and the following cities:

Empelathra	130		30	
Nadubanthagar	138	40	29	
Tamasis	133		30	20
Curaporina	130		29	

Moreover the region which is next to the western part of India, is called Indoscythia.

A part of this region around the river mouths is Patalena, above which is Abiria. That which is about the mouth of the Indus and the Canthicolpus bay is called Syrastrena.

The cities of Indoscythia which are remote from the river are the following:

Artoarta	121	30	31	15
Andrapana	124	15	30	40
Sabana	122	10	30	40
Banagara	122	15	30	20
Codrana	121	15	29	40

and along the river

Embolima	124		31	
Pentagramma	124		30	20
Asigramma	123		29	30
Tiausa	121	40	28	50
Aristobathra	120		27	30
Azica	119	15	27	
Pardabathra	117		25	30
Pisca	116	30	25	
Pasipeda	114	30	24	
Susicana	112		22	20
Bonis	111		21	30
Colaca	110	30	20	40

In the island formed by this river are the cities

Pantala	112	50	21	
Barbaria	113	15	22	30

On the east side of the river more remote from it are the following cities:

Xodraca	116	24
Sarbana	116	22 50
Auxoamis	115 30	22 20
Ausinda	114 15	22
Orbadarum	115	22
Theophila	114 15	21 10
Astacapra	114 40	20 15

Near this river are the following cities:

Panassa	122 30	29
Budaea	121 15	28 15
Naagramma	120	27
Camigara	119	26 20
Binagara	118	25 20
Parabali	116 30	24 30
Sydrus	114	23 30
Epitause	113 45	22 30
Xoana	113 30	21 30

The Larica region of Indoscythia is located eastward from the swamp near the sea, in which on the west of the Namadus river is the interior city

Barygaza emporium	113 15	17 20
on the east side of the river		
Agrinagara	118 15	22 30
Siripalla	116 30	21 30
Bamogura	116	20 45
Sazantium	115 30	20 30
Xerogeri	116 20	19 50
Ozena-Regia Tiastani	117	20
Minagara	115 15	19 30
Tiatura	115 50	18 50
Nasica	114	17

There dwell above these in Pulinde the *Agriphogi*, and above these the *Chatriaei*, among whom on the west and the east of the Indus river are the following cities:

Nigranigramma	124	28 15
Antachara	122	27
Sudassana	123	26 50
Syrnisica	121	26 30
Patistama	121	25
Tisapatinga	123	24 20

Moreover between the Sardonix mountains and the *Bettigi* dwell the *Tabasi*, a race of philosophers (wise men) and above these extending as far as the Vindius mountains are the *Parapiotae*, who are nomads; east of the river, are the following cities:

Cognabanda	120 15	23
Ozoabis	120 30	23 40
Ostha	122 30	23 40

Cosa, in which are diamonds

121 20 22 30

Near the Nanaguna river are the *Phyllitae* and the *Bettigi*, between whom are the *Gondali* who are next to the *Phyllitae* and the river. The *Ambastae* are next to the *Bettigi* and the mountains of that name; and their cities are

Agara	129 20	25
Adisathra	128 30	24 30
Soara	124 20	24
Nindosora	125	23
Anara	122 30	22

Between the *Bettigi* and the Adisathrus mountains are the *Sorae-Nomades*, and their cities are

Sangamarta	123	21
Sora-Arcati. Regia	130	20 15

On the eastern side of the Vindius mountains are the *Biolingae*; among these are the cities

Stagabaza	133	28 30
Bardaotis	137 30	28 30

Below these dwell the *Porvari*, among whom are these cities

Bridama	134 30	27 30
Tholobana	136 20	27
Malaeta	133 30	25 50

Below these, extending as far as the Uxentus mountains, are the *Adisathri*; among whom are the cities

Maliba	140	27
Aspathis	138 30	25 40
Panassa	137 40	24 30
Sageda metropolis	133	23 30
Balantipyrgum	136 30	23 30

More to eastward extending as far as the Ganges are the *Mandalae*; among these is the city

Asthagura	142	25
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Along the river are the cities

Sambalaca	141	29 30
Sigalla	142	28
Palibothra regia	143	27
Tamalites	144 30	26 30
Oreophanta	146	24 30

Likewise below the Bettigus mountains are the *Brachmani-Magi* (wise men) up to the *Bati*, among whom is the city

Brachma	128	19
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and below the Adisathro mountains as far as the Orundus mountains dwell the *Badiamae*, among whom is the city

Tathilba	134	18	50
and below the Uxentus mountains dwell the <i>Dryllophyllitae</i> , whose cities are			
Sibrium	139	22	20
Opotura	137	30	21 40
Ozoana	138	15	20 30

More to eastward as far as the Ganges are the *Cocconagae*, whose cities are

Dosara	142	30	22 30
and in the east near the river			
Cartinaga	146	23	
Cartasyna	145	30	21 40

Above the *Mesoli* are the *Salaceni* along the Orundus mountains, among whom are the following cities:

Benagurum	140	20	15
Castra	138	19	30
Magaris	137	30	18 20

Near the Ganges river are the *Sabarae* in whose region diamonds are found, whose cities are

Tasopium	140	30	22
Caricardama	141	20	15

In the entire region about the mouth of the Ganges are the *Gangaridae*, whose city is

Gange regia	146	19	15
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The cities and villages which are in the interior region of Ariaca and west of the Byda river are

Manippala	119	30	20 45
Sarisabis	119	20	
Tagara	118	19	
Betana regia	117	18	10
Deopolli	115	40	17 50
Gamaliba	115	15	17 20
Menogara	114	16	20

Between the Byda river and the Pseudostomus are

Nagaruraris	120	20	15
Tabasa	121	30	21 40
Lida	120	40	20 50
Tiripangalida	121	15	19 40
Hippocuri regia	119	45	19 10
Subuttum	120	15	19 10
Siramalaga	119	20	18 30
Calligeris	118	18	
Modogulla	119	18	
Petirgala	117	45	17 15
Banavasi	116	16	45

Moreover the interior cities of Viripyra are the following:

Olochoera	114	15	
Musopalle metropolis	115	30	15 45

In the western part of Limyrica interior on the Pseudostomus river are the cities

Naruila	117	45	15 50
Cuba	117	15	
Pallura	117	15	14 40

Between the Pseudostomus and the Baris rivers are the following cities:

Pasaga	124	20	21 50
Mastanur	121	30	18 40
Curellur	119	17	30
Punnata in which is beryl	120	40	17 30
Haloa	120	40	17
Carura regia Cerobrothi	119	16	20
Arembur	121	16	20
Berderis	119	15	50
Pantipolis	118	15	20
Adarima	119	30	15 20
Coreur	120	15	

In the interior of Aii

Morunda	121	20	14 40
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In the interior of Carei

Mendela	123	17	20
Selur	121	45	16 30
Tittua	122	15	40
Matitur	123	15	45

In the interior of Pandiones

Taenur	124	45	18 40
Perincari	123	20	18
Corindiur	125	17	40
Tangala	123	30	16 45
Modura regia	125	16	
Acur	124	45	15 20

In the interior of Bati

Calindoca	127	40	17 30
Bata	126	30	17
Tallara	128	16	45

Cities in the interior of Paralia-Soretarum are

Calur	129	17	40
Tenagora	132	17	
Icur	129	16	40
Orthura regia	130	16	20
Bera	130	20	16 15
Abur	129	16	
Carmara	130	20	15 40
Magur	130	15	15

Cities in the interior of Arvarni are

Cerauga	133	16	15
Phrurium	132	15	
Cariga	132	40	15
Poleur	131	30	14 40
Picendaca	131	30	14
Iatur	132	30	14
Scopolura	130	15	15 36

BOOK SEVEN — CHAPTER II

Icarta	133	30	13	40
Malanga regia	133		13	
Candipatna	133	30	12	20
In the interior of Mesoli				
Calliga	138		17	
Bardamana	136	15	15	15
Coruncala	135		17	
Pharytra	134	40	13	20
Pitynda metropolis	135	30	12	30
Islands adjacent to the accessible parts of India in the Canthicolpus bay are				
Baraca	111		18	

On the coast as far as the Colchicus bay				
Milizigeris	110		12	30
Heptanesia island	113		13	
Tricadiba	113	30	11	
Peprina	115		12	40
Trinesia island	116	20	12	
Leuca	118		12	
Nanigeris	122		12	
In the Argaricus bay				
Cory island	126	30	13	

CHAPTER II

*Location of India beyond the Ganges
(Eleventh map of Asia)*

INDIA beyond the Ganges is terminated on the west by the Ganges river; on the north by the accessible parts of Scythia and Serica; on the east by the Sinae region along the meridian line running from the border of Serica as far as the bay called the Great bay; on the south by the Indian sea and a part of the Parassadis sea which extends from the Menuthiadae island as far as the opposite shore of the Great bay; the coast of this part is described as follows:

In the Gangeticus bay, after the mouth of the Ganges is Antibolum, called the city of the gods

Pentapolis	150		18	
mouth of the Catabeda				
river	151	20	17	
Baracura emporium	152	30	16	
mouth of the Tocosanna				
river	153		14	30

In the Argentea region				
Samba city	153	30	13	45
mouth of the Sadus river	153	30	12	30
Sada city	154	20	11	20
Barabonna emporium	155	30	10	40

mouth of the Temala				
river	157	30	9	
promontory next to this	157	20	8	
On the Subaricus bay of the <i>Besyngiti</i>				

<i>Anthropophagi</i>				
Sabara city	159		8	30
Bsyga emporium	162	20	8	26
mouth of the Besynga				
river	162		9	
Berobae city	162	30	6	
promontory next to this	159		4	20

In the Golden Chersonesus				
Tacola emporium	160	15	4	15
promontory next to this	158	40	2	40
mouth of Chrysoana river	159		1	
Sabana emporium	160	south	3	
mouth of Palanda river	161	south	2	
Maleicolon promontory	163	south	2	
mouth of Attaba river	164	south	1	
Calipolis	164	20	equator	
Perimula	163	15	2	40
Perimulicus bay	162	30	4	15

In the region of Lestorum				
Samarada	163		4	50
Paprasa	165		4	50
mouth of Sobanus river	165	40	4	45
river sources	162	30	13	
Thipinobosti emporium	166	20	4	45
Acadra	167		4	50
Zabe city	168	20	4	45

On the Great bay				
next to the beginning of the Great promon-				
tory	169		4	15
Thagora	168		6	
Balanga metropolis	167	30	7	
Throana	167		8	30
mouth of Daona river	167		10	
river sources	153		27	
Cortatha metropolis	167		12	
Sinda city	167	15	13	40
Paprasa	167	30	14	30
mouth of Dorius river	168		15	30
river sources	163		27	
Aganagara	169		16	40
mouth of Serus river	171	30	17	20
river sources	170		32	
other sources	173		30	
river junction	171		27	
limits of the Great bay toward				
Sinae	173		17	20

The mountains in this part are called				
Bepyrrus, the limits of which				
are	148		34	
and	154		26	

Maeandrus, the limits of which		
are	152	24
and	160	16
Damasi, the limits of which		
are	162	23
and	166	33
Semanthini, western part, the limits of		
which are	170	33
and	180	26

Two rivers from the Bepyrus mountains empty into the Ganges; one of these which comes from the north has its sources in 148 33 the junction with the Ganges is in 140 15 30 20 the sources of the river next to this are in 152 27

From the Maeandrus mountains, which are near the Ganges, there are many rivers as far as the Besynga. The Serus river flows from the Semanthini mountains, having two sources; the one farthest west is in 170 30 32 the one further east is in 173 30 30 they unite in about 171 27

From the Damasi mountains flow the Dorius and the Daona rivers. The Daona comes from as far away as the Bepyrus mountains and the Dorius from the location 164 30 28 the Daona flows from the Damasi mountains in 162 20 30 and from the Bepyrus in 152 30 27 30 and these branches unite in 160 20 19 the source of the Sobanus is in 163 30 13 that which flows into the Golden Chersonesus branching in the center of the peninsula is without name, from which however one branch flowing eastward is the Attaba from about 161 30 3 another, the Chrysoana, from about 161 20 the other is the Palanda

The *Gangani* occupy that part along the eastern side of the Ganges throughout its entire course, but especially in the north, through whose territory the Sarabis river flows.

Among them are these cities
Sapolus 139 35
Storna 138 40 34 40

Heorta	138	30	34
Rhappa	137	40	33 40
Below these are the <i>Marundae</i> extending as far as the <i>Gangaridae</i> , among whom are the following cities on the east of the Ganges:			
Boraeta	142	20	29
Corygaza	143	30	27 15
Condota	145		26 30
Celydna	146	30	25 30
Aganagora	146	30	22 30
Talarga	146	40	21 40

Between the Imaus and the Bepyrus mountains are the *Tacoraei* extending northward; below these are the *Corancali*, and next the *Passalae*. Next to these above the Maeandrus mountains are the *Tiledae* who are also called *Besadae* as they are short, stooping, ignorant, uncultivated, with broad foreheads, and of white color. Moreover above Cirradia is the region in which they are said to produce the best cinnamon; those who dwell near the Maeandrus mountains are the *Tamere Anthropophagi*. Above the Argentia Regio, in which there is said to be much well-guarded metal, is a region near the *Besyngiti*, where there is very much gold. Those who inhabit this region are likewise white, short, with flat noses.

Between the Bepyrus mountains and the Damasi mountains, extending northward, dwell the *Aminachae*. Below these are the *Indaprathae*; next are the *Iberingae*; next the *Dabasae*, and the *Nangalothae* as far as the Maeandrus mountains which is an unprotected country. Between the Damasi mountains and their terminus which is toward Sinae but in the north, dwell the *Cacobaes*; and below these are the *Basanarae*; then the Chalcitis region in which there is much metal. Below this as far as the Great bay (Magnus Sinus) are the *Cudutae* and the *Barrae*; next to these are the *Sindi*; next are the *Daonae* along the river of this name. After these are the mountains along the *Lestori* region or the habitat of tigers and elephants. Here is the region of lions and robbers and wild men who live in caves, having skins like the Hippopotamus, who are able to hurl darts with ease.

The cities and villages of this interior region are all renowned. After those along the Ganges, are the following:
Selampura 148 30 33 20

Canogiza	143	32	
Cassida	146	31	30
Eldana	152	31	
Asanamara	155	31	
Archinara	163	31	
Urathene	170	31	20
Suanagura	145	30	29 30
Sagoda	155	20	29 20
Anthina	162	29	
Salatha	165	40	28 20
Rhandamartotza	172	28	
in which is Nardus			
Athenagurum	146	20	27
Maniaena	147	15	24 40
Tosale metropolis	150	23	20
Alosanga	152	24	15
Cimara	170	23	15
Parisara	149	22	15
Pandassa	165	21	20
Sipiberis	170	21	15
Triglyphon regia	154	18	

In this region are said to be bearded fowl, ravens, and white parrots

Lariagara	162	30	18 15
Rhingiberi	166		18
Agimoetha	170	40	14 40
Tomara	172		18
Daona	165		15 45
Mareura metropolis	158		12 30
Lasypa	161		12 30
Barevaora	164		12 50

In the Golden Chersonesus

Balonca	162		4 40
Coconnagara	160		2
Tharra	162	south	1 40
Palanda	161	south	1 30

Island said to be near the accessible part of India

Bazacata	149	30	9 40
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Here are many shellfish, and the inhabitants of the island are said at all times to go without clothing. They are called *Agmatae*. There are three Sindae islands of the *Anthropophagi*, the middle of which is

Bonae Fortunae	145	equator	
Brussae, five islands, the middle of which is in	152	40 south	5 20

In this the *Anthropophagi* are said to be natives. Likewise there are three other islands of the *Anthropophagi* which are called the Sabadicae the middle of which is in

	160	south	8 30
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Labadius or Barley island is said to be a most fruitful one, and to produce much gold.

This has a metropolis on the north side toward the west called Argentea, which is in

the eastern end of the island is in the Satyrorum islands are three in number, the middle of which is

Those who inhabit these are said to have tails such as they picture satyrs having.

There are said to be other islands here adjoining, ten in number, called Maniolae, from which they say that boats, in which there are nails, are kept away, lest at any time the magnetic stone which is found near these islands should draw them to destruction.

For this reason they say that these boats are drawn up on the shore and that they are strengthened with beams of wood. They also say that these islands are occupied by cannibals called *Manioli*. There are means of approach from these islands to the mainland.

CHAPTER III

Location of Sinae (Eleventh map of Asia)

SINAE is terminated on the north by the accessible part of Serica; on the east by the meridian marking the unknown land; on the west by India beyond the Ganges along the indicated boundary as far as the Great bay (Sinus Magnus), and from the Great bay and the parts adjacent to the land of wild beasts, and by that part of Sinae which the *Aethiopes Ichthyophagi* inhabit next to that we have described.

From the boundary limit on the bay near India, as noted

mouth of the Aspithara river	175	16	
river sources flowing from the eastern regions; out of the Semanthini mountains	180	26	
Brama city	176	40	12 30
mouth of the Ambastus river	177		10
river sources	179		15
Rhabana city	177		8 30
mouth of the Saenus river	176	20	6 30

Notium promontory	175	4
Recess of Indian sea	176	2
Satyrorum promontory	175	equator
Sinarus bay	178	south 2 20

Here dwell the *Aethiopes Ichthyophagi*.
mouth of the Cutiaris
river 177 south 7
near which the *Seniamni*
dwell 179 south
river sources 180 south 2
Cattigara Sina, roadstead 177 south 8 30

The *Semanthini* occupy the region farthest north, and above them are mountains of the same name. Below them and the mountains are the *Acadrae*, and next are the *Spi-orae*; next are the *Ambastae* on the Great bay (Magnus Sinus), and bordering them are the *Ichthyophagi* on Sinae bay.

The cities of Interior Sinae have the following names:

Acathara	178	20 21 15
Aspithra	175	30 16 15
Coccoranagara	179	south 2
Sarata	180	south 4
Thyne metropolis	180	south 3

They are said to have walled towns, but none deservedly renowned. It is surrounded toward the east from Cattigara by unknown land, and bordered by the Prusus sea as far as the Prasmum promontory, from which, as is said, begins the bay of the encircling ocean connecting the land from the Rhaptum promontory and the southern parts of Azan on the northeast coast of Africa.

CHAPTER IV

Location of the island of Taprobana (Twelfth map of Asia)

CORY, a promontory of India is opposite the promontory of the Island of Taprobana, which formerly was called the Island of Symondi, now by the natives Salica. Those who inhabit it, in the common language, are called *Salae*; all of the women are covered with hair.

Among these rice, honey, ginger, beryl, amethyst, also gold, silver, and other metals are found. It produces elephants and tigers. Its promontory, which is said to be opposite Cory has the location 126 12 30 and is called Boreum.

Its high surrounding coast is thus described: after the promontory of Boreum, which has been mentioned as located

in	126	12 30
Galiba extrema	124	11 20
Margana city	123 30	10 20
Iogana city	123 20	8 50
Anarismundi promontory	122	7 45
mouth of Soana river	123 20	6
river sources	124 30	3
Sindocanda city	122	5
Priapidis harbor	122	3 40
Anubingara	121	2 40
Prasodis bay	121	2
Jovis extrema, or promontory	120 30	1
Nubartha city	121	4 equator
mouth of Azanus river	123 20	1 so.
Hodoca city	123	2 so.
river sources	126	north 1
Ornion or Avium promontory	125	south 2 30
Dagana city, sacred to		
Luna	126	south 2
Corcobara	127	40 so. 2 20
Dyonisi, or city of		
Bacchus	130	south 1 30
Cetaeum promontory	132	south 2 20
mouth of Baracus river	131 30	1
river sources	128	2
Bocana city	131	1 20
Mordulae harbor	131	1 20
Abaraththa city	131	3 15
Solis harbor	130	4
Great coast (Magnum littus)		
Procuri city	130 15	4 40
Rhizala harbor	130 40	6 10
Oxia promontory	130	7 30
mouth of Gangis river	129	7 20
river sources	127	7 15
Spatana harbor	129	8
Nagadina city	129	8 30
Pati bay	128 30	9
Anubingara city	128 40	9 40
Modurgi emporium	128	11 20
mouth of Phasis river	127	12 20
river sources	126	8
Talacori emporium	126 20	11 40
after this is the northern promontory	126	12 30

The most important mountains in the island are called the Galibi, from which flow the Phasis and the Gangis, and from the mountains which are called Malaea flow

the Soana, the Azanus, and the Baracus rivers. Below these mountains near the sea is the feeding ground of the elephant; in the north of the island are the *Galybi* and the *Mudunti*, below whom are *Anurogrammi* and the *Soani*. Below the *Nanagadibi* are the *Semni*, and below these are the *Sandocandae* toward the west; then near the feeding ground are the *Bumasani*. The *Tarachi* are toward the east, below whom are the *Bocani*, the *Morduli*, and more toward the south are the *Rhogandani*, and the *Nanigiri*. The interior cities of the island are

Anvrogrammum regia	124	10	8	40
Magrammum metropolis	127		7	20
Adisamum	129		5	
Poduca	124		3	40
Ulispada	126	20	north	40
Nacaduma	128	30	equator	

There are many islands around Taprobana, which are said to number one thousand three hundred and seventy-eight, but the names of those which have been handed down are

Vangana	120	15	11	20
Canathara	121	40	11	15
Orneos	119		8	30
Egidion	119		8	30
Harmacha	116	15		15
Ammina	117		4	30
Carcus	118	south	40	
Philicus	116	30	so.	2 40
Irena	120	south	2	30
Calandadrus	121	south	5	30
Arana	125	south	5	30
Bassa	126	south	6	30
Balaca	129	south	5	30
Alaba	131	south	4	
Cumara	133	south	1	40
Zaba	135	equator		
Nagadiba	135	north	8	30
Zibala	135	north	4	15
Susuara	130	north	11	15

The description of the inhabited earth has been made thus part by part, according to provinces and satrapies. But since in the beginning of the work we have shown in what form the known parts of the world could be marked out on a sphere, and on a plane in such manner as to be most truthful and with relative dimensions such as are to be found on a solid sphere; it is fitting to add to the exposition of the whole

inhabited earth an epilogue for the demonstration of those things which have been expounded in general; this now will be appropriately done.

CHAPTER V

A descriptive summary of the map of the inhabited earth

WE have divided the inhabited regions into three large divisions as seemed proper to the ancient writers who examined these areas, and have left us their conclusions in their commentaries, as we ourselves desire to do, partly from what we have seen and partly from the traditions of others. We have set ourselves to depict such a map of the whole inhabited earth presenting nothing untried concerning those things which in part are useful and can well fill the mind by giving it something which is historical, arousing and exciting it to exercise its powers.

That part of the earth which is inhabited by us is bounded on the east by the unknown land which borders on the eastern races of Greater Asia, namely the *Sinae* and the *Seres*, and on the south by the likewise unknown land which encloses the Indian sea and which encompasses Ethiopia south of Libya, the country called Agisymba, and on the west by the unknown land encircling the Ethiopian gulf of Libya and by the Western ocean bordering on the westernmost parts of Africa and Europe, and on the north by the continuous ocean called the Ducalydonian and Sarmatian which encompasses the British islands and the northernmost parts of Europe, and by the unknown land bordering on the northernmost parts of Greater Asia, that is to say on Sarmatia and Scythia and Serica. The water moreover is much greater in extent than is the land.

Our sea (Mediterranean) has many bays which open into it — the Adriatic, the Aegean, the Propontis, the Euxine, and the Sea of Maeotis — and it flows into the ocean through but one outlet, the Straits of Hercules resembling an isthmus, for these narrow inlets of the sea have the shape of a chersonesus. The Hyrcanium sea, called also the Caspian, is surrounded on all sides

by land and has the shape of an island; and we may say the same of the Indian sea, for with its gulfs, the Arabian, the Persian, the Gangetic, and that which is called the Great gulf, it is entirely shut in, like the Caspian, by land on all sides. Wherefore the entire earth consists of three continents, Asia, Africa, and Europe. Asia is joined to Africa by the part of Arabia enclosed by our sea and the Gulf of Arabia, and by the unknown land which is washed by the Indian sea, and is joined to Europe by the land which lies between the Sea (swamp) of Maeotis and the Sarmatic sea in which is the basin of the river Tanis.

Africa is separated from Europe by the Atlantic Straits of Hercules, touching Europe nowhere by itself but only through Asia since the latter is coterminous with both the other continents along their eastern borders.

Of these three parts of the world Asia is the largest, Africa is next in size and Europe is the smallest. Of the seas surrounded by land, as has been said before, the first in size is the Indian sea, the second is our sea, the third is the Hyrcanium or Caspian. Of the most notable gulfs the first and largest is the Gangetic, the second is the Persian gulf, the third is that one which is called the Great gulf, the fourth is the Arabian, the fifth the Ethiopian, the sixth the Pontic, the seventh is the Aegean sea, the eighth is the Maeotis, the ninth the Adriatic sea, the tenth the Propontis.

Of the most noted islands the first is Taprobana, the second the island of Albion, one of the British islands, the third is the Golden Chersonesus, the fourth is Hibernia one of the British islands, the fifth is the Peloponesus, the sixth is Sicily, the seventh Sardinia, the eighth Corsica also called Cynros; the ninth Crete, the tenth Cyprus.

The southern boundary of the inhabited earth is defined by the parallel which is south of the equator sixteen degrees and twenty-five minutes of such degrees as are those of which the great circle has three hundred and sixty, and the parallel through Meroe is precisely the same number of degrees north of the equator. The most northern parallel is sixty-three degrees north of the equator and is called the parallel passing through the island of Thule. Where-

fore the breadth of the entire earth, which as yet is known to us is seventy-nine degrees and twenty-five minutes, or approximately eighty degrees or 40,000 stadia, inasmuch as one degree measures 500 stadia, as has been found by careful measurement, and the circuit of the whole earth is 180,000 stadia.

The extreme eastern region of the world known to us is defined by the meridian passing through the metropolis of Sinae, which meridian is distant from that drawn through Alexandria measured to eastward on the equator, one hundred and nineteen and one-half degrees, that is, about eight hours.

The extreme western limit is defined by the meridian drawn through the Fortunate Isles which is distant from the meridian of Alexandria sixty and one-half degrees or four equatorial hours, and distant from the semicircle which is farthest east one hundred and eighty degrees or twelve equatorial hours. Therefore the known length of the earth, measured along the equator, is ninety thousand stadia, but measured along the most southern parallel is approximately eighty-six thousand three hundred and fifty stadia, and measured along the most northern parallel it is forty thousand eight hundred and fifty-four stadia; and again, along the parallel of Rhodes, upon which measurements are usually made, and which is thirty-six degrees distant from the equator, approximately seventy-two thousand stadia; and along the parallel through Syene, which is twenty-three degrees and fifty minutes from the equator, being in about the middle of the world's breadth, is eighty-two thousand three hundred and thirty-six stadia. These calculations are made according to the proportion of the aforesaid parallels to the equator. The length therefore of the inhabited earth is greater than its breadth, in the northernmost climates by approximately one-fifth of the breadth, and in the climate of the parallel of Rhodes by about one-sixth more, and of that under the parallel of Syene by an amount equal to that along the parallel of Rhodes, and in the southernmost climates about the same, and along the equator by as much and in addition one-fourth.

The length of the longest day or night on the southernmost parallel is thirteen equa-

torial hours; on that through Meroe is twelve hours; on that through Syene thirteen and one-half hours; and on that through Rhodes fourteen and one-half hours; and on the northernmost, passing through Thule, it is twenty hours, and furthermore the extreme differences in latitude are eight equatorial hours.

CHAPTER VI

Description of the Armillary Sphere with a representation of the inhabited earth

IN what we have stated above concerning the relative location of different places on the earth we have made use of equal measurements. It will not be out of place to add to this an explanation of the way in which our earth can be depicted on a plane surrounded by an armillary sphere. Several have attempted to give this demonstration but have ended with this most absurd statement: "Let those represent the earth as a sphere who understand the earth's interior."

Let it now be our plan to delineate on a plane an armillary sphere enclosing a part of the earth, with the assumption that the point of view is such that we look directly at the intersection of the meridian passing through the signs of the tropics and cutting in half the length of the inhabited earth and the parallel drawn through Syene which cuts in half the breadth of the inhabited earth.

Let the calculations of the size of the armillary sphere, of the earth, and the distance of the point of view be such, that in the interval between the circle of the equator and that along the circle of the summer solstice the whole known part of the earth shall appear with the more southerly semi-circle constructed to appear through the middle of the circle upon the earth, in order that there may not be by this any obscuration of the inhabited earth placed in the northern hemisphere. Following this plan it is clear that the aforesaid meridians will present the appearance of one straight line following the same axis, and further for like reason as the parallel through Syene will appear perpendicular to that line it will make all others appear to be drawn in the form of curves to these

straight lines, namely, the meridian which cuts both poles and the parallel which is drawn through Syene, and let these lines be more curved than others which are more distant from the straight lines, which is an obvious adjustment.

An easy method whereby we can give a representation, to the eye, as nearly as possible, will be as follows:

Let the meridian which crosses the equator on the sphere be marked A B C D, and passing through the center E the diameter

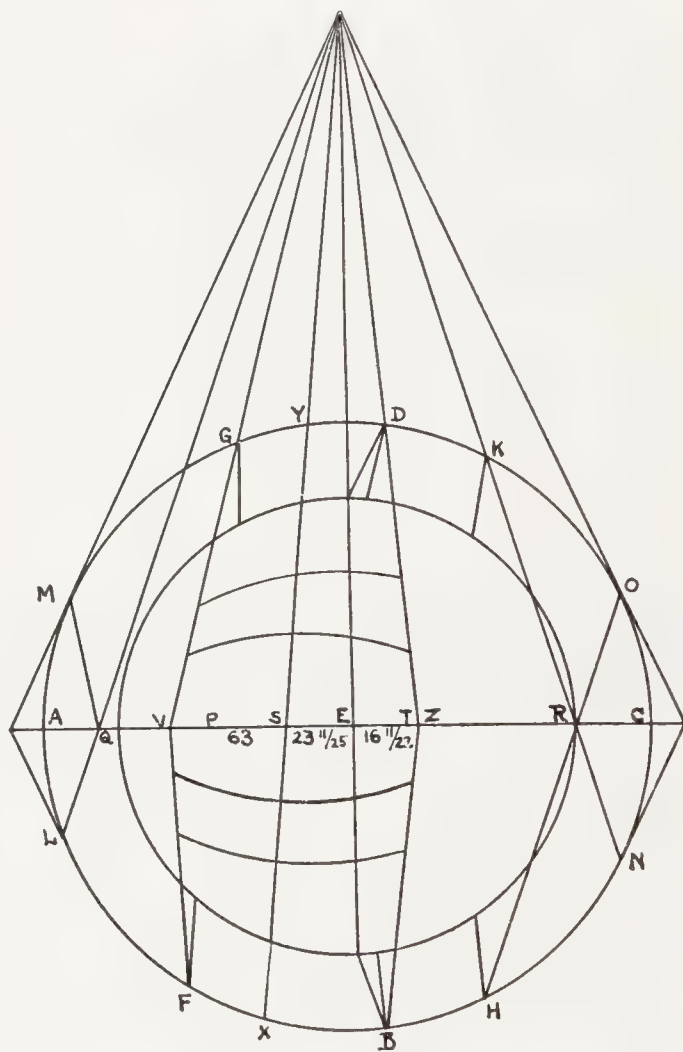


FIGURE V

A E C. Let A be the arctic pole, and let C be the antarctic pole. Let us then take B F and D G, and B H and D K on the circumference covering the distance that the tropics are from the equator; also A L and A M, N C and C O at distances of the arctic and antarctic poles; and let us divide the summer solstice A E at P. Since then the parallel passing through Syene should fall between E and P, and the ratio of the parallel through Syene to the equator is that of about four to five, let the length of E P which divides E P A be about four to

fifteen (i. e. 24° to 90°), thus E A will be four thirds (the length) of the line passing through the center of the earth.

Let us also take E Q of three parts of the same length as each of the four parts of E A, and with the center E and the radius E Q there is drawn the circle Q R which extends around the earth in the same plane. Then making use of a straight line equal in length to E Q and dividing it into ninety equal parts, or one quadrant, E P is given sixty-three such parts, E S sixteen and five-twelfths, and E T sixty-three of the same parts.

Produce X S Y to intersect the perpendicular, namely that along the parallel of Syene, T will thus be the point through which is drawn the parallel cutting the southern limit of the inhabited earth, or that opposite the parallel through Meroe, and V is similarly the point through which is drawn the parallel limiting the arctic boundary passing through Thule.

Then take another point more to the south than T as Z, and let Z and D be joined, and let S Y and Z D be produced to meet at W. If then we regard these circles as in the plane through the signs of the tropics and the poles, and through the axis of the eye (the lines) produced from W to A C through M, G, D, K and O make thereon sections of five parallels to Z through which is drawn the equator D A. Those parallels which join W to D, B, F, H, and G, make at A C the sections through which are drawn the terminal parts of the earth on the same parallels. Likewise also in drawing the parallels to be described on the earth, taking upon Q R the individual distances from the equator, as Z and T, the sections of the semicircle Q V R made by these straight lines joined from W, and opposed to these sections points at corresponding distances, we will have the sections, as seen by the eye, of five parallels to W, through which is drawn the equator D. The lines from W to D, B, F, H, and G make portions such as A T B and C T B the same as A E of the aforesaid parallels. Taking from these the intervals of the several meridians on either side of A V, and on the line X Y, and in the proper ratio on three parallels, we draw through the corresponding three points the portions of the neighboring meridians, as

also those terminating longitude E Y, F G, and P G.

The number of lines to be drawn on the map will be determined by the amount of the descriptive material to be inserted. Care must be taken in the planning of the circles that each be graded through the four assumed points, and care taken in the picture that it does not end too sharply in the section of the circle's termination and that it produces no extraordinary appearance. Also the circle must be adapted to its contents, although the names of cities may be inserted outside the circle of the map itself (that is, in the margin) by surrounding in that case the defective appearance of the map with an outer circle which agrees with the true circle itself.

Care must be taken that the lines through the poles are circles with suitable differences of width and color. Moreover the portions which are placed outside the earth should have fainter color than the portions which are offered to our view, and because they are more remote than the parts to which they are joined, let them be shown in their true likeness in circles and spaces of their own.

In addition, as to the circles of the signs, let them fall on the earth along the more southern semicircles and through the winter solstice, and let us give them in places here and there their proper denominations. On the circles of the earth itself let us write their distance or degree numbers, and the hour numbers of that location. Let us place around the outside circle the names of the winds likewise, just as on the circular sphere at the adjacent five parallels and the poles.

CHAPTER VII

Epilogue to the foregoing

IT seems fitting to insert an epilogue after the foregoing. Our representation of an armillary sphere (with the earth placed in the same) will be understood if the eye is fixed on a locality in relation to which the meridian circle (as commonly divided) passes between the points that mark the tropics and becomes a straight line, which straight line as a circle divides into two equal parts, as noted, the longitude of the inhabited earth.

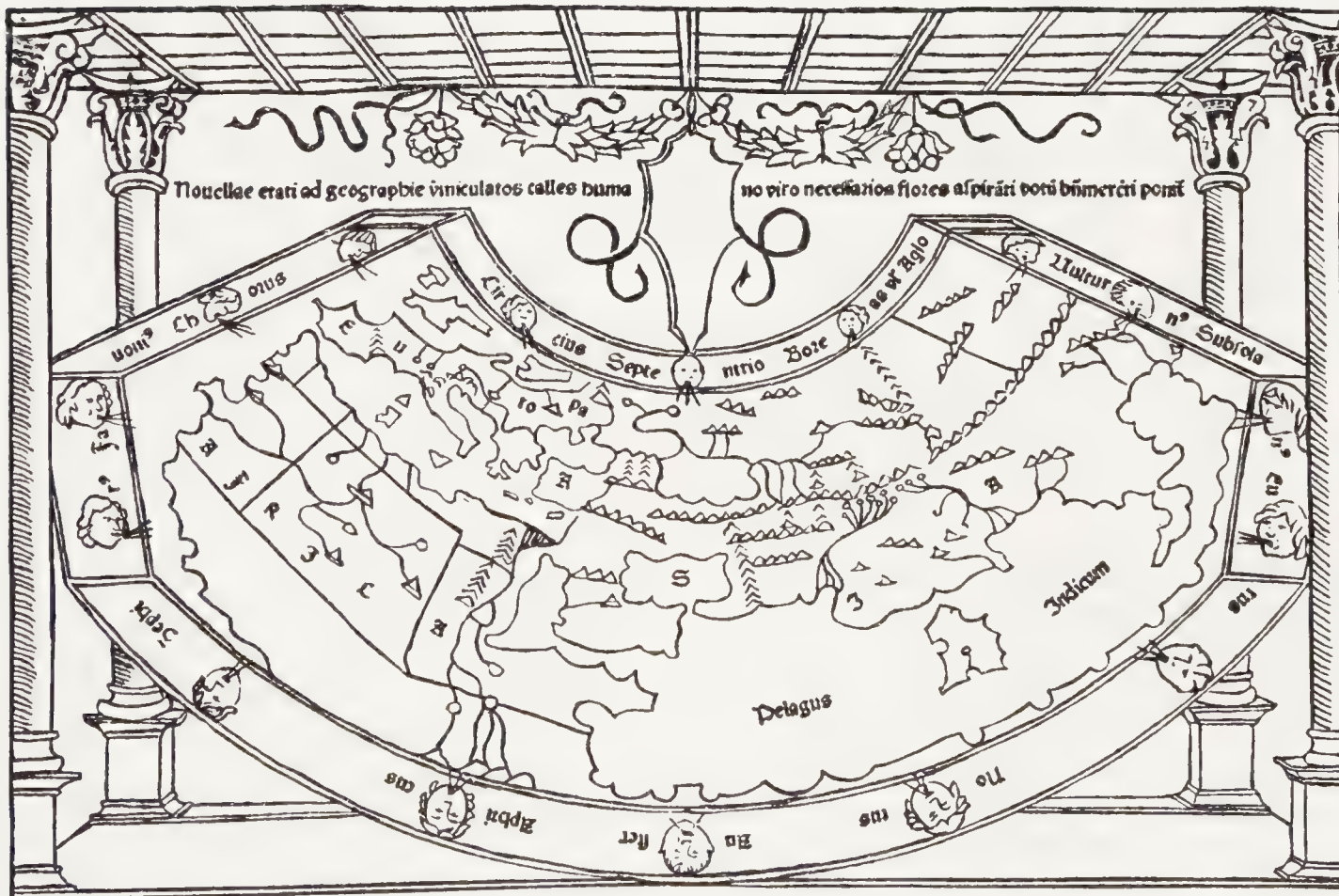
Moreover the parallel which we draw through Syene is a circle which has a latitude almost equal to that given to the earth itself. Let the ratio of the size be so arranged, that is, of the sphere and the earth and the perspective itself, that in the space which lies between the circle of the equinoctial line and the circle of the summer solstice, the entire inhabited earth may be shown to us. (See title-page illustration.)

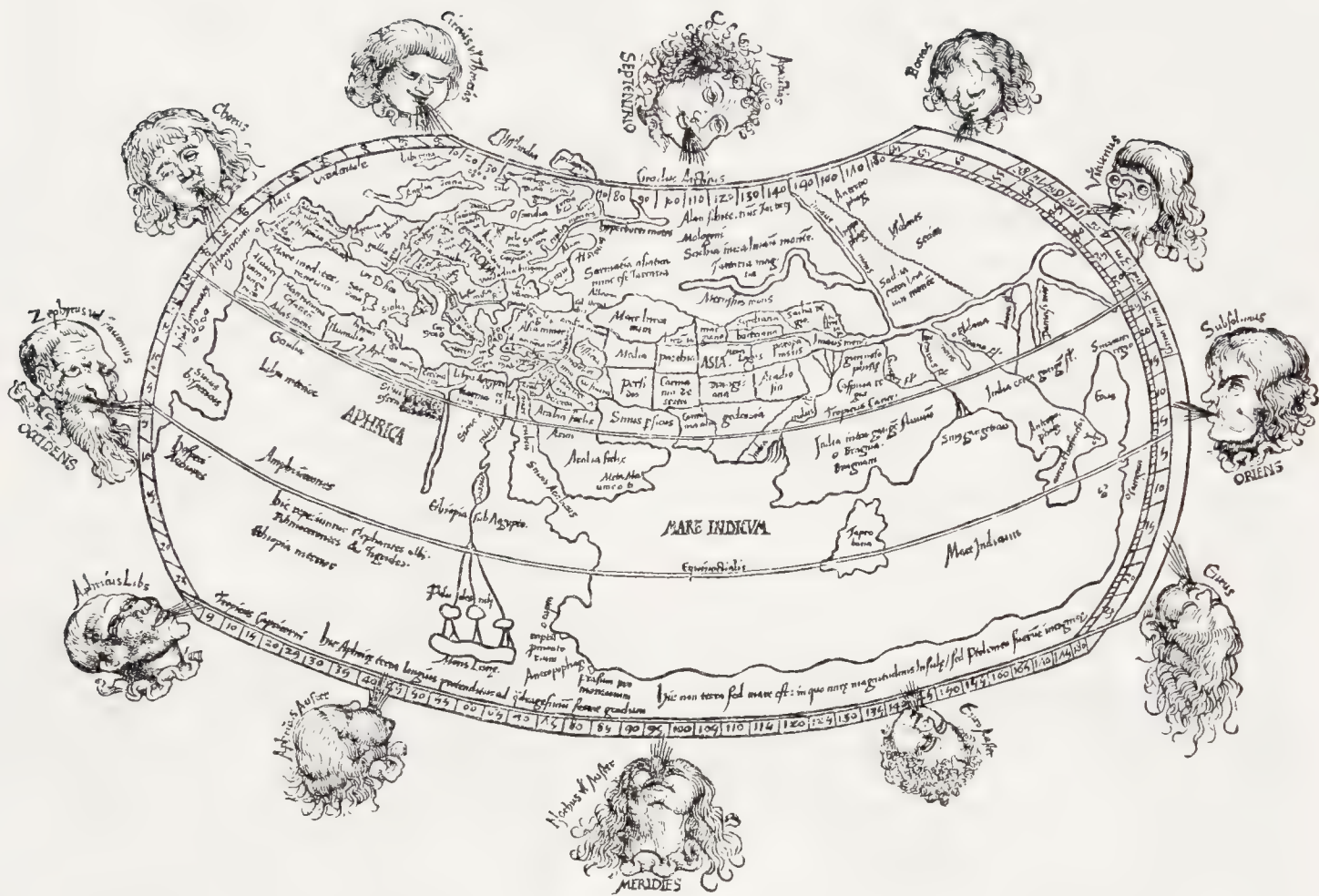
Let the more southern semicircle be drawn on the earth through the middle circle of the signs; let there be no northern addition to our habitable earth which extends to the hemisphere of the arctic. Wherefore the said meridian lines, drawn around the axis of one straight line, will give us a fanciful representation, as though the eye were surveying a plane surface, and the parallel which is drawn through Syene

will seem for the same reason to be a straight line. The rest of the true circles, drawn through the cities, will appear as straight lines. Let the meridians be adjusted to that which passes through Syene, and let the parallels be the more carefully adjusted which are the more distant from it on both sides, in order that the arctic circle may curve more toward the north than the summer solstice, and the winter solstice curve more than the equator because it is bent more to the south, and the antarctic circle curve more than the winter solstice.

The known part of the earth is so situated that it is nowhere entirely walled around by the ocean, except only in case of the land of Raptis, which belongs in part to Africa and in part to Europe, according to the testimony of the ancients.

END OF BOOK SEVEN





BOOK EIGHT



Book Eight contains the following:

1. What presuppositions are necessary in making a division of our habitable earth in the maps.
2. What adaptations must be made in each map.
3. The geographical information we have concerning Europe is represented in ten maps showing thirty-four provinces; the geographical information concerning Africa is set down in four maps showing twelve provinces; the geographical information concerning Asia is set down in twelve maps showing forty-eight provinces.

CHAPTER I

What presuppositions are necessary in making a division of our habitable earth in the maps

WHAT is the part of the diligent and assiduous traveler in the field of geographical investigations; what is the part of a reasonable consideration of the subject matter of geography with which we are familiar and which is within our province rather than that of the former; all this we have sufficiently explained, in my opinion.

As the practice of our predecessors advises us, we should here repeat, by means of an epilogue, through what places each parallel or meridian is drawn, lest we should become subject to ridicule in setting down our places in haphazard manner, not locating them correctly on a given circle nor properly placing them between the adjacent parallels in the manner in which a representation of the whole habitable earth should be set out before the eyes in one complete map.

It remains for us to show how we set down all places, so that when we divide one map into several maps, we may be able accurately to locate all of the well-known places through the employment of easily understood and exact measurements.

As it is necessary therefore, in a single map of the entire habitable earth — since there must be kept a proper proportion in the location of the sites of the different parts of the earth which we set down — to contract some parts on account of the crowding of others, and to expand yet other places on account of the lack of knowledge of certain others, that which many do without sufficient reason — lest they should appear to depart from traditional accounts — who in their maps consequently are led to make many errors in the measurements and representations of regions, or who give the greatest part of their map to Europe in latitude and longitude because the sites and places to be inserted therein are more numerous. They leave very little space for Asia in longitude, and for Africa little space in latitude, on account of an erroneous consideration of the relative size of the countries, and therefore misplace the Indian sea to the north of Taprobana, and in the same map give intimation of an empty space toward the east, and have nothing to describe toward the north, and extend the western ocean to the eastern shore.

Then, too, their map is often drawn out of proportion in a southerly direction, in connecting the vast extent of Africa with India making them a continuous whole; this, however, they may have done to make room for the numerous places to be located on the western coast.

Some surround the earth on all sides with an ocean, imbued with such an opinion, making a fallacious description, and an unfinished and foolish picture.

We can avoid this common error by dividing our map in such manner that the regions which are the more crowded with places are shown alone, or in a map with other regions in which there is greater distance between the circles; then the countries with fewer inhabitants and containing fewer sites in one map will be included in spaces of lesser size between the circles than when represented on a single map.

All maps need not measure the same distances between the circles, but in each map the same proportion however must be kept throughout, as for example, when we describe the head alone we speak in terms of the head, or when we speak of the hand alone we speak in terms of the hand, and we do not figure equally for the head and the hand unless we are drawing a figure of the whole man in one image. And so it does not matter whether we sometimes increase the size of the whole or sometimes lessen it; likewise it matters not in the special part which we can increase, or lessen, for instance, if there should be numerous localities in certain parts in which there are to be many entries. Again it will not be far from the truth if instead of circles we draw straight lines as we have shown at the beginning of this work.

Moreover in the separate maps we shall show the meridians themselves not inclined and curved but at an equal distance one from another, and since the termini of the circles of latitude and of longitude of the habitable earth, when calculated over great distances do not make any remarkable excesses, so neither is there any great difference in any of our maps. When we divide our map according to the proportion of the several parallels to the greatest circles, we say it ought to be done by comparing distances and we do not seek out every distance on the map but that which is from one extreme locality to another extreme.

CHAPTER II

What adaptation on each map is necessary

SUCH things therefore being presupposed, let us begin the task of a division such as the following:

We will make ten maps for Europe; we will make four maps for Africa; for Asia we will make twelve maps to include the whole, and we will state to which continent each map belongs, and how many and how great are the regions or provinces in each, and we will further explain what ratio the

parallel which passes through the middle of the region has to the meridian, stating also what is the circumference of the entire map, and giving throughout each region the assumed elevation (latitude and longitude) of the chief cities, and the greatest length of a day in each of them.

We shall take the measure of distances in longitude without traveling to each mentioned locality, but from the meridian of Alexandria, either at sunrise or sunset, and from the number of equinoctial hours between the places. Besides this we shall find in which of the constellations of the celestial circle is the longitude of the places, and in which of the constellations the sun is once or twice directly overhead, and the constellation's position with regard to the tropics themselves. We shall learn in addition what stars each may have overhead, if by observation the latitude should appear at the same equinoctial point, that is if the latitude were always measured on the same parallel.

We have shown in a mathematical work that the sphere of the fixed stars revolves as the revolution of the earth and of the equinoctial signs, not around the equinoctial poles, but around the pole of the circle through the middle of the zodiac, erratically, so to speak. The same stars are not at all times directly overhead in the same place, but of necessity are more northward at one time than at another, and others are more southward.

But it might be considered useless to add such an epilogue, since it is according to law in the celestial sphere, following this hypothesis in stated durations of time, that we fix the site of a place on a circle which extends from pole to pole, counting the whole distance on one meridian, and noting that the same is as many degrees from the equator as the parallel of the place to be determined is distant.

And this it also will be easy to perceive at both poles although the location of no place is determined by the constellations of the fixed stars whether many or few.

These things being settled beforehand we can now attend to that which remains.

TABLE OF MAPS REPRODUCED

The following are the known provinces and prefectures as listed in Ptolemy's ten maps for Europe, four for Africa, and twelve for Asia.

To the reproduction of the twenty-seven maps from the Ebner manuscript, including his world map, have here been added two maps which appear in printed editions of Ptolemy's Geography published after the discovery of America — the Ruysch world map from the 1508 edition, and the Lorenz Fries world map from the 1522 edition.

WORLD MAP

EUROPE

FIRST MAP

Britannia island Hibernia
Britannia island Albion
Thule island

SECOND MAP

Hispania Baetica
Hispania Lusitania
Hispania Tarraconensis

THIRD MAP

Gallia Aquitania
Gallia Lugdunensis
Gallia Belgica
Celtogalatia Narbonensis

FOURTH MAP

Greater Germania

FIFTH MAP

Rhetia and Vindelicia
Noricum
Pannonia Upper
Pannonia Lower
Illyria
Liburnia
Dalmatia

SIXTH MAP

Italia
Cynos island (Corsica)

SEVENTH MAP

Sardinia island
Sicily island

EIGHTH MAP

Sarmatia in Europe
Tauric peninsula

NINTH MAP

Iazyges Metanastae
Dacia
Mysia Upper
Mysia Lower
Thracia
Chersonesus (peninsula)

TENTH MAP

Macedonia
Epirus

EUROPE, TENTH MAP, *cont'd*

Achaia
Peloponnesus
Crete island
Eubea island

AFRICA

FIRST MAP

Mauritania Tingitana
Mauritania Caesariensis

SECOND MAP

Africa
Numidia

THIRD MAP

Cyrenaica
Marmarica
Libya
Egypt
Thebes

FOURTH MAP

Libya Interior
Ethiopia below Egypt
Ethiopia and all south

ASIA

FIRST MAP

Pontus
Bithynia, Phrygia, Lycia
Pamphylia, Pisidia
Galatia, Paphlagonia,
Isauria
Cappadocia
Armenia Lesser
Cilicia

SECOND MAP

Sarmatia Asiatica

THIRD MAP

Colchia
Ileria
Albania
Armenia Greater

FOURTH MAP

Cyprus island
Syria
Phoenicia

ASIA, FOURTH MAP, *cont'd*

Judea Palestina
Arabia Petraea
Arabia Deserta
Mesopotamia
Babylonia

FIFTH MAP

Assyria
Susiana
Media
Persis
Parthia
Carmania Deserta
Hyrcania

SIXTH MAP

Arabia Felix
Carmania

SEVENTH MAP

Margiana
Bactriana
Sogdiana
Sacae
Scythia this side the Imaus mountains

EIGHTH MAP

Scythia beyond the Imaus mountains
Serica

NINTH MAP

Aria
Paropanisadae
Drangiana
Arachosia
Gedrosia

TENTH MAP

India along the Ganges

ELEVENTH MAP

India beyond the Ganges
Sinae Region

TWELFTH MAP

Taprobana

RUYSCH WORLD MAP

LORENZ FRIES WORLD MAP





Expositio omnium summorum in sub
 continetur in Europa tabule decem
 provincie et quinquaginta

Rima europe tabula insulas britan
 cas continet cum ceteris insulis que
 circa ipsas sunt. Paralleli sunt medii
 ipsarum insularum: proportionem habet
 ad meridianum: quam undecim fecit ad uigin
 ti. Terminatur autem tabula ab omni parte oce
 ano: ab oriente germanico: ab austro britani
 co & eo qui vergionius appellatur. ab occa
 su occidentali: a septentrione hyperboreo: &
 eo qui deucallidomus dicitur. Thyle insula
 maximam diem habet horarum equinoctia
 lium 20. & distat ab Alexandria uersus oc
 casum horis equinoctialibus 2. **Ciuitates**
 Ibernice insule Ibenus maximam diem habet
 horarum 18. & distat ab Alexandria uersus oc
 casum horis 3 $\frac{1}{4}$.
 Rheba maximam diem habet horarum 18 $\frac{1}{2}$
 et distat ab Alexandria uersus occasum ho
 ris 3 $\frac{1}{4}$. **Albionis insule britanice**
 ciuitates londinium maximam diem habet
 horarum 17. et distat ab Alexandria uer
 sus occasum horis 2 $\frac{2}{3}$.
 Cantuarii maximam diem habet hora
 rum 18. & distat ab Alexandria uersus oc
 casum horis 2 $\frac{1}{3}$.
 Peteroton seu alatus exercitus maximam die
 habet horarum 18 $\frac{1}{3}$. et distat ab Alexan
 dria uersus occasum horis 2.
 Oces insula maximam diem habet horarum 16
 $\frac{2}{3}$. et distat ab Alexandria uersus occasum
 horis 2 $\frac{2}{3}$.

Prima Europe

Unus gradus longitudinis
in hoc paleo p. thlen.
habet miliaria 28 $\frac{3}{8}$.stadia vero
228.

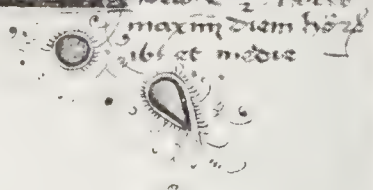
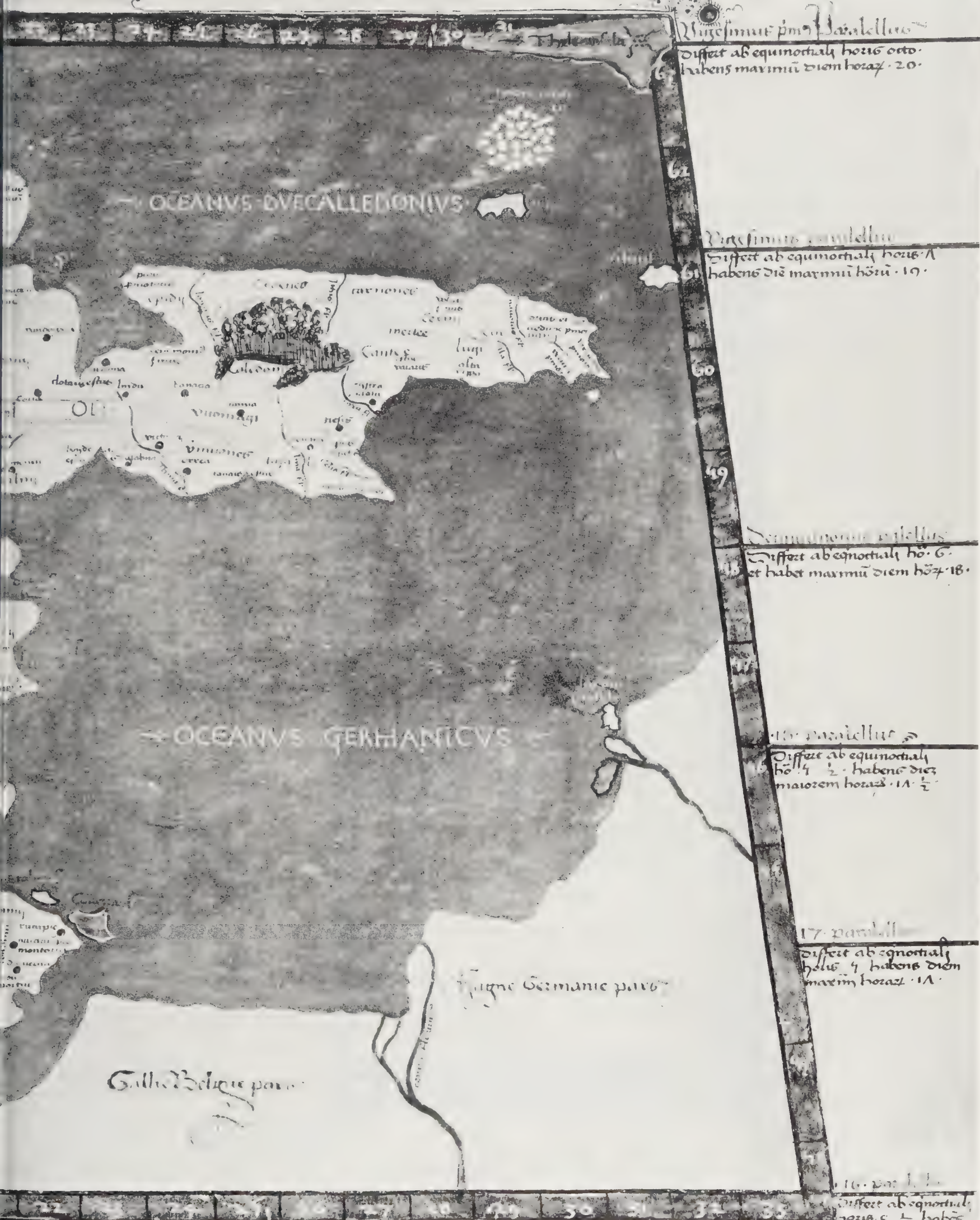
Differentia partu superioru
ad inferiorem tab. de. in
stadiis quidem 2240. In
miliaribus autem 40.
Ergo et

miliaria

miliaria 20 $\frac{1}{2}$

Unus g. longit. toti
net. Hadia 317. et
miliaria 38.





Secunda europe tabula continet
spaniam totam in tribus prou-
cijs partitam cum insulis sibi ad-
iacentibus. Parallelus p. cuius me-
dium ductus proportionem habet ad me-
ridianum: quam tres ad quatuor fecit.
Circumscribitur autem tabula ab oriente
montibus pyrenæis: A meridie balearico
& beico mari fretto q. herculeo: ac par-
te exterioris pelagi: ab occasu octano oc-
cidentalī ab arcto octano centaurico.

Lulitane Nocha cesarea maximam diem
habet horarum $14 \frac{1}{2} \frac{1}{3} \frac{1}{12}$ & distat ab
Alexandria uersus occasum horis $3 \frac{1}{2}$.

Augusta emeuta maximam diem habet
horarum $14 \frac{1}{4} \frac{2}{3}$ & distat ab alexandria u-
sus occasum horis $3 \frac{1}{2}$ Betice ciuitas

Corduba maximam diem habet horarum
 $14 \frac{2}{3}$ & distat ab Alexandria uersus oc-
casum horis $3 \frac{1}{3} \frac{1}{4}$ Hispanie tur-

ritanensis. Asturica augusta maxima
diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ & distat
ab Alexandria uersus occasum horis $3 \frac{1}{3} \frac{1}{12}$

Noua carthago maximam diem habet
horarum $14 \frac{2}{3}$ & distat ab Alexandria
uersus occasum horis $3 \frac{1}{6}$

Tarracon maximam diem habet horarum
 14 fere & distat ab Alexandria uersus
occasum $2 \frac{1}{2} \frac{1}{3} \frac{1}{12}$

Clunia maximam diem habet horarum
 $14 \frac{8}{8}$ et distat ab Alexandria uersus
occasum horis $3 \frac{1}{4}$

Cesarea augusta maximam diem habet
horarum $14 \frac{1}{12}$ & distat ab Alexandria u-
sus occasum $3 \frac{1}{12}$

Gadira insula maximam diem habet hora-
rum $14 \frac{1}{2}$ & distat ab Alexandria uersus
occasum horis $3 \frac{2}{3}$

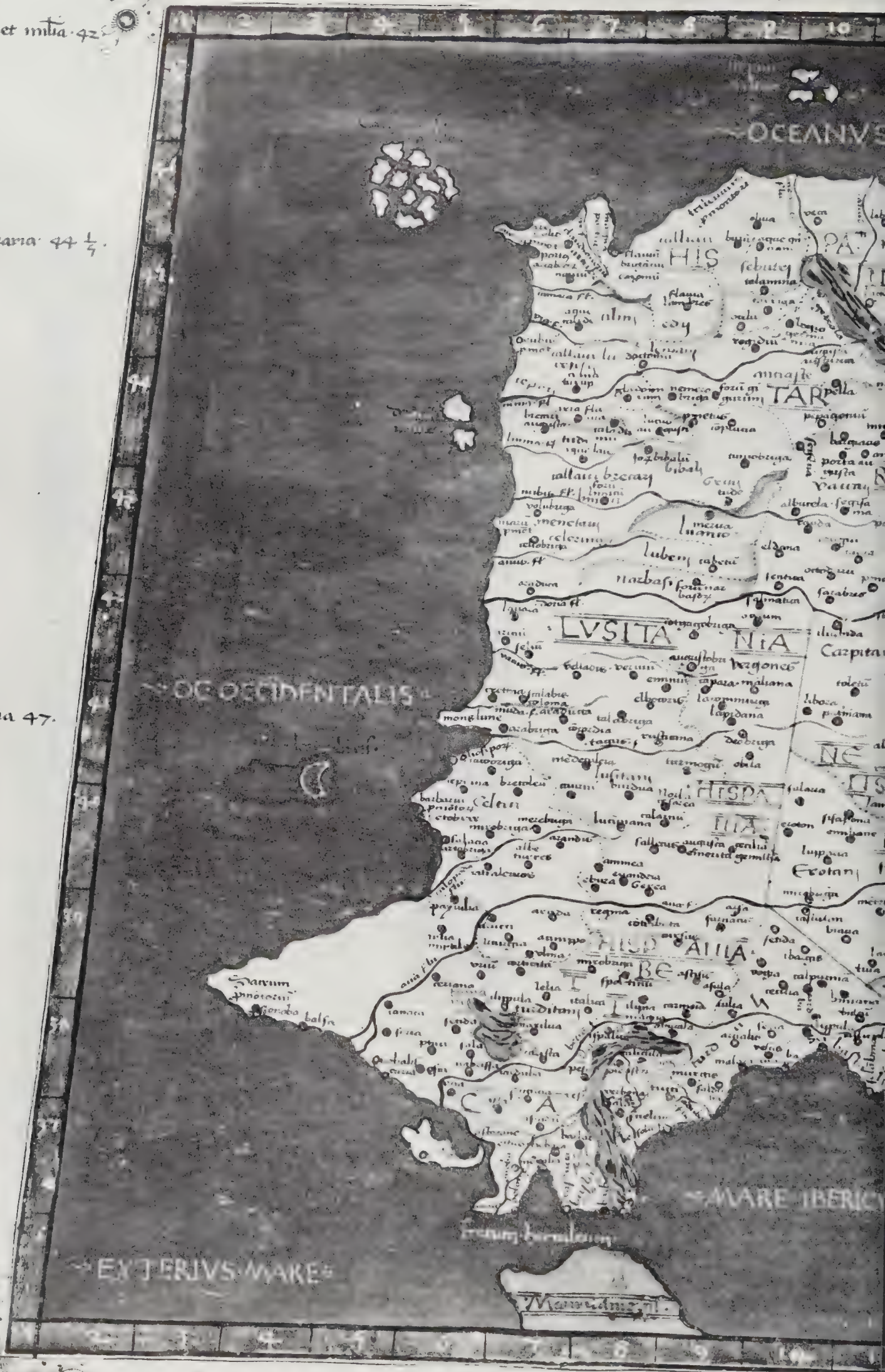
Secunda Europe

Vnus 5 logus ualet milia 42

miliaria 44 $\frac{1}{4}$

miliaria 47

miliaria 70





Differt ab equinoctiali horis $3\frac{1}{2}$
habens maximū diē $14\frac{1}{2}$

CLIMA SEXTVM

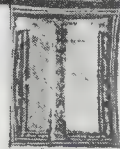
Differt ab equinoctiali horis $3\frac{1}{2}$
habens diē maiore horū $14\frac{1}{2}$

12: pvaellus per hellefonti
Differt ab equinoctiali horis $3\frac{1}{2}$
et habet diē maximū horū $14\frac{1}{2}$

Quantum clima

Differt ab equinoctiali horis $2\frac{1}{2}$
habens maximū diē
horū $12\frac{1}{2}$ et $1\frac{1}{2}$

Differt ab equinoctiali ho $2\frac{1}{2}$
et $1\frac{1}{2}$ et hz diē maximū
horū $12\frac{1}{2}$ et medie
Clima quartum



Etia Europe tabula continet
Galliamq; partem cum insulis
sibi adiacentibus. Medius iparū
parallellus proportionem habet
ad meridianum quam duo ad tres. Circū
scribitur autem tabula: ab oriente italia
et Rhetia ac germania: a meridie mari
gallico: ab occasu montibus pyrenæis
& oceano Aquitanico. ab æcto brita
nico oceano. Aquitanie civitatei
inlignes. mediolanum maximam diem
habet horarum $14 \frac{1}{2}$ & distat ab
Alexandria uersus occasum horis $2 \frac{1}{2}$
Burdigala maximam diem habet horarū
 $14 \frac{1}{2}$ & distat ab Alexandria usq; occasū
 $2 \frac{1}{2}$
Lugdunēsi Augustodanum maximam
diem habet horarum $14 \frac{1}{2}$ & distat ab
alexandria uersus occasum horis $2 \frac{1}{2}$
Lugdunū maximam diem habet ho
rarum $14 \frac{1}{2}$ et distat ab Alexandria
uersus occasum horis $2 \frac{1}{2}$
Belgæ Origiacum maximam diem habe
horarum $16 \frac{1}{2}$ et distat ab Alexandria
uersus occasum horis $2 \frac{1}{2}$
Durocortacum maximam diem habet ho
rarum 16 et distat ab Alexandria uersus
occasum $2 \frac{1}{2}$
Narbonēsi Massalia maximam diem ha
bet horarum $14 \frac{1}{4}$ et distat ab Alexandria
uersus occasum horis $2 \frac{1}{3}$
Narbon maximam diem habet horarum
 $14 \frac{1}{4}$ et distat ab Alexandria uersus
occasum horis $2 \frac{1}{3}$
Vienna maximam diem habet horarum
 $14 \frac{1}{2}$ et distat ab Alexandria uersus
occasum horis $2 \frac{1}{4}$

miliaria 40 $\frac{1}{2}$

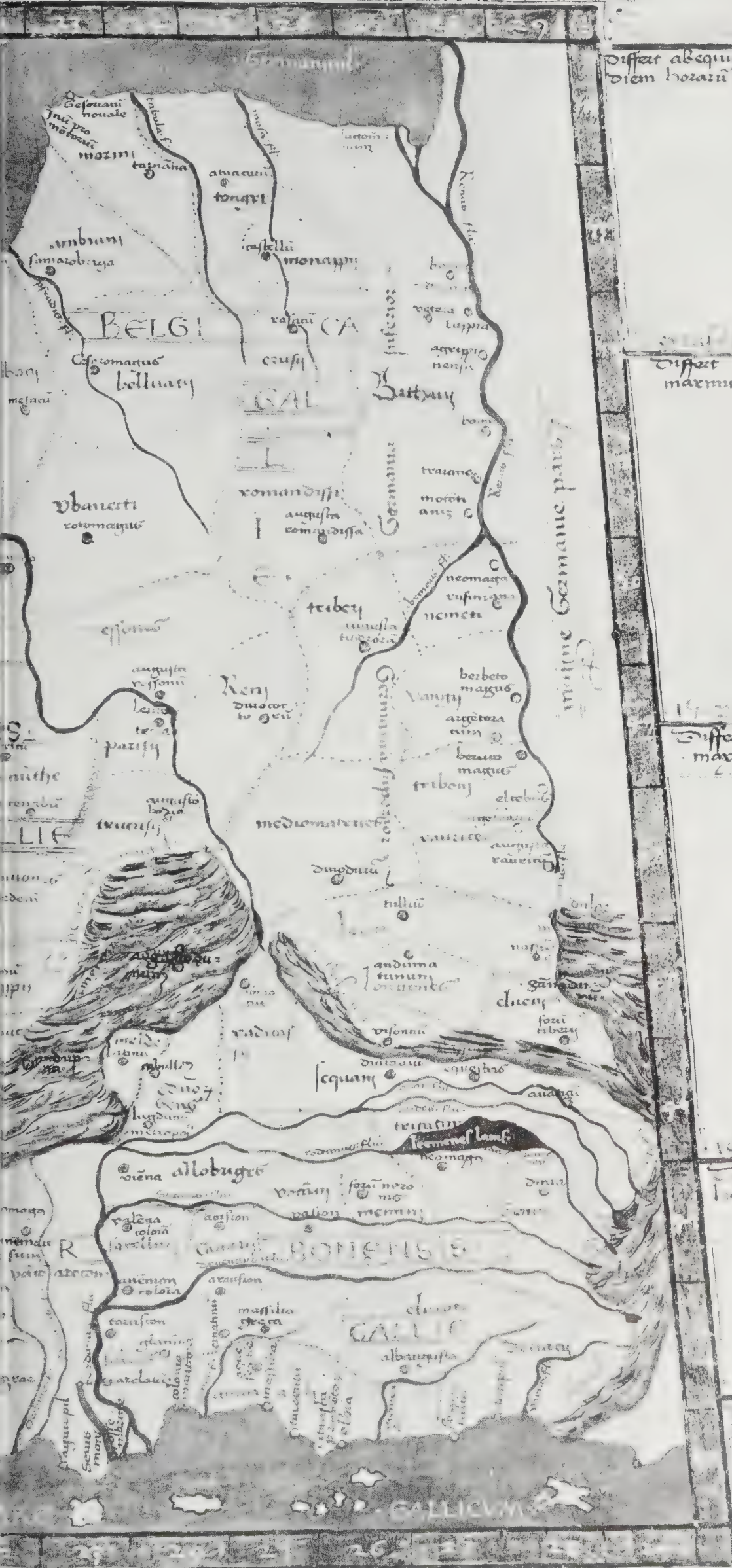
milia 44 $\frac{1}{4}$

miliaria 46

Albionis Insule britanue pars



Europe tabula



Differt ab equinoctiali horis 4. habens maximū diem horarū .11.

Differt ab equinoctiali horis 2. Et habet maximū diem horarū .16. et medie -

Differt ab equinoctiali horis 7. habens maximū diem horarū .16.

Cuma Septima

Differt ab equinoctiali horis 3. Et habens maximū diem horarū .14. et medie -

Cuma Sextima

Differt ab equinoctiali horis 3. Et habens maximū diem horarū .14. et medie -

milia 32 1/2

Quarta Europe tabula coraret
Germaniam cum insulis fibr ad
iacentibus. Medius ipius paralle
lus proportionem habet ad me
ridianum quam tres ad quinque. Ter
minatur autem tabula ab oriente lazib
metanastis et Sarmatia Europe. Ab au
stro Rhetia & Norico & duabus panno
niis. Ab occasu Gallia belgica: ab aceto
oeceno germanico

Magne germanie ciuitates insignes.
Amasia quidem maximam diem habet
horarum 16 1/2 et distat ab Alexandria
uersus occasum horis 2 fere.
Lupia autem maximam diem habet ho
rarum 16 1/2 1/3 et distat ab Alexandria
uersus occasum horis 1 1/2 1/4
Rhobodunum maximam diem habet
horarum 14 1/2 1/3 1/4 et distat ab ale
xandria uersus occasum horis 1 1/3
Scandia insula maximam diem habet
horarum 18 et distat ab Alexandria
uersus occasum horis 1

Vniuersi longit. ualet mil. 36 1/2

miliaria 40 1/2

miliaria 42



Clung Septimum.

Quinta Europe

Vn9 grad. milia 42

miliaria 47

miliaria 4



Quinta Europe tabula continet
Rhetiam & Vindelicos ac Noricum
duas q. pannonias ac totam Illiri-
dem cum adiacentibus insulis. Me-
dius eius parallelus portionem habet ad
meridianum quam quadraginta tres ad se-
xaginta. Circūscribitur aut tabula ab ori-
ente fazibus metanastis & Mysia superiori
a meridie Italia & sinu hadriatico ac par-
te macedonie ab apecto maiori germania
& e brigantium maximam diem habet
horarum $14 \frac{2}{3}$ et distat ab Alexandria uer-
sus occasum horis 2
Vindelice ci. Augusta uindelica maximā
diem habet horarum $1 \frac{2}{3}$
Norin hadriana maximam diem habet horarum

14 $\frac{3}{4}$ et distat ab Alexandria uersus
occasum horis $1 \frac{3}{4}$
ramonice superioris Patavium maximam
diem hē horarum $14 \frac{2}{3}$ et distat ab
Alexandria uersus occasum horis $1 \frac{2}{3}$
Iulium caenicum maximam diem hē horarum
 $14 \frac{1}{2}$ et distat ab Alexandria uersus
occasum horis $1 \frac{1}{2}$
S acarbantia maximam diem habet horarum
 $14 \frac{1}{2}$ et distat ab Alexandria uersus
occasum horis $1 \frac{1}{2}$
D eemonia maximam diem habet horarum
 $14 \frac{1}{2}$ et distat ab Alexandria uersus oc-
casum horis $1 \frac{1}{2}$
Pannonie inferioris Serbinum maximā
diem habet horarum $14 \frac{2}{3}$ et distat ab
Alexandria uersus occasum horis $1 \frac{2}{3}$



Differt ab egyptiaca
horis 3 1/2 habet die
maiores horis 14 1/2

clima temperatum

Differt ab egyptiaca
horis 3 1/2 habet
diem maiores ho
rarum 14 et 1/2

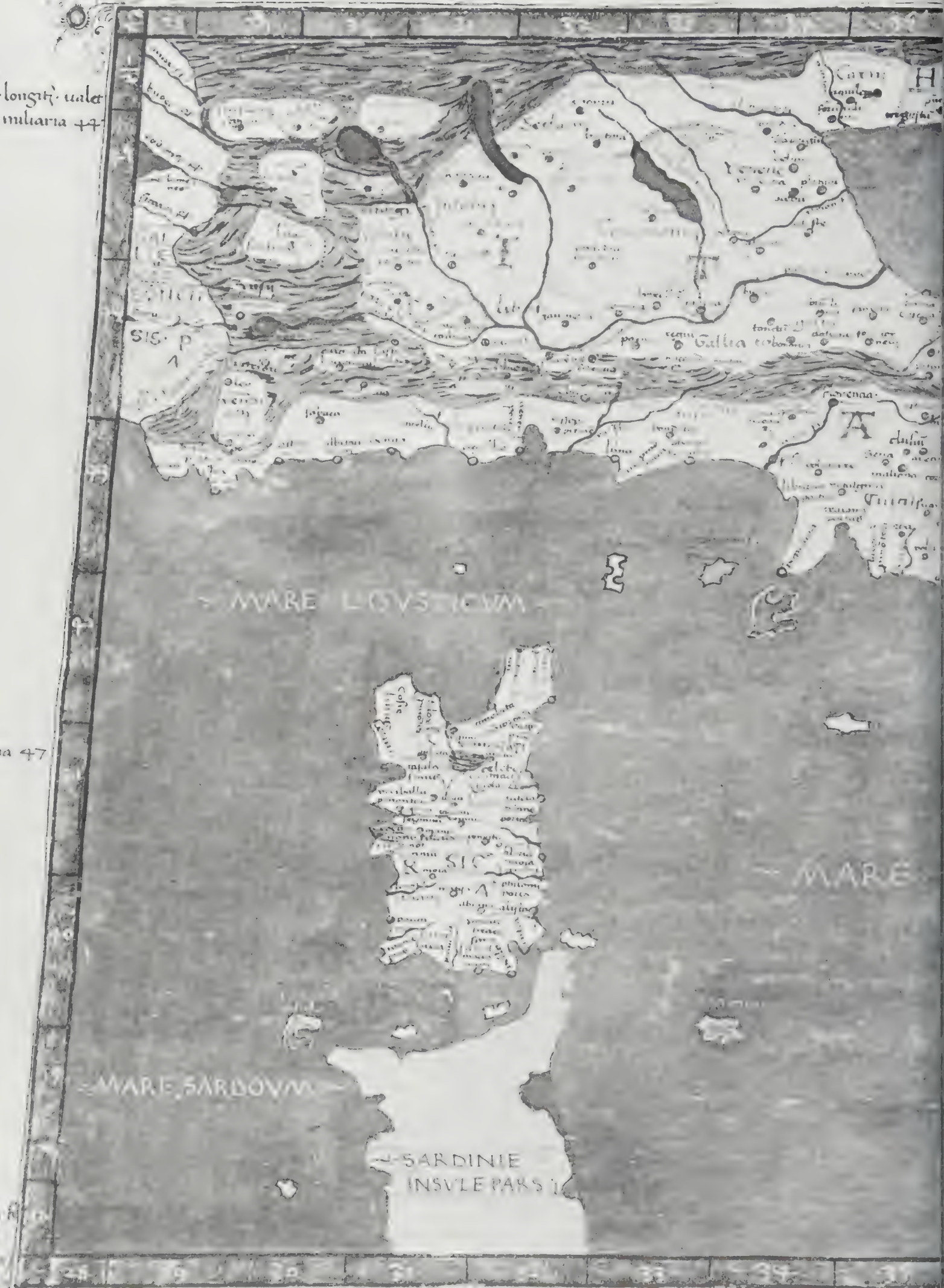
- S iemum maximam diem habet horarum
14 1/2 et distat ab Alexandria uersus
occasum horis 1. Illirid. si luc. liburne
ruut? s adria maximam diem habet ho
rarum 14 1/3 et distat ab Alexandria u
sus occasum horis 1 1/4
- S idronia maximam diem habet horarum
14 1/3 1/2 fecit et distat ab Alexandria u
sus occasum horis 1 1/8
- Dalmatie Salone maximam diem habet ho
rarum 14 1/4 et distat ab Alexandria
uersus occasum horis 1 1/8
- N arbona maximam diem habet horarum 14
1/4 fecit et distat ab Alexandria uersus oc
casum horis 1 1/4
- S cardona insula maximam diem habet
horarum 14 1/3 Et distat ab Alexan
dria uersus occasum horis 1 1/4

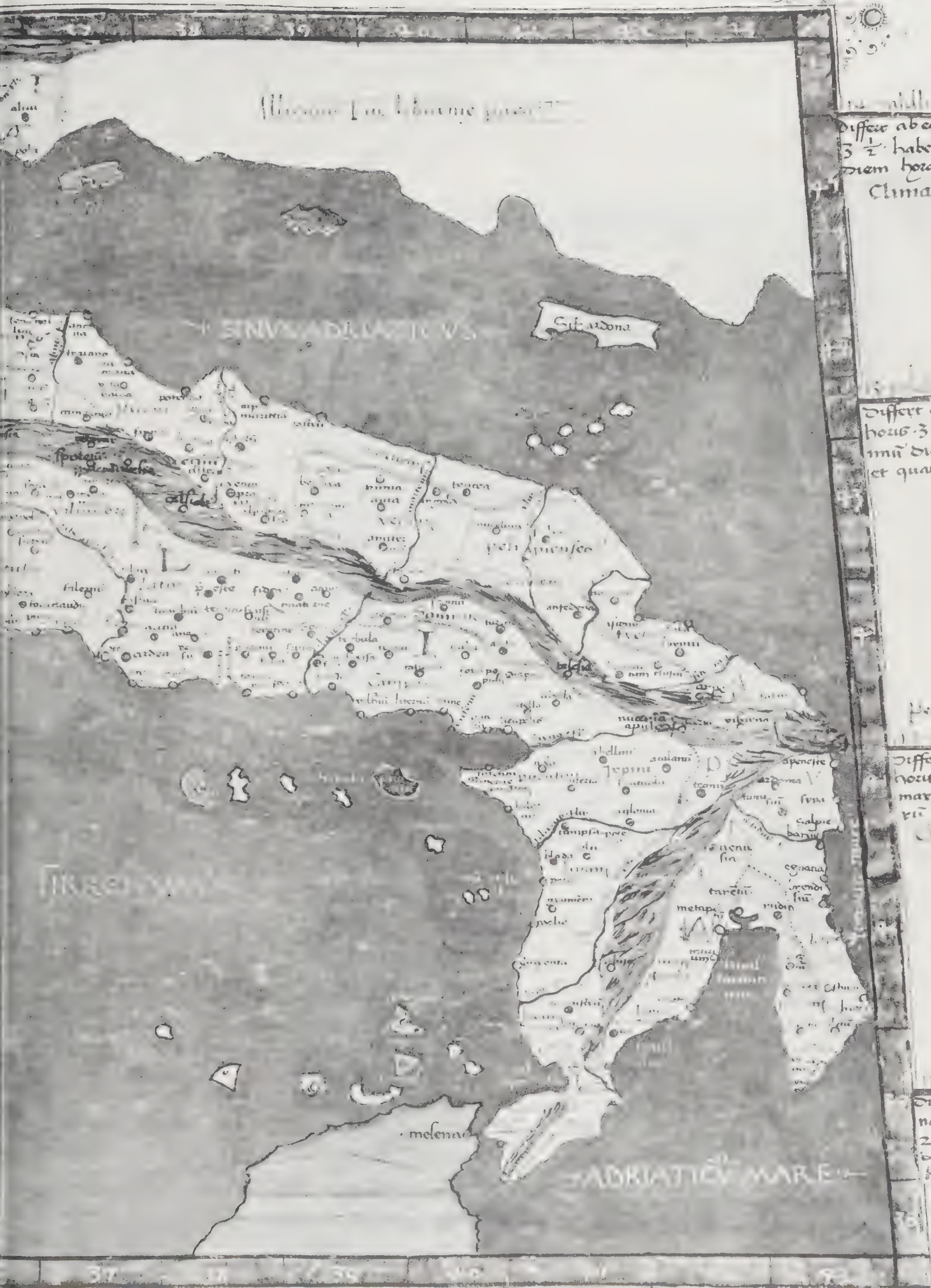
Septa Europe Tabula

Unal g. longit. uale
miliaria 47

miliaria 47

miliaria 47





Differt ab equinor^{ali} horis
3 $\frac{1}{2}$ habens maximū
diem horarū 14 $\frac{1}{2}$
Clima sextum

Differt ab equinor^{ali}
horis 3 $\frac{1}{2}$ habens mar
timū diem horū 14
et quarte vnuo

Differt ab equinor^{ali}
horis 3 habens
maximū diem hō
rū 14
Clima quintū

Differt ab equi
nor^{ali} horis
2 $\frac{1}{2}$ habens
maximū
diem horū 12 $\frac{1}{2}$

Extra Europe tabula Italiam continet
et Cynnum insulam cum ceteris sibi
adiacentibus insulis. Parallellus ipius
medius proportionem habet ad meri-
dianum quam tria ad quatuor. Circūscribitur
autem tabula ab oriente hadriatico sinu &
mari ionio a meridie iugustico pelago atq; tyr-
reno & parte hadriatici: ab occasu alpiū &
montibus atq; Gallia. A septentrione Rhetia &
Noricū & parte hadriatici sinus

et hie ciuitates in quibus hec sunt

Vrbis Roma regia maximam diem habet horarū
14 $\frac{1}{2}$ et distat ab Alexandria uersus occasum
horis 1 $\frac{1}{2}$ 8

Nicea massaliensium maximam diem habet horarū
14 $\frac{1}{4}$ et distat ab Alexandria uersus occasum hor
2 8

Tarracone maximā diem habet horarum 14 $\frac{1}{4}$
& distat ab Alexandria uersus occasū hor 1 $\frac{1}{2}$

Napoli maximam diem habet horarū 14 $\frac{1}{2}$ 3 &
& distat ab Alexandria uersus occasum hor 1 $\frac{1}{2}$

Brendesium maximam diem habet horarum 14
 $\frac{1}{2}$ 3 et distat ab Alexandria uersus occasū hor 1 $\frac{1}{2}$

Ancoon maximam diem habet horarum 14 $\frac{1}{2}$ et di-
stat ab Alexandria uersus occasū hor 1 $\frac{1}{2}$ 19

Rauenna maximā diem habet horarū 14 $\frac{1}{2}$ 12
fere et distat ab Alexandria uersus occasum
hor 1 $\frac{1}{2}$ 3

Aculia maximam diem habet horarum 14 $\frac{1}{2}$
& distat ab Alexandria uersus occasū hor 1 $\frac{1}{2}$ 4

Beneuentus maximam diem habet horarum
14 $\frac{1}{2}$ fere & distat ab Alexandria uersus oc-
casum hor 1 $\frac{1}{2}$ 4

Capua maximam diem habet horarum 14 $\frac{1}{2}$
et distat ab Alexandria uersus occasū hor 1 $\frac{1}{2}$

Aleria maximam diem habet horarum
14 $\frac{1}{2}$ 3 $\frac{1}{2}$ et distat ab Alexandria uersus
occasum horis 2 fere

Mariana maximam diem habet horarum 14
fere & distat ab Alexandria uersus occasum
horis 2 fere

SOptima Europe tabula continet Sar-
diniam & Siciliam insulas. Paralle-
lus ipsius medius proportionem habe-
ad meridianum quam quatuor ad
quinque. Circumscribitur aut tabula ab or-
parte pelago: ab ortu hadriaco a meridie
Aphricano: ab occasu Sardo: a septentrione li-
gustico.

Sardinie insule: ciuitates insignes

Susaleos maximam diem habet horarum $14 \frac{1}{2} \frac{1}{3}$
& distat ab alexandria uersus occasum horis $1 \frac{1}{2} \frac{1}{3} \frac{1}{4}$

Caralis maximam diem habet horarum $14 \frac{1}{2}$
& distat ab alexandria uersus occasum horis $1 \frac{1}{2} \frac{1}{3}$

Tueris byssonis maximam diem habet horarum
 $14 \frac{1}{2}$ & distat ab alexandria uersus occa-
sum horis .2. fere.

Gucullis noua maximam diem habet horarum
 $14 \frac{1}{2} \frac{1}{8}$ et distat ab alexandria uersus occa-
sum horis $1 \frac{1}{2} \frac{1}{3} \frac{1}{8}$

Sicilie insule insignium ciuitatum.

Lilybeum maximam diem habet horarum $14 \frac{1}{2}$
et distat ab alexandria uersus occasum
horis $1 \frac{1}{2} \frac{1}{3} \frac{1}{8}$

Syracuse maximam diem habent horarum $14 \frac{1}{2} \frac{1}{8}$
& distat ab alexandria uersus occasum
horis $1 \frac{1}{3} \frac{1}{4}$

Mesena maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et
distat ab alexandria uersus occasum horis $1 \frac{1}{3} \frac{1}{8}$

Scegesta maximam diem habet horarum $14 \frac{1}{4}$ et
quid parum & distat ab alexandria uersus
occasum horis $1 \frac{1}{2} \frac{1}{4}$

Catana maximam diem habet horarum $14 \frac{2}{3}$ &
distat ab alexandria uersus occasum horis $1 \frac{1}{3} \frac{1}{4}$

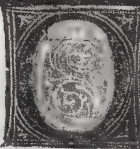


This is a historical map of Sicily, likely from a 15th-century manuscript. The map shows the island of Sicily with its characteristic shape, including the three main parts: the northern part (Mazara del Vallo area), the central part (Catania area), and the southern part (Syracuse area). The map is labeled 'SICILIA' in the center. Surrounding regions are labeled: 'PARS ITALIAE' to the east, 'AFRICUM' to the south, and 'MAGNA GRÆCIA' to the west. Major cities and towns are marked with dots and labeled in Latin, including Messina, Catania, Syracuse, Palermo, and Agrigento. The map is framed by a decorative border, and there are some marginal notes on the right side.

Differt ab equo mortali
homo $2 \frac{1}{2} \frac{1}{2}$ habet
tunc marmuri die hora
rum $19 \frac{1}{2} \frac{1}{4}$.

10. parallelus

Differt ab egnorly
horu 2 1/2 habeo
diē maiore horaz
19 et medie vni
China carum



Et tunc Europe tabula continet Sarmatiam que in ea est et tauricam chersonesum. parallelus ipsius medius proportionem habet ad meridianum quam undecim ad viginti. Terminatur autem tabula ab ortu solis bosphoro Cimmerico & Meoti palude ac Tanai fluuiio iuxta Sarmatiam Asie. A meridie pontico mari & parte Mysie inferioris et Dacia ac Iazyg Metanastis: ab occasu montibus Sarmaticis appellatis ac germania & Vistula fluuiio: a septentrione uenedico sinu & Sarmatico oceano ac terra incognita. Sarmatie in europa ciuitates.

Tamytica maximam diem habet horarum 16 & distat ab alexandria uersus occasum horis 1 $\frac{1}{4}$.

Naubarum maximam diem habet horarum 16 $\frac{1}{3}$ et distat ab alexandria uersus occasum horis 1 $\frac{1}{8}$.

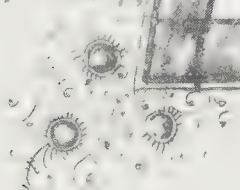
Olbia que et Borysthenes maximam diem habet horarum 16 $\frac{1}{2}$ & distat ab alexandria uersus occasum horis 1 $\frac{1}{4}$.

Thaurice chersonesi Theodosia maximam diem habet horarum 14 $\frac{2}{3}$ et distat ab alexandria uersus occasum horis 1 $\frac{1}{4}$.


$$\text{Meth: } z = \frac{1}{7}$$
$$11) \text{ then } 36 \cdot \frac{1}{2}$$
Miles 40 $\frac{1}{2}$

Spent total tubule
initially quid. 131 In the
dys uero: 10488 +

Mitra-93



60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Nona Europe tabula continet Iazyges me-
tanastas. Daciam utranq. Mysiam Thra-
ciam & chersonesum. Parallelus ipius me-
dius proportionem habet ad meridianum
quam quadraginta tres & sexaginta. Terminatur aut
tabula ab ortu pontico mari: & thracio bosphoro
atq. propontide & helesponto. Ab austro ego pe-
lago ac macedonia: ab occasu panonia inferiori ac
dalmaaa: ab arcto Sarmatia Europe

Lezigum. Bormarium maximam diem habet horarum
16 et distat ab alexandria uersus occasu horum 1 $\frac{1}{2}$

Indaria Saline maximam diem habent habent horum
14 $\frac{1}{2}$ $\frac{1}{3}$ et distat ab Alexandria uersus occa-
sum horis 1 $\frac{2}{3}$ aut 1 $\frac{1}{4}$ $\frac{1}{4}$.

Zarnisegethusa regia maximam diem habet horarum
14 $\frac{1}{2}$ et distat ab alexandria uersus occasum n
horis 1 $\frac{1}{2}$ $\frac{1}{3}$.

Mis superioris Rhetaria maximam diem habet
horarum 14 $\frac{1}{4}$ et distat ab alexandria uersus
occasum horis 1 $\frac{1}{2}$ $\frac{1}{4}$.

Supri maximam diem habet horarum 14 $\frac{1}{2}$ et di-
stat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{4}$.

Milie inferioris Odissus maximam diem habet
horarum 14 $\frac{1}{2}$ et distat ab alexandria uersus
occasum horis 1 $\frac{1}{4}$.

Oefus maximam diem habet horarum 14 $\frac{1}{4}$ $\frac{1}{8}$
et distat ab alexandria uersus occasu horis 1 $\frac{1}{2}$.

Iratie Enos maximam diem habet horarum
14 $\frac{1}{2}$ et distat ab alexandria uersus occasum
horis 1 $\frac{1}{3}$ $\frac{1}{8}$.

Apollonia maximam diem habet horarum 14 $\frac{1}{3}$ $\frac{1}{2}$
et distat ab alexandria uersus occasu horum 1 $\frac{1}{3}$.

Byzantium maximam diem habet horarum 14 $\frac{1}{4}$
& distat ab Alexandria uersus occasum horum 1 $\frac{1}{4}$.

Perinthos maximam diem habet horarum 14 $\frac{1}{6}$ &
distat ab alexandria uersus occasum horum 1 $\frac{1}{3}$ $\frac{1}{6}$.

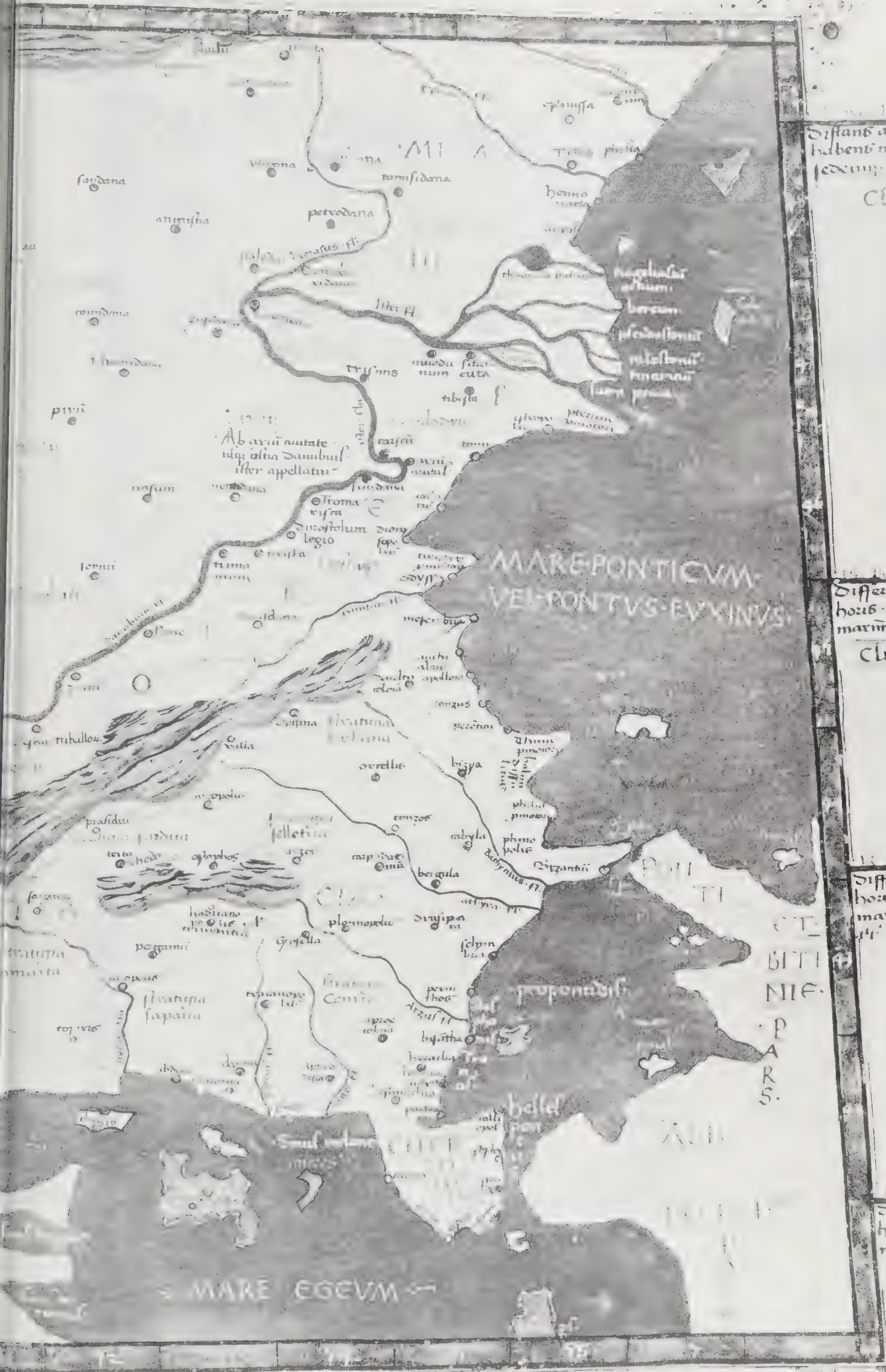
Nicopolis maximam diem habet horarum 14 $\frac{1}{6}$ et
distat ab alexandria uersus occasum horum 1 $\frac{1}{2}$ $\frac{1}{4}$.

Lysimachia maximam diem habet horarum 14 $\frac{1}{2}$
& distat ab alexandria uersus occasum horis
1 $\frac{1}{2}$ $\frac{1}{4}$.

Proconesus maximam diem habet horarum 14 $\frac{1}{8}$
& distat ab Alexandria uersus occasum horis 1
 $\frac{1}{3}$ fecit.

Cherioneii. hecleus maximam diem habet horarum
14 $\frac{1}{8}$ et distat ab alexandria uersus occa-
sum horis 1 $\frac{1}{3}$.

Sestos maximam diem habet horarum 14 $\frac{1}{8}$ & distat
ab alexandria uersus occasum horum 1 $\frac{1}{3}$.



Differt ab æquinoctiali ho. 4.
habens marini diem horarū
sedem.

Clima septimum

Differt ab æquinoctiali
horis 3. $\frac{1}{2}$. habens dies
marini horarū 14. $\frac{1}{2}$.

Clima sextum

Differt ab æquinoctiali
horis 3. habens
marini diem horarū
14. $\frac{1}{2}$.

Differt ab æquinoctiali
horis 3. habens diem
maiorē horarū 14.
Clima quintum

Decima europe tabula continet macedo-
niam & epyrum & Achaia & pelopon-
sum et cretam insulam & Euboeam cum
insulis adiacentibus. parallelus ipsius me-
dius proportionem habet ad meridianum quam se-
ptem ad nouem. Terminatur aut tabula ab ori-
ente Egeo pelago Myrto q & carpathio. ab austro
hadriatico ab aëto Dalmatia & Mylia superiori ac Thracia
Macedonie insignium ciuitatum in ea.

Dirachum maximam diem habet horarum 14 & di-
stat ab alexandria uersus occasum horis 1
Thessalonica maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{12}$
& distat ab alexandria uersus occasum horis $\frac{1}{3}$
Amphipolis maximam diem habet horarum 14 $\frac{1}{12}$
& distat ab alexandria uersus occasum horis 1 $\frac{1}{3}$
Hieraclea maximam diem habet horarum 14 & distat
ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{3}$
Pella maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{12}$ fere
& distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{4}$ fere
Larissa pelagopontina maximam diem habet horis 14 $\frac{1}{2}$ $\frac{1}{3}$ &
distat ab alexandria uersus occasum horis 1 $\frac{1}{3}$
Casandria maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{3}$ et di-
stat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{12}$
Lemnos insula maximam diem habet horarum 14 et
distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$
Nicopolis maximam diem habet horarum 14 $\frac{1}{3}$
& distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{3}$ fere
Ambracia maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{4}$ et
distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{3}$ fere
Coccyra insule ciuitas Coccyra maximam diem habet
horarum 14 $\frac{1}{3}$ et distat ab alexandria uersus oc-
casum horis 1 $\frac{1}{2}$ $\frac{1}{3}$
Thabe thebe boetie maximam diem habet horarum 14
 $\frac{1}{3}$ & distat ab alexandria uersus occasum horis $\frac{1}{2}$
Megara maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{3}$ et distat
ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{30}$
Athene maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{8}$ et di-
stant ab alexandria uersus occasum horis 1 $\frac{1}{2}$
Peloponnesi ciuitas Mefena maximam diem habet horarum 14 $\frac{1}{3}$ $\frac{1}{12}$
& distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{14}$
Corinthus maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{12}$ et
distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{8}$
Tegea maximam diem habet horarum 14 $\frac{1}{2}$ & distat
ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{4}$
Argos maximam diem habet horarum 14 $\frac{1}{2}$ & distat
ab alexandria uersus occasum horis 1 $\frac{1}{2}$ $\frac{1}{8}$
Lacedemon maximam diem habet horarum 14 $\frac{1}{2}$ $\frac{1}{12}$
& distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$
Cythera insule Chalos maximam diem habet horarum
14 $\frac{1}{3}$ & distat ab alexandria uersus occasum horis 1 $\frac{1}{2}$
Carystus maximam diem habet horarum 14 $\frac{1}{3}$ et distat
ab alexandria uersus occasum horis 1 $\frac{1}{3}$ $\frac{1}{30}$
Gortina maximam diem habet horarum 14 $\frac{1}{3}$ et distat
ab alexandria uersus occasum horis 1 $\frac{1}{3}$ $\frac{1}{30}$

habet horarum 14 $\frac{1}{3}$ et distat ab alexan-
dria uersus occasum horis 1 $\frac{1}{3}$ $\frac{1}{14}$
Cnossos maximam diem habet horarum
14 $\frac{1}{3}$ et distat ab alexandria uersus oc-
casum horis 1 $\frac{1}{3}$

hinc tabularum europe decem.

Europe tabula.



12. parallelus. Differt ab equinoctiali hora 3. habens maximū diem hōr. 14.

Clima quintum

Ind. annu. parallelus. Differt ab equinoctiali hora 2. habens maximū diem hōr. 14. et medietatem.

parallelus. Differt ab equinoctiali hora 1. habens maximū diem hōr. 14. et medietatem. Clima quartum.

· Affine tabule quatuor. quarum prima

Prima libie tabula continet ambas mauri-
tanas tinganicam & cesariensem. Paralle-
lus ipsius medius proportionem habet ad
meridianum quam ecclesiam ad quindecim
terminatur aut tabula ab ortu aethiopiae a meridie
interiore lybia iuxta getuliam. Ab occasu occiden-
tali oceano. Ab arcto fretto herculeo & ibero ac
sardoo pelago. *Mauritane tinganice. cunctae*

Tingis maximam diem habet horarum $14 \frac{1}{2}$ & di-
stat ab Alexandria uersus occasum horis $3 \frac{1}{2}$ $\frac{1}{12}$

Lyx maximam diem habet horarum $14 \frac{1}{2}$ & distat ab
Alexandria uersus occasum horis $3 \frac{1}{2}$

Volbilis maximam diem habet horarum $14 \frac{1}{2}$ et distat
ab Alexandria uersus occasum horis $3 \frac{1}{2}$

Cesariensis. Cactina maximam diem habet horarum
 $4 \frac{1}{4}$ et distat ab Alexandria uersus occasum horis 3

Col cesarea maximam diem habet horarum $14 \frac{1}{4}$ et di-
stat ab Alexandria uersus occasum horis $2 \frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{14}$

Salde maximam diem habet horarum $14 \frac{1}{6}$ & distat
ab Alexandria uersus occasum horis $1 \frac{1}{2}$ $\frac{1}{14}$

h oppidum maximam diem habet horarum $14 \frac{1}{12}$
& distat ab Alexandria uersus occasum horis $2 \frac{1}{3}$ $\frac{1}{14}$

Zuchabari maximam diem habet horarum $14 \frac{1}{4}$ et
distat ab Alexandria uersus occasum horis $2 \frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{14}$

Busuptus maximam diem habet horarum $14 \frac{1}{8}$ et distat
ab Alexandria uersus occasum horis $2 \frac{1}{3}$ $\frac{1}{14}$

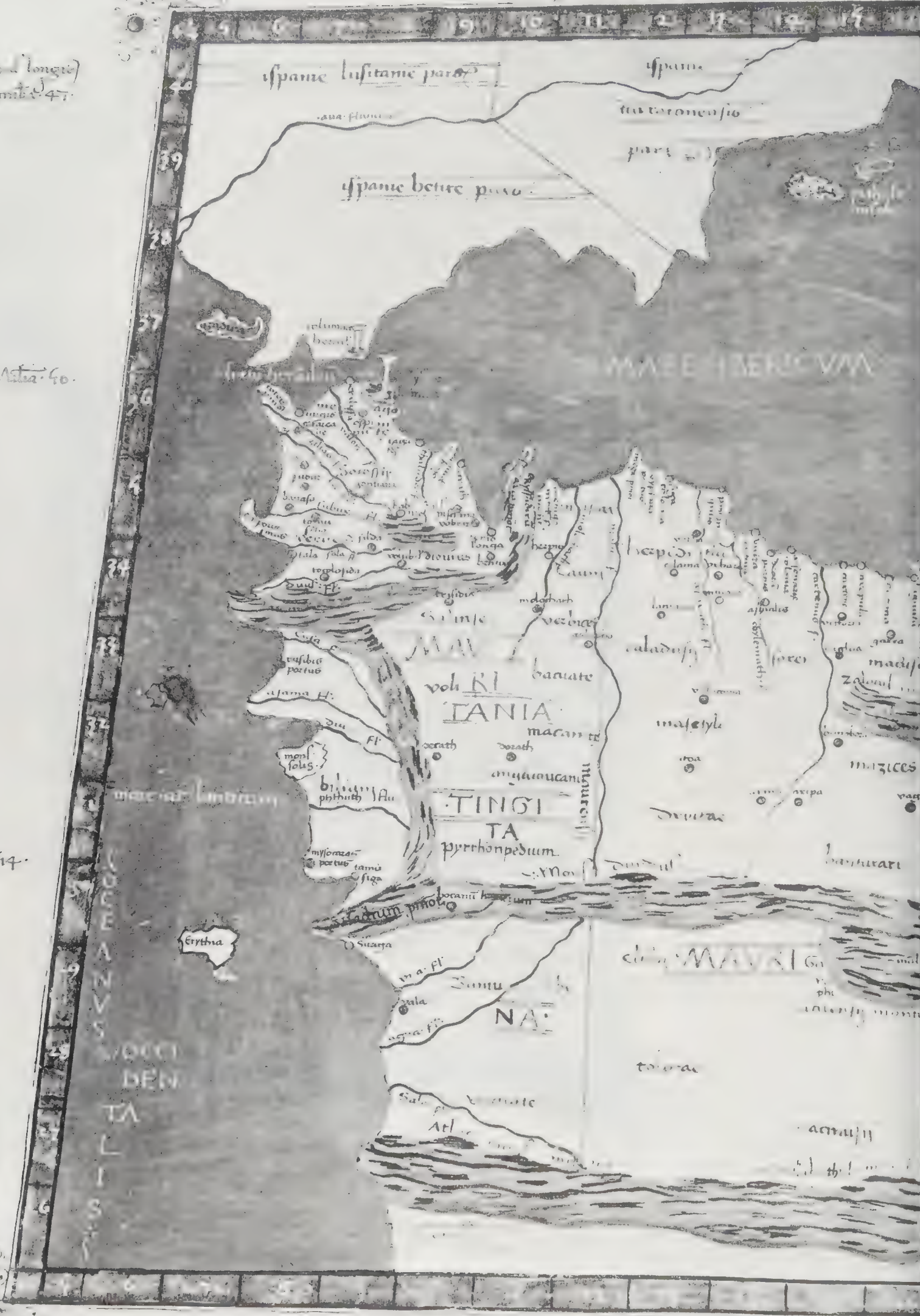
Prima Affricæ tabula

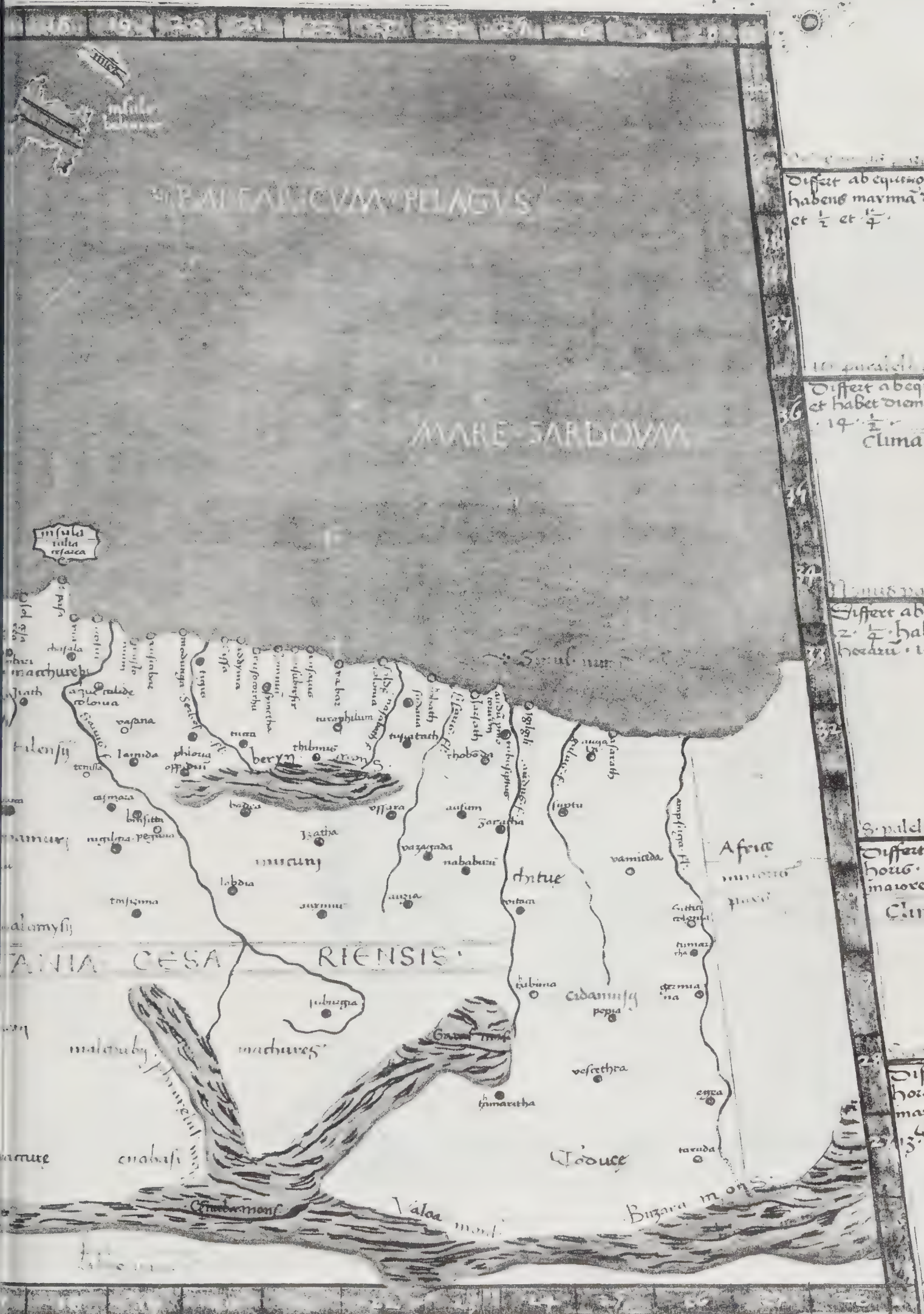
Unus gradus longitudo
continet milia 47.

Milia 40.

Milia 44.

Milia 46.





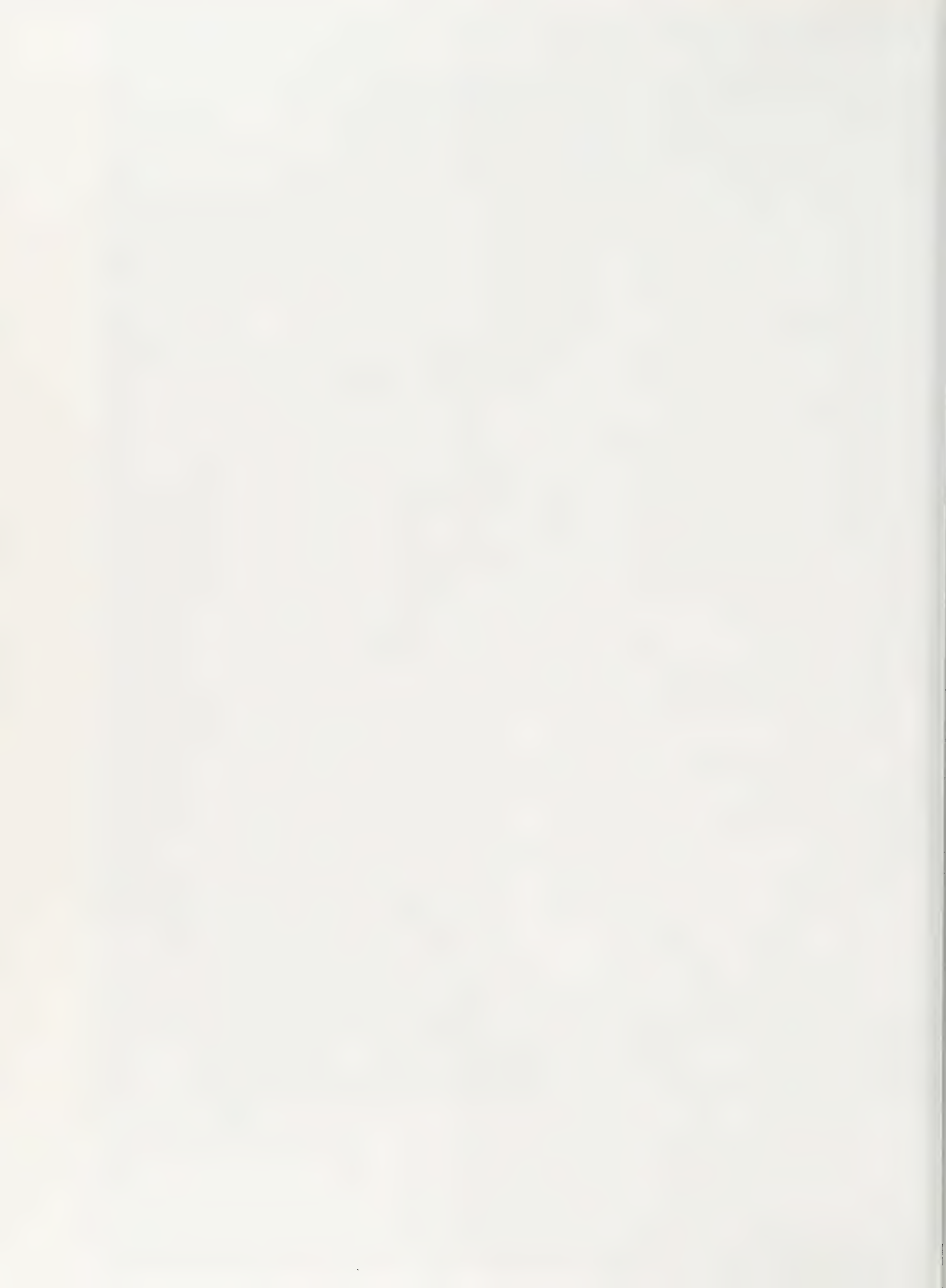
Differt ab equinoctiali horis $2\frac{1}{2}\frac{1}{4}$
 habens maximā diem horarū $19\frac{1}{4}$
 et $\frac{1}{2}$ et $\frac{1}{4}$.

Differt ab equinoctiali horis $2\frac{1}{2}\frac{1}{4}$
 et habet diem maiorem horarū
 $19\frac{1}{2}$
 Clima quartum.

Differt ab equinoctiali hor
 $2\frac{1}{4}$ habens maximā diem
 horarū $19\frac{1}{4}$.

Differt ab equinoctiali
 horis 2 habens diē
 maiorem horarū 19
 Clima tertium.

Differt ab equinoctiali
 hora $1\frac{1}{2}\frac{1}{4}$ habens
 maximā diem horarū
 $18\frac{1}{2}\frac{1}{4}$.

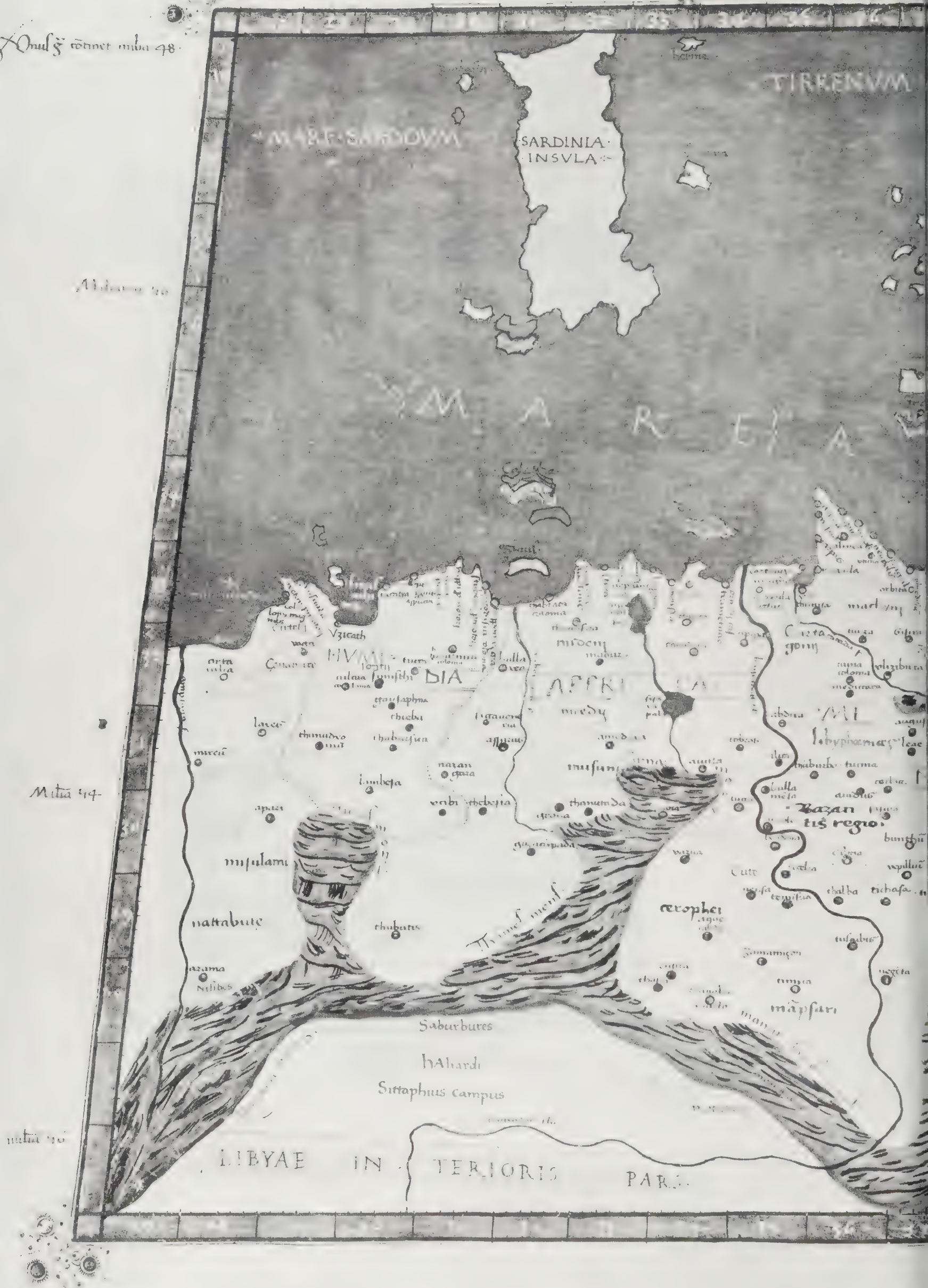


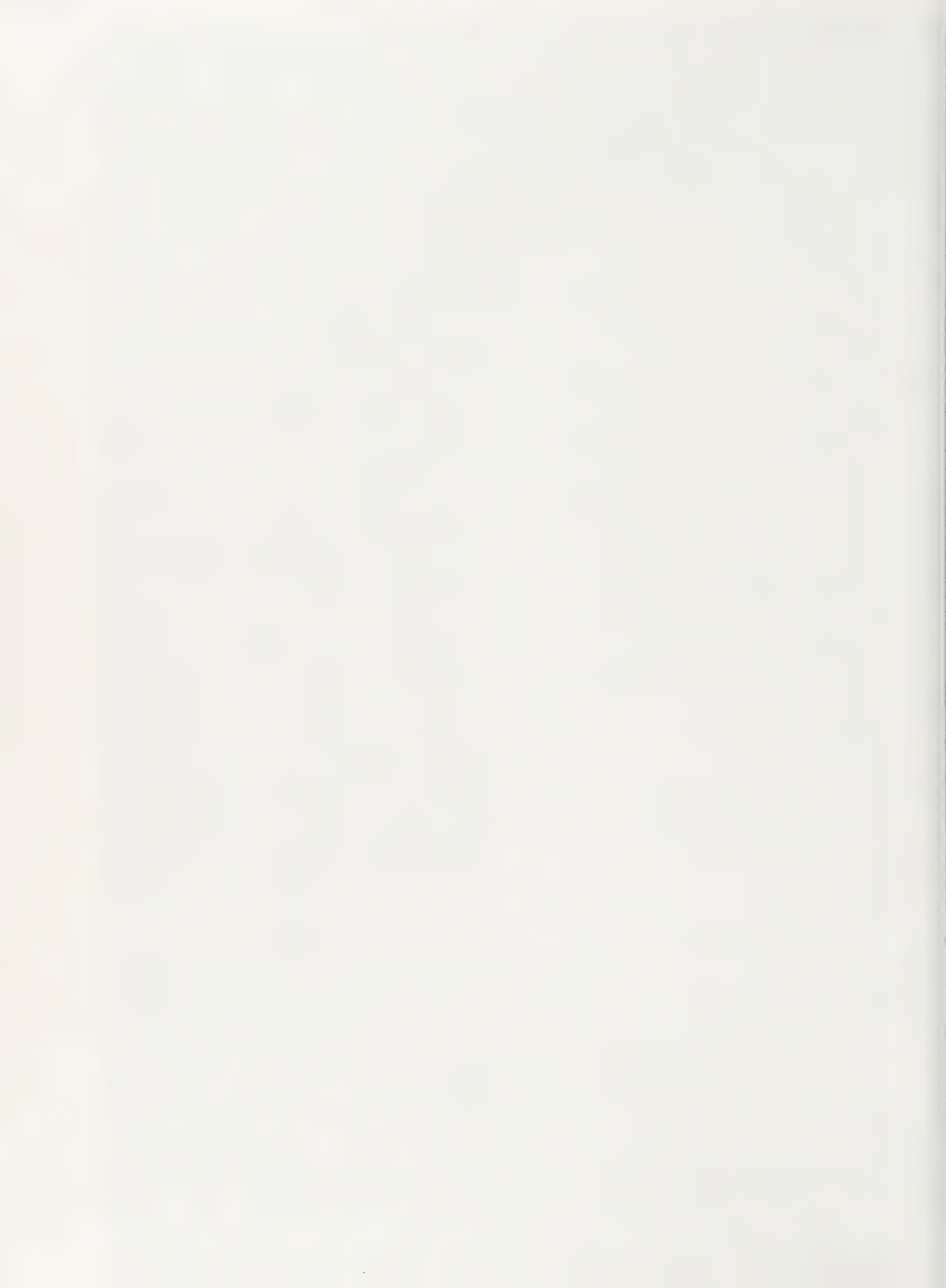
Secunda aethrice tabula continet Aethri-
cam & insulas que circa ipsam sunt. Pa-
rallelus ipsius medius proportionem habet
ad meridianum quam cecidit ad quin-
decim. Terminatur autem tabula ab oriente Cyre-
naica a meridie interiori Libya iuxta getuliam
et Erythrum ab occasu mauritania cesariensis
Ab aethio pelago Aethro.

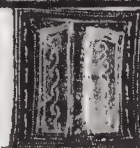
A. ff. ite minoril insignes ciuitatei.

Thabraca maximam diem habet horarum $14 \frac{6}{8}$ et
distat ab alexandria uersus occasum hor $2 \frac{1}{2}$ fecit
Tycha maximam diem habet horarum $14 \frac{4}{8}$ et distat
ab alexandria uersus occasum hor $1 \frac{2}{3}$
Charago maximam diem habet horarum $14 \frac{4}{8}$ et
distat ab alexandria uersus occasum hor $1 \frac{2}{3}$
Adrumetum maximam diem habet horarum $14 \frac{4}{8}$
et distat ab alexandria uersus occasum hor $1 \frac{2}{3}$
Magna leptis maximam diem habet hor $14 \frac{8}{8}$ et di-
stat ab alexandria uersus occasum hor $1 \frac{1}{4}$
Cuxteulia maximam diem habet horarum $14 \frac{1}{2}$ et di-
stat ab alexandria uersus occasum hor $2 \frac{1}{4}$
Sicca Venneria maximam diem habet horarum 14 et
qd par et distat ab alexandria uersus occasum hor 2
Bullaria maximam diem habet horarum $14 \frac{1}{2}$ et distat ab
alexandria uersus occasum hor 2
Vtina maximam diem habet horarum $14 \frac{1}{2}$ et distat
ab alexandria uersus occasum hor $1 \frac{2}{3}$
Thysbros^{insula} maximam diem habet horarum $14 \frac{8}{8}$ et distat
ab alexandria uersus occasum hor $1 \frac{1}{2}$
M^{insula}enux maximam diem habet horarum $14 \frac{1}{2}$ et distat ab
alexandria uersus occasum hor $1 \frac{3}{4}$
Coffera^{insula} maximam diem habet horarum $14 \frac{3}{4}$ et distat
ab alexandria uersus occasum hor $1 \frac{1}{6}$
Meleta insula maximam diem habet horarum $14 \frac{3}{4}$
et distat ab alexandria uersus occasum hor $1 \frac{3}{8}$

Quis igitur continet munda 48.







TERCIA Aphricae tabula continet Cyrenaicam et egyptum cum adiacentibus insulis. Parallelus ipsius medius proportionem habet ad meridianum quam quinquaginta tres ad sexaginta. Terminatur aut tabula ab ortu iudeae & arabia petrea ac acabico sinu. Ab austro interiori deserta libia & ethyopia quae sub egypto est. ab occasu aphrica & magna syete & parte interioris libye. Ab aceto libyco & egyptio pelago. Cirenaique regionis ciuitates insignes.

Berenice quae et Esperides maximam diem habet horarum $14 \frac{1}{2}$ et distat ab alexandria uersus occasum horis $1 \frac{2}{3} \frac{1}{4}$.

Ptolemais maximam diem habet horarum $4 \frac{1}{2}$ et distat ab alexandria uersus occasum horis $1 \frac{2}{3} \frac{1}{4}$.

Apollonia maximam diem habet horarum $14 \frac{8}{8}$ et distat ab alexandria uersus occasum horis $1 \frac{2}{3}$.

Cyrene maximam diem habet horarum $14 \frac{1}{2}$ et distat ab alexandria uersus occasum horis $1 \frac{2}{3}$.

Marmarice cheersonesus maximam diem habet horarum $14 \frac{8}{8}$ & distat ab alexandria uersus occasum horis $1 \frac{2}{3} \frac{1}{4}$.

Libia Paretonium maximam diem habet horarum $14 \frac{1}{2}$ et distat ab alexandria uersus occasum horis $1 \frac{2}{3}$.

Alexandria maximam diem habet horarum $14 \frac{1}{2}$ & distat a meridiano fortunatarum insularum ab ortu solis horis 4 .

Pelusium maximam diem habet horarum $14 \frac{1}{2}$ & distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Memphis maximam diem habet horarum $13 \frac{1}{2} \frac{1}{4} \frac{1}{8}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Trisdras Ptolemais maximam diem habet horarum $13 \frac{2}{3}$ & distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Magna diopolis maximam diem habet horarum $13 \frac{1}{2}$ & distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Syene maximam diem habet horarum $13 \frac{1}{2}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Hic sol semel in anno fit supra uerticem capris quando in aestiuo est tropico.

Ammon maximam diem habet horarum $13 \frac{1}{2} \frac{1}{3}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Magna Oasis maximam diem habet horarum $13 \frac{2}{3}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

Mysoemus maximam diem habet horarum $13 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

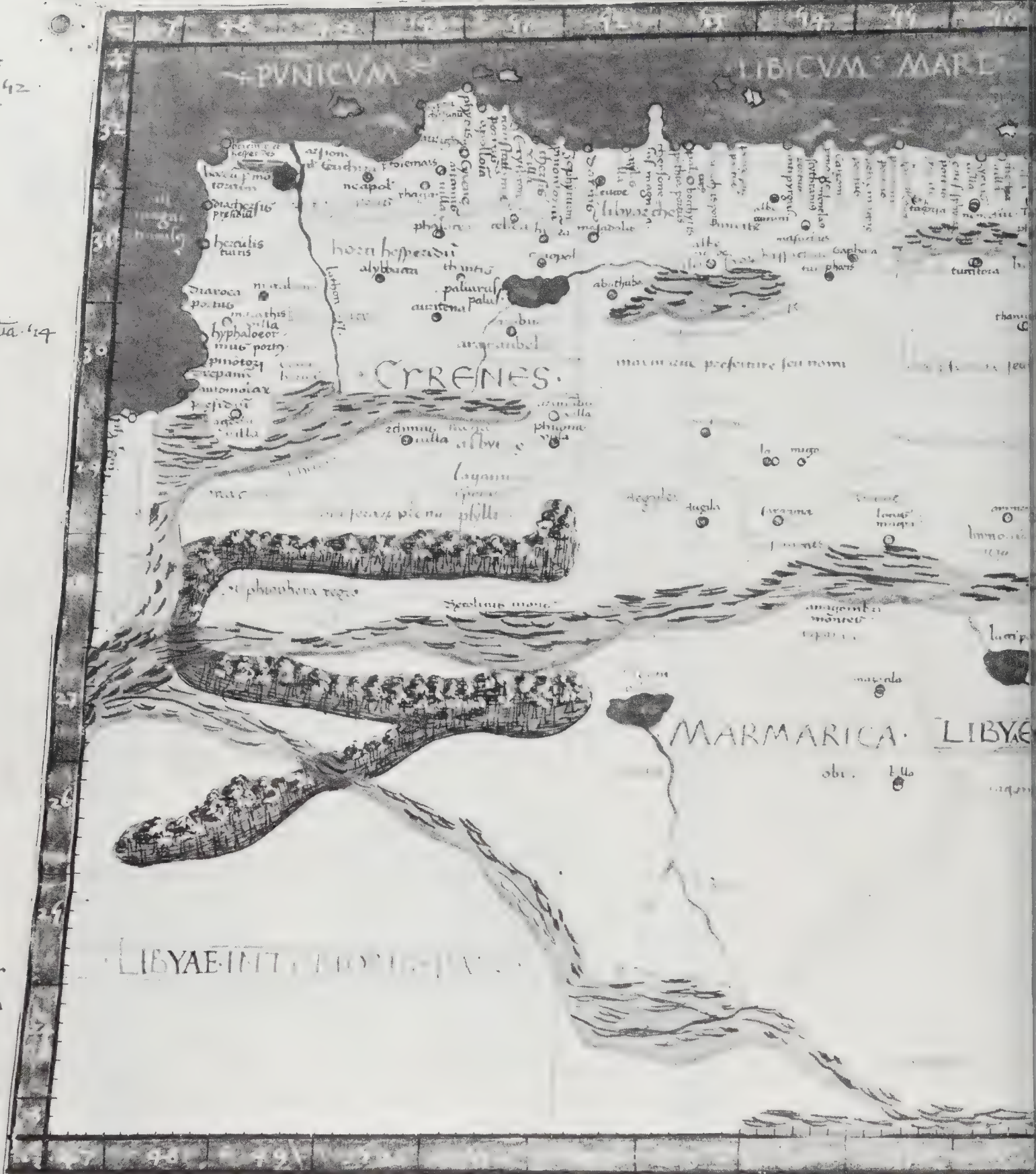
Berenice maximam diem habet horarum $13 \frac{1}{2}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$.

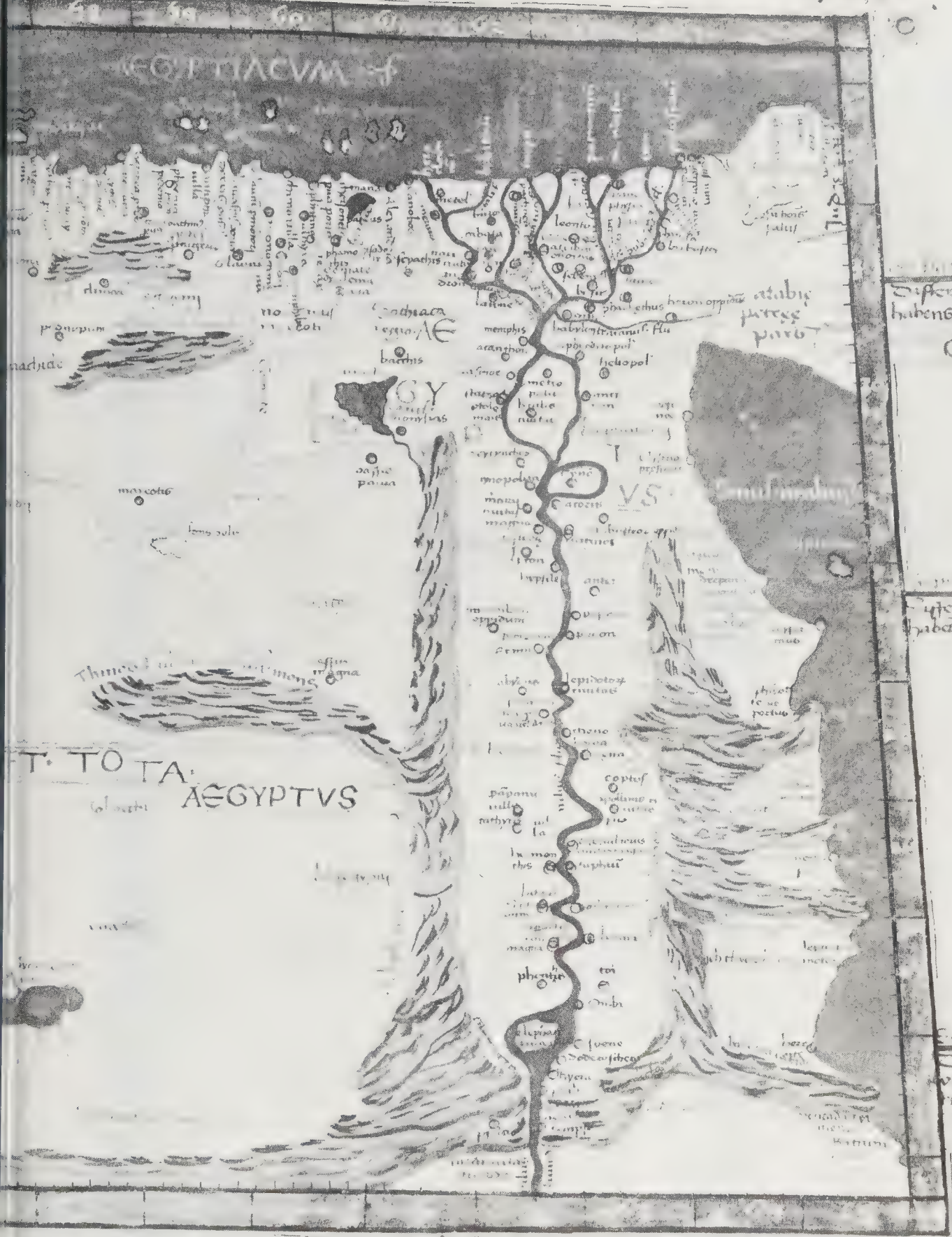
Hic sol semel fit in anno supra uerticem quando est in tropico aestiuo.

Vnus gradus
continent miliaria 42

Milia 44

Vnus gradus
continent milia
ria 44 $\frac{1}{2}$

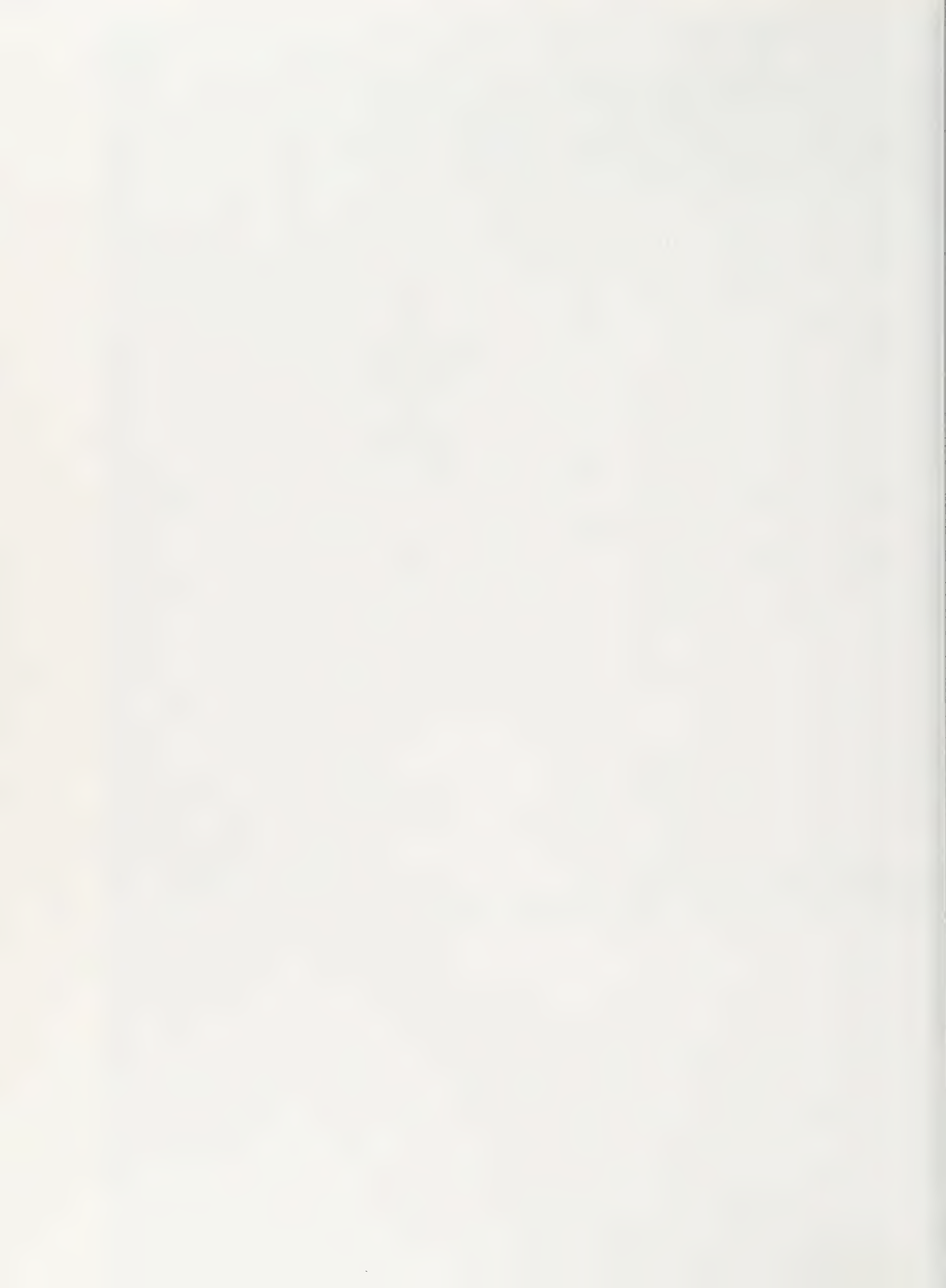




Difert ab equinoctiali horis 2
habens maxima diem horarum 14
Clima tertium

Difert ab equinoctiali hora 1 1/2
habens diem maxim horarum 13 1/2

Difert ab equinoctiali hora
una et 1/2 habens maxim diem
horarum 13 1/2
Clima secundum



Varta et ultima aethiopiae tabula continet
interiorem libyam & ethiopiam que sub
egypto est & que est interior cum insulis
& adiacentibus. Parallelus ipsius medius
proportionem habet ad meridianum eandem fere.
Terminatur autem tabula ab ortu sinu arabico & mari
rubro ac sinu barbarico & parte india pelagi. Ame-
ricae terra incognita & oceano occidentali. A septen-
trione utraq; Mauritania & aethiopia ac athenaica &
egypto.

Civitatium insignium (sdr) interiori libyam.

Auote maximam diem habet horarum $13 \frac{1}{2}$ & distat ab
alexandria uersus occasum horis $2 \frac{1}{3}$

Hic sol semel in anno fit supra uerticem capitis in tro-
pico estuo

Arzuta maximam diem habet horarum $12 \frac{1}{2} \frac{1}{3} \frac{1}{12}$ et di-
stat ab Alexandria uersus occasum horis $3 \frac{1}{3}$

Hic sol bis in anno fit supra uerticem capitis quando di-
stat a tropico estuo ex utraq; parte gradibus $48 \frac{2}{3}$

Thamondocana maximam diem habet horarum 13 et di-
stat ab alexandria uersus occasum horis $2 \frac{1}{2}$

Sumit autem bis in anno solem supra uerticem quando
distat a tropico estuo ex utraq; parte gradibus 43

Gira maximam diem habet horarum $13 \frac{1}{12}$ & distat
ab alexandria uersus occasum horis $1 \frac{1}{3} \frac{8}{8}$

Habet autem solem bis in anno supra uerticem quando
distat a tropico estuo ex utraq; parte gradibus 43

Garame maximam diem habet horarum 13 et distat ab
alexandria uersus occasum horis $1 \frac{1}{6}$

Hic sol bis in anno fit supra uerticem cum distat a
tropico estuo ex utraq; parte gradibus 24

Ethiopie sub egipto insignium civitatum.

Nupata maximam diem habet horarum $13 \frac{1}{4}$ et distat
ab alexandria uersus ortum horis $1 \frac{1}{6}$

Hic sol fit supra uerticem bis in anno cum distat a tropi-
co estuo ex utraq; parte gradibus $31 \frac{1}{6}$

Mecoe maximam diem habet horarum 13 et distat ab Ale-
xandria uersus ortum horis $1 \frac{1}{14}$

In ea sol bis in anno fit supra uerticem quando distat a
tropico estuo ex utraq; parte gradibus 44

Ptolemais ferat maximam diem habet horarum 13 &
& distat ab alexandria uersus ortum $1 \frac{1}{3} \frac{1}{14}$

In ea sol bis in anno fit supra uerticem cum distat a
tropico estuo ab utraq; parte gradibus 44

Adulis maximam diem habet horarum $12 \frac{2}{3}$ et distat
ab alexandria uersus ortum horis $1 \frac{1}{3} \frac{8}{8}$

Hic sol bis in anno fit supra uerticem cum distat a tropico
estuo ab utraq; parte gradibus 62

Dera maximam diem habet horarum $12 \frac{2}{3}$ et distat ab
alexandria uersus ortum horis 1

Sumit autem solem bis in anno supra uerticem cum
distat a tropico estuo ex utraq; parte gradibus $63 \frac{1}{2} \frac{1}{4}$

Mosylum maximam diem habet horarum $12 \frac{1}{2}$ et distat ab alexandria uersus ortum
horis $1 \frac{1}{3}$ fere

In sol bis in anno fit supra uerticem cum
distat a tropico estuo ab utraq; parte
gradibus gradibus $68 \frac{1}{2} \frac{1}{4}$

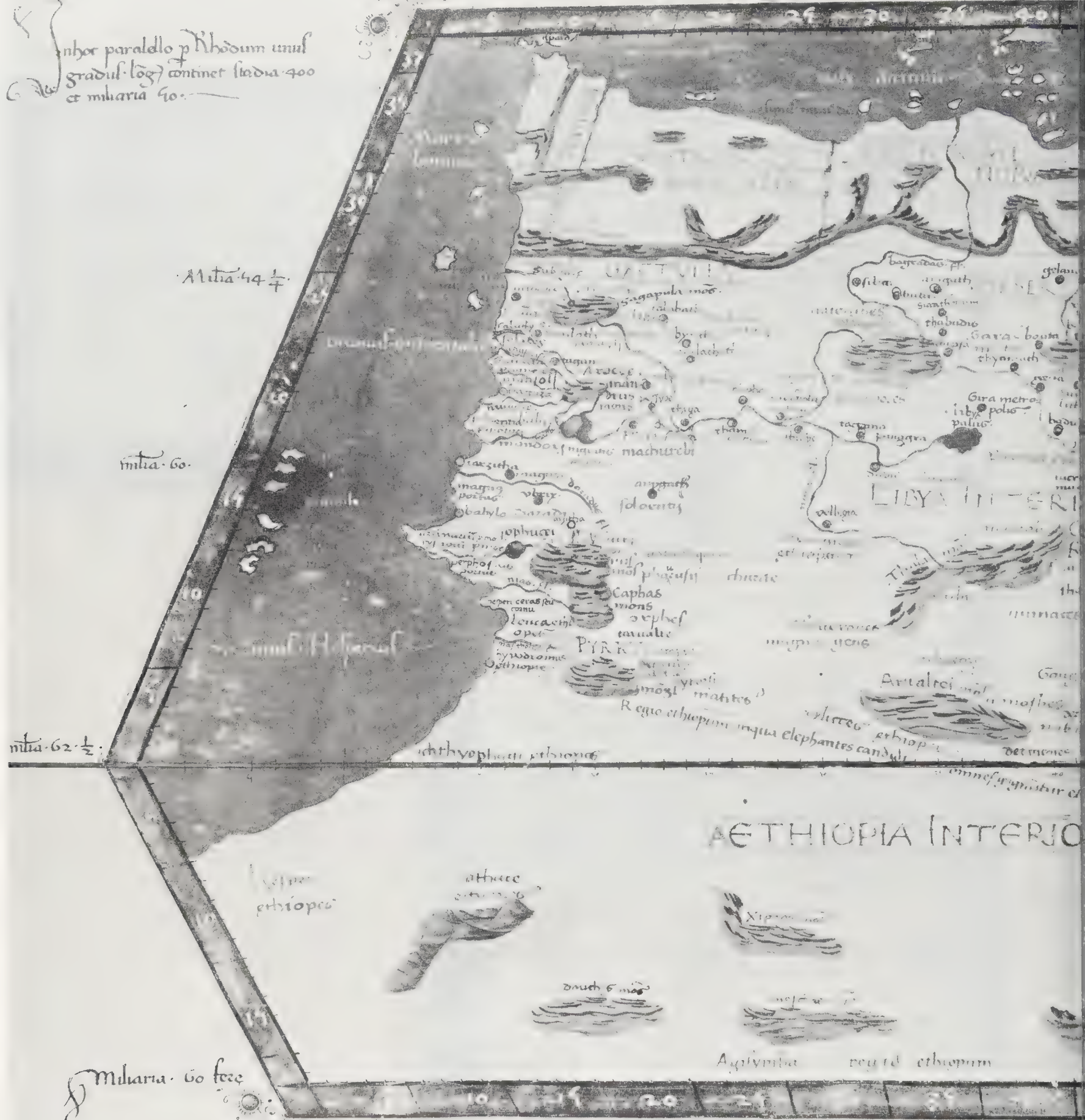
Acomata maximam diem habet horarum
 $13 \frac{1}{3} \frac{8}{8}$ & distat ab alexandria uersus
ortum horis $1 \frac{1}{2}$

In his bis in anno sol fit supra uerticem
quando distat a tropico estuo ab utraq;
parte gradibus 76

Huius tabularum Aethiopiae quatuor.

Quarta a face

In hoc parallelo p Rhodum unus
 gradus. lxxj continet stadia 400
 et miliaria 40.



Alie maioris tabule duodecim. Quarum prima

Prima Asia tabula continet pontum & bithyniam & regionem que proprie Asia dicitur: ac Lyciam & Gallaciam ac Pamphylia & Cappadociam armeniam minorem & Ciliciam. Parallelus ipsius medius proportionem habet ad meridianum quam tria ad quatuor. Circumscribitur autem tabula ab ortu quidem armenia maiori & parte Syrie. Ab austro Carpathio licoano & Pamphylio mari angustis q. Cilicie & sinu Issico. Ab occasu thraeo bosphoro & propontide ac helesponto & egeo pelago ac scario & mero. Ab arcto mari pontico.

Ponti et Bithynie ciuitates insignes.

- C**halcedon maximam diem habet horarum $14 \frac{1}{4}$ et distat ab Alexandria uersus occasum $1 \frac{1}{4}$
Hierocomedia maximam diem habet horarum $14 \frac{1}{6}$ & distat ab alexandria uersus occasum $1 \frac{1}{6}$
Aphania maximam diem habet horarum $14 \frac{1}{8}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{8}$
Eraclea ponti maximam diem habet horarum $14 \frac{1}{3}$ & distat ab alexandria uersus occasum horis $1 \frac{1}{10}$
Nica maximam diem habet horarum $14 \frac{1}{8}$ & distat ab alexandria uersus occasum horis $1 \frac{1}{7}$

In Asia proprie dicta ciuitates insignes.

- C**yzicus maximam diem habet horarum $14 \frac{1}{12}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{3}$
Pergamus maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4} \frac{1}{8}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{4}$
Smyrna maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{8}$
Ephesus maximam diem habet horarum $14 \frac{1}{3}$ et distat ab Alexandria uersus occasum horis $1 \frac{1}{8}$
Miletus maximam diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{6}$
Cnidos maximam diem habet horarum $14 \frac{1}{2}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{4}$
Sardis maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{8}$
Magnesia maximam diem habet horarum $14 \frac{1}{3}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{8}$
Aphania maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus occasum horis fere nihil
Cibeca maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria nihil
Mithylene maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{4}$
Rhodos maximam diem habet horarum $14 \frac{1}{2}$ et distat ab alexandria uersus occasum horis $1 \frac{1}{8}$
Litic pattara maximam diem habet horarum $14 \frac{1}{2}$ & s. eodem alexandrie meridiano sita est
Cnos maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ & quid parum & distat ab alexandria uersus ortum horis $1 \frac{1}{4}$
Andriaca maximam diem habet horarum $14 \frac{1}{2}$ & quid parum & distat ab alexandria uersus ortum parum quid.

Mira maximam diem habet horarum $14 \frac{1}{2}$ et distat ab alexandria uersus ortum horis quid parum.

Galatie Sinope maximam diem habet horarum horis $13 \frac{1}{3}$ et distat ab alexandria uersus ortum horis $\frac{1}{4}$

Amysos maximam diem habet horarum $14 \frac{1}{4}$ & distat ab alexandria uersus ortum horis $1 \frac{1}{3}$

Angyria maximam diem habet horarum $14 \frac{1}{8}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{6}$

Germa maximam diem habet horarum $14 \frac{1}{8}$ et distat ab alexandria uersus ortum parum quid

Pessenuus maximam diem habet horarum $14 \frac{1}{12}$ et distat ab alexandria uersus ortum parum quid

pamphlie Sida maximam diem habet horarum $14 \frac{1}{2}$ & quid parum et distat ab alexandria uersus ortum horis $1 \frac{1}{4}$

Perga maximam diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ & distat ab alexandria uersus ortum horis $1 \frac{1}{8}$

Aspendus maximam diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ et distat ab alexandria quid parum

Termessus maximam diem habet horarum $14 \frac{1}{2} \frac{1}{8}$ et distat ab alexandria uersus ortum quid parum & appedus

Capadonie trapezos maximam diem habet horarum $14 \frac{1}{4}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{3}$

Comana pontica maximam diem habet horarum $14 \frac{1}{12}$ et distat ab alexandria uersus ortum $1 \frac{1}{3}$

Maza que et cesarea maximam diem habet horarum $14 \frac{1}{2} \frac{1}{3}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{14}$

Comana cappadonie maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ fere & distat ab alexandria uersus ortum horis $1 \frac{1}{2}$

Mutina maximam diem habet horarum $14 \frac{1}{2} \frac{1}{3}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{4}$

Armenie my. nicopolis maximam diem habet horarum $14 \frac{1}{8}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{14}$

Satala maximam diem habet horarum $14 \frac{1}{8}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{8}$

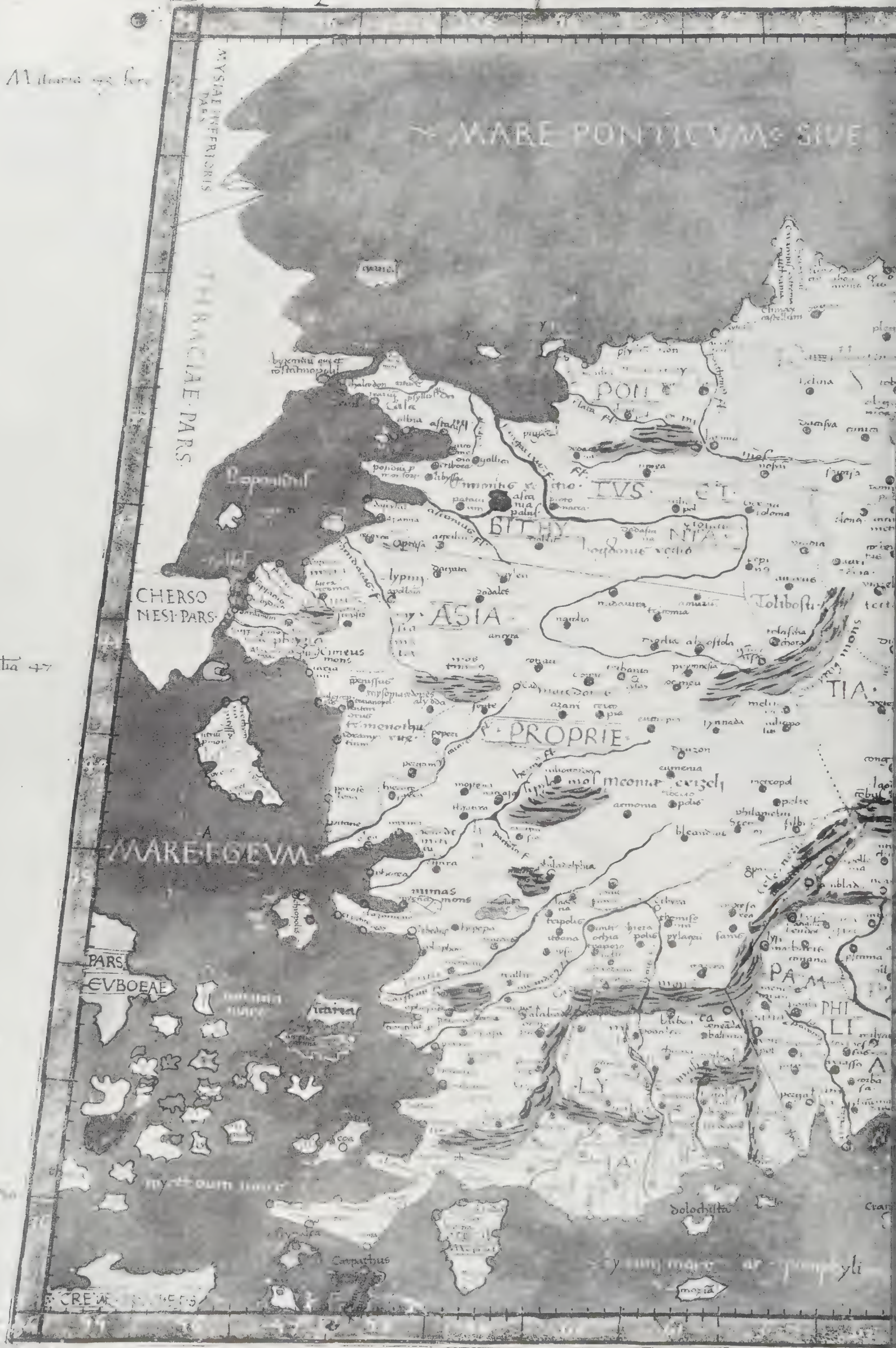
Cilicie selinus maximam diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{4}$

Pompeiopolis maximam diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ & distat ab alexandria uersus ortum $1 \frac{1}{2}$ fere

Malos maximam diem habet horarum $14 \frac{1}{2} \frac{1}{14}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{2}$

Tarsos maximam diem habet horarum $14 \frac{1}{2} \frac{1}{12}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{2}$

1942





Differt ab aequinoctiali
horis 3. $\frac{1}{4}$ habet die
maxima horarum 14 $\frac{1}{2}$
Clima sextum

Differt ab equinoctiali
horis 3. $\frac{1}{4}$ habet die
maxima horarum 14 $\frac{1}{2}$

Differt ab equinoctiali
horis 3. habet maxi-
mum diem horarum 14.
Clima quintum

Differt ab equinoctiali
horis 2. $\frac{1}{2}$ $\frac{1}{4}$
habet maximum diem
horarum 14 $\frac{1}{2}$ $\frac{1}{4}$

Differt ab equinoctiali
horis 2. $\frac{1}{2}$ $\frac{1}{4}$
habet maximum diem
horarum 14 $\frac{1}{2}$ $\frac{1}{4}$

Secunda Asiae tabula continet Sarmatiam ipsius. Parallelus ipsius medius proportionem habet ad meridianum quam septem ad duodecim. Terminatur autem tabula ab ortu Scythia intra Imaum montem & parte Casspij maris. Ab austro Albania & Iberia & Chordide & parte Euxini ponti. Ab occasu ammerio bosphoro & palude meotide atq; Sarmatia Europe. Ab arcto terra incognita Sarmatie asiaticae ciuitate insignes.

Hermonasa maximam diem habet horarum $14 \frac{2}{3}$ et distat ab alexandria uersus ortum horum $1 \frac{1}{3}$ fere

Oenanthia maximam diem habet horarum $14 \frac{2}{3}$ fere et distat ab alexandria uersus ortum horum $1 \frac{1}{3}$ fere

Tyramba maximam diem habet horarum $16 \frac{1}{3}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{3}$ fere

Tanaus maximam diem habet horarum $17 \frac{1}{6}$ et distat ab alexandria uersus ortum horum $1 \frac{1}{3} \frac{1}{10}$

Naubarus maximam diem habet horarum $17 \frac{1}{4}$ et distat ab alexandria uersus ortum horis $1 \frac{2}{3}$

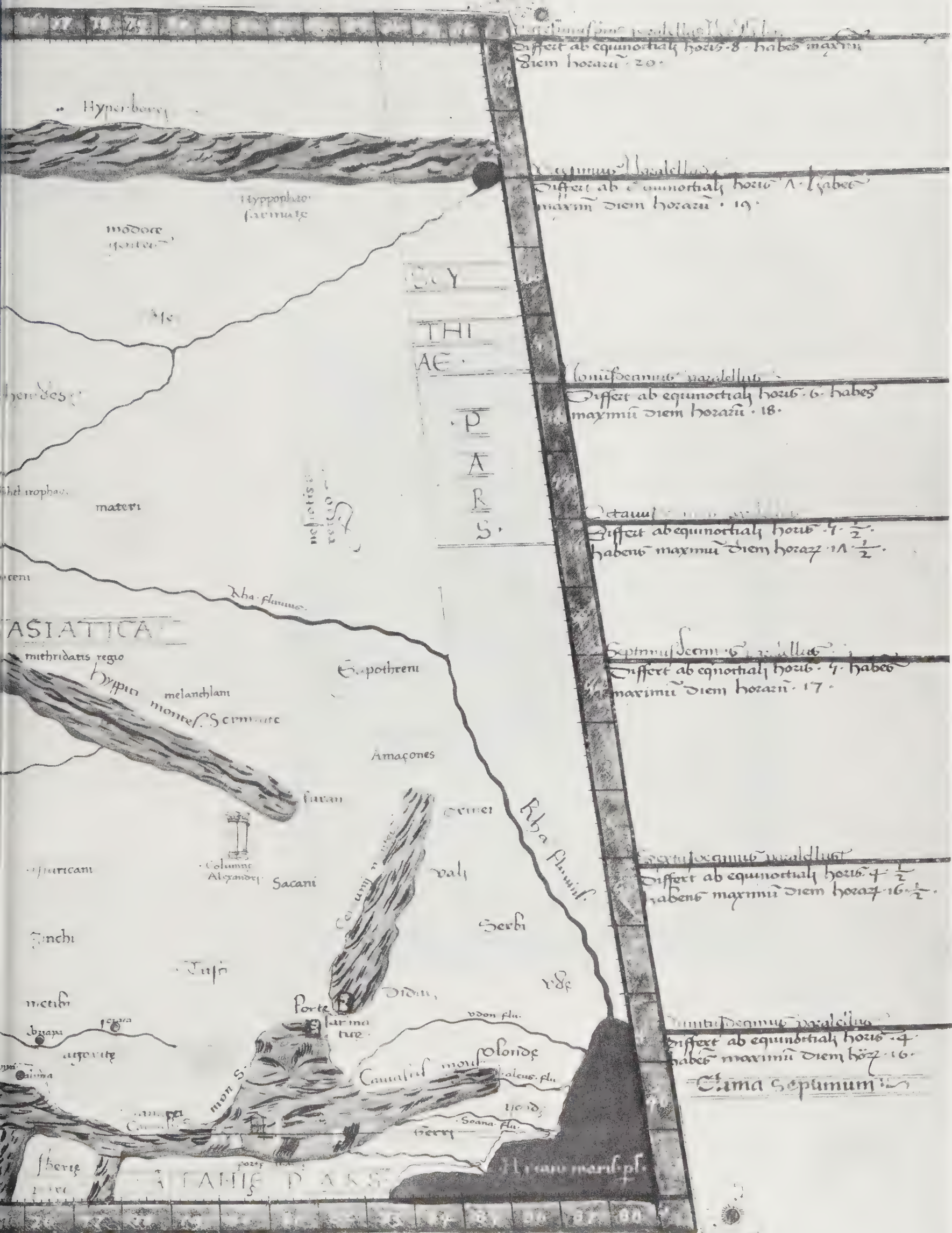
Unus gradus long. in hoc loco continet stadia 227
et milia 28 $\frac{1}{2}$ quasi. Est ergo longitudo
totius palelli p. thlen. 40400 stadiorum
que faciunt milia 4062 $\frac{1}{2}$



Milia 32 $\frac{1}{2}$

Milia 70 $\frac{1}{2}$

milia 43 fere



Differet ab equinoctiali horis .8. habes maximu diem horarū .20.

Differet ab equinoctiali horis .1. habes maximu diem horarū .19.

Differet ab equinoctiali horis .6. habes maximu diem horarū .18.

Differet ab equinoctiali horis .4. $\frac{1}{2}$. habens maximu diem horarū .17. $\frac{1}{2}$.

Differet ab equinoctiali horis .7. habes maximu diem horarū .17.

Differet ab equinoctiali horis .4. $\frac{1}{2}$. habens maximu diem horarū .16. $\frac{1}{2}$.

Differet ab equinoctiali horis .4. habes maximu diem horarū .16.

Clama Septimum

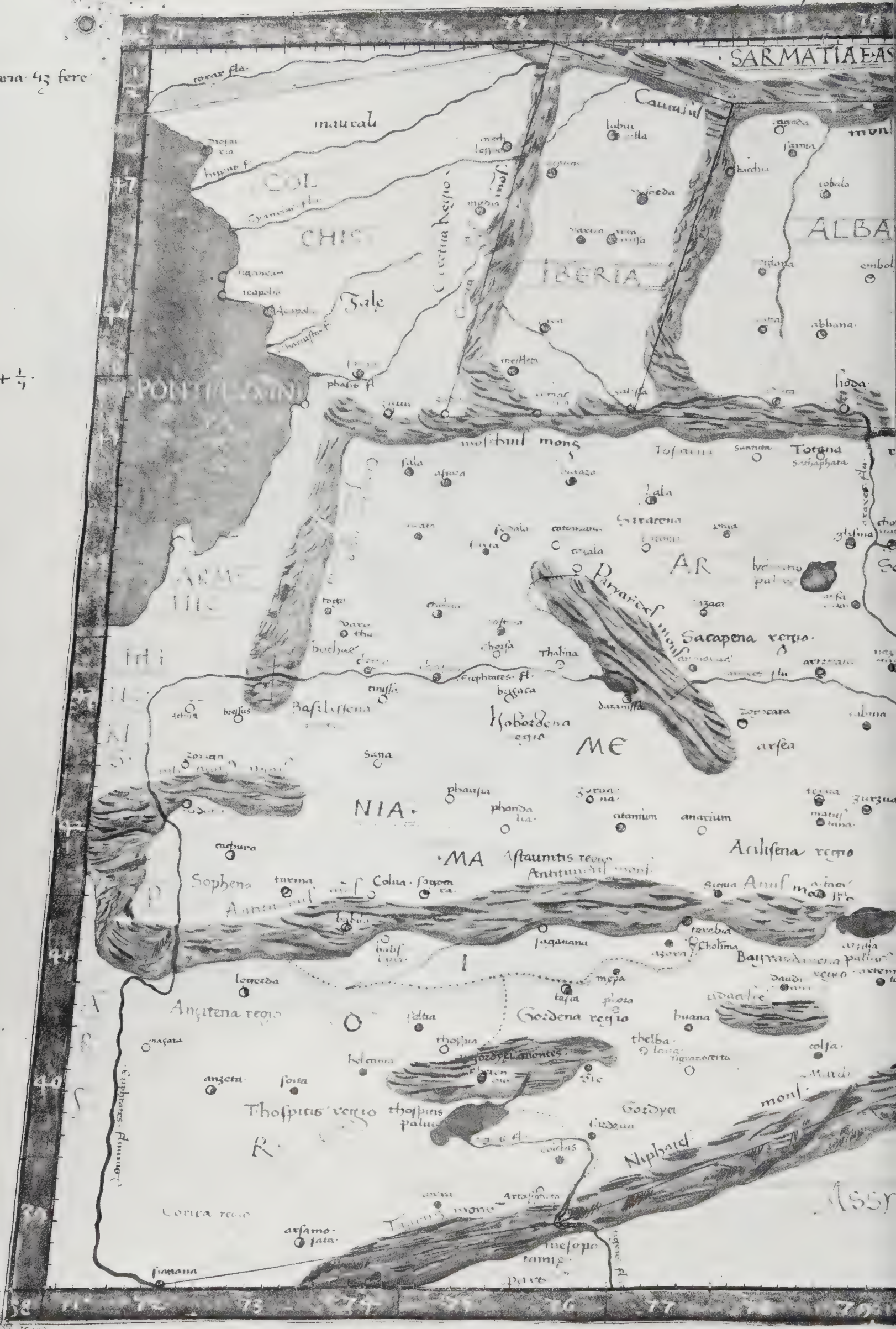


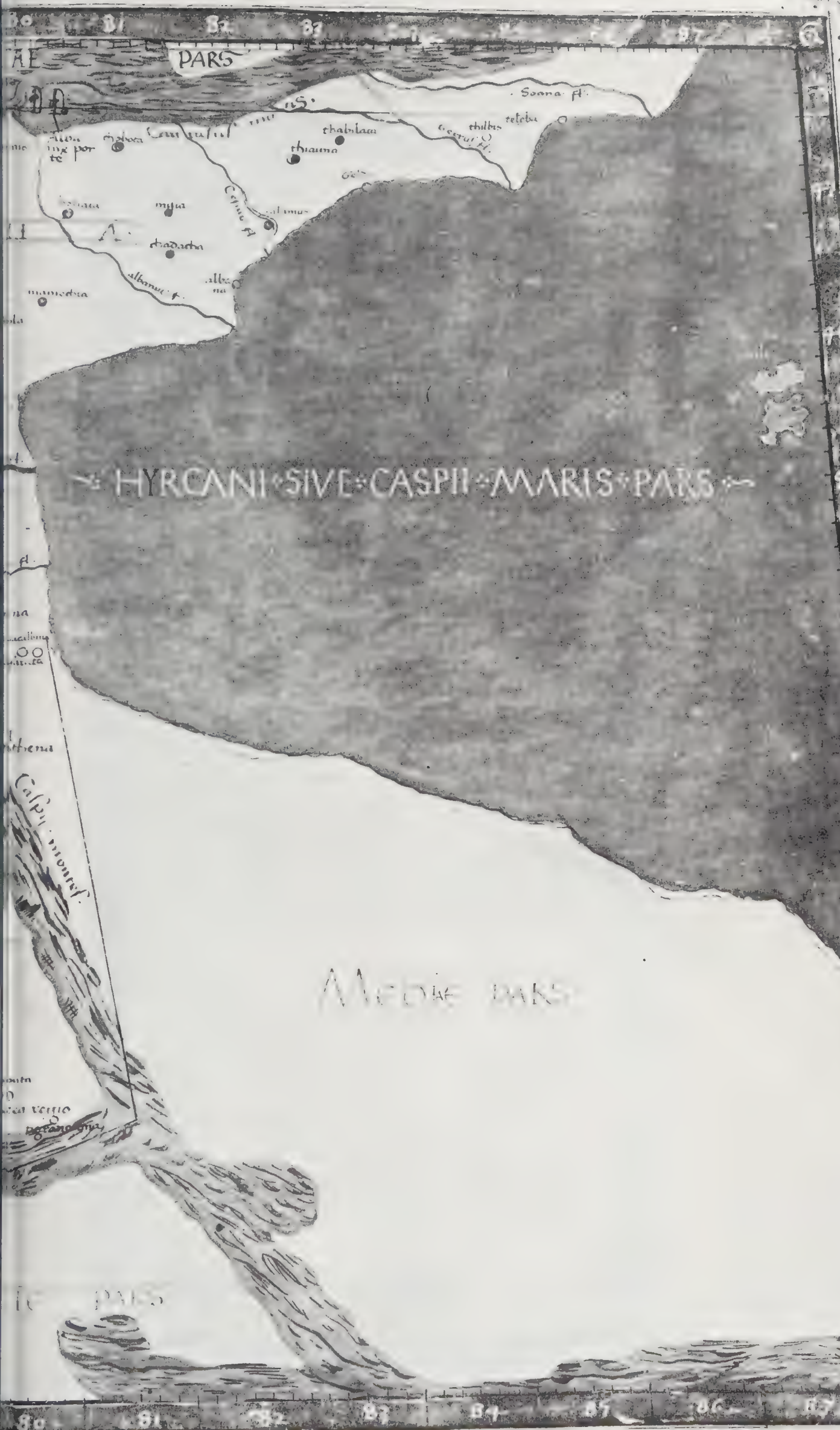
Erca Asia tabula continet Cholonidem *
Iberiam Albaniam & maiorem Armeniam
Parallelus ipius medius proportionem habet
ad meridianum quam undecim ad quindecim.
Terminatur tabula ab ortu parte Caspij maris
& mediorum. Ab austro assyria & Mesopotamia ab
occasu cappadocia & parte Euxini ponti. Ab aequo
Sarmatia asiatica Colchidis insignes ciuitates.
Iosurias maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et
distat ab alexandria uersus ortu horis $1 \frac{2}{3}$
Iberie. Actanussa maximam diem habet horarum $14 \frac{2}{3}$ &
distat ab alexandria uersus ortu horis $1 \frac{3}{10}$
Armenia maximam diem habet horarum $14 \frac{1}{2}$ fecit et
distat ab alexandria uersus ortu horis 1
Albanie Getara maximam diem habet horarum $14 \frac{1}{2}$
& distat ab alexandria uersus ortu horis $1 \frac{1}{4}$
Albana maximam diem habet horarum $14 \frac{2}{3}$ et distat
ab alexandria uersus ortu horis $1 \frac{1}{3} \frac{1}{10}$
Armenie maior Actaxata maximam diem habet
horarum $14 \frac{1}{6}$ et distat ab alexandria uersus or-
tum horis $1 \frac{1}{6}$
Armenia maximam diem habet horarum $14 \frac{1}{4}$ fecit et
distat ab alexandria uersus ortu horis $1 \frac{1}{10}$
Thospia maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4} \frac{1}{8}$ et di-
stat ab alexandria uersus ortum horis 1 fecit
Armenia maximam diem habet horarum $14 \frac{1}{2} \frac{1}{3}$
& distat ab alexandria uersus ortu horis $1 \frac{1}{4}$

Miliana 43 fere

miliana 44 $\frac{1}{4}$

miliana 47





Differt ab equinotti
ali horis. $3\frac{1}{2}$. habet
diem maximu horarum
 $19\frac{1}{2}$.
Clima sextum

13. al. Byzantium
Differt ab equinotti
ali horis. $3\frac{1}{4}$.
habet diem maximu
horarum. $19\frac{1}{4}$.

12. al. Chelid
Differt ab equinotti
ali horis. $3\frac{1}{4}$.
habet diem maximu
horarum. $19\frac{1}{4}$.
Clima quintu

11. al. Chelid
Differt ab equinotti
ali horis. $3\frac{1}{4}$.
habet diem maximu
horarum. $19\frac{1}{4}$.

Quarta Asiae tabula continet cyprum & Sy-
riam & iudeam & utramque arabiam petream
& desertam ac Mesopotamiam & Babiloniam.
Parallelus ipsius medius proportionem habet
ad meridianum quam quinq; ad sex. Terminatur aut
tabula ab ortu Assyria & susiana & parte sinus persici
a meridie parte ipsius persici sinus & felici Arabia: &
interiore parte sinus arabici. Ab occasu parte egypti
& egypto Syria: & pamphylia maris: ac persico sinu
& Cilicia. Ab arcto augustus clios & parte cappa-
doce & maioris armenie Cipri insule ciuitates
Paphos maximam diem habet horarum $14 \frac{1}{3} \frac{1}{12}$ et distat
ab alexandria uersus ortum horis $1 \frac{1}{4}$

A matusa maximam diem habet horarum $14 \frac{1}{3} \frac{1}{12}$ fecit
& distat ab alexandria uersus ortum horis $1 \frac{1}{3} \frac{1}{14}$

Salamis maximam diem habet horarum $14 \frac{1}{2}$ fecit et distat
ab alexandria uersus ortum horis $1 \frac{1}{3} \frac{1}{8}$

Syrie Laodicea maximam diem habet horarum $14 \frac{1}{3} \frac{1}{12}$ et
distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{14}$

Hierapolis maximam diem habet horarum $14 \frac{1}{2}$ et di-
stat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{4}$

Antiochia maximam diem habet horarum $14 \frac{1}{2}$ fecit et di-
stat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{12}$

Apamea maximam diem habet horarum $14 \frac{1}{3} \frac{1}{12}$ fecit et
distat ab alexandria uersus ortum horis $1 \frac{1}{3}$

Palmira maximam diem habet horarum $14 \frac{1}{3}$ fecit
& distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{4}$

Heliopolis maximam diem habet horarum $14 \frac{1}{4}$ & qd
& distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{14}$

Cesarea maximam diem habet horarum $14 \frac{1}{4}$ fecit & distat
ab alexandria uersus ortum horis $1 \frac{1}{2}$

Damascus maximam diem habet horarum $14 \frac{1}{4}$ fecit et
distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{12}$

Palestine iudee ciuitas cesarea stratonis maximam
diem habet horarum $14 \frac{1}{6}$ et distat ab alexandria
uersus ortum horis $1 \frac{1}{3} \frac{1}{14}$

Ascalon maximam diem habet horarum $14 \frac{1}{8}$ & distat ab ale-
xandria uersus ortum horis $1 \frac{1}{3}$

Hierusalem maximam diem habet horarum $14 \frac{1}{8}$ fecit
& distat ab alexandria uersus ortum horis $1 \frac{1}{3} \frac{1}{14}$

Arabia petrea Petra maximam diem habet horarum
 14 et distat ab alexandria uersus ortum horis $1 \frac{1}{3} \frac{1}{10}$

Medana maximam diem habet horarum 14 et distat ab
alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{14}$

Bosra maximam diem habet horarum $14 \frac{1}{12}$ et distat
ab alexandria uersus ortum horis $1 \frac{2}{3}$ fecit

Mesopotamie Edeffa maximam diem habet horarum
 $14 \frac{1}{2}$ & distat ab alexandria uersus ortum horis
 $1 \frac{1}{2} \frac{1}{3}$

Nisibis maximam diem habet horarum $14 \frac{1}{2}$ & distat
ab alexandria uersus ortum horis 1

Nicephorum maximam diem habet horarum $13 \frac{1}{3} \frac{1}{12}$ et qd

et distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{3}$

Labana maximam diem habet horarum $14 \frac{1}{2}$ et
quid & distat ab alexandria uersus ortum horis $1 \frac{1}{6}$

Sclucia maximam diem habet horarum $14 \frac{1}{2}$
fecit & distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{4}$

Babilonie Babilon maximam diem habet
horarum $14 \frac{1}{3} \frac{1}{12}$ et distat ab alexandria
uersus ortum horis $1 \frac{1}{4}$

Baseta maximam diem habet horarum $14 \frac{1}{3}$ et di-
stat ab alexandria uersus ortum horis $1 \frac{1}{4}$ fecit

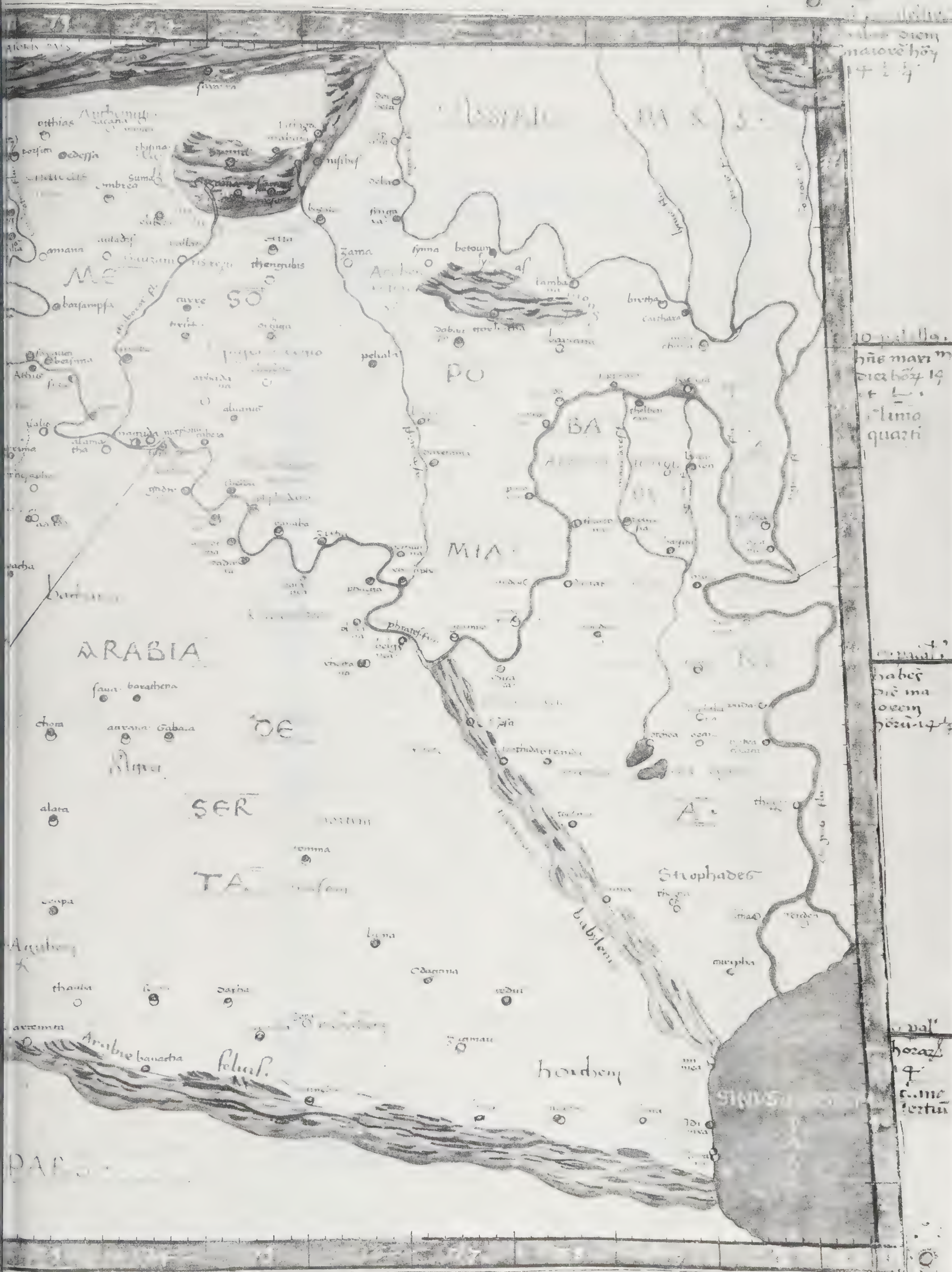
Ochoa maximam diem habet horarum $14 \frac{1}{6}$ et qd
et distat ab alexandria uersus ortum horis $1 \frac{1}{7}$

Teredon maximam diem habet horarum $14 \frac{1}{12}$
fecit et distat ab alexandria uersus ortum
horis $1 \frac{1}{3}$

Milia 40

milia
44 1/2





diem
maiorē hōy
+ 2 4

10 p. lla.
hūe mari m
die hōy 19
+ L.
lino
quarti

4?
habes
die ma
orem
pōu 17 1/2

pal'
horaz
+
c. me
tertū

Vinta Aſie tabula continet Affyriam. Su-
ſianam medos. perſidem. parthiam et car-
maniam. ^{hircaniam} deſertam. Parallelus ipſius medi
proportionem habet ad meridianum quam
quatuor ad quinque. Terminatur autem tabula ab
ortu Aria. ab aſtro Carmania & ſinu perſico. ab
occaſu Babylonia ac Meſopotamia & parte maio-
ris armenie. ab arcto hircani maris parte. & regi-
one hircanie.

Aſſirie inſignium ciuitatum. .

Ninos maximam diem habet horarum $14 \frac{1}{3} \frac{1}{2}$ et diſtat
ab alexandria uerſus ortum horis $1 \frac{1}{4}$

Araha maximam diem habet horarum $14 \frac{1}{2} \frac{1}{8}$ et di-
ſtat ab alexandria uerſus ortum horis $1 \frac{1}{3}$

Cuſiphon maximam diem habet horarum $14 \frac{1}{3} \frac{1}{2}$ fece-
et diſtat ab alexandria uerſus ortum horis $1 \frac{1}{3}$

Suliane. euſſidez noſ. Suſa maximam diem habet
horarum $14 \frac{1}{3}$ et diſtat ab alexandria uerſus
ortum horis $1 \frac{1}{2} \frac{1}{2}$

Tariana maximam diem habet horarum $14 \frac{1}{6}$ et
diſtat ab alexandria uerſus ortum $1 \frac{1}{2}$ fece

Medie Gyropolis maximam diem habet horarum
 $14 \frac{1}{6}$ et diſtat ab alexandria uerſus ortum horis $1 \frac{1}{3}$

Achatana maximam diem habet horarum $14 \frac{1}{3} \frac{1}{2}$ et diſtat
ab alexandria uerſus ortum horis $1 \frac{1}{3}$

Aſſacia maximam diem habet horarum $14 \frac{1}{2} \frac{1}{2}$ et diſtat
ab alexandria uerſus ortum horis $1 \frac{1}{2} \frac{1}{3}$

Europus maximam diem habet horarum $14 \frac{1}{2} \frac{1}{2}$ et
diſtat ab alexandria uerſus ortum horis $2 \frac{1}{4}$

In perſide Axima maximam diem habet horarum
 $14 \frac{1}{3}$ et diſtat ab alexandria uerſus ortum horis $2 \frac{1}{4}$

Araſſum maximam diem habet horarum $14 \frac{1}{3}$ et diſtat
ab alexandria uerſus ortum horis $2 \frac{1}{4}$ fece

Parthie hecatompolis maximam diem habet hora-
rum $14 \frac{1}{3} \frac{1}{2}$ et diſtat ab alexandria uerſus ortum
horis $2 \frac{1}{3} \frac{1}{4}$

Ambrode maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4}$ et
diſtat ab alexandria uerſus ortum horis $2 \frac{1}{3} \frac{1}{4}$ fece

Areticana maximam diem habet horarum $14 \frac{1}{4} \frac{1}{8}$ et
diſtat ab alexandria uerſus ortum horis $2 \frac{1}{3} \frac{1}{4}$

Hircanie inſignium ciuitatum. .

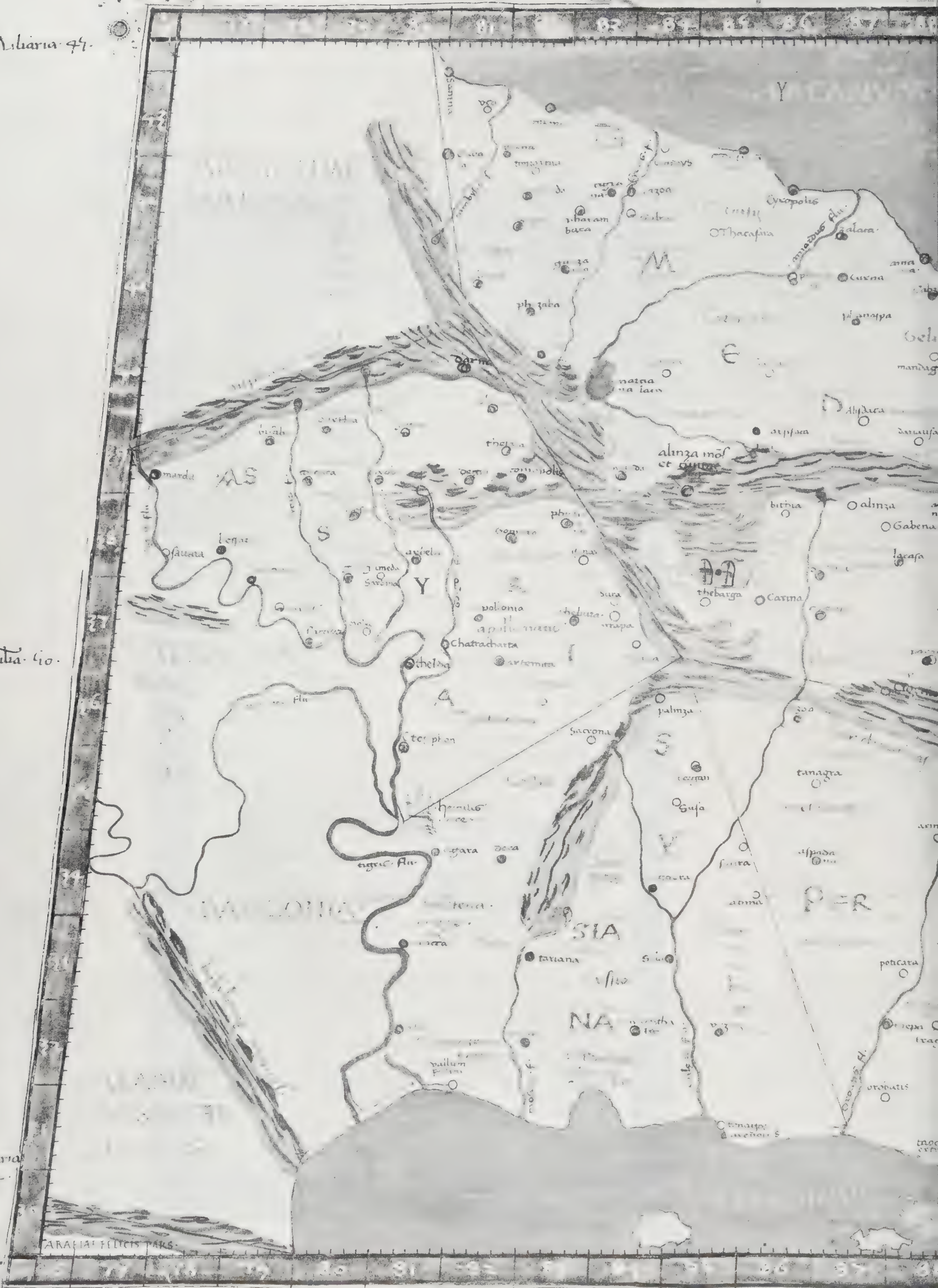
Hircania ciuitas maximam diem habet horarum $14 \frac{1}{2} \frac{1}{2}$
et diſtat ab alexandria uerſus ortum horis $2 \frac{1}{2} \frac{1}{4}$

Amaruſa maximam diem habet horarum $14 \frac{1}{2} \frac{1}{4} \frac{1}{8}$ et diſtat
ab alexandria uerſus ortum horis $2 \frac{1}{2} \frac{1}{4}$. .

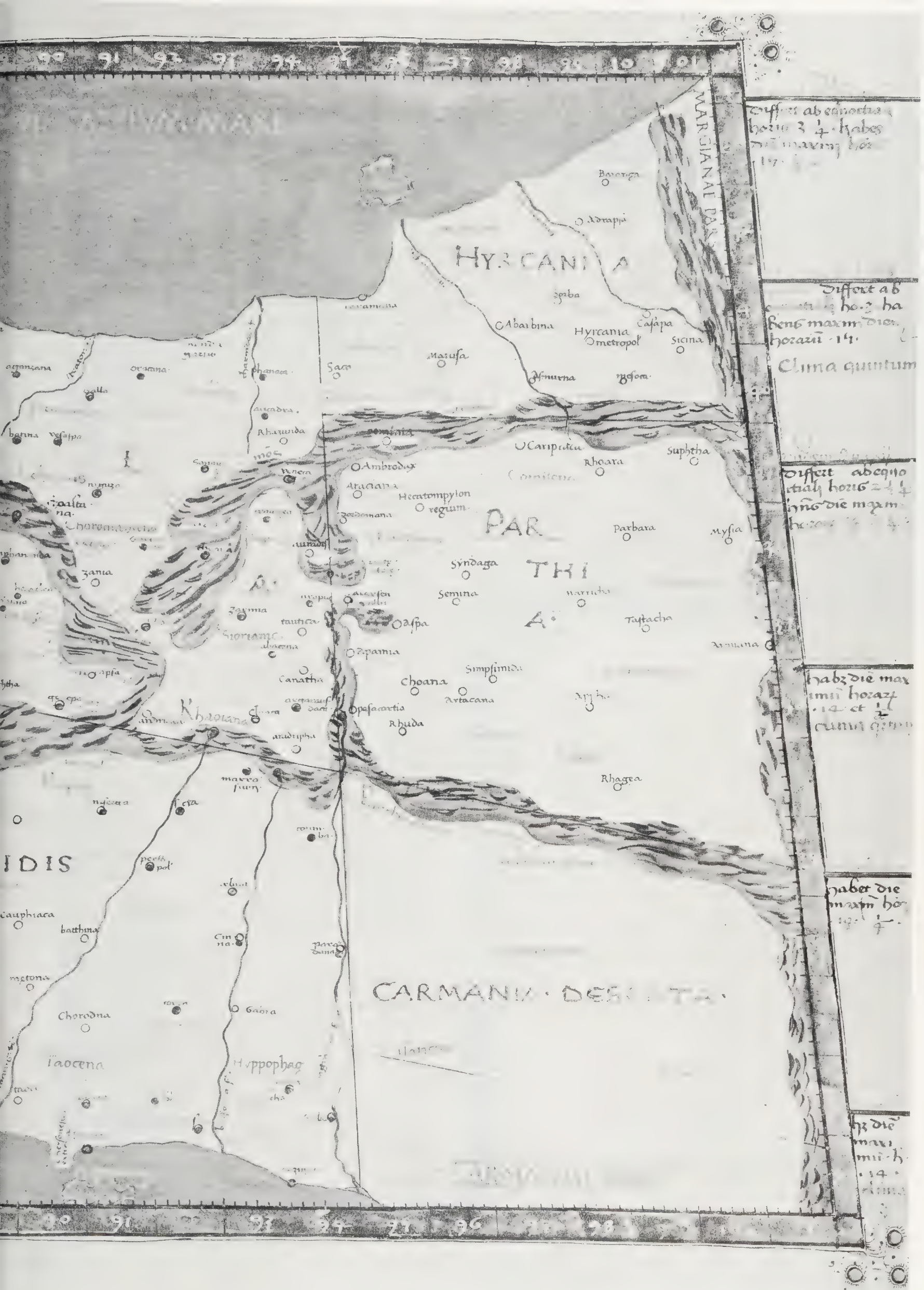
Miliaria 44

milia 40

miliaria 47



ARABIA FELIX PARS



Differt ab aequinoctio
horis 3 $\frac{1}{4}$ habet
die maximam horam
17.

Differt ab
horis 3 ha
bens maximam diei
horam 14.

Clima quantum

Differt ab aequinoctio
horis 2 $\frac{1}{4}$
habet die maximam
horam 14.

habet die maxi
mum horam
14 et $\frac{1}{2}$
clima quantum

habet die
maximam horam
14 $\frac{1}{4}$.

habet die
maximam horam
14.

Extra Afie tabula continet Arabiam felicem atq; Caermaniam cum adiacentibus insulis. Parallelus ipius medius proportionem habet ad meridianum quam undecim ad duodecim. Terminatur autem tabula ab ortu Gedrosia & indico pelago. Ab austro ipso indico pelago & mari rubro. Ab occasu sinu arabico. Ab aequo utraq; arabia petrea et defecta ac sinu persico & Carmania defecta.

Arabie felici insignium ciuitatum.

Badeo maximam diem habet horarum $13 \frac{1}{4}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{3}$
Hic aut sol bis in anno fit supra uerticem distans ab utraq; parte estui tropici gradibus 30
B udnos maximam diem habet horarum 13 et distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{3}$
Hic q sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus $44 \frac{1}{3}$
M uza maximam diem habet horarum $12 \frac{1}{2} \frac{1}{3}$ et distat ab alexandria uersus ortum 7 fere
Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus $44 \frac{1}{3}$
O celis maximam diem habet horarum $14 \frac{1}{3} \frac{1}{4}$ fere & distat ab alexandria uersus ortum horis 7
Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus $61 \frac{1}{4}$
A rabia emporium maximam diem habet horarum $12 \frac{1}{3}$ & distat ab alexandria uersus ortum horis $1 \frac{1}{3}$
Hic sol bis in anno fit supra uerticem cum distat a tropico estui ab utraq; parte gradibus $62 \frac{1}{3}$
C ana maximam diem habet horarum $12 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{2}$
Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus $4 \frac{1}{3}$
M ara maximam diem habet horarum $13 \frac{1}{8}$ & distat ab alexandria uersus ortum horis $1 \frac{1}{4}$
Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus 32
M erambis maximam diem habet horarum 13 et distat ab alexandria uersus ortum horis $1 \frac{1}{20}$
Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus 44
S abbada maximam diem habet horarum 13 et distat ab alexandria uersus ortum horis $1 \frac{1}{8}$
Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus 44
S aba maximam diem habet horarum $12 \frac{1}{2} \frac{1}{4} \frac{1}{30}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{4}$
Hic sol bis in anno fit supra uerticem distans a tropico ab utraq; parte gradibus 18
S aphax maximam diem habet horarum $12 \frac{1}{2} \frac{1}{4} \frac{1}{8}$ et distat ab alexandria uersus ortum horis $1 \frac{1}{2} \frac{1}{3} \frac{1}{30}$

Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus $62 \frac{1}{2}$

Dioschori insula maximam diem habet horarum $12 \frac{1}{3}$ & distat ab alexandria uersus ortum horis $1 \frac{1}{3}$

Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus $61 \frac{1}{2}$

S acapridis insula maximam diem habet horarum $13 \frac{1}{12}$ fere et distat ab alexandria uersus ortum horis $2 \frac{1}{4} \frac{1}{10}$

Hic sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus 41

Insignium Carmanie ciuitatum.

Carmania regia maximam diem habet horarum $13 \frac{1}{2} \frac{1}{4}$ & distat ab alexandria uersus ortum horis $2 \frac{1}{2} \frac{1}{3}$

A rmuza maximam diem habet horarum $13 \frac{1}{2}$ fere et distat ab alexandria uersus ortum horis $2 \frac{1}{4} \frac{1}{20}$

Hic q sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus 7

Carmina insula maximam diem habet horarum $13 \frac{1}{8}$ fere et distat ab alexandria uersus ortum horis $2 \frac{1}{2} \frac{1}{4} \frac{1}{10}$

Hic q sol bis in anno fit supra uerticem distans a tropico estui ab utraq; parte gradibus 40 fere.

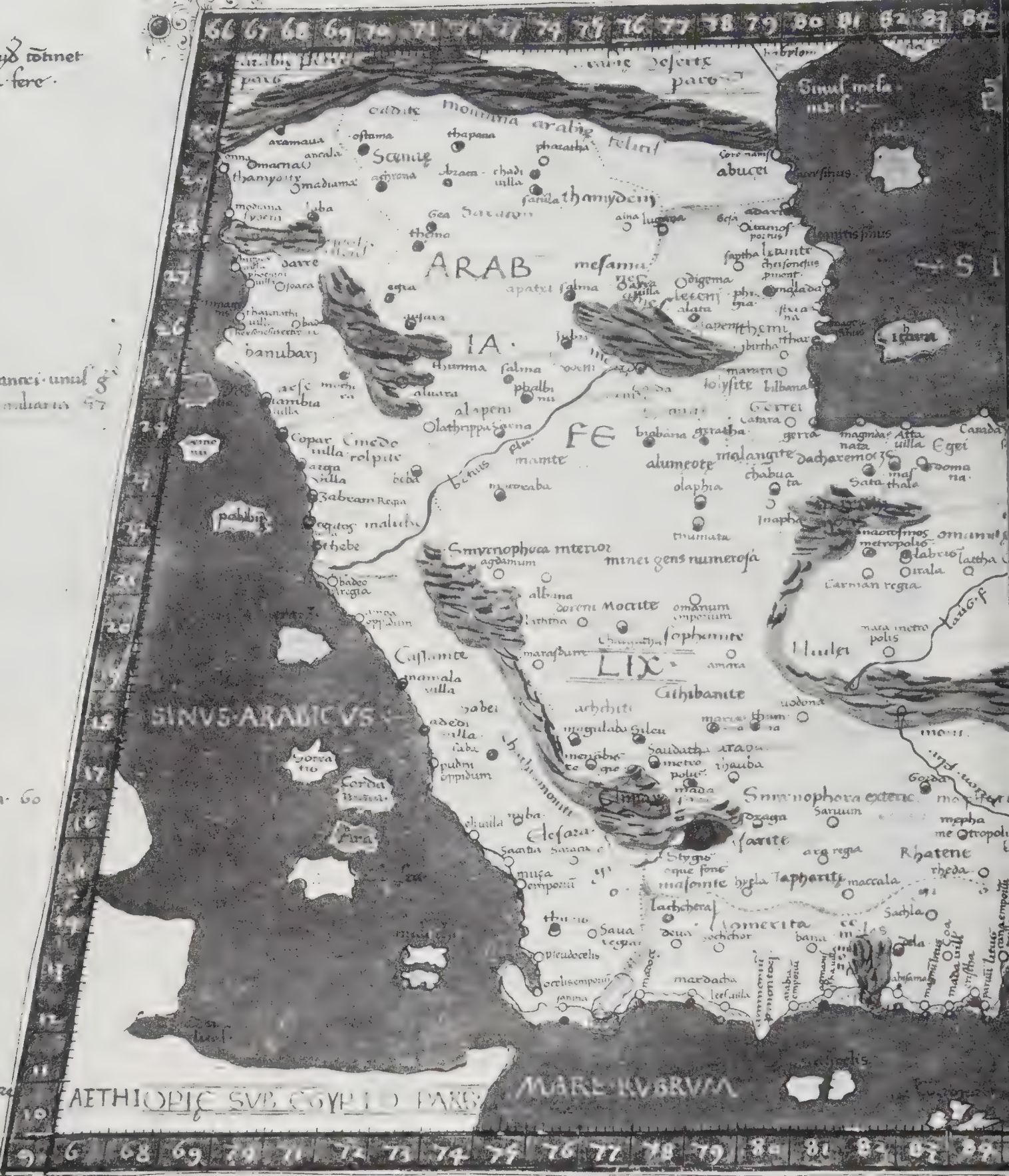
Sexta asiae tabula

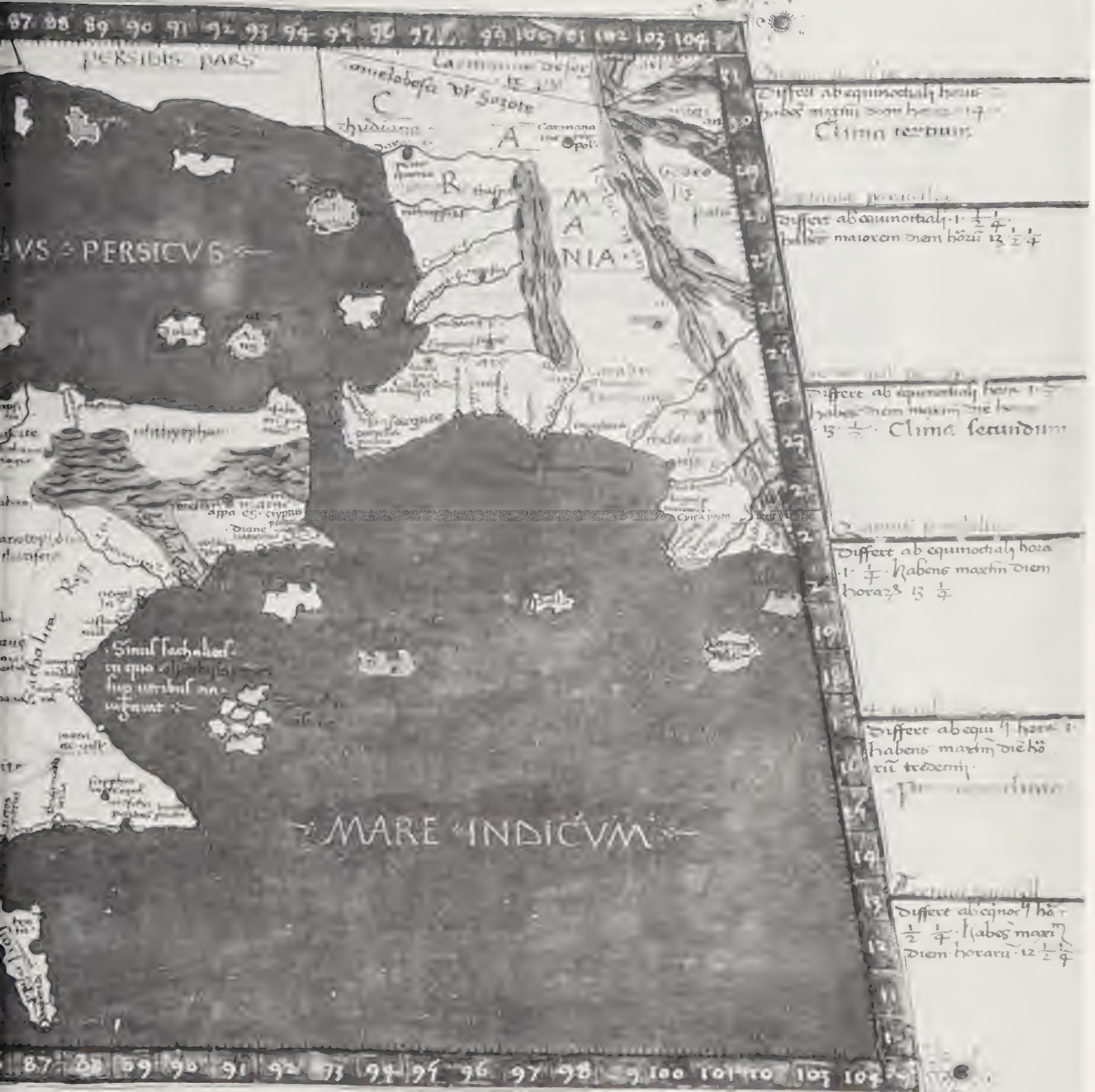
Vnus longitudo continet
miliaria 44 fere.

In hoc circulo continet vnus
longitudo continet miliaria 47

miliaria 60

miliaria 61 fere





S Epima Asia tabula continet hyrcaniam Mar-
 gianam. Bactrianam. Sogdianos. Sacas &
 Scythiam intra Imaum montem. Parallelus
 ipius medius proportionem habet ad me-
 ridianum quam duo ad tria. Terminatur autem aut
 tabula ab ortu scythia que intra Imaum montem est.
 Ab austro monte Imao qui supra indos est. qui natus
 et extra Gangem sunt. Preterea paropanisadibus
 & Aria ac parthia & parte hyrcani maris. ab oc-
 casu parte medorum & hyrcani pelagi & Sarma-
 tia asiatica: ab arcto terra incognita. Insigniorum
 hyrcanie ciuitatum eiusdem nominis cum regione.
 Hyrcania ciuitas maximam diem habet horarum $14 \frac{1}{2}$
 & distat ab alexandria usque ortum horum $2 \frac{1}{2}$ $\frac{1}{4}$
 A marusa maximam diem habet horarum $14 \frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{8}$ et
 distat ab alexandria uersus ortum horum $2 \frac{1}{2}$ $\frac{1}{4}$

Margiane ciuitatum insignium:—

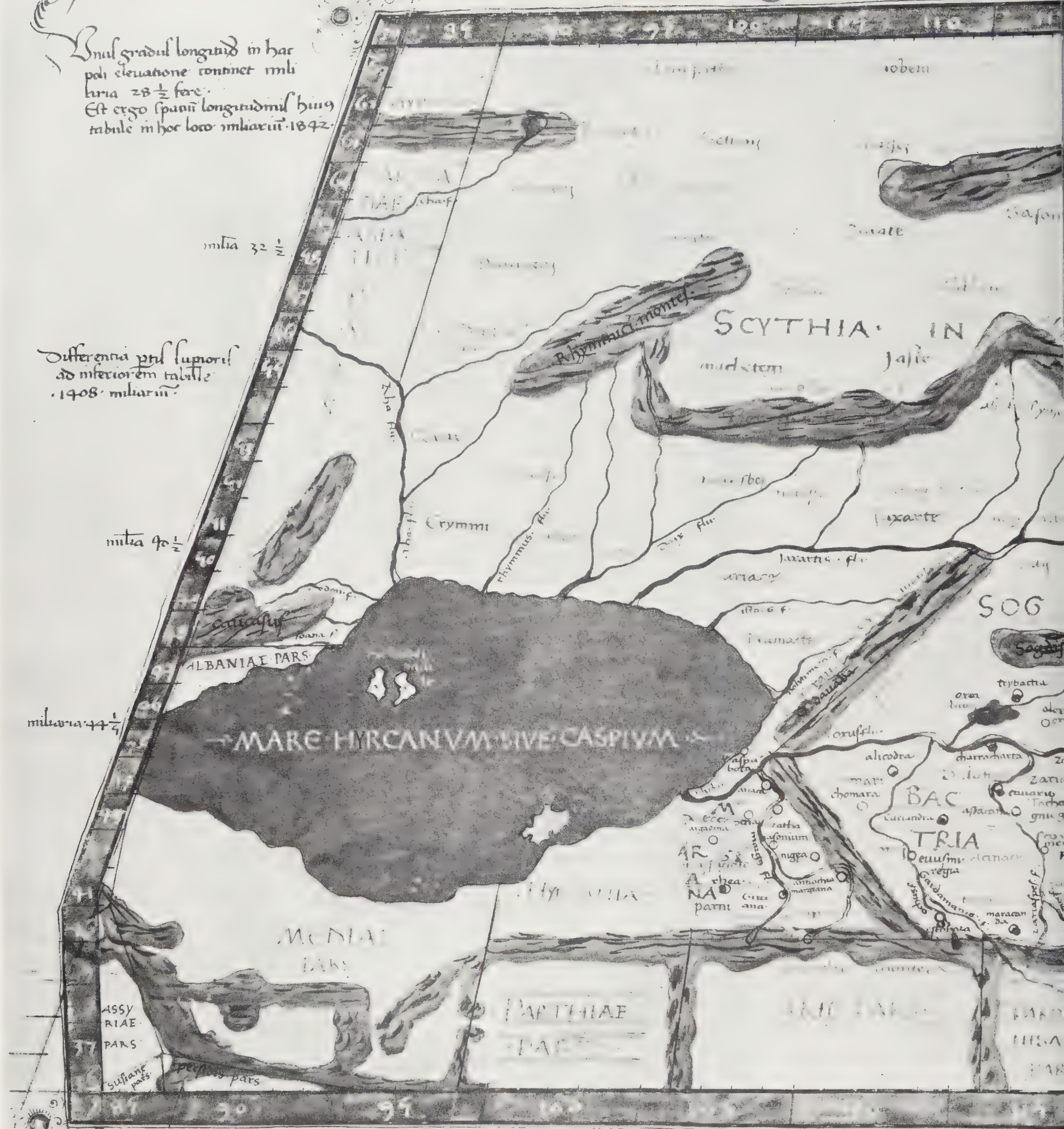
Antiochia maximam diem habet horarum 14 fere et di-
 stat ab alexandria uersus ortum horum $1 \frac{1}{4}$
 Nigra maximam diem habet horarum $14 \frac{1}{9}$ et distat ab
 alexandria uersus ortum horum 3
 Bactriane Characharta maximam diem habet horarum $14 \frac{1}{3}$ $\frac{1}{2}$
 et distat ab alexandria uersus ortum horum $3 \frac{1}{3}$
 Zaispa maximam diem habet horarum $14 \frac{1}{4}$ $\frac{1}{8}$ et distat
 ab alexandria uersus ortum horum $3 \frac{1}{3}$
 Bactra maximam diem habet horarum 14 & distat ab
 Alexandria uersus ortum horum $3 \frac{1}{3}$ $\frac{1}{4}$
 Maracanda maximam diem habet horarum $14 \frac{1}{2}$ $\frac{1}{3}$
 & distat ab alexandria uersus ortum horum $3 \frac{1}{3}$ fere
 Sogdiane Oxiana maximam diem habet hora-
 rum $14 \frac{1}{2}$ fere et distat ab alexandria uersus
 ortum horis $3 \frac{1}{2}$ $\frac{1}{3}$ fere.
 Maruca maximam diem habet horarum $\frac{1}{3}$ fere et di-
 stat ab alexandria uersus ortum horis $3 \frac{1}{2}$ $\frac{1}{3}$ fere
 Drepsa maximam diem habet horarum $14 \frac{1}{2}$ & distat
 ab alexandria uersus ortum horum 4
 Iama Alexandria maximam diem habet horarum 14 & distat
 ab alexandria uersus ortum horum 4 $\frac{1}{8}$
 Scythie que intra Imaum est montem ciuitas
 Asabota maximam diem habet horarum $14 \frac{1}{2}$ $\frac{1}{8}$ et di-
 stat ab alexandria usque ortum horum $2 \frac{1}{2}$ $\frac{1}{3}$ fere
 Danaba maximam diem habet horarum $14 \frac{1}{2}$ et distat
 ab alexandria uersus ortum horis $2 \frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$



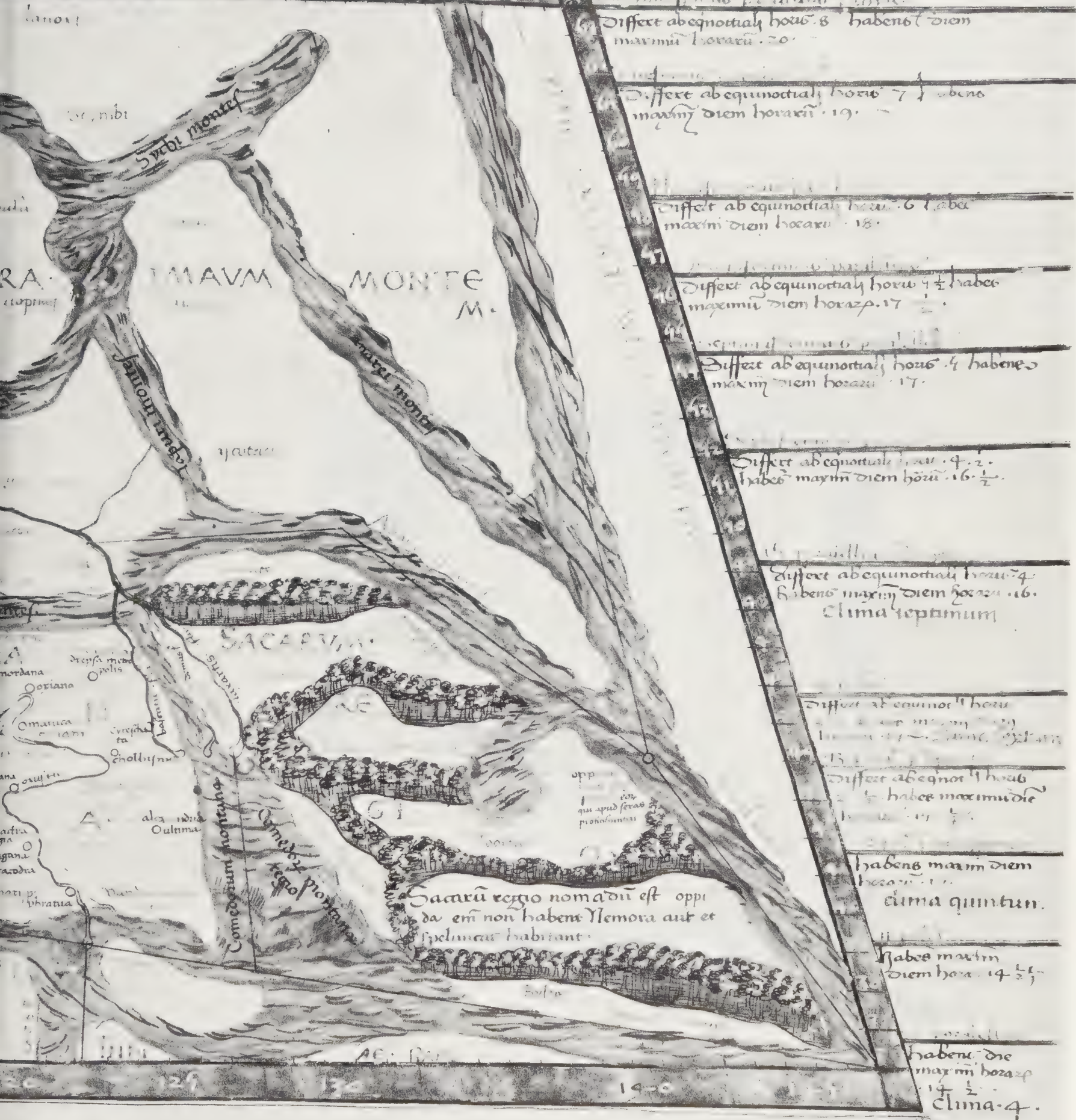
Unus gradus longitudinis in hac
palea elevatione continet mili-
taria $28\frac{1}{2}$ fore.
Est ergo spatium longitudinis huius
tabule in hoc loco miliarum 1842.

Differentia poli superioris
ad inferiorem tabule
1408 miliarum.

militaria $44\frac{1}{4}$



Unus gradus longitudinis in hoc paleo
rhodiensi continet militaria 40. Est ergo
spatium totius tabule in hac pte 3240 miliarum





Citra Asiae tabula continet Scythiam que
circa Imaum est & Seras. Parallelus ipsius
medius proportionem habet ad meridianum
quam duo ad tria. Circūscribitur autem tabu-
la ab arcto & oriente terra incognita. Ab austro Sinis
& parte indie. Ab occasu Sacis & Scythia que intra
montem Imaum est

Scythie intra Imaum montem ciuitates

I ssidon Scythia maximam diem habet horarum 16 et distat
ab alexandria uersus ortum horis 6

A uzacia maximam diem habet horarum 16 $\frac{1}{4}$ fere et distat
ab alexandria uersus ortum hor 9 $\frac{3}{4}$ $\frac{10}{16}$

Que apud Seras sunt ciuitates magis res

I ssidon Serica maximam diem habet horarum 14 $\frac{1}{2}$ et distat
ab alexandria uersus ortum horis 6 $\frac{1}{2}$ $\frac{1}{3}$ fere

D rosica maximam diem habet horarum 14 $\frac{1}{6}$ et distat ab ale-
xandria uersus ortum hor 7 $\frac{1}{6}$ fere

O uorocora maximam diem habet horarum 14 $\frac{2}{3}$ fere
et distat ab alexandria uersus ortum horis 7 $\frac{1}{2}$
 $\frac{1}{3}$ aut 8 integris

Unus gradus longitudinis sub hoc
parallelo p̄ thilen continet stadia
227. que faciūt miliaria 28 $\frac{2}{3}$.

Differentia partū superiorū ad inferiorē
tabule 864 miliarium.

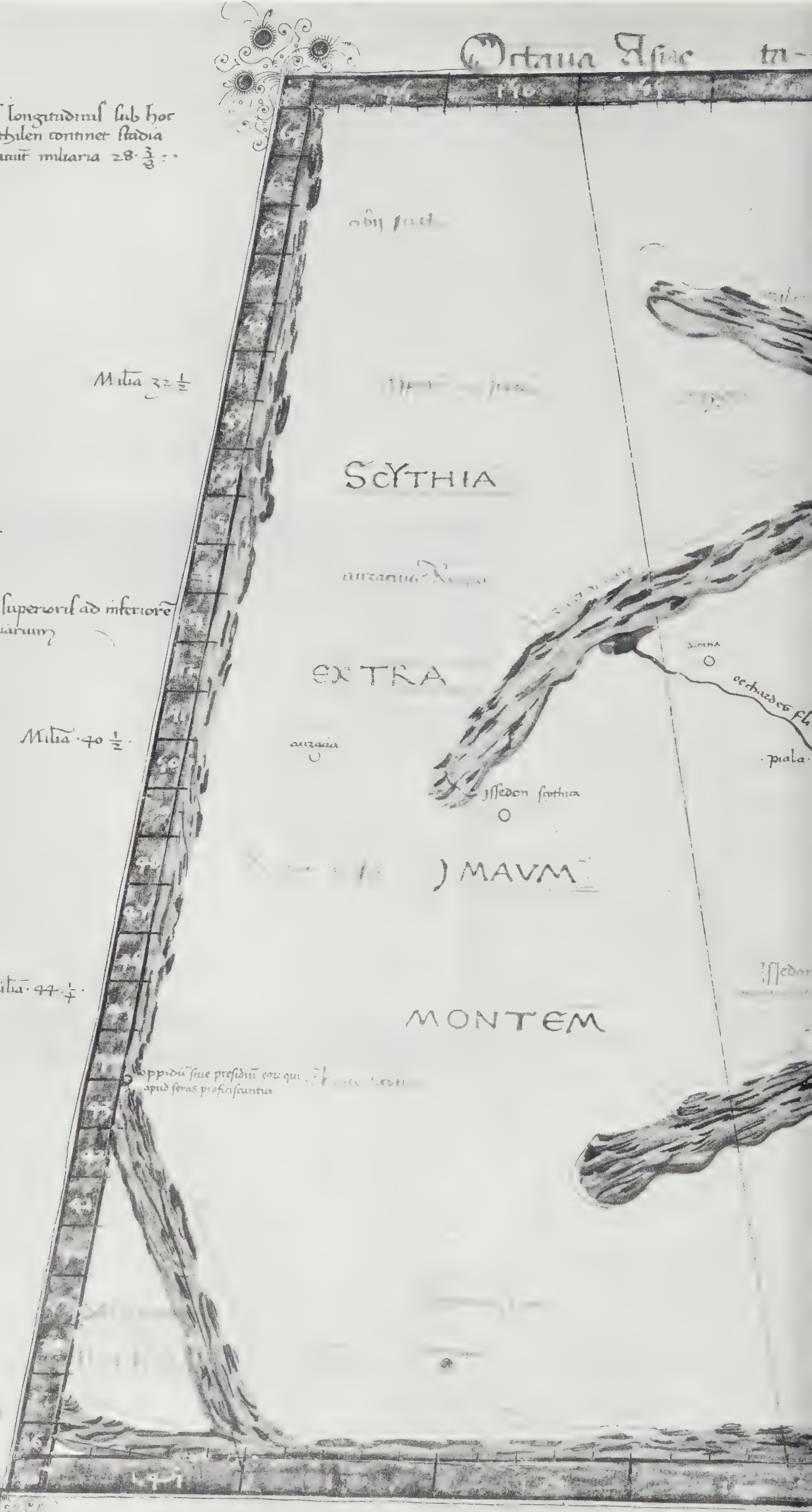
Milia 32 $\frac{1}{2}$

Milia 40 $\frac{1}{2}$

Milia 44 $\frac{1}{4}$

oppida siue presidia eorū qui
apud seras proficiuntur

Vulgo loquuntur et vocant



Ortana Asiae

ta-

ad hunc

ad hunc

SCYTHIA

auraria

EXTRA

auraria

Issedon scythica

MAVM

MONTEM

ochusidensis fl.

pala.

Issedon

bula

SERICA

Garing

thobanc

R E

Almire Regio

G

oechardes fl.

afonrea

thoana

thron

sedon

seria

apimot

sparta

saofuba

palliana

abeaguna

basin to flur

palana

Septimus vni e' parali
magis ppinquus arcto. differt ab equinoctiali horis 8.
habens diem maxm horaru 20.

Differt ab equinoctiali horis 7. habens maxm diem
horaru 19.

Differt ab equinoctiali horis 6 habens diem
maxm horaru 18.

Differt ab equinoctiali horis 4 $\frac{1}{2}$ habens
diem maxm horaru 17 $\frac{1}{2}$.

Differt ab equinoctiali horis 4 habens
diem maxm horaru 17.

Differt ab equinoctiali horis 4 $\frac{1}{2}$ habens
maxm diem horaru 16 $\frac{1}{2}$.

Differt ab equinoctiali horis 4 habens
maxm diem horaru 16.

Clima septimum

Differt ab equinoctiali horis 3 $\frac{1}{2}$
habens maxm diem horaru 14 $\frac{1}{2}$.

Clima sextum

Differt ab equinoctiali horis 3 $\frac{1}{4}$
habens maxm diem horaru 14 $\frac{1}{4}$.

Differt ab equinoctiali horis 3
habens maxm diem horaru 14.

Clima quintum

Differt ab equinoctiali horis 2 $\frac{1}{4}$ habens maxm
diem horaru 14 $\frac{1}{4}$.

Differt ab equinoctiali
horis 2 habens maxm diem
horaru 14.

Clima Quartum

Lona Asiae tabula continet Ariam & paro
panisadas et Drangianam & Atachosiam
& Gedrosiam: Parallelus ipsius medius pro
portionem habet ad meridianum quam

recedam ad quindecim. Graī scribit aut tabula
ab ortu india. a meridie indico mari. ab occasu u
trag carmania & parthia. ab arcto narioria & ba
ctriana. Insignium in aris rursus
cia maximam diem habet horar. $14 \frac{1}{3} \frac{1}{2}$ et distat
ab alexandria uersus ortum horis .3.

A cia maximam diem habet horar. $14 \frac{1}{3} \frac{1}{2}$ et distat
ab alexandria uersus ortum horis .3.

B utaxa maximam diem habet horarum $14 \frac{2}{3}$ & distat
ab alexandria uetus octum horis $3 \frac{1}{3}$ $\frac{1}{12}$

Alexandria Acie maximam diem habet horar. 14 & distat ab alexandria uersus occu horis 3

Paropanisatou Naulibis maximam diem habet ho-
rarum 14 fore et distat ab Alexandria uetus
ortum horis 3 $\frac{1}{3}$

Citura que et orospansa maximam diem habet horarum 14 $\frac{3}{4}$ $\frac{1}{2}$ & distat ab alexandria uersus orientum horis.

Drangiane Prophthasia maximam diem habet
horarum 14 $\frac{7}{8}$ & distat ab alexandria uersus or-
tum horis 3 $\frac{1}{6}$

A riappa maximam diem habet habet horar 13 $\frac{1}{3}$ et
distat ab alexandria uersus ortu horis 3 $\frac{1}{4}$

Amatholite Alexandria maximam diem habet horarum 14 $\frac{12}{10}$ & distat ab Alexandria uersus ortum horis 3 $\frac{1}{10}$

Arcotus maximam diem habet horarū 14 & distat
ab alexandria uersus ortū horis 3. 30.

Gedrosie. Cui maximam diem habet horarum
13 $\frac{1}{3}$ fecit et distat ab Alexandria uetus occu-
patis 3 $\frac{1}{3}$.

ufarna maximam diem habet horar. $13\frac{1}{4}$ et distat
ab alexandria uersus occi huius $3\frac{2}{3}$

A. r. b. s. maximam diem habet horarum $13\frac{1}{2}$ fecit et distat ab alexandria uersus occū horis .3.

ic sol bis in anno fit supra uerticem in ipso equinoctio tropico. Diamus autem hec: quia sol prope ipsum est tropicum. Sciendum autem quod distat recta parte unius magni gradus: qui in Zodiaco gradus tres efficitur et hic non semel in anno sed bis necesse fit solum supra uerticem fieri. quando scilicet distat a tropico estuo ab utraque parte gradibus tribus sicut in alijs ciuitatibus scriptum est que in eadem parte latitudinis sitae sunt.

• Miliazia 50 •

Mita. 44.

Maria. 47. $\frac{1}{4}$

Vnus gualer mltia. 48.

Asia Tabula



Differt ab equinoctiali horis $2 \frac{1}{2} \frac{1}{4}$ habens
maximū diem horarū $14 \frac{1}{2} \frac{1}{4}$.

Differt ab equinoctiali horis $2 \frac{1}{2}$ habens diem
maximū horarū 14 et medie.
Clima quartum

Differt ab equinoctiali horis $2 \frac{1}{4}$ habens
maximū diem horarū $14 \frac{1}{4}$.

Differt ab equinoctiali horis 2 habens
maximū diem horarū 14
Clima tertium

Differt ab equinoctiali hora $1 \frac{1}{2} \frac{1}{4}$ habens
maximū diem horarū $13 \frac{1}{2}$ et $\frac{1}{4}$

Differt ab equinoctiali horis 1 et media
habens maximū diem horarū $13 \frac{1}{2}$
Clima secundum

Differt ab equinoctiali horis $1 \frac{1}{4}$
habens diem maximū diem maximū
horarū $13 \frac{1}{4}$.

Deama asiae

Vnus gradus miliaria 40

milia 44

Miliaria 47 $\frac{1}{4}$

Milia 60





differt ab equinotiali horis. $2 \frac{1}{2} \frac{1}{4}$
habens maximū diem horū $14 \frac{1}{2} \frac{1}{4}$.

Differt ab eqnortali horis $2 \frac{1}{2}$
 habens diem maximū hōz $14 \frac{1}{2}$
 Luna quarum

Differt ab equimortalibus horis 2. $\frac{1}{4}$.
habens diem maximū horū 14. $\frac{1}{4}$.

Differet ab equinoctiali hoas. 2.
habens maximū diē horaz. 19.
Clima tertium.

Differet ab equinoctiali hora
1. $\frac{1}{2}$ $\frac{1}{4}$ habet maxim diem
horaz. 13. $\frac{1}{2}$ $\frac{1}{4}$.

Differt abegnormali hois
1. $\frac{1}{2}$ habens maximū die
horarū. 13. $\frac{1}{2}$.
Clima secundum

Differt ab eod normal
hois .1. $\frac{1}{4}$. Habes dies
maxim horazs .3. $\frac{1}{4}$.

4: paral' pMeroet
ha beñs diem ma-
ximū horaz. 13.
Clima primum

habes die max
imum höze
12: $\frac{1}{2}$ $\frac{1}{4}$.

Decima Asia tabula continet indiam intra Gangem fluvium cum insulis sibi adiacentibus. Parallelus ipsius medius proportionem habet ad meridianum quam unde cum ad duodecim. Circumscribitur autem tabula ab ortu India extra Gangem. Ab austro parte gangetica fluvij & indici pelagi. ab occasu Gedrosia & arachosia & paropanisades. ab arcto parte fmau montis que sub Sogdianis & sacis est India intra Gangem civitates insignes.

Symalla maximam diem habet horarum $12 \frac{1}{2} \frac{1}{3}$ fecit et distat ab alexandria uersus ortum horis $3 \frac{1}{3}$.

Hic sol bis in anno fit supra uerticem quando distat a tropico estuo ab utraque parte gradibus $41 \frac{1}{3}$.

Muzotis maximam diem habet horarum $12 \frac{1}{2} \frac{1}{3}$ et distat ab alexandria uersus ortum horis $3 \frac{1}{3}$.

Hic sol bis in anno fit supra uerticem quando distat a tropico estuo ab utraque parte gradibus $44 \frac{1}{2}$.

Chaberis maximam diem habet horarum $12 \frac{1}{2} \frac{1}{3}$ aut 13 fecit et distat ab alexandria uersus ortum horis $4 \frac{1}{2}$.

Hic sol bis in anno fit supra uerticem cum distat a tropico estuo ab utraque parte gradibus $47 \frac{1}{2}$.

Palmira maximam diem habet horarum $12 \frac{1}{3} \frac{4}{5}$ et distat ab alexandria uersus ortum horis $4 \frac{1}{9}$.

Hic sol bis in anno fit supra uerticem cum distat a tropico estuo ab utraque parte gradibus 7 .

Cassira maximam diem habet horarum $14 \frac{1}{2}$ fecit et distat ab alexandria uersus ortum horis $4 \frac{1}{2}$ fecit.

Bucephala maximam diem habet horarum $11 \frac{1}{4}$ fecit et distat ab alexandria uersus ortum horis $4 \frac{1}{3} \frac{3}{5}$.

Palmbothra maximam diem habet horarum $13 \frac{1}{2} \frac{1}{4}$ fecit et distat ab alexandria uersus ortum horis $4 \frac{1}{2} \frac{3}{5}$.

Patala maximam diem habet horarum $13 \frac{1}{2}$ fecit et distat ab alexandria uersus ortum horis $3 \frac{1}{2}$.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus $23 \frac{1}{2} \frac{1}{3}$.

Arbata maximam diem habet horarum $13 \frac{1}{3} \frac{1}{2}$ et distat ab alexandria uersus ortum horis $3 \frac{1}{2} \frac{1}{10}$.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus $23 \frac{1}{2} \frac{1}{3}$.

Bauraga maximam diem habet horarum $13 \frac{1}{3} \frac{1}{2}$ et distat ab alexandria uersus ortum horis $3 \frac{1}{20}$.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus $41 \frac{1}{3}$.

Ozena maximam diem habet horarum $13 \frac{1}{4}$ fecit et distat ab alexandria uersus ortum horis 4 .

Hic sol bis in anno fit supra uerticem cum distat a tropico estuo ab utraque parte gradibus 31 .

Bethana maximam diem habet horarum $13 \frac{1}{8}$ fecit et distat ab alexandria uersus ortum horis $3 \frac{1}{3}$ fecit.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus $38 \frac{1}{4}$.

Hic propterea maximam diem habet horarum $13 \frac{1}{2}$ et distat ab alexandria uersus ortum horis 4 .

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus $34 \frac{1}{3}$.

Caurata maximam diem habet horarum 13 et distat ab alexandria uersus ortum horis $3 \frac{1}{2} \frac{1}{3}$.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus $44 \frac{1}{3}$.

Modura maximam diem habet horarum 13 et distat ab alexandria uersus ortum horis $4 \frac{1}{3}$.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus 44 .

Orthura maximam diem habet horarum 13 et distat ab alexandria uersus ortum horis $4 \frac{1}{3}$.

Hic sol bis in anno fit supra uerticem distans a tropico estuo ab utraque parte gradibus 46 .

Pityndra maximam diem habet horarum $12 \frac{1}{2} \frac{1}{4}$ et distat ab alexandria uersus ortum horis 4 .

Hic quod sol bis in anno fit supra uerticem cum distat a tropico estuo ab utraque parte gradibus 60 .

Ndecima Asia tabula continet indiam
extra Gangem & Sinas. Parallelus ipius
medius fere eandem habet proportionem
quam meridianus. Circūscribitur autē
tabula ab ortu terra incognita. Ab austro parte
Gangetici sinus & pelago indico & sinu magno &
terra & incognita. Ab occasu india intra Gangē
Ab arcto parte Scythie atq; Scis.

Indie extragem fluvium cuius? insignel

Tacola maximam diem h̄t horarū 13 equinoctialium

14 $\frac{1}{4}$ & distat ab alexandria uersus ortū h̄orē 6 $\frac{2}{3}$

Hic sol bis in anno fit supra uerticem distans a tropico
estiuo ab utraq; parte gradib' 79 $\frac{1}{2}$

Zame maximam diem habet horarū 14 $\frac{1}{4}$ et distat
ab alexandria uersus ortū horis 7 $\frac{1}{3}$

Hic sol bis in anno fit supra uerticem distans a tropi
co estiuo ab utraq; parte gradibus 78 $\frac{1}{2}$ $\frac{1}{4}$

Tosala maximam diem h̄t horarū 13 $\frac{1}{2}$ et distat
ab alexandria uersus ortū horis 6.

Hic sol semel in anno fit supra uerticem in tropi
co ipso estiuo

Soagima maximam diem h̄t horarū 13 $\frac{1}{4}$ et distat
ab alexandria uersus ortū horis 6 $\frac{1}{8}$

Hic sol bis in anno fit supra uerticē distans a tropi
co estiuo ab utraq; parte gradibus 14

Tilingum maximam diem habet horarū 13 et distat
ab alexandria uersus ortum horis 6 $\frac{1}{4}$

Hic sol bis in anno fit supra uerticem distans a tro
pico estiuo ab utraq; parte gradib' 39

Mareura maximam diem habet horarū 12 $\frac{1}{2}$ $\frac{1}{4}$
et distat ab alexandria uersus ortum h̄orē 7 $\frac{1}{2}$ fere

• Sinariū. Aspithra maximam diem habet h̄orē 13 $\frac{1}{8}$
& distat ab alexandria uersus ortū h̄orē 7 $\frac{2}{3}$

Hic q; sol bis in anno fit supra uerticem distans a
tropico estiuo ab utraq; parte gradib' 44 $\frac{1}{2}$ $\frac{1}{4}$

Tine metropolis maximā diem habet horarū 13 $\frac{1}{8}$ et
distant ab alexandria uersus ortū horis 7 $\frac{2}{3}$

Hic q; sol bis in anno fit supra uerticem distans a
tropico estiuo ab utraq; parte gradib' 43 $\frac{1}{8}$

Cattigara statio maximam diem habent horarū
12 $\frac{1}{2}$ & distant ab alexandria uersus ortum

7 $\frac{1}{2}$ $\frac{1}{4}$ polo australi supra terram elato

Hic q; sol bis in anno fit supra uerticem distans a
tropico estiuo ab utraq; parte gradib' 68 $\frac{1}{2}$ $\frac{1}{4}$

• Dela Abadei insula ubi metropolis nōnē argen
tea maximam diem h̄t h̄orē 12 $\frac{1}{2}$ similiter au
strali polo supra terram elato & distant ab ale
xandria uersus ortum h̄orē 7 $\frac{2}{3}$

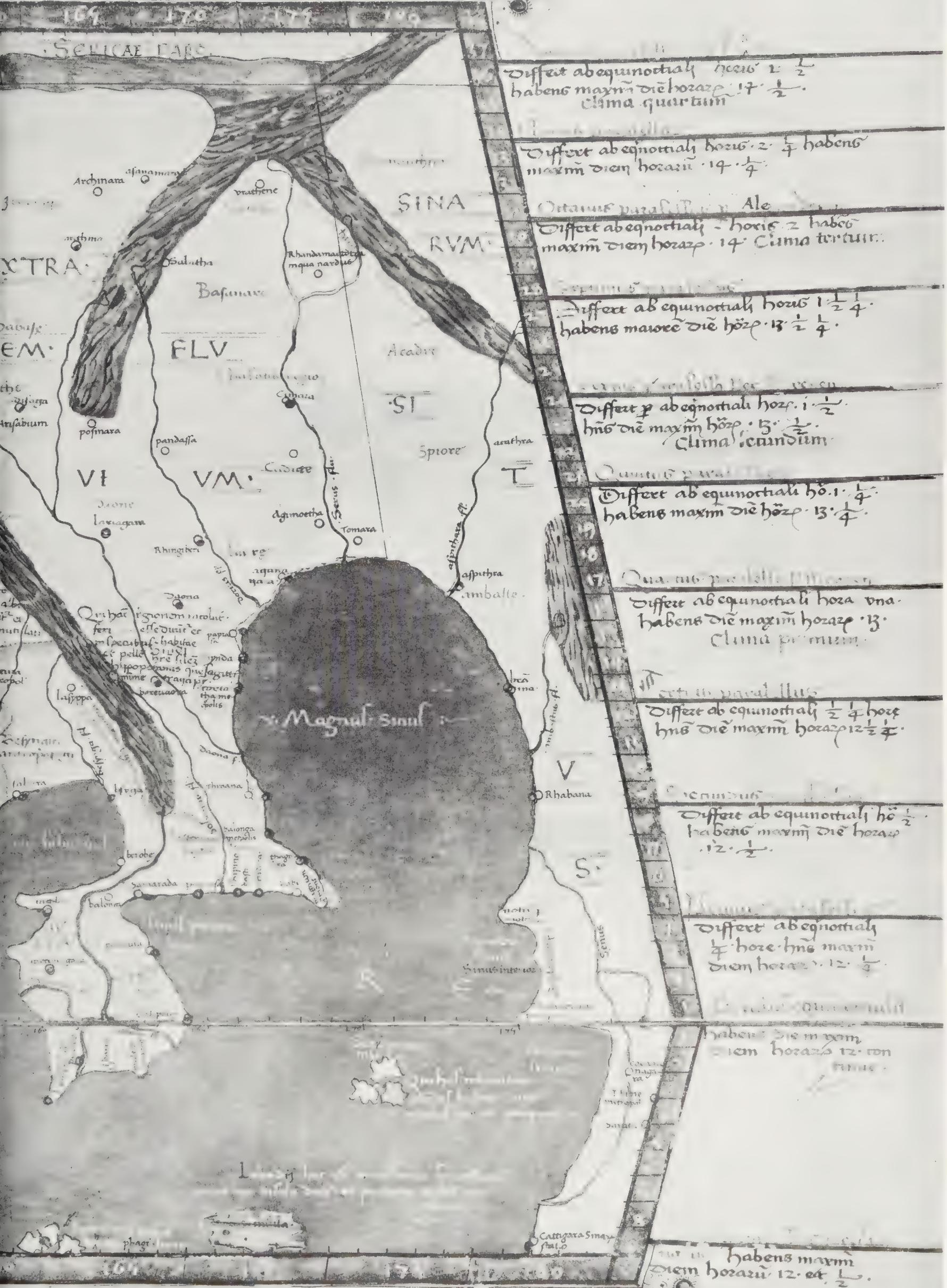
Hic sol bis in anno fit supra uerticem distans a
tropico estiuo ab utraq; parte gradib' 68 $\frac{1}{2}$ $\frac{1}{4}$

Unus gradus longitudinis in hoc parallelo
rhodiensi continet miliaria 40 et
stadia 400

Unus gradus longitudinis in circulo Canari sive
parallelo p Sienem continet stadia 477 que fa-
ciunt miliaria $47\frac{1}{4}$.

Unus gradus longi et latitud sub
equinoctiali continet stadia 4000
que faciunt miliaria $62\frac{1}{2}$





Dodecima Asiae tabula continet Taprobanem
insulam cum ceteris insulis adiacentib'. Paral-
lelus ipsius medius proportionem habet ad
meridianum eandem. Circūscribitur autem
tabula ab omī parte indico pelago

Taprobane insule ciuitates insignes

Talacotis emporium maximam diem habet horarum e-
quinocetialium $11 \frac{2}{3}$ & distat ab alexandria uersus
ortum horis $4 \frac{1}{2} \frac{1}{4}$

Agadiba maximam diem habet horarum $12 \frac{1}{2}$ & distat
ab alexandria uersus ortum horis $4 \frac{1}{2} \frac{1}{4}$

Hic q. sol bis in anno fit supra uerticem cum distat a
tropico estuo ab utraq. parte gradib' $69 \frac{1}{2} \frac{1}{4}$

Maugrānum metropolis maximā diem habet horarum
 $12 \frac{1}{2} \frac{1}{2}$ & distat ab alexandria uersus ortū hor. $4 \frac{1}{3} \frac{1}{12}$

Hic sol bis in ano fit supra uerticem cum distat a tropi-
co estuo ab utraq. parte gradibus $72 \frac{1}{2} \frac{1}{4}$

¶ finis tabularum Asiae maioris & duodecim.

Duodecima et vltima asye Tabula



PROVINCIE SEU SATRAPIE NOBIS HABENT

In secundo	In Europaea regina & quatuor	Que proprie Asia dicitur	48	68
	1. Britannia insula britannica	P. brigia magna	60	38
	2. Albion insula britannica	Lyca	60	37
	3. Hispania betica	G. alania	62	41
	4. Hispania lucitana	P. apblagonia pifidida	62	43
	5. Hispania tarraconensis	P. amphibia ffauria	61	37
	6. Gallia aquitana	Cappadocia	64	39
	7. Gallia lugdonensis	Armenia minor	71	39
	8. Gallia belgica	Cilicia	68	37
	9. Gallia narbonensis	Sarmatia asiatica	74	44
	10. Germania magna	C. olonis	73	44
	11. Rethia & vindelica	1. betia	74	44
	12. Horium	Albania	78	44
	13. Pannonia superior	Armenia maior	77	41
	14. Illiris	Cypus insula	66	34
	15. Delmata	Syria curua	71	36
In tertio	16. Italia	Syria phenicea	71	33
	17. Cyrenos insula	Syria palestina iudea	67	31
	18. Sardinia insula	Arabia petrea	68	31
	19. Sicilia insula	Mesopotamia	73	37
	20. Sarmatia in europa	Arabia deserta	74	32
	21. Taurica chersonesus	Babylonia	78	32
	22. Iaziges metanaste	Assyria	80	37
	23. Dacia	Sufiana	84	34
	24. Mysia superior	Media	83	39
	25. Mysia inferior	Persis	90	32
	26. Thracia	Parthia	96	37
	27. Chersonesus	Carmania deserta	96	32
	28. Macedonia	Carmania altera	99	24
	29. Epirus	Arabia felix	86	22
	30. Achaia	Hyrcania	94	40
	31. Euboea insula	Margiana	103	40
	32. Deloponefus	Bactriana	116	41
	33. Creta insula	Sogdiana	113	44
	34. In Africa prouinae seu Satrapie	Saces	130	43
	35. duodecim	Sythia intra fmau motem	120	46
In quarto	36. Mauritania	Sythia extra fmau motem	140	48
	37. Mauritania cesariensis	Scia	162	44
	38. Numidia	Aria	104	37
	39. Africa	Pacoparufade	117	34
	40. Cyrenica que & pentapolis	Dangiana	108	24
	41. Marmarica	Aragofia	114	30
	42. Libya	Ectrofia	114	29
	43. Egyptus inferior	India intra gangem	132	27
	44. Egyptus thebaica	India extra gangem	132	27
	45. Libya africana	Smarum regio	172	16
	46. Ethiopia supra egyptum	Taprobane insula	124	3
	47. Ethiopia omnibus his australior	Omnes prouinae nostre habita		
	48. Australia	biles sunt nonaginta & quatuor		
In quinto	49. Pontus			
	50. Bithynia			

In Sexto

In septimo

¶ Not quot gentes subiacent Zodia-
co his sol fit supra uerticem a borea
descendens ad austrum: Ascendens q si-
militer bis q semel in anno alijs bis.
Omnes autem qui sub Zodiaco habitant
ab occasu ad ortum solis ethyopes sunt
pari modo coloribus nigri: & hi maxime
qui sub circulo equinoctiali sunt abun-
de nigri sunt. Qui aut extra lineam
catheton Zodiaci incolunt remissiores
colore sunt & in albedinem tendunt
secundum distantie rationem usq ad Sar-
matas hyperboreos. Eadem est ratio ab
utraq parte equinoctialis uersus boream
atq austrum usq ad utrosq polos Zo-
daci.

VERSALIOR
TIBVS CONFECTA.



TABVLA
BVS
COGNITI ORBIS
OBSERVATIONI





TRADITIONEM EXACTISSIME DEPICTA. 1522. L.F. 2

ASIA

India superior

India inferior

Sina

Cathay

Mogolatum

120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

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Auster

Euronothus

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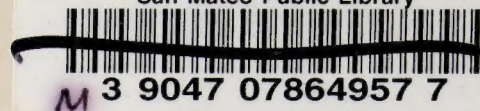
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Although the *Guide to Geography* contained many errors, it exerted great influence on later generations, including such explorers as Christopher Columbus, who used it to fortify his conviction that it was possible to reach Asia by traveling westward. As it turned out, Asia was not nearly as close as Ptolemy had claimed. Similarly, it was not until the 18th century that the voyages of Captain James Cook disproved the Ptolemaic idea that a southern continent bounded the Indian Ocean. In spite of these and other shortcomings, however, the *Guide* remains an important landmark in the first serious attempts to construct an accurate geography of the world.

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