THE COPY OF DIOCLETIAN'S EDICT ON MAXIMUM PRICES FROM APHRODISIAS IN CARIA

By KENAN T. ERIM and JOYCE REYNOLDS

With notes on clothing and cloth by J. P. Wild and on marble by M. H. Ballance and an appendix on the copy of the Edict from Ptolemais in Cyrenaica by Joyce Reynolds *

(Plates IX-XII)

Aphrodisias in Caria had already yielded a number of fragments of the Latin text of Diocletian's Edict on Prices by the early years of this century, and others, some of them very important, came to light during the brief Italian investigations conducted by G. Jacopi in 1937.1 The excavations initiated in 1961 by New York University under the direction of K. T. Erim have yielded in the course of their annual campaigns a considerable number of new pieces. Although more fragments will undoubtedly come to light in future seasons as work proceeds, it seems appropriate that the group so far discovered should be published. All of these pieces have been made available to Professor S. Lauffer for use in his consolidated edition of the text of the Edict as known at present; nevertheless, we consider it our duty to publish the new material from Aphrodisias separately and in full; we do so here and offer such comments on it as we can.

There is very little information available for the findspots of fragments recorded before 1961. CIL III, S, p. 2208, no. 1 was, however, rediscovered in 1969 in the area of the Portico of Tiberius; 2 and that is precisely the spot where two large and several smaller fragments were found in 1937 by the Italian excavators 3 as well as a number of small fragments found in the New York University excavations. Large and small fragments, also located by the New York University expedition in 1961-2, had been re-used in the Temple of Aphrodite, transformed into a Christian basilica, and in the Baths of Hadrian, which lie directly to the west of the Portico of Tiberius and were extensively remodelled in early Byzantine times. Small pieces were occasionally found re-used in the walls of houses and gardens of the modern Turkish village of Geyre. In the light of this information, it appears clear that the Portico of Tiberius is a sort of 'epicentre' for the discovery of these fragments, and consequently it is reasonable to guess not only that the panels carrying the text were originally exposed there but also that, as suggested in note 2, the Portico formed part of the Agora of Aphrodisias. Future discoveries may, it is hoped, clarify these points.

The text is in Latin, as are all the versions found outside Achaia with the exception of the Pettorano fragment.4 It is cut on a series of heavily-moulded panels of local marble. On one of these (Jacopi 2), traces of both the top and the bottom moulding do survive,⁵ but the total vertical height (1·13 m.) is considerably shorter than some of the panels for which we do not have the total height. Breadth certainly varies. It is sometimes sufficient only for one column of text, but sometimes provides for at least two or possibly more. Another variant is the moulding which is not the same in all cases.⁶ Under these circumstances, it is difficult to form a precise image of the total appearance of the panels. It is quite possible that, when the Edict had to be inscribed, the Aphrodisians hurriedly collected

¹G. Jacopi, Monumenti Antichi XXXVIII (1939), col. 73 f.

³ Jacopi, l.c., cols. 202 f. and 231-2; see also

without moulding.

6 Contrast pls. X, I and XI, 3. Jacopi's view, that a change was made because the concluding panel had been reached, presents difficulties which are not with the contrast Riv. Fil.

entirely met, we think, by A. Degrassi, Riv. Fil. LXVIII (1940), 139 f.

^{*} Our debt to those on whose assistance we have drawn is very heavy. We are especially grateful to Prof. S. Lauffer for his generosity; we have also had the help of our colleagues Mr. R. G. G. Coleman, Mr. Michael Crawford, Mr. Richard Duncan-Jones, Mr. M. K. Hopkins, Mr. W. H. Plommer of Cambridge the Library of the Potential Cardons in the bridge, the Librarian of the Botanical Gardens in the University of Cambridge, Mr. R. Meiggs of Oxford and Mr. K. D. White of Reading, as well as from Mr. Feakes of Cyril Ridgeon and Son, Builders' Merchants, of Cambridge. Moreover, the contribution of Cambridge. Merchants, of Cambridge. Moreover, the contributions of Mr. Ballance and Mr. Wild have not been confined to the notes that they have written. Even with their help we do not claim to have done full justice to the complex material we present.

² For the portico see Jacopi, l.c., col. 81 f.; the large rectangular area which it surrounds, as well as an adjacent portico slightly to the north-east, very probably form the Agora of the city.

p. 137 below.

⁴ M. Guarducci, Rend. Pont. Acc. Arch. xvi (1940), 11 f.; Bull. Mus. Imp. Rom. xix (1940), 35 f.

⁵ Jacopi, l.c., col. 204 f., see also pl. xxxviii, b; Jacopi wrongly reported the top as broken and

a number of 'secondhand pieces', or that various artisans carved the panels themselves, which would have a passable, though imperfect, homogeneity. The present evidence concerning the specific placement of these panels is obviously almost non-existent, but it is safe to assume that they were set up to form a sort of dado or screen 7 in, or in the vicinity of, a public building.

The lettering is, on the whole, good. Several hands are detectable, one at least given to more flamboyant flourishes than the others.⁸ All are notable for writing A without a crossbar and—where it survives—uncial d in the headings. There are occasional carelessnesses in transcription, but remarkably few considering the tedium of this length of Latin to a Greek-speaking cutter.

We have followed in arrangement the basic editions of Mommsen/Blümner and E. R. Graser.¹⁰ We have also used their chapter-divisions and line-numerations, but we have added a number in brackets to mark every fifth line counted from the beginning of each Aphrodisias fragment as it survives. To save space we have not given a complete apparatus criticus, but have noted any major variants in the Aphrodisias copy where other Latin versions survive. For convenience we have included references to pieces previously discovered at Aphrodisias and already published, but except for the lines in which we have new readings to offer we have not republished their texts, with the one exception of the fragment from the imperial title rediscovered in 1969.¹¹

The denarius in which all the prices are calculated remains a subject beset with uncertainties. It is briefly discussed by Blümner 12 who derives its value from Chapter xxx of the Edict, De Auro. But the figure of 50,000 denarii, taken as the equivalent of 1 pound of gold by Blümner, has been challenged and 90,000 now seems more likely.¹³ Diocletian's currency has recently been discussed by A. H. M. Jones 14 and by C. H. V. Sutherland, 15 both of whom adopt substantially the same view, which is contested, however, by T. V. Buttrey. 16 A third solution has been propounded by J.-P. Callu. 17 We do not feel competent to add to the discussion.

The Preamble

Since Graser three fragments (adding nothing new) have been found at Ptolemais in Cyrenaica (see Appendix, p. 140). Aphrodisias has yielded two pieces:

I. CIL III, S, p. 2208, Aphrodisias I; rediscovered in 1969 in the area of the Portico of Tiberius,

now in the Depot (inv. no. 69.220). See pl. IX, 1.

Fragment $(0.19 \times 0.32 \times 0.41)$ with upper moulding, from the first panel in the series, containing part of the first three lines with the titles of Diocletian and Maximian. There has probably been some chipping along the edges since it was originally described. Letters: l. 1, 0.028; ll. 2, 3, 0.025. An upward-slanting stroke follows abbreviations; it is placed above the line in l. 1 and after AV G in 1. 3, otherwise within it but above the mid-point.

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— — Diocletian us p(ius) f(elix) Aug(ustus) p[ontifex — —
——] Adiab(enicus) m(aximus) trib[unicia potestate ——
— Au]g(ustus) pont(ifex) m[aximus — -
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2. Found in 1966, in a garden in the modern village; now in the Depot (inv. no. 66.608). See pl. IX, 2.

Fragment (0·15 \times 0·64 \times 0·13) cut down for re-use, containing parts of ll. 1-8 (as laid out in the Stratoniceia copy). Letters: 1. 1, truncated; 1. 2, 0.035; 11. 3-12, 0.03; 11. 13 f., 0.025. The text must have been laid out in approximately the following manner:

[licet tranquillo orbi]s sta[tu et in gremio altissimae quietis locato etiam pacis bonis] [propterquam sudore la]rgo lab[oratum est disponi fideliter adque ornari decenter hone] [stum publicum et Roma]na dig[nitas maiestasque desiderant ut nos qui benigno fauore] [numinum aestuantes de] praeteri[to rapinas gentium barbararum ipsarum nationum clade]

⁷ Two fragments, Jacopi 2 and one new fragment, see p. 139 below, show moulding on the back as well as on the front face of the panel, which suggests a free standing monument.

⁸ See pl. IX, 1. ⁹ See pl. XI, 3.

¹⁰ Der Maximaltarif des Diokletian (Berlin, 1893, reissued 1958); Tenney Frank, ESAR v, 307 f.

¹¹ See above.

¹² Maximaltarif 59, cf. Mommsen, Hermes xxv

<sup>(1890), 25.

13</sup> J. Bingen, Chron. d'Ég. LXXIX (1965), 206;
J.-P. Callu, La Politique monétaire des empereurs romains (Paris, 1969), 358, n. 6.

14 The Later Roman Empire (Oxford, 1964), 438.

¹⁵ Roman Imperial Coinage vi (London, 1967), 93 f.

¹⁶ Gnomon XLI (1969), 679 f. ¹⁷ J.-P. Callu, l.c., in n. 13; 362, n. 1.

5 [conpressimus in aeter]num fund[atam quietem debilis iustitiae munimentis saepiamus.]
[Etenim si ea quibus null]o sibi f[ine proposito ardet auaritia desaeviens quae sine]
[respectu generis hu]mani no[n annis modo uel mensibus aut diebus sed]
[paene horis ipsisque mo]mentis ad [incrementa sui et augmenta festinat aliqua]
[continentiae ratio fr]enaret [uel si fortunae communes aequo animo perpeti]

[possent hanc debacha]ndi licen[tiam qua pessime in dies eiusmodi sorte lacerantur]
[dissimulandi forsita]m adque r[eticendi relictus locus uideretur cum detestandam in]
[manitatem condicionem]que mise[randam communis animorum patientia temperaret. Sed]
[quia una est cupido fur]oris ind[omiti nullum communis necessitudinis habere dilectum et]
[gliscentis avaritiae ac ra]pidi[s aestuantes ardoribus uelut quaedam religio apud]

[improbos et inmodestos existi]m[atur in lacerandis fortunis omnium necessitate potius]

[quam voluntate destitui — —

Chapters V and VI

Since Graser new fragments have been published in Greek from Argos (SEG XIII, 245) and Pherae (SEG XXII, 311, col. 1), and in Latin from Ptolemais in Cyrenaica (see Appendix, p. 140). Further, Mr. M. H. Ballance has generously allowed us to see an unpublished piece in Latin from Sandikli. Pl. IX, 3.

Aphrodisias has yielded fragments containing V, 1. 3-VI, 1. 74:

Three pieces, two certainly adjoining (together, c. 1.00 × 1.90 × 0.25) and a third (0.29 × 0.13 × 0.225) probably so, found in 1961 in the Temple of Aphrodite, during clearance of the nave of the Church into which the Temple was converted in late antiquity; they had perhaps been re-used as part of the chancel screen. The first two remain in the temple (inv. nos. 62.266 C, D), the third is in the Depot (inv. no. 62.266 B). The bottom edge with lower moulding survives on the lower piece of the adjoining pair. A cut edge, without moulding, and only approximately horizontal, survives on the upper piece and on the third piece; it presumably represents an adaptation for re-use, during which the top moulding and three to four lines of text were removed. See pl. IX, 3. Letters: column 1, ave. 0.01; column 2, 0.012-0.015; as a result of the differences in the letter heights in the two columns, their lines do not exactly correspond with each other; upward slanting strokes high in the line follow abbreviated words; M for modius, Po. for pondus, s for sextarius, N. for numero, X for denarius.

Column 1

	is flubiali]ș opțimi	vac. [[ta]]. po. unum		X dụodẹç[im]		
4 [Pis]	çis şeçundi flübialis	vac. Ital. po. unum		X octo	vac.	
5 [Pi]so	cis salsi	vac. Ital. po. unum		X sex	vac.	
6 Ōstri	ae	vac. N. centum	vac.	X centum	vac.	
(5) 7 Echin	ni	vac. N. centum	vac.	X quinquaginita	ı	sic
8 Echi	ni recentis purgati	vac. Ital. s unum		* quinquaginta		
9 [E]ch	nini salsi	vac. Ital. s unum		X centum	vac.	
10 Sfon	duli marini	vac. N. centum	vac.	X quinquaginta		
11 Case	i sicci	vac. Ital. po. unum		X duodecim	vac.	
(10) 12 Sarda	ae siue sardinae	vac. Ital. po. unum		X sedecim	vac.	
VI. 1 [I]tem	vac.	vac.				
Card	us maiores	vac. N. quinque	vac.	X decem	vac.	
2 Sfon	duli	vac. N. decem	vac.	X sex	vac.	
3 [I]ņta	aba optiṃ[a	vac.]N. decem	vac.	X decem	vac.	
(15) 4 [S]eq			vac.	X quattuor	vac.	
	ı(a)e ma[ximae			X quattuor	vac.	
6 [M]a	lu(a)e se̞[quentes	vac.]N. decem	vac.	X quattuor	vac.	
	tucae [optimae			X quattuor	vac.	
8 Sequ			vac.	X quattuor	vac.	
(20) 9 Colic	uli opti[mi				vac.	
10 Sequ		vac. N. decem	vac.	X quattuor	vac.	
	ae optim[ae]			X quattuor	vac.	
12 Porri	maxim[i			X quattuor	vac.	
13 Sequ				X quattuor	vac.	
	e maxi[mae		vac.	X qua[tt]uor	vac.	
15 Sequ				X q[ua]țtuor	vac.	
	ces ma[ximae			X [q]uattuor	vac.	
17 Sequ		vac. N.] uiginti		X quattuor	vac.	
18 Қара	e max[imae	vac. N.] decem	vac.	X quattuor	vac.	

		DIO OLIZIIII (B I III)		TOT THOM IN THOO			3
(30)	19	Sequentes[vac.	N. uig]int[i]	vac.	X quattuor	vac.
(0)	2Ó	Çeparum s[iccarum		Ital. mo. unum]		*X quinquaginta	
		[Cepae u]ir[ides primae	vac.	N. uiginti qui]nquae	vac.	X quattuor	vac. sic
		[Sequentes]	vac.	N. quinq[uagin]ța		X quattuor	vac.
		[Alei]	Ital.	mo. unum		X sexaginta	vac.
(35)		[Sis]imbriorum fascis in N. uiginti			vac.	X decem	vac.
		[Ca]pparis		[I]tal. mo. unum		X centum	vac.
		[C]ucurbitae primae		N. decem		X quattuor	vac.
		Sequentes		N. uiginti		X quattuor	vac.
()		Cucumeres primi		N. decem		X quattuor	vac.
(40)		Sequentes Melopopopopopopopopopopopopopopopopopopop		N. uiginti		X quattuor	vac.
	•	Melopepones maiores		N. duo		X quattuor	vac.
		Sequentes Pepones	vac.	N. quattuor N. quattuor		X quattuor X quattuor	vac. vac.
		Fasiolorum fascis habens	vac.	N. XXV		X quattuor X quattuor	vac.
	33				cuc.	=	cuc.
		vac.		vac.		vac.	
			Coli	umn 2			
	27	[Ciceris uiridis fasciculi	nac	N. quattuor	nac	X quattuor	vac.]
		Fab(a)e uiridi[s pur]ga[tae		Ital. s unum		X quattuor	vac.
		Fasioli uiridis pur[gati		Ital. s unum		X quattuor	vac.]
		Germina palma[e siue elatae		N. quattuor		X quattuor	vac.
(5)		Bulbi Afri siu[e Fabriani maximi		N. uiginti		*X duodecim	
(3)		Bulbi min[ores		N. quadraginta		* duodecim	
		[Oua		N. quattuor	vac.	X quattuor	vac.
		P[arstinacae maximae fascis habens		iiginti quinque		X sex	vac.
		[Sequentes fascis habens		N. quinquaginta		X sex	vac.
(10)	46	Cuchliae maximae	vac.	N. uiginti	vac.	X quattuor	vac.]
	47			N. quadraginta	vac.	X quattuor	vac.]
		[Con]diment[orum praemisquorum				X quattuor	vac.]
		[C]a[s]taneae vac.[N. centum	vac.	X quattuor	vac.
		Nuces optimae [uirides		N. quinguaginta	vac.	X quattuor	vac.
(15)		Nuc[es] siccae[N. centum		X quattuor	vac.
		Amygdalarum p[urgatarum		Ital. s unum		X sex	vac.
		Nucium Abellan[arum purgatarum				X quattuor	vac.
	54	Nuclei pinei pur[gati		Ital. 8 unum		X duodecim X sedecim	vac.
(20)		Psittaciorum vac.[Ital. s unum Ital. s unum			vac.
(20)		Zizyforum vac.[Cerasiorum vac.[Ital. s unum		X quattuor X quattuor	vac.] vac.]
		Praecocia vac.		N. decem		X quattuor	vac.
	_	Duracina maxima[N. decem		X quattuor	vac.
		Sequentia vac.[N. uiginti		X sex	vac.
(25)	61	Persica maxima vac.		N. decem		X quattuor	vac.]
(-3)		Sequentia vac.[N. uiginti		X quattuor	vac.
		Pira maxima vac.		N. decem		* — —	
		Sequentia vac.	vac.	N. uiginti	vac.	X — —	
	65	Mala optima Mattiana s[iue Saligni		N. decem	vac.	X quattuor	vac.
(30)		Sequentia vac.[N. uiginti		X quattuor	vac.
,		Mala minora vac.[vac.	N. quadraginta	vac	X quattuor	$vac. reve{1}$
		Rosae vac.[vac.	N. centum		X octo	vac.
		Pruna cerea maxima		Ņ. [triginta		X quattuor	vac.
, .		Sequentia		N. [quadraginta		X quattuor	vac.]
		Mala granata maxima		N. d[ecem		X octo	vac.
sic		Sequentes		N. ui[ginti		X octo	vac.
		Mala Cydonea		N. de[cem		X quattuor	vac.
	74	Sequentia	vac.	N. uigi[nti	vac	X quattuor	vac.]
		vac.		vac.		vac.	

In essentials the Aphrodisias text here repeats what is already well known from several versions. It shows, like the other published versions, inconsistency in the use of b for v and -e for -ae, and sometimes uses them at points which do not coincide with theirs. Otherwise its variant spellings

are sometimes, but not invariably, more correct than theirs; in these it coincides with the Sandikli fragment, cf. piscis salsi for piscisalsi at v, 5 = col. 1, l. 3 and lactucae for lattucae at vi, 7 = col. 2, l. 18; but see the incorrect intaba = "vroupon for intuba at vi, 3 = col. 1, l. 14.

For comment on the items see Mommsen/Blümner, Maximaltarif pp. 81 f.

Chapter XII

Since Graser a small fragment in Latin has been found at Ptolemais in Cyrenaica (see Appendix, p. 140) and one in Greek from Pherae (IG v, 1, 1359 B = SEG xxII, 311, col. 3) was recognized by S. Lauffer, Studien zur Papyrologie und Antiken Wirtschaftsgeschichte Friedrich Oertel zum Achtzigsten Geburtstag gewidmet (Bonn, 1964), 183 f., and J. Bingen, BCH LXXXIX (1965), 173 f.; and Professor Lauffer has suggested to us that a new fragment from Aegira (SEG xXIV, 338, from E.I. Mastrokostas 'Apx. 'Ep. 1964, p. 62, and 1967, p. 83) may also contain part (presumably of the end) of this chapter.

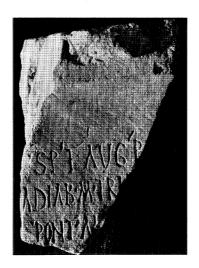
Aphrodisias has yielded a fragment containing ll. 1–16, of which ll. 12 f. are completely new: Fragment (0.83 × 0.58 × 0.15) with moulding down the right side. Found in 1968 in the South Gallery of the Baths, in topsoil, which suggests that it was dragged there from the nearby Portico of Tiberius; now in the Depot (inv. no. 68.267). The surface is stained extensively and in the lower right corner partially lost. See pl. X, 1. Letters: 0.015; an upslanting stroke high in the line follows the abbreviations of numero, a small point those of supra and scriptae; the long downslanting tail of Q has impinged on the area of the line below, imposing an awkward vacat in 1.5.

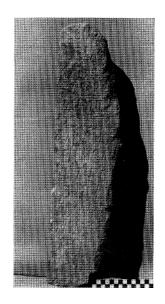
sic 1a materiae a]biginea(e) cubitorum quinqu[aginta vac. lati]tudinis in quadrum cubitorum quattuor X quinquaginta milibus 2 cubitor]um N. quadraginta quinque latitudinis s.s. X quadraginta milibus 3 cubitor um N. quadraginta latitudinis s.s. X triginta milibus 4 cubito]rum N. t v. riginta quinque latitudinis per quadrum (5)vac. vac.] digitorum octoginta X duodecim milibus 5 cubit orum N. uiginti octo latitudinis in quadrum vac. vac.] cubitorum quattuor ** decem milibus 6 cubi|torum N. triginta latitudinis in quadrum X octo milibus (10) v.] digitorum septuaginta duum 7 v. cu]bitorum N. uiginti octo latitudinis in quadrum X sex milibus v.] digitorum sexaginta quattuor 8 culbitorum N. uiginti quinque latitudinis in quadrum X quinque milibus v.] digitorum sexaginta quattuor 9 Ead]em praetia etiam materiae pineae su(n)t praestituta (15)10 materiae roboreae cubitorum quattuordecim in longum latitudinis in cuadrum digitorum quadraginta octo X ducentis quinquaginta sic II materiae fraxineae cubitorum quatt(u)ordecim in longum latitudinis in cuadrum digitorum quadraginta octo X ducentis quinquaginta sic (20)malteriae faginae cubitorum quatt(u)ordecim in longum latitudinis sic] in cuadrum digitorum cuadraginta octo X ducentis quinquaginta mat]eriae cypa(pa)rissi cubitorum duodecim in longum latitudinis sic in cuadrum digitorum quadraginta octo X trecentis mat eriae sappineae cubitorum duodecim in longum latitudinis j in cuadrum digitorum quadraginta octo X ducent[is quinqua]gint[a] (25) sic sec]tori materiarum roborearum in pede(m?) per pede(m) X [— ——in] pede(m?) per pede(m)

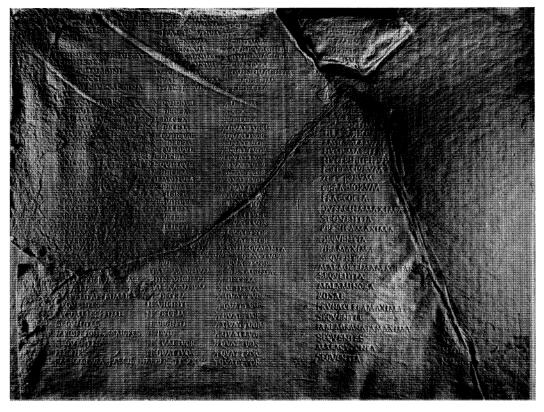
Of the mis-spellings, abiginea (l. 1), also occurs in the Stratonicean version, those in ll. 15, 17-21, 23, 27, may be copying errors, as the dittography in l. 22 must be, but could be influenced by contemporary forms of popular speech (quattordecim also occurs in the Aphrodisias version of the final chapter, q.v., and cf. CIL III, 7148, and VIII, 8573, for quattor; cuadrum, cuadgraginta are paralleled by, e.g., acuam CIL IV, 3948; cuo CIL VI, 18744; cuiesc(it) CIL XII, 2016). Otherwise the Aphrodisias spelling is rather more correct than that of the other Latin versions, with cubitorum for qubitorum in ll. 1, 2, 16, 18, and uiginti for biginti in ll. 7, 11, 13. The use of the transliterated Greek Cyparissus for Latin Cupressus is perhaps a reminder of the Eastern origin of the document.

In l. 17, Aphrodisias gives the girth as digitorum quadraginta octo where Stratoniceia has sexaginta octo. It would be easy enough for the eye of either copyist to slip and pick up the figure or part of it from another line, but, as Prof. Lauffer has pointed out to us, quadraginta octo is a standard girth measurement in this area of the list; in fact it is the only one occurring in ll. 16-21, and since at this point the lengths and the prices are identical, it is reasonable to expect the girths to be so too.

JRS vol. lx (1970) PLATE IX





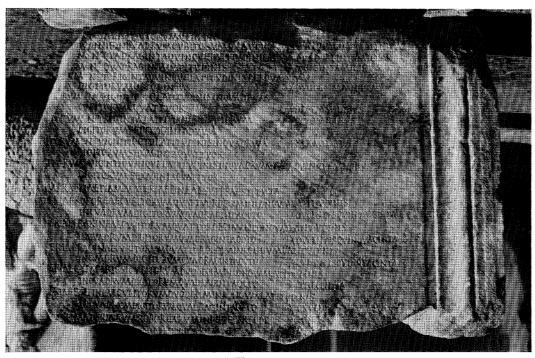


APHRODISIAS, DIOCLETIAN'S EDICT: PREAMBLE (1, 2) AND CHAPTERS V-VI (3) (see p. 121 f.)

Photographs (1) by NYU Expedition, (2) by E. Alföldi-Rosenbaum, (3) by Museum of Classical Archaeology,

Cambridge, from squeezes by NYU Expedition

JRS vol. LX (1970) PLATE X

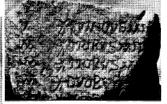








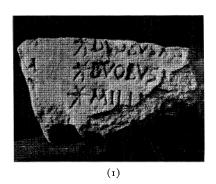


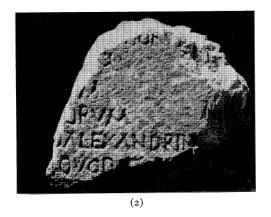


aphrodisias, diocletian's edict : chapters XII (1), XV (2), XXIV (3) and three fragments of chapter XXVI (4) (see pp. 124-7)

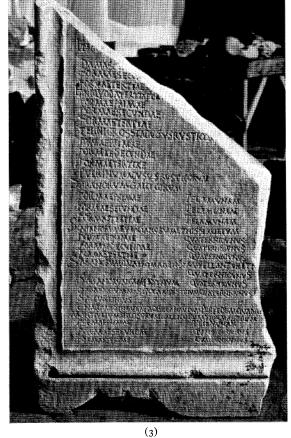
Photographs (1, 3) by NYU Expedition, (2) by E. Alföldi-Rosenbaum, (4) by the Museum of Classical Archaeology, Cambridge, from photographs by NYU Expedition and E. Alföldi-Rosenbaum

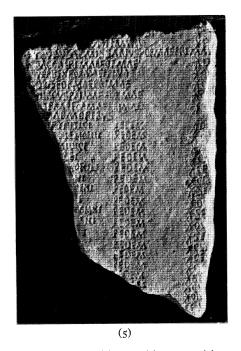
JRS vol. LX (1970) PLATE XI





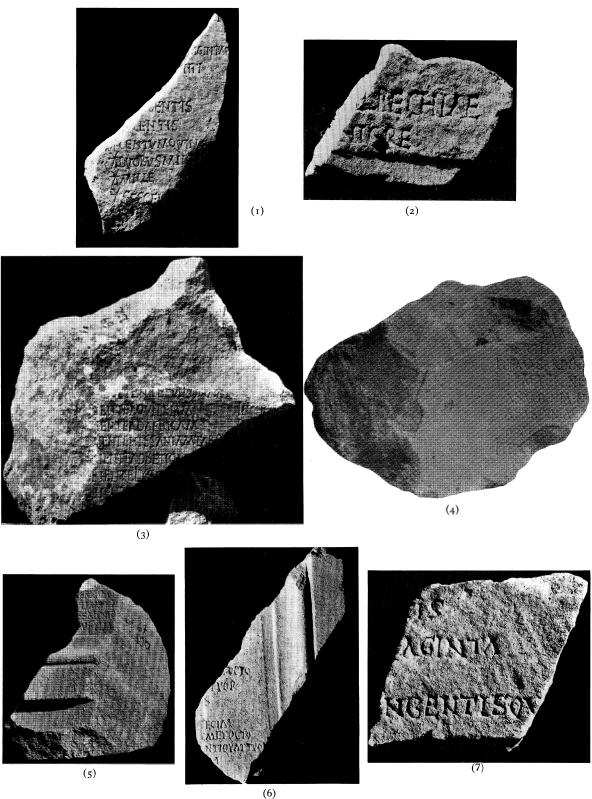






aphrodisias, diocletian's edict : chapters xxvi (1), xxvi-xxviii (2), xxviii (3), xxix (4), xxxii a (5) (see pp. 128-133)

JRS vol. lx (1970) PLATE XII



aphrodisias, diocletian's edict : chapters xxxII b (1, 2), final chapter (3–6), and unallocated (b) (see pp. 136–140)

In these circumstances it seems likely that the Aphrodisias text is to be preferred to the Stratonicean

On ancient timber in general see Blümner, Maximaltarif 132 f., and in greater detail id., Technologie II, 285 f.; cf. also W. Kubitschek, 'Die Holzpreise des Diocletianischen Maximaltarifs', Hermes XXIV (1889), 580 f. The only item whose identity seems questionable is the materia sappinea of l. 24. Pliny, NH XVI, 12, 61, notes that some give the name sappinus to a particular kind of fir which he himself regards as a pitch-pine whose character has been modified by cultivation; in his view sappinus is only properly used of timber felled in a particular manner. In XVI, 76, 196, he uses it of fir-wood from the lower part of the trunk and without knots, floated down a river and freed from bulges; but we are informed that the immersion in water—or ponding—can only have been for convenience of transportation, and that the special character of the timber must be the result of cutting, as Pliny says in the former passage. If sappinus was normally cut from the lower part of the trunk only, the comparatively short length specified is explained.

The prime position of abies (silver fir) and pinus (pine of various types) in the list, and the elaborate specifications for them, are completely in accord with the stress laid on their value by Theophrastus (cf. History of Plants V, I, 5, πλείστας δὲ χρείας καὶ μεγίστας ἡ ἐλάτη καὶ ἡ πεύκη . . . cf. also V, 6, I, on their ability to carry weights) and Pliny (cf. NH xVI, 10, 42; XVI, 42, 225). They clearly provided the bulk of the timber used both by the building trade and in shipyards. It would appear that the list of timbers was completed at l. 25, i.e. that only fir, pine, oak, ash, beech, cypress and sappinus were listed; presumably these were the woods in most common use, as indeed the discussions

of Theophrastus, Pliny and to some extent Vitruvius (II, 9) suggest.

The measurements specified raise some difficulties. Taking I cubit as equivalent to I English feet and 24 digits to the cubit, we may convert as follows (the girth being that of the roughly squared timber):

Fir:	75 ft. long \times 6	ft. in girth.
	$67\frac{1}{2}$ ft. long \times 6	ft. in girth.
	60 ft. $long \times 6$	ft. in girth.
	$57\frac{1}{2}$ ft. long \times 5	
	42 ft. long \times 6	ft. in girth.
	45 ft. long \times 4 $\frac{1}{2}$	
	42 ft. long \times 4	
	$37\frac{1}{2}$ ft. long \times 4	
Pine:	The same.	· ·
Oak:	21 ft. long \times 3	ft. in girth.
Ash:		ft. in girth.
Beech:	21 ft. long \times 3	ft. in girth.
Cypress:		ft. in girth.
Sappinus:	18 ft. long \times 3	ft. in girth.

The lengths, we are told, are substantially greater than those which a modern timber-merchant would expect to get if he were buying timbers of any of the species involved here. On the other hand, there are parallels for them in the ancient record. Pliny, NH XVI, 40, 200, reports a larch log 120 × 2 Roman ft. (the largest ever seen in Rome), and in xVI, 40, 201, mentions a fir log $100 \times 1\frac{1}{2}$ Roman ft. which was left over from the timbers used by M. Agrippa for the *Diribitorium*. Also possibly relevant are the roof-spans of ancient buildings in which single timbers may have been used as beams. Thus at Trier the span of the fourth-century Basilica was 82 ft. (W. Reusch, Frühchristliche Zeugnisse in Einzugsgebiet von Rhein und Mosel (Trier, 1965), 144 f.). This of course was an exceptional building; at a very ordinary level, the aisled barns of Roman Britain seem to have been in the neighbourhood rather of 25 ft. (cf. the plans in I. A. Richmond—R. G. Collingwood, Archaeology of Roman Britain 148).

That the second measurement was a girth measurement was effectively explained by Blümner, but it is inconceivable that the same girth could be maintained over such great lengths of wood; we must either have an average, or the girth at the thickest point. It is described in terms of per quadrum or in quadrum, but again it is impossible to believe that the log could be cut so as to give a perfect square in section throughout its length, only that it was roughly converted into an angular form. It is worth noting that for private buildings in Roman Britain round-section timbers seem to have been the norm, but in military contexts squared timbers, as specified here, were almost always used. It seems probable that the military use reflects that normal in the more sophisticated

areas of the Roman Empire.

In 1. 26 the list moves from timbers to workmen: the only possible supplement at the beginning of the line seems to be [sec]tori, cf. the sectores materiarum Aquileienses who dedicated, appropriately, to Silvanus in CIL v, 815. The pay of these men seems to depend on the wood on which they worked, and it is not as surprising as it might seem at first sight that the opening specification should be for

men concerned with oak, although oak is only third in the list of timbers, since it is very much the hardest wood in the list and its sector is likely, in consequence, to have received the highest pay. The unit by which the work is valued is unparalleled as far as we have discovered, and we are uncertain whether to restore it as in pede per pede(m) or in pede(m) per pede(m). It presumably means ' per square foot', and it seems a reasonable guess that the work concerned is the rough squaring of the logs mentioned above.

Chapter XV

Since Graser two fragments in Latin have been published, no. 2 below and one from Synnada (AE 1953, no. 132). A third may be among those found at Ptolemais in Cyrenaica (see Appendix, p. 141). In publishing the Synnada fragment, I. W. Macpherson (JRS XLII (1952), 72 f.) referred to one in Greek found at Aidipsos in Euboea (not yet published as far as we have traced, no doubt because of the death of Mr. E. J. Doyle who discovered it); the Aidipsos fragment is there said to continue the text which at present breaks off at xv, 60.

Aphrodisias has yielded fragments containing xv, ll. 22a-36 and 55-63, adding three lines not known from the published material:

- 1. CIL III, S, pp. 2208/9, Aphrodisias II, present location unknown, contains XV, 22a-36; the end of a section of uncertain content followed by parts of the heading and of seven lines of the section De vehiculis.
- 2. Jacopi, Mon. Ant. xxxvIII (1939), col. 231, 2a; AE 1947, 152 (no text) = xv, ll. 55 f., now in the Depot at Aphrodisias (see pl. X, 2); the left side of a column with traces of the final items of a list of mills, of the beginnings of the lines of the section De cribris and part of the heading of the next section. This was tentatively read by Jacopi as De a[t]ra[mentis], but corrected by Lauffer, following Degrassi, to De a[e]ra[mentis] (Akte IV Kongr. f. Gr. u. Lat. Epigraphik (Wien, 1964)), and now, on the evidence of the Aidipsos fragment, to De a[e]ra[mento].

For comment on the items in both fragments see Blümner, Maximaltarif pp. 139 f.

Chapter XIX

Since Graser fragments of the Latin version have been published from Synnada (AE 1953, no. 132) and from Ptolemais in Cyrenaica (see Appendix, p. 141) and of the Greek from Delphi (SEG xiv, 408); add also another in Greek from Skolos (Boeotia) (J. D. Keramopoullos, 'Αρχ. 'Εφ. 1931, pp. 163 f.).

Aphrodisias has yielded ll. 25-40:

CIL III, S, pp. 2208/9, Aphrodisias IV = MAMA VIII, no. 425, with bibliography; now in the Depot (inv. no. 70.1); containing the final provision concerning stragula and a number of garments, for the most part hooded cloaks of different makes. In l. 4, read Laodicena for Laodicenae (so MAMA).

For comment on the items see Blümner, Maximaltarif pp. 152 f.

Chapter XXIV

Since Graser (whose texts were all in Greek) one very small fragment in Latin has been found at Ptolemais in Cyrenaica (see Appendix, p. 141). A new fragment from Aphrodisias gives parts of ll. 3–8 in Latin:

Fragment (0.22 \times 0.125 \times 0.11), found in 1969 in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.223). See pl. X, 3. Letters: ave. 0.015; an upslanting stroke near the top of the line follows the abbreviation in 1. 7.

3 [Purpurae hypoblattae] v. libra u[na [vac. X triginta et duobus milibus

4 [Purpurae oxytyriae] v. libra una[
5 [Purpurae hapliae] v. libra una vac. X sedecim milibus vac. [vac. X duodecim milibus

6 [Purpurae Milesiae] dibafae optimae uera[e lib(ra) una X duodecim milibus]

[Purpurae Milesiae secund]ae qualitatis lib(ra) [una v. X decem milibus] 8 Purpurae ?coccineae ?Nicaensis] [[i]bṛa una vac. [X mille quingentis]

Although the Greek text does not repeat the word πορφύρας at the beginning of each line, we have assumed, from the Ptolemais fragment, that the Latin did.

Note by J. P. Wild

These entries refer to purple-dyed unspun wool.¹⁸ Lines 4 and 5 enable us to place the surviving lines of text in their correct position.

¹⁸ See my Textile Manufacture in the Northern Roman Provinces (1970), 23, 79-80.

Chapter xxiv records the prices of various categories and qualities of dyed silk and wool and the wages of specialists who could be employed to spin this material. The terminology used to describe the dyestuffs is obscure, but seven main dyestuffs or finishes can be distinguished: purpura blatta, hypoblatta, oxytyria, monobafa (haplia), dibafa, coccin(e)a and hysgina (algensis). The first three appear to be terms for differing qualities or shades of murex purple, true purple from the shellfish murex brandaris and murex trunculus. 'Once-dyed' or 'simple' purple was probably the cheapest type of true purple available, and contrasts with the 'twice-dyed' purple listed next, which is cheaper only because it comes from Miletus and not from Tyre. Coccin(e)a, 'scarlet', was either cochineal or kermes, and hysgina was a vegetable dye—archil when qualified as algensis. The popularity of the cheaper purples is indicated by the widely varying qualities put on the market. 19

- I (3) Hypoblattae can be supplied from the Greek texts (XXIV, 3), from which we also learn that the cost of a pound of hypoblatta-dyed wool was set at 32,000 denarii.
- 2 (4) Purpurae oxytyriae can be supplied. The price is 16,000 denarii per pound, just half that of hypoblatta, if we follow Graser's $\dot{M}_{,5}$ '.
- 3 (5) The Greek texts read ἀπλίου. The Latin fragment from Ptolemais has in l. 28 purpura]e hapli[ae (ἀπλίου in the Carystus fragment) and so hapliae can be read here. Its price was 12,000 denarii per pound.
- 4 (6) The Greek entry states: 'Milesian true purple wool, twice-dyed, best quality; one pound, price 12,000 denarii.' Milesian purple was hardly known before the fourth century (see Blümner, ad loc.).
- 5 (7) The Greek entry states: 'Milesian purple wool, second class; one pound, price 10,000 denarii.'
- 6 (8) The precise wording of the Latin entry is in some doubt, since the city Nicaea and the dyestuff coccum admit of several adjectival forms. Purpura coccin(e)a may seem a contradiction in terms, but the Greek has: 'Nicaean purple wool, dyed with scarlet; 1,500 denarii per pound.' In comparison with prices above this is exceptionally low.

Chapter XXVI

Since Graser a new fragment in Greek has been published from Delphi (SEG XVII, 238) and there is probably a very small one in Latin from Ptolemais in Cyrenaica (see Appendix, p. 141).

Aphrodisias has yielded substantial parts of the Latin text of ll. 23-34 and a fragment which

is perhaps from 11. 66a-69, or 72a-75:

1. Three fragments which do not adjoin but clearly come from the same section of the text, as Professor Lauffer pointed out to us: a (0·115 × 0·22 × 0·08) found in 1961 in the area of the Portico of Tiberius; b (0·18 × 0·12 × 0·08) found in 1965 in the so-called Caldarium of the Baths; c (0·13 × 0·18 × 0·09) showing slight traces of a moulding on the left side, found in 1969 in the area of the Portico of Tiberius; all now in the Depot (inv. nos. 61.53, 65.522, 69.225). See pl. X, 4. Letters: 0·01-0·15, unusually uneven; d for D in 1. 14; there is a gross spelling mistake in 1. 8 (-eundae for -cundae) and possibly another or a ligature in 1. 12, see below; in 1. 9 the cutter has had to avoid damage to the surface of the stone.

	23	[Scythopolitana]rum [telam una]m	vac. X quinque mi[libus	v.]
	24		vac. X tribus mil[ibus quingenti	is]
	25	Bybliarum v. telam un am	vac. X tribus mislibus	v.
	26	Laodicenarum v. telam un am	vac. X duobus milibus quingen	tis
(5)	27	[Tarsico Alexa]ndrina[rum telam un]a	m v. X duob[us milibus	$v.\bar{1}$
(0)	28	Şţric[tori]ar[u]m milit[arium	vac.	ĺ
		Formae pr[i]mae v. [vac. X mille quingentis	v.
	29	Formae se(c)undae v.[vac. X mille ducentis quinquagir	ntaj
		For v. ma[e] tertiae v.[vac. mille	v.
(10)		Item ex ļ[i]ņo grosso v.[vac.	ĺ
` '	Ü	ad usus [ru]sticorum u[el familiaricoru	ım formae primae X octingentis	ĺ
	32		vac. X sescentis	v.
	33	Form[ae tertiae	vac. X quingentis	v.
	34	D[elmaticarum asemarum muliebrium		j

L. 12, it is possible that the cutter wrote FORME.

Note by J. P. Wild

These lines are from the main list of plain linen goods known from a series of fragments in Greek. L. 6 is crucial to their identification; for the only plain linen garment described as *militaris* (στρατιωτικός) in the existing list is the *strictoria*, so l. 6 is xxvi, 28.

- 1-5 (23-7) This section contains the entries dealing with plain strictoriae of Class III (formae tertiae). The five cities of the East Mediterranean which marketed the best-known linens in the Empire are listed here in their usual order: Scythopolis, Tarsus, Byblus, Laodicea (Syria) and Alexandria. The adjectival forms can be restored with confidence; the only difficult case, Tarsico Alexandrinarum, appears in the fragment from Chapters xxvI-xxvIII, l. 5, see p. 129 below. I have discussed elsewhere the problem of 'Alexandrian linens woven by the Tarsian method'.²⁰ The prices quoted in fragment b correspond to those in the Greek translations at this point. It should be noted that the Latin archetype has telam unam, 'one web', in the accusative, while the Greek has a nominative (10τος α').
- 6 (28) Strictoriarum militarium, gained from the juxtaposition of fragments a and b, is the rubric to a list of three qualities of soldiers' shirt, varying in price from 1,500 denarii for Class I to 1,000 denarii for Class III. The strictoria, a long-sleeved shirt, became the uniform of the Roman army and civil service in the late third century. It is commonplace in late antique art.²¹ The new Latin text raises the problem of whether the terms militaris and indictionalis are synonymous or distinct. The strictoria militaris, whether plain or decorated with purple bands, was of linen,²² while the strictoria indictionalis (XIX, 2; XXII, 2) was of wool.²³ The χλαμύς στρατιωτική Ινδικτιωνάλις (XIX, 1a) (? chlamys militaris indictionalis) does not help.²⁴

7-9 (28-30) The prices can be restored from the Greek text.

- 10-13 (31-3) Most of the more widely sold textiles named in Chapters XXVI-XXVIII end with a statement of three price-levels relating to varieties 'made of coarse(r) linen for the use of country-folk or slaves'. Lines 10-11 give for the first time the Latin form of this heading, complete apart from the final word (φαμιλιαρικῶν). Familiaricorum is supported by a parallel passage in Ulpian (Dig. XXXIV, 2, 23, 2). The prices fixed for strictoriae of Classes I and II under this heading are missing in the Greek texts, but shirts of Class III cost 500 denarii each. Reference to XXVI, 75a-77, 96a-98, will show that the figures for rustics' linen goods are arrived at by halving the prices of the previous category of linens; so octingentis in l. 11 (31), sescentis in l. 12 (32).
- 14 (34) This line is the heading for the next subsection dealing with women's plain dalmatics. Asemarum and muliebrium are attested elsewhere in the Edict.²⁵
- 2. Fragment (unmeasured) found in 1969 in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.490). See pl. XI, 1.

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— telam una]m v. X duobus mil[ibus — — — telam una]m v. X duobus m[ilibus — — — — telam una]m v. X mille [— — — — ] v. [— —
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As Professor Lauffer has pointed out to us, this fragment, too, should belong to Chapter xxvi, and there are two places in the known text to which it might be assigned:

- (a) ll. 66a-69, where three qualities of women's dalmatics, priced respectively at denarii 2,500, 2,250 and 1,750 for a single *tela*, are followed by the heading introducing rougher cloths of the same type.
- (b) Il. 72a-75, where three qualities of men's dalmatics, priced respectively at 2,500, 2,000 and 1,500 are followed by a heading introducing rougher cloths of the same type.

Chapters XXVI-XXVIII

For evidence on Chapter xxvi, see above. On xxvii-xxviii, in addition to material available to Graser, there has been published a fragment in Greek from Delphi (SEG xvii, 238) and in Latin one from Ptolemais in Cyrenaica (see Appendix, p. 141), and item 1 below.

Aphrodisias has yielded two fragments which cannot be placed precisely within these three chapters:

²⁰ 'The tarsikarios, a Roman Linen-Weaver in Egypt', Hommages à M. Renard II (1969), 810–19.

²¹ For representations, see R. Delbrueck, Die Consulardiptychen und verwandte Denkmäler (1929), 33; G. Wilpert, I Sarcofagi cristiani antichi I (1929), Tav. CVII.

²² Graser's xxix, 5 ff. (Latin) is her xxix, 17 ff. (Greek).

23 JRS XLV (1955), 111.

²⁴ For military clothing, the clothing levy and the gynaecea see Latomus XXVI (1967), 655, 661.
²⁵ JRS XLV (1955), 111 (XXII, 3, 10); JRS XLII (1952), 72 (XIX, 8).

- 1. Jacopi, Mon. Ant. XXXVIII (1939), col. 221; AE 1947, 150; now in the Depot at Aphrodisias. 2. Fragment (0·15 × 0·14 × 0·09) found in 1969, in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.229). See pl. XI, 2.
 - Letters: 0.015.

	[Scythopolit]anor	rum [—			
	[Tarsicoru]m	vac. [—			
	[Byblioru]m	vac. [—			
	[Laodicen]orum	vac. [—			
5.	[Tarsic]o Alexan	drin[orum	. — —	-	
-	[Item lin]i quod	fo[rma te	rtia ?disc	repat —	

Note by J. P. Wild

The familiar five city-names in this fragment occur throughout Chapters XXVI-XXVIII, but the items listed are masculine or neuter in gender (ll. 1, 4), which excludes some of those specified in the surviving Greek text. If the fragment gives the Latin version of something surviving in the Greek, it could be equivalent to xxvi, 88-93 (anabolia, 26 'wraps'), xxvi, 109-14 (facialia; see p. 130), xxvi, 130-5 (caracalli, 27 'hoods'), lacuna preceding xxvii, 2 (coxalia, 'girdles'), xxvii, 18-23 (oraria, 'napkins'), xxvIII, 26-31 (σινδόνες κοιτάριοι). In this connection it is perhaps worth noting that the letter-style seems different from that of the fragments which are certainly from Chapter xxvi, q.v.; but it may correspond to a lost section of xxvi-xxviii.

5. For 'Alexandrian linens woven by the Tarsian method', see above.6. The formula can be recovered from the fragment of Chapter XXVIII, l. 7, below. The translators found difficulty in rendering the relative clause directly into Greek (cf. xxvi, 7; xxvi, 93; and xxvi, 114).

Chapter XXVIII

Since Graser further fragments in Greek have been published from Delphi (SEG XVII, 239) and a very small piece in Latin from Ptolemais in Cyrenaica (see Appendix, p. 141).

The new Aphrodisias fragment offers an almost complete Latin text for ll. 45-74:

Part of a panel (0.47 × 0.87 × 0.13) with moulding at the left side and bottom, found in 1968 in the South Gallery of the Baths, with the fragment from Chapter XII, q.v.; now in the Depot (inv. no. 68.268). See pl. XI, 3. Letters: ave. o o i, markedly uneven, with some letters, not only initials, given the height of capitals; F with a base extended to the left; the omission of the final M of item in 1. 11 may be a copying error or a reflection of common speech (cf. W. S. Allen, Vox Latina (Cambridge, 1965), 30 f.)

45 F[ormae tertiae fascia una 46 Item [culcita Tralliana siue Antinoensis	X centum et quinquaginta] X duobus milibus]
[septingentis et qui	
47 Damascensa siue Cypria et ceterae formae primae	** mille septingentis et quinquaginta
(5) 48 Formae secun[dae	** mille ducentis et quinquaginta]
49 Formae tertiae [X octingentis
50 Lini quod a tertia form[a ? discrepat]
50a Formae primae [X sescentis]
51 Formae secundae [X quingentis
(10) 52 Formae tertiae [X quadringentis
53 Ite(m) lini grossi ad usus rusticor[um uel familiaricoru	
53a Formae primae [** trecentis et quinquaginta
54 Formae secundae [X trecentis
55 Formae tertiae [X ducentis et quinquaginta
(15) 56 Pulbinum ad usus rusticorum [X centum vac.
57 Sabanorum Gallicorum [vac.
Formae primae telam unam [X tribus milibus et quingentis]
58 Formae secundae telam unam	X duobus milibus et quingentis
59 Formae tertiae telam unam [X? octingentis et uiginti vac.
(20) 60 Sabanorum Eulalianorum et his similium [vac.
60a Formae primae quaternio unus [X mille octingentis vac.
61 Formae secundae quaternio unus	$\frac{X}{N}$ mille ducentis vac.
62 Formae tertiae quaternio unus [X — —
63/64 Sabanorum quae Romanensia appellantur et h[is	similium vac.

²⁶ A rare loan-word in Latin: CIL XII, 354.

²⁷ For the gender, see Latomus XXIII (1964), 534.

(25) 65/66 vac. quaternio unus	[X duc	entis et q	uinquaginta	1
66/67 Sabanorum campestrium quaternio unus	3 [X —			-
67 Sabanorum masipocampestrium quatern	io unus [X —			
68 Saccus lineus vac.	Ī	X —			
69/70 Chartae singulae ad bela nauium per pede		n X —			
(30) 71 Mantiulium billosorum Gallicorum siue m	napparum[vac.]
/	vac. [X —			
	vac. [X			
74 Formae tertiae quaternio unus	vac. [\mathbf{x} —			

Note by J. P. Wild

The entries list a wide variety of minor linen textiles which are of great interest. Previously ll. 20-33 (XXVIII, 60-74) were imperfectly known from the Greek of Megara II. The Greek fragment from Gythium, printed by Blümner and Graser alongside the Megarian text, can now be seen to be out of place; it may indeed contain the lost end of Chapter xxvIII.28 Most of the prices can be restored from the Greek text.

I (45) This line is the last entry under the heading fascia, 'band'; the unusual fascia una for telam unam is attested by the Greek translations.

2-3 (46) The four-line fragment from Ptolemais (XXVIII, 45-7, see Appendix, p. 141) reveals that culcita was the term behind the Greek τύλη μετά προσκεφαλαίου. Culcita was the name for the permanent cover for a mattress, perhaps with a fixed bolster.²⁹ It is possible, but not likely, that culcita was qualified here by a phrase such as cum cervicali (μετά προσκεφαλαίου, 1. 46, καὶ προσκεφάλαιου, l. 50a). The Ptolemais fragment starts the next line (l. 3) with milibus, as if X duobus had been pushed to the end of the previous line by the length of the entry; but close examination of the word-spacing shows that this is not the only possible explanation. The production-centres for culcitae (Tralles, Antinoe, Damascus, Cyprus) are notably different from those for fine linens recorded in Chapter xxvi. There is now independent evidence for the weaving of τύλαι at Antinoe.³¹

4 (47) A Ptolemais fragment has vel ceteris for ἢ τοῖς λοιποῖς at xx, 13; 32 so et ceterae here for καὶ αἱ λοιπαί.

5-14 (48-55) These lines add nothing new. For discrepat as a source of difficulty for translators see above, p. 129. For familiaricorum see above, p. 128.

15 (56) Pulbinum appears to be nominative, but is normally masculine in gender. The Greek translators rendered it πουλβεῖνος. Perhaps a mistake by the cutter? Pulvinus is a cushion-cover

or pillow-slip, in this case without its stuffing.

16-19 (57-9) Sabanum seems to be a Semitic loan-word in Greek, borrowed into Latin 33 and first mentioned in an early second-century papyrus.34 Regularly of plain linen, it was a small rectangular towel 35 with many uses—for wiping face and hands after ordinary or medicinal baths, 36 for wiping down animals,37 for draining and preparing food 38 and in later antiquity for wrapping a corpse.³⁹ Sabana are normally mentioned in pairs in the Egyptian papyri.⁴⁰ Archaeological evidence confirms these data. A complete linen towel was found in a sealed cinerary urn near Rome in 1928.⁴¹ Remains or impressions of towels are frequently found as wrappings in late Roman gypsum burials in northern Europe. 42 Gaul appears from the Edict to have cornered the market in sabana. Gallic linen was famous in the first century, and the Rhône valley was an important flax-growing area in the fourth century,⁴³ so it is perhaps not surprising.

The price in 1. 19 (59), \$20 denarii (ωκ' in Megara II according to Blümner), does not fit the

Edict's pricing system and may be completely wrong.

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^{28}\, The term τετράλασσον places it firmly in xxvIII, but the last two lines contain a prescription
on weight, perhaps the closing lines of the chapter
(cf. XXIX, 49).

29 TLL s.v.; Isid., Orig. XIX, 26.
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30 But cervical was often transliterated, see P. Ox.

921, 9-10, 20 (third century).

31 E. Wipszycka, L'Industrie textile dans l'Egypte romaine (1965), 120; for Gallic culcitae, Pliny,

NH XIX, 13.

32 JRS XLV (1955), 111.

33 A. Walde and J. B. Hofmann, Lateinisches Etymologisches Wörterbuch (1938), s.v.

³⁴ P. Mich. 468, 10-11: sabana par unum; cf. P. Mil. Vogl. 66, 8; 152, 11, 44.
³⁵ We are indebted to the Editors of the Thesaurus

Linguae Latinae for references to sabanum.

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36 Isid., Orig. XIX, 26, 7; Hist. Apoll. Tyr. 13;
Marc. Emp. 5, 1; 7, 17; 15, 93.

37 Veg., Mulomed. V, 46, 11.
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³⁸ Apic. vi, 215, 237, 239; vii, 276; viii, 376; Palladius vii, 7, 3.

39 Greg. Magnus, Dial. 3, 17.
40 P. Mich. 468, 10-11; C. Wessely, SPP 111
(1904), Nr. 83, 4; P. Ox. 1843, 19.
41 Bullettino della Commissione Archeologica

comunale di Roma LXV (1937), 73 ff.

42 Wild, Textile Manufacture 94-6, 112 (York, Trier); new finds (1969) from Dorchester, Dorset (unpublished).
43 Pliny, NH XIX, 8; CIL XIII, 1995, 1998; Notitia Dig. Occ. XI, 62.

20-3 (60-2) From l. 20 (60) onward the Greek text of Megara II is incomplete and was inaccurately published, as Professor Lauffer has kindly informed us; from the squeezes of the stone, which he generously lent to us, it is clear now that the Greek text was very close to the Latin as we have it. Sabana Eulaliana are otherwise unknown,44 but they were clearly much inferior to Gallic sabana. Eulalianorum may be translated: 'in the style of Eulalia (-us?)'—who presumably first marketed this type.

The formula quaternio unus (for the previously enigmatic τετράλασσον α') is new. There is no exact parallel for its use here, but in late Roman writers quaternio means 'a group of four, the number

four '.45 To be sold in fours, the textiles must have been very small.

The price for four sabana Eulaliana of Class III is lost. It should be approximately half the cost

of a Gallic sabanum of Class III, but that figure is corrupt (see above).

24-5 (63-6) This and the following lines pose numerous problems. Sabana Romanensia may be construed as 'towels in the style of Romanus', on analogy with Eulaliana in l. 20 (60) above. On the other hand Romanensis or Romaniensis can imply, as Festus points out, a connection with the city of Rome. 46 Negotiatores Romanenses, sagarius Romanensis, pistor Romaniensis, tignarii Romanenses are all traders or craftsmen concerned with Rome or products in Roman style.⁴⁷ This is probably the more plausible way to interpret sabana Romanensia.

26 (66/67) Sabana campestria are probably linen versions of the leather campestre, a sort of loincloth worn by athletes, wrestlers, etc. 48 They may be the nappy-like garments seen on representations

of gladiators.

27 (67) Masipocampestria (surviving in Megara II as μα]σιπποκαμπ[, as it may now be read from the squeezes) is a term without parallel. Its meaning can only be conjectured. The last element in the compound—campestria—may refer to sporting activities as in l. 26. The first element, masipo, appears to be Greek, perhaps from μάσσω, 'handle, smear', and ἵππος, 'horse'. 'Horse-cloth' may not be far from the mark; for wiping down race-horses?

28 (68) 'Linen bag', presumably small. 49 Linen is specified in the entry, since sacks or bags

of goat-hair were perhaps commoner and more hard-wearing.⁵⁰

29 (69/70) 'Sheets of single thickness for ships' sails, per square foot. . . .' Quadratum corresponds to Megara II τετράγωνον. The maximum width of a web of cloth which could be woven on a Roman loom was about 6 ft. (2 m.), so sails were necessarily composed of chartae sewn together. The use of the word charta in this context is unusual, but cf. charta plumbea in Suetonius, Nero 20.

30 (71) Mantiulium (see pl. XI, 3) may be a cutter's mistake for *mantillium or mantilium. Mantile (mantele) was a towel or napkin, but by the sixth century meant a tablecloth.⁵¹ In this entry it is further defined by the phrase sive mapparum. The actual differences between a mantile, a mappa

and a sabanum were probably slight.

The adjective billosorum (villosorum) implies that these Gallic napkins (or tablecloths?) had a pile.52 As linen textiles from late Roman Egypt show, this is likely to have consisted of rows of small closed loops—the same principle as is used in modern rough towelling. Pile based on carpetknots seems confined to woollen textiles in antiquity.

So far there is no archaeological evidence of mantil(l)ia villosa in Gaul. But tablecloths with a pile (perhaps of linen) are shown on at least one funerary monument in the Rhineland.⁵³ In the

fifth century lintea villosa were still used as towels in Gaul.⁵⁴

30-3 (71-4) It is conceivable that the difference between mantil(l)ia of Class I (sold singly) and those of Classes II and III (sold in fours) was one of size as well as quality. If so, Class I might have been a tablecloth, the rest napkins and towels.

Chapter XXIX

Since Graser, items 1 and 2 below have been published.

Aphrodisias has now yielded fragments from ll. 13-20, 39-43, and perhaps ll. 49 f.:

- 1. Jacopi, Mon. Ant. xxxvIII (1939), col. 222 f.; AE 1947, 151b (no text); now in the Depot at Aphrodisias, containing ll. 13-20.
- 2. Jacopi, l.c., col. 231/2 b; AE 1947, 153 (no text); present location unknown, probably containing ll. 49 f.

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44 We are grateful for information on this point to the Editors of TLL.
45 Vulg. Act. XII, 4; Mart. Cap. VII, 767, 778, 789;
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Isid., Orig. XVIII, 65.

48 Aug., Civ. Dei xIV, 17.

⁴⁷ Paul. Fest. 61; CIL XIII, 1928; XIV, 2213; CIL x1, 3936.

⁴⁹ cf. Pliny, NH XXIX, 134.
50 Wild, Textile Manufacture 20.

⁵¹ Isid., Orig. XIX, 26, 6.
⁵² cf. Vergil, Georg. IV, 377.
⁵³ From Bonn (1963): Das Rheinische Landesmuseum Bonn 1966, 38 (plate).
⁵⁴ Cid. Appill Phiet V 77, 8 ⁵⁴ Sid. Apoll., Epist. v, 17, 8.

3. Fragment (0·27 × 0·21 × 0·09) found in 1969 in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.227). See pl. XI, 4. Letters: ave. 0.015; the right-hand slant of Y and the upper horizontal of F are extended in a somewhat flamboyant manner; a number of letters, not only initials, are given the size of capitals.

(39)	[Hypoblattosemor					vac.]
,	[vac.]			unam 🎛 ı	niginti e	t duobus mili	bus]
(40)	Ox]y[t]yriorum -	clauantium	uncia[s	sex		vac.]
	[vac.]	vac.			duodecim	milibus]
5 (41)	[Hapliae siue] mo	nobafae clau:	antium 1	u[ncias :	sex	vac.	Ī.
,	vac.	vac.	te[lam	unam X	octo milił	ous et quingenti	s]
	Hysginosemorum				tribus mil	libus et quingen	tis]
(43)	Hysginosemorum	n] çļaua[ntium	uncias	sex		vac.]
	vac.] vac.	te[lam	unam X	duobus m	ailibus et quinge	ntis]

Note by 7. P. Wild

This fragment is from a short list of linen garments decorated with bands or stripes of purpledyed wool. The sequence of entries in the chapter as a whole is clear.⁵⁵ One entry is probably missing before XXIX, I, in Blümner's text.⁵⁶ The order in which the textiles are listed follows the scheme adopted in Chapter xxvi, namely: shirts (strictoriae), soldiers' shirts (strictoriae militares), dalmatics of two categories (distinguished by price), striped kerchieves (facialia) and ladies' hoods with stripes (mafortia). The prices of the items under each heading vary according to the weight of purple wool woven into them and the type of dye used.⁵⁷ Five types of purple are recorded: purpura blatta, hypoblatta, oxytyria, monobafa (haplia) and hysgina (see p. 127 above).

The wording of the Aphrodisias fragment indicates that it is part of a list of the different types of purple used to dye a specific garment, the name of which is missing. In 1. 3 oxytyriorum has a masculine or neuter termination and so the choice lies between facialia (φακιάλια of Megara II) or mafortia (μαφόρτια). But the Aphrodisias fragment carries another entry (ll. 8/9) after the reference to librae unius (1. 7), and so by elimination must be part of a list of facialia (XXIX, 39-43). Facialia, translated below as 'kerchieves', were large rectangular pieces of linen cloth, decorated in this case with purple woollen bands woven into the weft. They were similar to, but clearly not

identical with, sabana, mantil(l)ia and mappae.⁵⁸

1/2 (39) The Greek text states: '(for striped kerchieves) carrying stripes containing six ounces of hypoblatta-dyed wool: one web, price 22,000 denarii.' Clavantium (sc. facialium), as if from a verb clavare (cf. clavata in SHA, Alex. Sev. 37), is a Roman technical term found only in the present participle.⁵⁹ It may be followed by the type of purple in the genitive and the weight (of purple wool in the band) in the accusative. 66 Hypoblattosemorum, on analogy with blattosemarum (Latin of XXIX, 10), is a likely expansion of]um. Hypoblatta appears to have been an inferior variety of blatta, requiring presumably the same raw material, but less complex dyeing-processes.

3/4 (40) '(For striped kerchieves) carrying stripes containing six ounces of oxytyria-dyed wool: one web, price 12,000 denarii.' The exact nature of oxytyria, 'bright Tyrian purple', is obscure.

- 5/6 (41) '(For striped kerchieves) carrying stripes containing six ounces of simple or oncedyed purple wool: one web, price 8,500 denarii.' 'Simple' or 'once-dyed' purple was probably the cheapest true purple on sale. It is not surprising to find a Greek loan-word here in Latin; for the techniques of purple-dyeing were developed in the East Mediterranean.
- 7 (42) This line, ending in telam unam and the price, appears to be a complete entry and should correspond to Megara: '(for striped kerchieves) carrying stripes containing one pound of hysginadyed purple wool: one web, price 3,500 denarii'. But the case of librae unius and the lack of space available in the line make it unlikely that the usual form of words embodying clavantium was used here. Hysginosemorum may be suggested before librae on analogy with the entry in XXIX, 9 (Halicarnassus) = 20 in Blümner's edition.
- 8/9 (43) The Latin appears to revert here to the longer formula, as in ll. 1-5 above. L. 9 appears to mark the end of the section dealing with facialia.

⁵⁵ Blümner's XXIX, 5-10 (Latin fragment from Halicarnassus) is the same as his XXIX, 16-22 (Greek from Megara). His XXIX, 12-15, is XXIX, 32-4, as Graser noted; Prof. Lauffer doubts this.

⁵⁶ Strictoria with bands of blatta-dyed wool. This is likely to have been the first line of the chapter; but there might have been a previous section listing more expensive strictoriae corresponding to the more expensive dalmaticae below.

⁵⁷ Since linen yarn is difficult to dye successfully, the decoration woven into Roman linen shirts was normally of wool, as finds from Egypt show.

 ⁵⁸ For facialia see Blümner, o.c., 171; TLL
 s.v.; cf. σαβανοφακιάριον in P. Ox. 921, 11-12.
 59 See Macpherson's discussion in JRS XLII (1952), 74. 60 ibid., 72, Col. B, 14-15.

Chapter XXXII

A. Farm Animals and Marbles

Mommsen-Blümner xxxII, ll. I-8, are in fact from a Greek version of the section on marbles (Geronthrae V) but were only recently recognized as such (J. Bingen, BCH LXXVIII (1954), 349 f.). Since Graser another fragment in Greek from Pettorano (M. Guarducci, Rend. Pont. Acc. Arch. XVI (1940), II f.) has given the end of the section on farm animals (previously unknown) and a good deal more of that on marbles; its list, however, was arranged with several items to a line and only the left side of its lines survives. The new Aphrodisias fragment, in which each line contained one item only, adds more new information in consequence than its many lacunae might lead one to expect:

Fragment (c. $0.29 \times 0.45 \times$ depth not measured) found accidentally outside the city walls during the winter 1967/8; now in the Depot (inv. no. 68.396). No trace of edge-moulding survives, but the small uninscribed spaces to left of 11. 4–7 show that here is the left side of a column. See pl. XI, 5. Letters: ave. 0.01; F and Y show the same flamboyant features as in the fragment from Chapter xxix.

```
— —] <del>X</del> [— —

<u>X</u> [— —

<u>X</u> de[cem
    ? I v \dots c \dots 15 \dots ]s
v \dots c \dots 8 \dots ] opțimum
      2] v. Taurus admissarius formae primae [X —
        v. Bacca primae formae
      3] v. Verbex formae primae
                                                      ₩ qu[-
                                                      ₩ q[u
        v. Obis formae primae
                                                      X q[u
         v. ]Hircus primae formae
                                                      X q[u
         v. Clapra formae primae
(10) 5 v. De] marmoribus
          v. Por]fyritici
                                                      X duf
                                 pedem
      6 v. Lac]edaemonii
                                 pedem
                                                      ₩dſ
          v...3-4..]midici
                                 pedem
         v. Lucul]lei
                                 pedem
                                                      X q[uinquaginta et centum]
(15)
          v. Pyrrh]opoecili
                                 pedem
                                                      X ce[ntum -
         v. Claudia]ni
                                 pedem
                                                      X cen[tum
                                                                       ? vac.
                                 pedem
                                                      X sep tuaginta quinque
          v.\ldots c. 7\ldots]ŗeni
                                                      * duscentis
         v. Docimen]i
                                 pedem
                                                      X se[_ -
          v. . . c. 6 . .]asiani
                                 pedem
(20) 10
         v. Anacast]eni
                                 pedem
                                                      X qu[ — —
          v. . . c. 8 . .]i
                                 pedem
                                                      X sep[tuaginta — ·
         v. Thessalici]
                                 pedem
                                                      *X cen[tum et quinquaginta]
     11
                                 pedem
          v.\ldots c. g \ldots]
                                                      X cen[tum
                                 pedem
         v. Scyriani]
                                                      X q[uadraginta
(25)
                                                      X se[— —
                                 pledem
          7).
                                                                                  1
         v. Lesbii
                                 pede]m
                                                      X qu[inquaginta
          v. Thasii
                                 pedem
                                                      X qu[-
     14 v. Potamogalleni
                                                     ] <del>X</del> qụ[-
                                 pedem
```

Farm Animals

From II. 4 f. it is clear, as Prof. Guarducci noted, that the list is concerned with breeding stock. It seems possible to supplement the Pettorano fragment here from the Aphrodisias copy, although the variant line-lengths in the following proposal suggest that we have not been successful in finding the exact words of the Greek:

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ταῦρος ἀδμισσάριος [\bar{\alpha} φώρ(\mu\eta\varsigma) X \cdot βοῦς \bar{\alpha} φώρ(\mu\eta\varsigma) X \cdot δις] ἀρσενικὸς \bar{\alpha} φώρ(\mu\eta\varsigma) [X \cdot θηλεία \bar{\alpha} φώρμης X \cdot ] τράγος \bar{\alpha} φώρμης [X \cdot αἴξ \bar{\alpha} φώρμης X \cdot ]
```

In the preceding lines the clear neuter of optimum in l. 3 suggests that the list here treated a different category of animal. In the Pettorano fragment Professor Guarducci read βοῶν κάλλιστος[in the line above the reference to the bull. Since the final c is not clear on her photograph it may perhaps be legitimate to wonder whether the traces are compatible with N so as to give a neuter form corresponding to optimum; on the other hand Pettorano normally has two items and sometimes part of a third to the line, where Aphrodisias has only one—so that βοῶν κάλλιστος may contain part of the description of the item in Aphrodisias l. 2. In any case, both Pettorano and Aphrodisias suggest that teams of draught beasts are concerned.

For Aphrodisias 1. 3 Mr. J. P. Wild has most attractively suggested par boum optimum; we

have no satisfactory supplement to offer for the Pettorano entry, however.

The prices are all completely lost in Pettorano and survive in too fragmentary a state for comment, if at all, in the Aphrodisias copy. The only relevant material that we have found in the literary sources is in Varro, RR 11, 1, 14, where it is said that a Reatine ass (doubtless a remarkable one) had been known to fetch 60,000 sesterces = 15,000 denarii, and a team of four 400,000 sesterces = 100,000 denarii. In the light of these astronomical figures it is difficult to know what to expect in the decree.

Marbles

Names. L. 13, the space is rather long for the obvious Nulmidici—ideally a supplement of 3-4 letters is needed; l. 19,]agiani is also possible. Prof. Guarducci's reading of the Pettorano fragment suggests that the Greek version of the name in 1. 19 began with a circular letter— ϵ , θ , σ , ϵ , ω ; and that in l. 25 with H. The published drawing of Geronthrae v (J. Schmidt, Mitt. Ath. Inst. vII (1882), 22 f.), if it could be trusted, would indicate — —]ηδικου in l. 13 and]ησιου in l. 17.

Prices. Supplements have only been offered above where the surviving traces impose a particular figure or where evidence exists in the Pettorano fragment; in this connection it should be noted that Prof. Guarducci believes that, although the stone breaks off immediately after X ρ' in the price for Claudianus, no further figure followed (l. 16 = Pettorano 8), and the drawing of Geronthrae v at

this point seems to confirm her view.

If the published drawing of Geronthrae v could be trusted, it would be possible to argue that the price of Porphyritic was 200 + (? 250) concealed under YCIH, of Lacedaemonian perhaps 250 again (concealed under & CH), of]idicus 200 (\(\frac{4}{3}\)C) and of Pyrrhopoecilus 100 (\(\frac{4}{3}\)P); in so far as these guesses agree with what survives on the Aphrodisias copy, and taking into account that it has the correct figure for Lucullan and probably Claudianus, it may be reasonable to accept them tentatively.

Note by M. H. Ballance

Types of Marble. Prof. Guarducci's commentary on the Pettorano fragment, excellent in itself, 61 can now be supplemented and occasionally corrected in detail; the following notes are intended only to add new material on particular types of marble that has come to light in the last thirty years, and to comment on the possible restoration of some of the fragmentary items in the Aphrodisias text.

I [Por]fyritici. The quarries have been studied by D. Meredith and more recently by Th. Kraus and J. Röder. 62 Meredith estimated that the quarries were abandoned in the fourth century, though the use of porphyry sarcophagi for the burial of the Eastern Emperors up to Marcian, who died in

457,63 suggests that the quarries operated sporadically as late as the fifth.

2 [Lace]daemonii. The quarries, producing small irregular lumps of green porphyry, were first worked as early as Helladic times, as is shown by the discovery of a quantity of rough blocks in the palace at Knossos.⁶⁴ The date of the final abandonment of the quarries is uncertain and not of great importance, as large quantities of the stone, mainly in the form of small slabs, continued to be re-used all through the Middle Ages.

3? [Nu]midici (...]ηδικοῦ Geronthrae). This restoration makes good sense as referring to the giallo antico quarried at Colonia Simitthu (Chemtou), which is typically a breccia of lumps of finelycrystalline pale or deep-yellow marble set in a brownish matrix. It was used in Rome at least as early as 78 B.C.65 and occurs regularly in buildings of the first and second centuries A.D. Inscriptions

at the quarries continue into the fourth century.66

4 [Lucul]lei. This is probably a brownish-black marble with very small crystals found, together with the better-known multicoloured portasanta, in the large quarries at Latomi, a little to the north of the town of Chios. The high price (150 denarii at Pettorano) is perhaps a maximum to include the coloured varieties as well as Lucullan proper. The so-called africano can now be excluded, as it is known to have been quarried at Teos on the Asiatic mainland.67

5 [Pyrrh]opoecili (...]οικίλου Geronthrae). The Aphrodisias text confirms that of Geronthrae. Pliny 68 shows that this was the red granite of Syene, extensively used in Dynastic times, especially

⁶¹ M. Guarducci, Bullettino del Museo dell'Impero

Romano XI, 1940, 35 ff.

62 D. Meredith, Journ. Egypt. Arch. XXXVIII, 1952, 107 f.; Th. Kraus, J. Röder and W. Müller-Wiener, Mitt. d. A.I., Abt. Kairo XXII (1967), 108 f. 63 P. Grierson, Dumbarton Oaks Papers XVI, 1962,

^{39-44.} 64 Sir Arthur Evans, *Palace of Minos* III, 268 ff.

⁶⁵ Pliny, NH XXXVI, 49.
66 CIL VIII, 14,600. The quarries were described at length by R. Cagnat, Archives des Missions Scientifiques, ser. 3, XI, 100 f., and Nouvelles explorations en Tunisie, 97 ff.
67 PBSR XXXIV, 1966, 79 ff.

⁶⁸ NH xxxvi, 63.

for obelisks. It was used in Rome for decorative purposes in the first century A.D., 69 and more widely for columns from the late second to the early fourth century.⁷⁰

6 [Claudia]ni. Further work on the quarries has been done since 1940.71 Apart from such obvious examples as the columns of the Pantheon and the Forum of Trajan, Mons Claudianus

granite is rare even in Rome and very rare elsewhere.

7 ...]reni (...]notou Geronthrae). The termination of the name in the Aphrodisias text suggests Thrace, Syria or, more probably in view of the distribution of the quarries, Asia Minor. But a search through lists of Asiatic place-names has produced no likely source for this stone. In the Geronthrae text one is strongly tempted to restore [Προκονν]ησίου; Proconnesian, white or greyish, often with pale bluish bands, was the most important marble for general architectural purposes, throughout the eastern Mediterranean at least, from the second century A.D., and was also much used in the western provinces. The price (75 denarii at Geronthrae) suits well enough. It is possible that at Aphrodisias we have an alternative geographical term equivalent to 'Proconnesian'.

8 [Docimen]i. The quarries at Dokimion (Işçihisar) are some 40 km. from the site of Synnada, and the only reason for the frequent mention of 'Synnadic' marble in ancient writers seems to be that Synnada was the principal city of the district and the residence of the procurator responsible for the quarries. The production of these quarries included white and grey marbles as well as the better-known purple-and-white pavonazzetto, though the latter, together with a certain amount of high-grade white statuary marble, must have accounted for almost all the exports outside Asia

Minor. The price reflects the high cost of transport to the coast.

9 ... siani. Even the surviving letters are too uncertain to admit of confident restoration. Aphrodisiani, if it is philologically admissible, would be a possibility in view of the widespread activities of Aphrodisian sculptors using their own local marble. 72 But the price is low for a stone produced so far inland.

10 [Anacast]eni. The name and the apparently low price suggest a marble produced in Asia Minor within a short distance from the coast, but no further information is forthcoming on either

the place or the stone.

11 [......]i. The most likely restorations, on grounds of length and general possibility, are [Pentelic]i and [Carysti]i (green cipollino). The price (60 or 70 denarii) seems suitable to either.

12 [Thessalici]. Archaeological evidence confirms that this marble came into general use only at the end of the second century A.D. and achieved its greatest importance in the fifth and sixth centuries. The quarries have been re-examined by I. Papageorgakis.⁷⁸

13 [......]. A fairly short name and a fairly high price seem to exclude 'Proconnesii'

- (above, no. 7), but provide no clue to the correct restoration.

 14 [Scyriani]. The absence of Skyros marble from major public buildings in Rome, whereas it appears quite frequently at Pompeii and Herculaneum, suggests that it was regarded as a cheap substitute for Dokimian, which it resembles not only in the appearance of its coloured forms but in the fact that much of the marble quarried was plain white. The quarries have been described by M. Defner.74
- 15 [E.....]. The initial letter (η at Pettorano) and the fairly low price do not give a useful clue to the restoration.
- 16 [Lesbii]. The prevailing marble in buildings at Mytilene is a coarsely crystalline white or blue-grey, sometimes quite dark but often with prominent white veins. But it is hard to distinguish from other 'island marbles', and any estimate of its use outside the immediate area of Lesbos would probably be misleading.
- 17 [Thasii]. Thasos appears to have produced two quite distinct types of marble. The first, a greyish white with exceptionally large crystals, was much used for architectural work on the Macedonian coast. The second, pure white with fairly large crystals that give cut surfaces a characteristic glittering appearance, was much more widely exported, and was used both as a statuary marble and for paving and pool-linings.

18 [Potamogalleni]. Probably Asiatic and perhaps from the valley of the Gallus, a Bithynian tributary of the Sangarius, though the identification of this river is still uncertain. 75 Until the ancient quarries of Bithynia have been thoroughly investigated on the ground the nature of this

stone will remain a matter of conjecture.

69 Stat., Silv. II, 2, 86; IV, 2, 27.
70 e.g. in the Severan Basilica at Lepcis Magna, at Split and at Rome in the Baths of Diocletian

⁽S. Maria degli Angeli).

1 D. Meredith, o.c. (above n. 62), 101 f., 109 f.; also Journ. Egypt. Arch. xxxix, 1953, 105, n. 7. Kraus, Röder and Müller-Wiener, Mitt. d. A.I., Abt. Kairo xvIII (1962), 80 f. and art. cit. (n. 62).

⁷² M. Squarciapino, La Scuola di Afrodisia, Rome, 1943, passim.

⁷⁸ Πρακτικά τῆς 'Ακαδημίας 'Αθηνῶν ΧΧΧVIII, 1963,

<sup>564-572.
&</sup>lt;sup>74</sup> 'Αρχαιολογική Έρημερίς, 1923, 112 ff.
⁷⁵ R. Gnoli, *Parola del Passato* XXI, 1966, 49;

Omissions from the list. Comparison of the three fragments leaves only two complete blanks (or three if, as seems possible though not likely, there is room for a nineteenth variety at the end of the Pettorano text). The most notable stones missing from the list as it stands are probably (a) Proconnesian, (b) Pentelic, (c) Carystian and (d) grey granite.

Of these four (a), Proconnesian, cannot have been entirely omitted, and, although the suggestion that it is masked under another name in no. 7 may seem difficult, it is almost certainly impossible to

fit it in elsewhere; nos. 11 and 13 seem to demand shorter names.

(b) and (c) have already been proposed as alternative restorations in no. 11, and there seems to

be no objection to restoring either of them in no. 13.

(d) Enormous numbers of grey granite columns have survived all round the coasts of the eastern Mediterranean. Small quarries of a similar stone exist in the region of Alexandria Troas, and there are epigraphic references to 'columnae Troadenses'. But there must be much larger quarries awaiting discovery, either in the Troad or elsewhere. It is possible that this granite is the unidentified stone of Anacasta (no. 10), and not absolutely impossible, though geologically unlikely, that it came from the Gallus (no. 18).

Other omissions from the list are perhaps less surprising. Parian, long the sculptor's marble par excellence, seems to have been little used at this period. Marmor Lunense ('Carrara') had once been largely exported to the western provinces. But even there it had been eclipsed in the second century by local products and imported Proconnesian. At Lepcis Magna, by no means remote from Italian quarries, the vast building programme of Severus seems to have relied entirely on Greek, Asiatic, Egyptian and African sources of supply. The lack in the Edict of any explicit reference to stones from western sources, although perhaps partly explicable if the Edict was not intended to apply in the western provinces, also seems in fact to reflect the situation in the marble industry at this time.

Prices. The prices given in the Edict are presumably calculated by the cubic foot of quarried block rather than by the square foot of finished slab. Obviously a price by the square foot would not apply in the case of columns or other large pieces. Some of the prices seem to reflect the high cost of overland transport. Dokimian at 200 denarii, and Thessalian at 150, compete with Syene granite, which benefited from cheap water transport down the Nile, at 100. But porphyry, which had to be hauled a considerable distance across desert, is not unduly expensive, and Mons Claudianus granite, to which the same applied, is surprisingly cheap.

B. Aromata

Since Graser (all of whose texts were in Greek), further fragments from the Greek text have been published from Delphi (SEG XVII, 240) as well as the large section in Latin which is no. I below.

Aphrodisias has now yielded a fragment from ll. 38-48, another probably giving ll. 49, 50, and a large piece giving the final 21 lines of the section:

1. Jacopi, Mon. Ant. XXXVIII (1939), col. 203 f., ll. 1-21, now in the Depot at Aphrodisias, giving the last 21 items listed in this section. For commentary see Jacopi, l.c.

2. Fragment (0·16 × 0·30 × 0·13) found in 1969 in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.224). See pl. XII, 1. Letters: ave. 0·015, rather irregular.

38	[Xylocassiae	po. unum	X centum uigintiqu	ı]in[que	v.
39	Bdellii			v. [$v.ar{]}$
40	Bdellii?quadriennis	po. unum	X centum septu]ag	intaq[ui	nque]
	[Petroselini	po. unum	X centum uigi]nti	v.	[v.]
(5) 42	[Libani optimi		X centum]	vac.	[v.]
43	Styracis Cilicii		X qui]ngentis	vac.	[v.]
	[Styracis? Antiochensis			vac.	[v.]
45	Thymiamatis		🔀 centum quin[qua	ıginta	v.]
	[Croci Arabici		X duobus mil[ibus		v.]
(10) 47	[Croci ?Arabiae Felicis	po. unum]	X mille	v. [vac.]
48	·	po. unum]	X sescen[tis		vac.]

The names of the items are translated conjecturally from the Greek text as constructed by Graser from Geronthrae v, Tegea I and Troezen. In l. 3 = 40, quadrimi might be better than the post-classical quadriennis as a translation of the τετροετικής of Geronthrae, but Troezen here seems to have Πετρ[, which suggests Petraei; in l. 10 = 47, Arabiae Felicis is offered for the Φειλικίου of Tegea I, but Troezen here has κι [, which suggests Cilicii; in l. 11 = 48 only Tegea I preserves

any part of the name [...c.7..] opou, the letters being perhaps the conclusion of the noun or of an adjective (e.g. "Appou), on which, however, see also under 3 below.

We have assumed the abbreviation po. for *pondo* since it appears in no. 1.

The items concerned are the subject of very full comment by Blümner, Maximaltarif 180 f.; Philologus LIII (1894), 334 f.; Berliner Philologische Wochenschrift xxvI (1906), 908 f.; J. Schmidt, Ath. Mitt. VII (1882), 25 f.; A. Arvanitopoullos, Aθηνᾶ xVIII (1905/6), 3 f.; Jacopi, l.c. under I; cf. also J. I. Miller, The Spice Trade in the Roman Empire (Oxford, 1969)—but he does not take account of all the evidence in the Edict.

3. Fragment (0·11 × 0·08 × 0·11) with traces of moulding below. Found in 1969, in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.228). See pl. XII, 2. Its allocation to this chapter we owe to the suggestion of Professor Lauffer. Letters: 0·015.

The only obvious item which comes in white and black varieties and whose white variety at least is closely associated with Chios seems to be mastic, cf. Pliny, NH XII, 17, 72, 'laudatissima autem Chia candida cuius pretium in libras X X, nigrae vero X II'. From Tegea I, Chian mastic (possibly with a colour specification for which there seems to be space) appears in Graser I. 49, following the item [..c. 7..] ppou (see in 2 above), and is followed by an item for which only the price is preserved but which appears from Troezen to be again mastic, though further specification is lost; its price shows a difference from the price of the preceding line as startling, although not quite in the same proportion, as the difference between Pliny's prices of Chian white and black mastic, and so tends to confirm the identification.

The vacat above the adjectival part of the description in l. I = 49 here, corresponds with the remains of Tegea I at this point, on the assumption that the Latin here occupied about the same amount of space as the Greek; that militates against the restoration...*A] $\varphi = 1$ or in the Greek text, since the Latin Africani would leave inadequate space for the noun that it described.

After 1. 50 the new fragment shows the bottom moulding of the panel and since fragment I shows top and side mouldings, it is clear that at least one complete column of items from this section intervened between fragment 3 and fragment I. Since we do not yet know the complete height of the Aphrodisias panels this does not allow of very precise calculation of the number of items listed on it—hardly, however, less than 77.

Chapter on Water Transport Costs not known to Mommsen/Blümner or Graser

In 1939 Jacopi published two large fragments from Aphrodisias, one of which contained the end of the section on aromata (see Ch. xxxII B) and the beginning of the section on water transport, and the other the end of the section on water transport—a section which, to judge from the large blank area to the right of the text (far wider than a margin), may have been the final chapter of the Edict, at any rate in the Aphrodisias copy. These were discussed by A. Degrassi, *Riv. Fil.* LXVIII (1940), 139 f. and Miss Graser, *TAPA* LXXI (1940), 157 f., and subsequently appeared in *AE* 1947, 148, 149. Later, a short section of the Greek text was found at Delphi (*SEG* XVII, 241); in publishing it, Prof. Bingen noted that another fragment is to be recognized in Tegea 2, col. 2 ('Aθηνᾶ XVIII (1905–6), 3 f.), and probably another in Cleitorian, col. 3 (*CIL* III, S, p. 2328 61).

Aphrodisias has now yielded five fragments certainly from this section and probably a sixth:

1. Jacopi, Mon. Ant. XXXVIII (1939), col. 203 f., ll. 22-76; Graser, l.c.; AE 1947, 148; now in the Depot at Aphrodisias. This gives prices for freight (calculated for a castrensis modius) carried from Alexandria, 'Oriens', Asia, Africa, a lost departure point, and Nicomedia to listed destinations, and apparently also directions for converting some items (certainly animals) into terms regarded as equivalent to the castrensis modius. Castrensis modius is abbreviated in all fragments of this chapter to K M. For its meaning, see the recent discussion by R. MacMullen in Aegyptus XLI (1961), 3 f.

After examination of the stone, squeezes and photographs, we should like very tentatively to suggest the following supplements to 11. 55-61:

```
55 [Item a] L[ib]ya
                        vac. Siciliam usque
                                            in ke. mo. uno
                                                             X sex
     [A Libya ]
                       vac. Thessalonicam
                                            in ke. mo. uno
                                                             *X decem et octo
     [A Libya
                       vac. A]chaiam v.
                                            in ke. mo. uno v. X quattordecim
     [A Libya
                      ] vac. Ad Ispaniam
                                             in ke. mo. uno v. X decem
     A Libya
                       vac. Ad Gallias
                                            in ke. mo. uno v. X quattuor
     [A Libya ]
                       vac. Ad Gallias
                                            in ke. mo. uno v. X octo
   [Item a Nico]media v. Romam usque
                                            in ke. mo. uno v. X decem et octo
```

In the first column of 1. 55, the top of a tall upright seems to be just visible in the position required for the L of Libya, and an upslanting stroke before the final A of the place of departure, which is most satisfactorily explained as part of a typically flamboyant Y. It is true that this restoration, at first sight, produces an intolerable anomaly over the price of sailings to Achaia—14 denarii for a castrensis modius from Libya to Achaea, as compared with only 12 from the more distant Africa, given in 1. 53. But it is very clear that the copyist has slipped badly in this section: the repetition of ad Gallias in 11. 59, 60 proves it, and the absence of an entry for sailings to Rome may well be another example of it. In the circumstances we cannot be sure that any of the prices have survived correctly. Mr. Hopkins advises us that when the transport-prices are converted into prices per ton/kilometre, their oddity seems corroborated by the fact that four are extreme, i.e. either higher or lower (though not by much) than the 35 transport-prices previously known (from Jacopi/Graser).

2. Jacopi, l.c., cols. 204 and 210 f.; Graser, l.c.; AE 1947, 149; now in the Depot at Aphrodisias. This gives another list of sailings from Nicomedia and possibly another port, with provision for special rates applicable to carriage of fiscal cargoes to Rome and possibly another specified port; further regulations for calculating the weight of animals in terms of the castrensis modius; and part of a small number of rates for carriage by river or canal.

Here examination of the stone, squeezes and photographs, following a suggestion from Professor Lauffer, leads us to propose in l. 14:

```
[Ite]m a Byzant[io - - -]m in ke. mo. uno X decem et octo
```

This stone is in very bad condition, but might still yield additional or improved readings to continuous study in a variety of lights.

3. Fragment $(0.36 \times 0.36 \times 0.18)$, found in 1969 in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.222). See pl. XII, 3. Letters: ave. 0.012.

```
Ab oriente Salonam
                                 vac.
                                          in ke. mo. uno vac. \times -
  [Ab or]iente Aquileiam
                                          in ke. [mo. uno vac. X —
                                  vac.
  [Ab or]iente ad Africam
                                          in [ke. mo. uno
                                                          vac. X —
                                  vac.
  [Ab o]riente Hispaniam Tarr[aconensem
                                          in ke. mo. uno
5. [Ab] oriente ad Beticam
                                          in ke. mo. uno vac. X —
                                 vac.
  Ab] oriente Lysi[taniam
                                  vac.
                                          in ke. mo. uno vac. \times -
  [A]b orient[e in Galliis
                                  vac.
                                          in ke. mo. uno
                                                          vac. X —
  [A]b o[riente Byzantium
                                          in ke. mo. uno
                                                          vac. X —
                                  vac.
```

A substantial area of stone without surface flanks the text to the left; there may have been either a broad uninscribed area at this point, in which case the text was part of the right-hand column on a panel containing at least two columns, or else a moulding that has been chipped away.

A list of sailings ab oriente, to destinations which are the same as those listed here in so far as they survive, has already been found at Aphrodisias (see I above, Il. 34 f.): there are some slight differences in spelling and description (Spania for Hispania Tarraconensis, Baetica for Betica), but they are not of a sort to suggest that one of the two lists is a sub-standard reject. Nor is it likely that Aphrodisias commissioned two copies of the Edict. The problem had already been raised by the existence of two lists of sailings from Nicomedia in I, Il. 61 f., and 2, Il. 8 f., and was discussed by Miss Graser. Her view seems to be that while the first list gives rates for ordinary sailings, the second gives them for fiscal cargoes. It must, we believe, be the case that the second list gives rates for special circumstances not covered in the first list, but these can hardly, we think, be for fiscal cargoes. In 2, l. 4, there is a reference to fiscal cargoes and probably another in 2, l. 6 (cf. also 2, Il. 21 and 23); in both cases, however, it seems clear that they are mentioned because they travelled at rates different from those being listed, i.e. that at this point the text ran:

```
Ab X ad Y in ke. mo. uno X — praeter onera fiscalia quae formam suam optinent
```

(Cf. our proposed restoration of 4, ll. 4, 8, below.) There is nothing in the chapter heading, which survives intact at 1, ll. 22/23 ('Ex quibus locis ad quas provincias quantum nauli excedere minime sit licitum'), to indicate that the lists contained in the first column under it were confined to rates for fiscal cargoes only; and the rubric which exempts fiscal cargoes from the listed rates in the second of Jacopi's pieces makes it clear that there again the reference is to ordinary cargoes.

4. Fragment ($0.36 \times 0.26 \times 0.16$) found in 1961 in the Temple of Aphrodite; now in the Depot (inv. no. 62.266A). See pl. XII, 4. Letters: ave. 0.01.

```
[A Si]çilia Afr[icam in ke. mo. uno vac. X — — A Sicilia Gen[?uam in ke. mo. uno vac. X — —
```

Item a Sardin[ia ?Romam usque in ke. mo. uno praeter one[ra fiscalia quae formam suam optinent]

5. A Sardinia in [— —
A Sardinia G[— —
A Sardi[ni]a [— —

Item [a — — ?Romam usque in ke. mo. uno x — —
p[raeter onera fiscalia quae formam suam optinent]

L. 3, cf. also 1. 8, in every section, except that which we have proposed to attribute to Libya (see I above), the first destination mentioned is Rome, where it survives, so that it seems reasonable to restore it here; and the sequence, with the exemption of fiscal cargoes which immediately follows, is an entirely natural one: 1. 5, G (possibly C) suggests Gallias or Genuam as the destination.

There is a large blank margin to left of the text, indicating that it is from the right-hand column on a panel on which at least two columns were inscribed. It cannot, therefore, be from the same panel as fragment 1, which only has room for one inscribed column.

This is the first list of sailings from Western ports (apart from Africa) to come to light.

5. Fragment ($0.23 \times 0.32 \times 0.14$) with traces of the bottom moulding, both front and back, suggesting that it was from a free standing monument; found in 1967 in the North Gallery of the Baths, now in the Depot (inv. no. 67.300). See pl. XII, 5. Letters: ave. 0.013.

The destinations recall 1, ll. 28-33 (sailings from Alexandria), although there Ephesus appears between Sicily and Thessalonica.

? 6. Fragment (0.22 × 0.33 × 0.13) with part of the right-hand moulding; found in 1969, in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.221). See pl. XII, 6. Letters: ave. 0.012.

L. 3, the final word is unlikely to be *tres* in view of the predominant system of reckoning in which the digits are multiples of 2 or of 5 (for one possible figure 3, cf. Chapter xxiv, 13, which, however, may well have been misread).

The figures as listed do not coincide with those at any point in the known text; but the sequence closely recalls several in nos. 1 and 2 above, so that it is very probable that the fragment belongs to

this chapter.

There has been some comment on the items in this chapter by Jacopi, l.c., Degrassi, l.c., Graser, l.c., Guarducci, l.c. (above, n. 4), and most recently by M. Giacchero, *Note sull'Editto Calmiere di Diocleziano* (Genova, 1962), 29 f.; these authors have been concerned mainly with the relevance of the references to the Western ports (increased in number by the new fragments) to the controversy over the area in which the Edict was intended to apply. Work is being carried out currently on the prices listed by Mr. M. K. Hopkins, who has very kindly allowed us to see a draft version of some of his results. In view of his forthcoming article, no further comment will be attempted here.

Unallocated fragments

Six further fragments found at Aphrodisias have not so far proved assignable to any known section.

1-4. CIL III, S, pp. 2208/9, Aphrodisias III and v-VII, of which VII is now in Vienna (R. Noll, Griechische und Lateinische Inschriften der Wiener Antikensammlung (Wien, 1962), no. 68; inv. no. III.869), and the remainder not currently located.

- 5. Jacopi, Mon. Ant. XXXVIII (1939), col. 224, no. 5; AE 1947, 151c (no text); present location unknown.
- 6. Fragment (0·14 × 0·10 × 0·10) found in 1969 in the area of the Portico of Tiberius; now in the Depot (inv. no. 69.226). See pl. XII, 7. Letters: 0·012.

Appendix on the copy of the Edict found at Ptolemais in Cyrenaica

By Joyce Reynolds

In $\Re S$ XLV (1955), 106 f. (cited below simply as $\Re S$), Giacomo Caputo and Richard Goodchild published fragments of a copy of the Edict discovered at Ptolemais in Cyrenaica. Subsequently a number of additional fragments have come to light, two in the course of excavation on the site by the Oriental Institute of the University of Chicago (published by C. H. Kraeling, *Ptolemais* (Chicago, 1962), p. 215, no. 47 and pl. LV b, c, cited below simply as *Kraeling*), the remainder by the Department of Antiquities of the Government of Libya. In the course of completing work left unfinished by Goodchild's untimely death, I studied the whole collection during visits to Ptolemais during the summers of 1968 and 1969 ¹ and have some new readings and interpretations of the older fragments to propose as well as the new fragments to present. Since the Ptolemais copy has been cited at a number of points in the account of the Aphrodisias copy I take this opportunity to summarize the present state of knowledge on it.

The copy has yielded fragments, some substantial, from the following chapters:

1. The Preamble: JRS, p. 112, items N, O, P. It is perhaps worth emphasizing that in N the titles of Maximian have been erased, which indicates that the Edict was still in position in a public place at the time of his damnatio memoriae in 310.²

2. Chapter 1: $\Im RS$, p. 112, item P, and probably, p. 113, item V, which could be supplemented to give the opening of ll. 21-3.

```
[Fasi]oli s[icci — — [Lini] semi[nis — — [Oryza]e mun[dae — —
```

Goodchild read — BLIS — in the first line here and suggested assignment to Chapter XXIX, where the letter group VBLIS has been reported (probably wrongly) in the fragmentary 1. 4. The fragment could not, unfortunately, be found on either of my two recent visits to Ptolemais; but Prof. Caputo most kindly showed me the copy he made at the time of its discovery, from which it appears that only the bottom of the first letter survived. Experience of the letter-forms in two Latin copies of the Edict has taught me that the lower parts of O and B are often difficult to distinguish.

3. Chapter v (probably): Kraeling, no. 47Å, which should be re-read to show a vacat between ll. 1 and 2, and could therefore be restored to give the prices for fish listed in ll. 1a-4.

```
— — unu]m X uiginti
? vac quattuor] vac.
— — sed]ecim vac.
— — d]uodecim vac.
. — — o]cto vac.
```

- 4. Perhaps Chapter VII: JRS, p. 113, item R; but see under Chapter xv below.
- 5. Chapter XII: a new find, 0.09 × 0.09; letters 0.019: giving the prices and a small part of the specifications for firwood, cf. p. 124 above.

¹ I am deeply indebted for permits and help to the Libyan Department of Antiquities, especially to Mr. Awad Sadawiya, then Controller of Antiquities in Cyrenaica, and Mr. Abdussalem Bazama, the officer of the department permanently resident at Tolmeita, but also to the staff of the Museum who, on this and other occasions, opened it at odd hours for me, moved stones and sustained me with tea and other kindnesses.

² See Callu (o.c. (above, n. 13), 406-7) who argues that the prices were valid up to 311/2: a reference I owe to Mr. Crawford; also Macmullen, l.c. (above, p. 137) for an earlier statement of the view that the Edict was more effective than is sometimes thought.

- 6. Perhaps Chapter XV: JRS, p. 113, item R; see also under Chapter VII above. Goodchild assigned this fragment tentatively to Chapter VII, which contains rates of pay for workmen in bronze, although he supposed it in fact to come from the section on articles of bronze, De aeramento. This we now have reason to believe part of Chapter xv, see p. 126 above.
- 7. Chapters XIX-XXII: $\mathcal{J}RS$, pp. 108-11; several of the new fragments fit into the section containing XIX, ll. 11-36, and it will also be possible to suggest minor changes in some of Goodchild's supplements on the basis of new measurements of the spaces available; but these do not add effectively to our knowledge of the chapters and I reserve them therefore for the full publication of The Inscriptions of Roman Cyrenaica.
- 8. Chapter XXIV: JRS, p. 113, item 5.
 9. Chapter XXVI: a new find, 0.08 × 0.05; letters, 0.025; the beginnings of two lines concerned with dalmatics, which might be 38/39, 43/44, 48/49, 53/54, 58/59.

```
v. Tarsico A[lexandrinarum —
Dalmatic arum
```

- 10. Chapter XXVIII: JRS, p. 113, item Q; ll. 45-7.
- 11. Possibly Chapter XXX: Kraeling no. 47B; as re-read, this could be restored to give parts of the Latin version of ll. 2-4, otherwise known only in Greek. While the phrase in po(ndo) unum occurs at several points in the surviving chapters of the Edict, it is only here that it appears in the necessary relation to a description of an item which can have taken the amount of space implied in the second line below.

p for pondo.

In l. 1 the E read by Kraeling is no longer visible and was not visible in his photo; in l. 2 the space before IS is very broad and incompatible with most letters; T seems the most likely.

- L. 1, in Mommsen/Blümner and Graser the item is given as Χρυσοῦ ἐνηγμένου (? auri ductilis, Blümner, Maximaltarif 177) and the price as $X \stackrel{\text{ii}}{N}$, β' . J. Bingen has recently proposed to re-read the item as χρυσοῦ ἐνησμένου, and noted that the figure is uncertainly read (Chron. d'Ég. 1965, 206 f.): 1. 2, the item appears in Greek as τοῖς τεχνείταις τοῖς εἰς τὸ μέταλλον ἐργαζομένοις; 1. 3, the item, which appears in Greek as σύρικαεσωρίβους is clearly a transliteration of the Latin auricaesoribus.
 - 12. Unallocated:

 - (a) JRS, p. 113, item T. (b) JRS, p. 113, item U. (c) A new find; 0.085 × 0.095 × 0.02; letters 0.015.

Addendum

Many new pieces of the Edict were found during the summer of 1970 in the Portico of Tiberius. They confirm that the Edict was originally displayed in the Portico, prove conclusively that the panels on which it was inscribed formed a screen, moulded on the back as well as on the front, and provide evidence which will probably suffice for an eventual reconstruction of the monument. With them were a number of pieces from a second edict of Diocletian and his colleagues, probably contemporary and concerned with the coinage, and written in hands often difficult to distinguish from those of the Price Edict. It is certain that the item given above as Preamble 1 (p. 121) belongs to this second edict, and probable that the unallocated CIL III, Sp. 2209, nos. VI, VII (p. 139) should also be assigned to it rather than to the Price Edict.