

## DIOCLETIAN'S CURRENCY REFORM; A NEW INSCRIPTION

By KENAN T. ERIM, JOYCE REYNOLDS and MICHAEL CRAWFORD

(Plates XII–XIII)

During the 1970 campaign of excavations at Aphrodisias in Caria, investigations begun during the previous summer in the Portico of Tiberius were continued and brought to light some 150 fragments of marble panels bearing inscriptions in Latin in a hand of the fourth century A.D.<sup>1</sup> Initially, these fragments were considered additional evidence to the considerable harvest of pieces of Diocletian's Edict on Maximum Prices found in the course of preceding seasons.<sup>2</sup> Most of them, indeed, proved to belong to the Edict. On closer examination and more careful transcription, however, it became clear that, while the Price Edict was cut on free standing panels,<sup>3</sup> most of which were *c.* 0·12–0·14 m thick, a small number of fragments belonged to thicker panels. In addition, the letter forms of these latter fragments tended to betray some consistent, though minor, differences from those of the Price Edict. Furthermore, while the preamble of the Price Edict was definitely recognizable among the new pieces belonging to that decree, another preamble appeared to be preserved in a fragment that undoubtedly pertained to a different, but contemporary, document, which had been cut on thick marble panels and probably displayed in proximity to the Price Edict. It also seems that at least two fragments, known earlier and hitherto connected with the Price Edict, belonged in fact to the new decree (see *a* and *d* below), and of these *CIL* III S, p. 2208, Aph. 1 makes a join with the new preamble-fragment. It is possible that closer scrutiny will provide further joins; and more fragments of the new text might be identified as well among the smaller pieces discovered last summer. In view of the very obvious significance of the document, we have judged it proper to publish the identifiable fragments of the new text at once; it is not likely that substantial additions will be made in the near future, if ever.

The new text was cut on at least two blocks, one probably standing above the other. The bottom block, which is almost complete except for surface chips (*b* below), contains the final ten lines of the text. Content and measurements make it virtually certain that we also have part of the top of the first block (*a* below), which has a simple cornice above; and either to be associated with this broken block or, less probably, with another block intervening between it and the final block, there are two fragments with a bottom edge and several without edges (and in some cases also without backs). All pieces except *b* (i) are now in the Aphrodisias Depot.

The letters were drafted freehand, so that heights vary a little within a line, and horizontal spacing is too irregular to allow very precise calculation of the number of letters lost in a gap. In the imperial titles, abbreviated words are normally followed by a stop, usually a small stroke slanting upwards from left to right, on occasion not much more than a point, which may be placed within the line but is sometimes set just above it. A similar stroke also follows a figure. In the text, to judge from *d*, abbreviations are not always marked in this way, although they may be so. Sentence ends are indicated by a small *vacat*. Letter-forms are typically fourth century; A is normally but not invariably without a cross bar; the second stroke of L descends well below the line; the slant stroke of R may do so too but may also run out at a more oblique angle to the upright so as to join the base line at the point where the next letter begins.

<sup>1</sup> The supervisors in charge of this excavation were Professor J. Stephens Crawford of the University of Delaware and Dr. Joseph Gary of New York University. The assistance of Mr. David MacDonald of the University of Minnesota, for a useful squeeze of fragments *b* (i) and (ii); of Mr. Frederick Lauritsen, of Eastern Washington State College (Cheney, Wash.) for recognizing the connection between fragments *b* (i) and (ii); and of Miss C. M. Wrinch, of Newnham College, Cambridge, for help with the transcriptions, is hereby gratefully acknowledged. In preparing the commentary we have had most generous help from Mr. Michael Hendy (Fitzwilliam

Museum, Cambridge) and Professor S. Lauffer of Munich.

<sup>2</sup> See *ÿRS* LX (1970), 120 f. (hereafter referred to as Erim/Reynolds). There can be little doubt now that in view of the huge quantity of fragments of the Price Edict found there the Portico of Tiberius is definitely part of the agora of Aphrodisias.

<sup>3</sup> For the precise original location and display of the panels we still lack specific evidence. The great majority of the pieces discovered in 1970 were found within the Portico itself, and some were located near a building that lies immediately south of the colonnade, and was very probably a temple.

*a* (i) Upper left corner of a block, reconstructed from two adjoining pieces, with remains of a simple moulding above ( $0.65 \times 0.72 \times 0.42$ ) inscribed on one face (inv. no. 70.401 A and B); (ii) *CIL* III S, p. 2208, Aph. 1 = Erim/Reynolds 1 (inv. no. 69.220), wrongly published as part of Diocletian's Price Edict; (iii) a fragment without edges or back, probably trimmed for re-use, ( $0.075 \times 0.71 \times 0.24$ ) inscribed on one face with a text whose first line contains part of the missing imperial titles of l. 5 (inv. no. 70.000). Measurements suggest the connection between this piece and *d* below, while the initial word of l. 8, *bicharacta*, a *hapax legomenon* (at any rate not listed in *TLL*) whose meaning is discussed below, shows without much doubt that the subject was currency.

Letters: l. 1, 0.05; ll. 2-4, 6, 8 and 10, 0.03; ll. 5, 7 and 9, 0.025; ll. 11 f., 0.02-0.025.

Photos: (i), Pl. XII, 1; (ii) see Erim/Reynolds, Pl. IX, 1; (iii) not photographed.

|    |  |   |   |                 |             |           |
|----|--|---|---|-----------------|-------------|-----------|
|    | <i>vac.</i>  |   | B. <i>vac.</i> F. [   |                 | <i>vac.</i> | ]         |
|    | Imperator Caesar Gai. Aur. Val. Diocletianus p. f. Aug. p[ont. m. Germ. m. VI Sarm. m.]              |   | v. IIII Pers. m. II Brit. m. Carp. m. Aram. m. Med. m. Adiab. m. trib. [pot. VXIII(?) cons. VII p. p. |                 | procs. et]  |           |
|    | Imperator Caesar M. Aur. Val. Maximianus p. f. Aug. pont. m. [Germ. m. V Sarm. m. III Pers. m. II    |   |   |                 |             | Brit. m.] |
| 5  | v Part. m. Arab. m. Med. m. Adiab. m. tri[b. pot.] VXI[I(?) cons. VI p.p. procs. ? <i>vac.</i> et]   |   |   |                 |             |           |
|    | Flabius Valerius Constantius [et G. Val. Maximianu]s Ge[rmm. Sarmm. Perss. Britt. Carpp. Aramm. (?)] |   |   |                 |             |           |
|    | v. Medd. Adiabb. III cons. no[bb. Caess. dicunt(?) <i>vac.</i> [                                     |   |   |                 | <i>vac.</i> | ]         |
|    | <i>vac.</i>  | [ | <i>vac.</i>   | ] <i>vac.</i> [ | <i>vac.</i> | ]         |
|    | Bicharacta MI[   |   | ..c. 30..   | ]NTIAII[...     |             |           |
|    | quae in maiore[  |   | ..c. 31..   | ]riorum[...     |             |           |
| 10 | one INVS[  |   | ..c. 34..   | ]CIASAP[...     |             |           |
|    | Roma[  |   | ..c. 36..   | ]AIVRV[...      |             |           |
|    | TVOR[  |   | ..c. 37..   | ]PGOLI[...      |             |           |
|    | SIQ[   |   | ..c. 38..   | ]ATTV[...       |             |           |
|    |  |   |   | ...]EVNIY[...   |             |           |
| 15 |  |   |   | ...]ATIONA[...  |             |           |
|    |  |   |   | ...]YSTRIA[...  |             |           |
|    |  |   |   | ...]ETDEI[...   |             |           |
|    |  |   |   | ...]EPREI[...   |             |           |
|    |  |   |   | ...]REM[...     |             |           |

l. 1, B(onium) f(actum); ll. 2-7, the latest datable item in the surviving part of the imperial title is the third consulate of the Caesars in A.D. 300. Since they held a fourth consulate in 302, this indicates a date in 300 or 301; but the consular date in *b* below allows an exact dating in 301 and the titles have been restored accordingly. They include a number of anomalies in detail, some of which are also attested in the (unpublished) Aphrodisias copy of the introduction to the Price Edict, suggesting that the models from which the inscribed versions were made were in a similar hand and difficult to read, at any rate by persons unfamiliar with Latin—thus:

(i) l. 2, the abbreviation *Gai.* for *C(aius)*. (ii) l. 5, the order *vx* in Maximian's *trib. pot.* figure, and we have assumed the same order for Diocletian in l. 2. It also occurs for both Augusti in the Price Edict, at Aphrodisias; there, by a further error, Diocletian's figure is given as *vx* when it should be *xviii* and Maximian's is probably the same when it should be *xvii*; we think it probable, however, that for Maximian at least this error was avoided here (unless we are misinterpreting the traces after *x*). (iii) ll. 2, 4, the omission of *inuictus* before *Aug.* is paralleled in the Price Edict. (iv) l. 2, *Aram.* for *Armen(iacus)*, also occurs in the Price Edict in the title of the Caesars (as we have restored it here in l. 6). (v) l. 5, *Arab.* for *Armen.* (vi) l. 5, *Part.* which must be for *Carp(iacus)*. (vii) l. 7, the omission of *m(aximi)* after the titles of the Caesars, which also occurs in the Price Edict.

l. 8, *Bicharactam* [ is equally possible; the broken letter, while apparently an upright, could perhaps also be  $\phi$ , whose left curve is sometimes remarkably like an upright; if so, *Bicharacta mo[neta* is an attractive possibility; *poten*tia may have stood later in the line but there are many other possibilities; l. 9, *in maiore* [parte or *in maiori* [bus, uel. sim., seem to us most likely, but a reference to the coinage known later as *pecunia maiorina* is epigraphically possible; *dena*]riorum perhaps stood later in the line, but e.g. *necessa*]riorum is also possible; l. 10, perhaps *in us[um or inus*]itatum; and ]cia sap[ientia; l. 11, perhaps ]a iur.]; l. 12, perhaps *quat*]tuor; l. 13, perhaps *qu*]attu[or.; l. 14, perhaps ]e uniu[er]; l. 15, probably from *ratio* or *rationalis*; l. 16, perhaps *ind*]ustria[ or ]us tria[; l. 17, perhaps from *denarius* or *debeo, debitor*; l. 18, probably from *deprehendo*.

*b* (i) Block (1.55 × 1.21 × 0.48) inscribed on the upper part of one face on which there is a large chip near the top; into this fits (ii), fragment without back or edges (0.24 × 0.13 × 0.02) inscribed on the face (inv. nos. 70.563, 331).

Letters, ave. 0.02.

Photos: (i) block + chip, Pl. XII, 2; squeeze of text, Pl. XII, 3.

cos[. . . c. 17 . . .]IRE[. . . c. 8. . .]COIE[. . . c. 11 . . .]rgenteus centum denariis [. . . c. 20 . . .]  
*sic* ti quinque den[ari]orum potentia uige[ant? ?cui]us legis obseruantiae etiam fiscum no[st]rum  
 esse scire te comu[. . .]t ut scilicet ex kal(endis) Se[pte]mbribus Titiano et Nepotiano cons(ulibus)  
 esse noui coeperint etiam fisco geminata p[ote]ntia ea(n)dem tradant pecuniam parique condicione  
 5 xigat etiam fiscus adnumeret *vac.* Super his autem debitoribus qui ante kal(endas) Septemb(res)  
 debitis deprehendendum uel in priuatis contractibus monstrantur obnoxii iustum esse aequissimumque  
 perspicitur hanc adhiberi obseruantiam ut eandem pecuniam ita numerent ut ualuisse cognoscitur  
 am et per prouisionem nostram propter unius obseruantiam leg[is] facta fuerit adcessio nec iniquitatem  
 statuti putent quibus ista condicio praescribitur cum in ea potentia pecuniam repraesentare uideantur  
 10 eos suscepisse manifestum est *vac.* in qua

l. 1, COS is probably not for *consul* which is here regularly abbreviated to *cons*; l. 3, possibly comu[en]it (*u* is certain though incomplete; for the construction cf. the Edict of Constantine *de accusationibus*, *CIL* V, 2781, ll. 26/7, *quandoquidem eos pro tanti sceleris audacia poenae conveniat subiugari*); the consuls Titianus and Nepotianus held office in 301; 1st September is the first day of the tax year in the later Roman world, E. J. Bickerman, *Chronology* (London 1968), 78; l. 4, EADEM *lapis*, which can only be a mistake for *eandem*; l. 8, LEGEM *lapis*, which can only be a mistake for *legis*.

The following fragments must be fitted into the text between *a*, l. 7, and *b*, l. 1.

*c* Fragment, reconstructed from three pieces, with a bottom edge only and no back (0.27 × 0.15 × 0.05) inscribed on the face (inv. no. 70.320 A + B + C). The content of this fragment clearly connects it with problems of currency and debt.

Letters, ave. 0.023.

Photo, Pl. XIII, 1.

...]S F[...  
 ...]R *vac.* quare nec[... ]rio[...  
 ...]bere compertum et credi[tor-...  
 ...]tia adquae unam aes[timationem? ...  
 5 ...]m etiam in aereas ad[...]

l. 2, perhaps [dena]rio[rum] or nec[essa]rio[rum]; l. 3, perhaps *prae]bere compertum*.

*d* Fragment with a bottom edge only, probably trimmed for re-use, (0.14 × 0.41 × 0.40) inscribed on one face (inv. no. 70.400). The thickness strongly suggests association with this document though the content gives no unequivocal pointer, since ll. 5 and 9 would be perfectly appropriate in the Price Edict; but *forma* is also consistent with a monetary context, see *Cod. Just.* XI, 11, 1.

Letters, ave. 0.02.

*CIL* III S p. 2208/9, Aph. V, published, probably wrongly, as part of the Price Edict.

Not photographed.

...]II[...  
 ...]VTA[...  
 ...]RIACV[...  
 ...]aest[...  
 5 ...]forma[...  
 ...]rigid[...  
 ...]p]raecep[...  
 ...]AMOVA[...  
 ...]t]ertiae[...]

l. 3, *CIL* omits R and gives L for I; l. 4, perhaps *aest[imatio]*; l. 7, *CIL* omits R and gives F for P; l. 8, *CIL* adds I at end.

*e* Fragment without edges or back, probably trimmed for re-use ( $0.06 \times 0.18 \times 0.18$ ) inscribed on the face (inv. no. 70.325). This piece is connected with the text because of its thickness. Letters, ave. 0.02. Photo, see Pl. XIII, 2.

...]ēge q[uae ?...  
 ...]est v. id[em ?...  
 ...de]sidere[...  
 ...]di vac.[...  
 ...]ē uni[...]

5

l. 1, Q might be C, G or O; l. 3, probably from *desiderare*, e.g. *desideretur*.

*f* Fragment without back or edges, probably trimmed for re-use, ( $0.055 \times 0.19 \times 0.14$ ) inscribed on the face (inv. no. 70.327). If this piece belongs, as seems very likely, the only possible position for it, in our present state of knowledge, is in *a*, ll. 8 ff. Its thickness suggests its connection with the text and we have so far failed to find a position for it in the Edict on Prices.

Letters, ave. 0.025.

Photo, see Pl. XIII, 2.

...]vac.[...  
 ...]BENI[...  
 ...]TRAI[...  
 ...]MI[...  
 ...]TIT[...]

l. 1, possibly from *benivolus* or *benivolentia*; l. 2, I might be D—possibly from *trans*, *tradere*, or *trahere*; l. 4, perhaps e]t it[a, or ]Tit[ianus, cf. *b*, l. 3.

*g* Fragment without back or edges, probably trimmed for re-use, ( $0.12 \times 0.255 \times 0.075$ ) inscribed on the face (inv. no. 70.342). The apparent reference to kalends in l. 4 seems more appropriate to this text than to the Price Edict.

Letters, 0.025–0.03.

Not photographed.

...]EA[...  
 ...]AESER[...  
 ...]QVODE[...  
 ... kal]endar[um ...  
 ...]ibus IV[...  
 ... pu]blico[...  
 ...]GEI[...]

5

l. 7, perhaps from *argenteus*.

*h* Fragment without edges, probably trimmed for re-use ( $0.56 \times 0.49 \times 0.29$ ) found in 1966, re-used in a modern wall in the village (inv. no. 66.608). It is probably to be connected with this document in view of the reference to one of the consuls of 301 in l. 6.

Letters: ave. 0.025.

Photo, see Pl. XIII, 3.

...]CIR[...  
 ...]FACI[...  
 ...]VST[...  
 ...]RAV[...  
 ...]et ear[um...  
 ... Nep]otian[...  
 ...]m redi[...  
 ...]ae POSTR[...  
 ... imp]p. Augg v.[...  
 ...]DIVMINO[...  
 ...]am si fieri p[...  
 ...]ius atque perI[...  
 ...]ssione com[...]

5

10

l. 3, possibly from *Augustus*; l. 4, possibly from *imperator Augustus*; l. 6, cf. *b*, l. 3, *Titiano et Nepotiano cons.*, i.e. 301; l. 7, possibly from *reditus*, although the horizontal of the T ought then to be visible; l. 8, possibly from *postremus* or *post r[...]*, but R could be P; l. 10, possibly *reme]dium*, perhaps followed by *ino]pinatum*; l. 11, P should probably be completed from *posse*; l. 13, perhaps *oca]ssione*.

It is natural to suppose that the document to which these fragments belong is an edict. On the other hand the only satisfying interpretation of the crux in *b*, l. 3 that has occurred to us is *scire te comu[en]it* (see above p. 173), but the use of *te* is inappropriate to an edict and suggests a letter addressed to an official. There may, of course, be an error in the text as we have it, due to Aphrodisian difficulty in interpreting the Latin manuscript (see above, p. 172); but we would prefer to suggest that we perhaps have an edict to which an explanatory letter has been appended. The imperial title remaining in fragmentary form in *h*, l. 9 might in that case mark the introduction to the letter.

Apart from its other interest the document contains two lexicographical items—the words *bicharactus* and *argenteus*. The latter has hitherto been a numismatists' convention in relation to Diocletianic coinage, but is now attested in contemporary use. The word *bicharactus*, which means literally 'twice-stamped', is puzzling.<sup>4</sup> It has been tentatively suggested above that the text began *Bicharacta moneta . . .*, in which case Diocletian was perhaps here talking about the new coinage of A.D. 294, created by a grand re-coinage (i.e., second striking) of old pieces.

From the content of *d*, there can be no doubt that the subject at issue is a currency reform taking place on the 1st September in the consulship of Titianus and Nepotianus, i.e. A.D. 301, and so approximately contemporary with the Edict on Maximum Prices. A currency reform complementary to the Price Edict has in fact been posited by some historians,<sup>5</sup> but this is the first specific evidence for it.

Of the provisions of the reform, we can say with certainty that from 1st September, A.D. 301 all new debts and analogous obligations were to be paid in current *pecunia* with a doubled face value. The emperors were at pains to assert that this regulation applied to payments made by the *fiscus* as well as those made by private persons.<sup>6</sup> They were at even greater pains to assert (but without serious justificatory argument) that their associated regulation for payment of debts incurred before 1st September, 301 in *pecunia* at its old face value was perfectly fair<sup>7</sup>—it was of course very much to the advantage of creditors and the interest of the *fiscus* was heavily involved. The really important point is that there was no physical change in the coinage. This is confirmed by the coinage itself—and it is the absence of such a physical change that has caused some unwillingness among scholars in the past to accept a reform at this date.<sup>8</sup>

There is also a statement (*b*, l. 1) of the relation of the *argenteus* to the *denarius* which—it will be apparent—can only refer to the reformed conditions, so that at this point in *b*, l. 1 we suggest the supplement . . . *ut nummus ar]genteus centum denariis [ualeat*.<sup>9</sup> The relationship involves surprises; since 1 *argenteus* = 1/96 lb. of silver, 1 lb. of silver = 9,600 *denarii*; even at a ratio of gold:silver of 1:10 the result is that 1 lb of gold = 96,000 *denarii*, which comes very near to the outside limit of the maximum price for gold specified in the Price Edict (99,000 *denarii*);<sup>10</sup> the ratio of gold to silver used is far lower than has been thought possible.<sup>11</sup>

Following this statement is a badly damaged one, beginning in l. 1 and carrying over into l. 2. We believe that the temptation to restore here *uigin]/ti quinquae denariorum* must be resisted, for there is no known coin to correspond to this value; given an *argenteus* of 100 *denarii*, the only theoretical candidate is Diocletian's large laureate silver-bronze coin.<sup>12</sup> But in about A.D. 300–1 these are provided with the mark of value XXI *vel sim.* (see below),

<sup>4</sup> δισχάρακτος in *IGRR* IV, 595 is no help.

<sup>5</sup> For the idea of a currency reform complementary to the Price Edict, see C. H. V. Sutherland, *RIC* VI, 99.

<sup>6</sup> For regulations covering repayment of debts applied to state debts, compare Cicero, *pro Fonteio* 1–5 on the Lex Valeria of 86 B.C.

<sup>7</sup> For the notion of a debt being reclaimable in the exact form in which it was incurred, compare *Dig.* 46, 3, 99; 46, 3, 94, 1; M. Kaser, *Tijdschrift* 1961, 169.

<sup>8</sup> See n. 5.

<sup>9</sup> Compare Pliny, *NH* xxxiii, 47, 'ita ut scripulum

valeret sestertiis vicenis'. For an *argenteus* of 100 *denarii*, see Epiphanius 15 = Hultsch, *Metrol. Script.* 1, 267; compare the equations 1 *folles* = 12,500 *denarii* (*P. Panop.* 2, 302, Feb./Mar. 300) = 125 silver coins (Epiphanius, 19 with 49 and 40 = Hultsch, *Metrol. Script.* 1, 269 and 267).

<sup>10</sup> J. Bingen, *Chron. d'Eg.* 1965, 206–8; his reluctant retraction of this figure, *ib.* 1965, 431–4, is unwarranted, and is rightly rejected by J.-P. Callu, *Politique monétaire* 358, n. 6.

<sup>11</sup> See J.-P. Callu, *Politique monétaire* 357–8.

<sup>12</sup> For the relationship of this to the *argenteus* see below.

and this cannot possibly be reconciled with a value of 25 denarii.<sup>13</sup> The opening *ti* of l. 2 is therefore not part of a figure; a coin with a value of 5 denarii must be sought.<sup>14</sup> Diocletian's large laureate silver-bronze coin may be ruled out; in terms of metal content it was worth at least an eighth of an argenteus<sup>15</sup> and could never have been undervalued at a twentieth.

It is moreover unlikely that there was ever a coin worth  $2\frac{1}{3}$  denarii which would become one of 5 denarii, *geminata potentia*, in 301.<sup>16</sup> In view also of the fact that the phrase used to describe the value here is different in form from that used in l. 1, it may be suggested that the provision is to maintain unchanged the face value of a coin worth 5 denarii. This coin should be identified with Diocletian's radiate bronze. The space available to express this is very limited—we suggest something like *sed ut nummi radia]/ti*<sup>17</sup> *quinquae denariorum potentia*<sup>18</sup> *uige[ant*, which completely fills it.<sup>19</sup> To resume the conclusions so far, it seems that in 301 the face value of the argenteus (and with it the large laureate silver-bronze coin) was doubled, while that of the radiate bronze coin (and the small laureate bronze coin) remained unchanged.<sup>20</sup>

It should now be clear that after the reform Diocletian's large laureate silver-bronze coin was worth 20 denarii, a fifth of an argenteus; in terms of metal-content it was worth at least an eighth (see above), and it is likely that it was overvalued, being a coin composed largely of bronze but having a pronounced silvery appearance. Precisely in 300-1, these large laureate silver-bronze coins appear with the mark *XXI vel sim.*<sup>21</sup> which has usually been interpreted as meaning 20 sestertii;<sup>22</sup> but this interpretation is in any case unacceptable because, while sestertii were never in significant use in the East, the mark appears in the East as well as in the West. The marks of value should be regarded as indicating expressly that the large laureate silver-bronze coins were worth twenty denarii.<sup>23</sup> Appearing as they do only at this time, the marks can be seen to be highly significant; they should be connected with the currency reform of this inscription, and the latter connected in turn with the Price Edict; the appearances of the marks of value on the coins of a Western mint (Siscia) perhaps casts some doubt on the view that the Price Edict was *intended* to apply only to the East.

On the basis of these arguments and interpretations it may be calculated that before 301 the coins of Diocletian should be identified as follows:

|                              |              |
|------------------------------|--------------|
| Small laureate bronze        | = 2 denarii  |
| Medium radiate bronze        | = 5 denarii  |
| Large laureate silver-bronze | = 10 denarii |
| Argenteus                    | = 50 denarii |

<sup>13</sup> The suggestion that the mark of value refers to the proportions of silver and bronze contained in the coins, W. Brambach, *Frankfurter Münzzeitung* 1920, 204; S. Bolin, *State and currency* 292, may be discounted—the proportions of silver and bronze are about 1 : 25, not 1 : 20, see n. 23. The view of L. H. Cope, *NC* 1968, 115, that the mark of value indicates 20 obols of silver to 1 libra of bronze is even more improbable (his assertion that the proportion is the same in the reformed coinage of Aurelian is simply untrue).

<sup>14</sup> We take it that this figure, like the earlier figure of 100 denarii, expresses the value of a coin *after* the reform.

<sup>15</sup> An eighth, J.-P. Callu, *Politique monétaire* 362 n. 1; a seventh, L. H. Cope, *NC* 1968, 148; over a seventh, T. V. Buttrey, *Gnomon* 1969, 679, para. 4.

<sup>16</sup> A  $12\frac{1}{3}$  coin appears under Licinius, *RIC* VII, 548, 607, 645, 681, 707, after a series of currency adjustments; a coin with a value including  $\frac{1}{2}$  is not plausible in Diocletian's new coinage of 294-301. We are not prepared to express an opinion on the marks  $\begin{matrix} H \\ CIS \end{matrix}$  (Lugdunum, *RIC* VII, 263, A.D. 308-9) and CMH (in monogram) Nicomedia, *RIC* VI, 561, A.D. 308-11; Cyzicus, *RIC* VI, 591, A.D. 311-13); cf. J.-P. Callu, *Politique monétaire* 464, n. 4.

<sup>17</sup> For a coin named from its type compare *quadrigatus*, *bigatus*, *victoriatius*. Note also Pliny, *Paneg.* 52, *radiatum caput*.

<sup>18</sup> Compare Gaius I, 122, 'nummorum vis et

potestas'; Volusius Maecianus, *Distributio* 44.

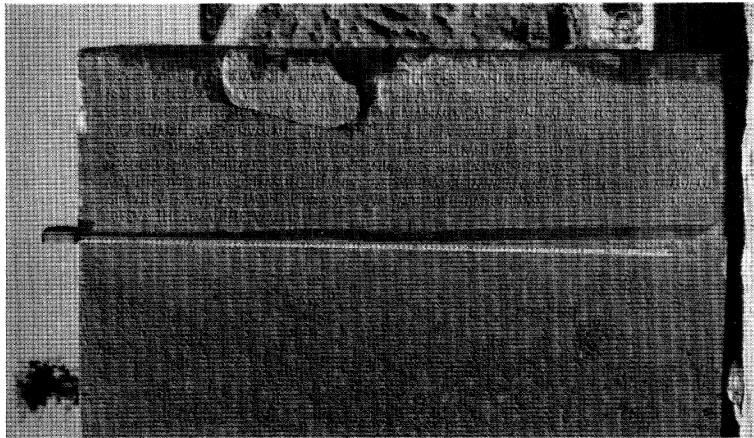
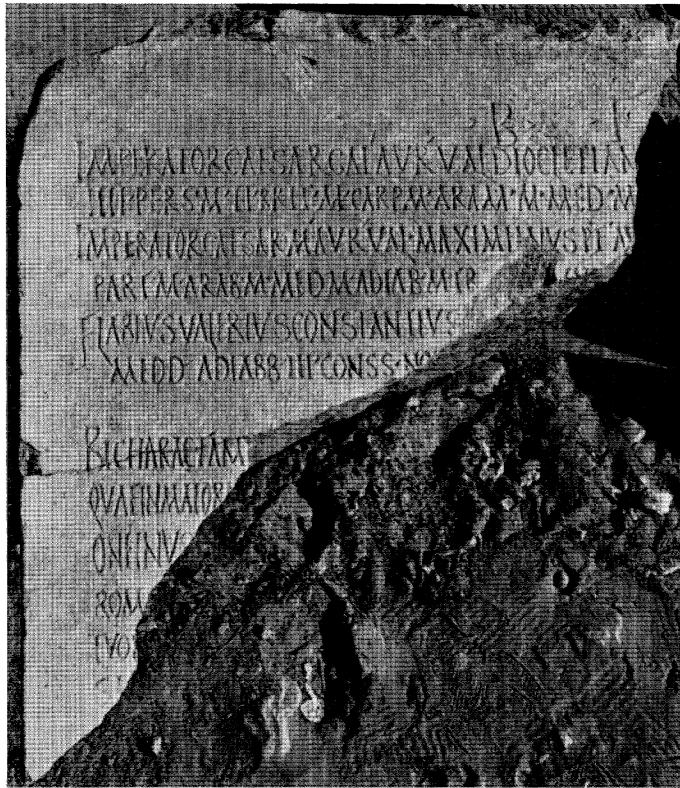
<sup>19</sup> The absence of a phrase such as *ut ante* indicating that no change is involved may perhaps be explained by the hypothesis that the reform was fully described in the early part of the text of the inscription. The choice of the *nummus argenteus* and the radiate piece as the two coins to be mentioned here is readily intelligible; each is the larger of the two coins in their respective classes.

<sup>20</sup> Anyone used to a silver standard doubtless believed that the measure devalued the radiate bronze coin and the small laureate bronze coin; if ἰταλικὸν ἀργύριον can be taken generically as meaning 'Italian money' (i.e. some of the new coinage of Diocletian introduced to Egypt in 294), *P. Ryl.* 607 perhaps reflects this belief.

<sup>21</sup> K V, Antioch, *RIC* VI, 620 (A.D. 300-1); XXI, Alexandria, *RIC* VI, 648, 651, 665 (A.D. 300-1); XX I, Siscia, *RIC* VI, 437, 445, 467 (c. A.D. 300).

<sup>22</sup> C. H. V. Sutherland, *JRS* 1961, 94.

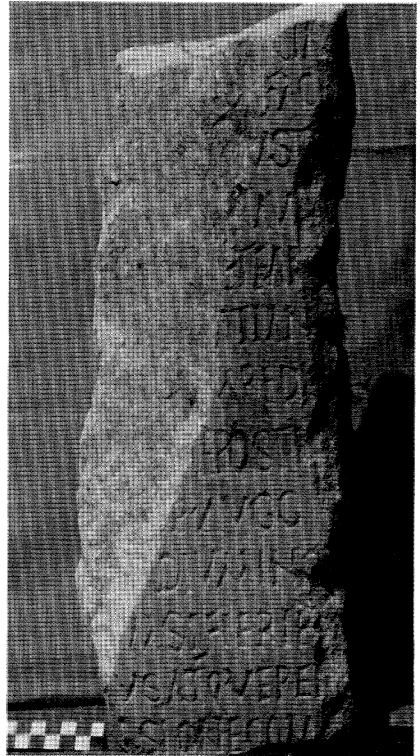
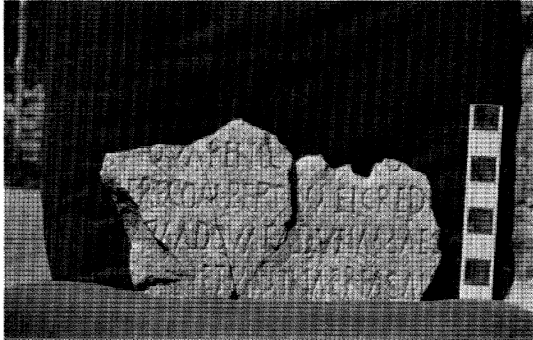
<sup>23</sup> XX I = 20 units (denarii). Contemporary marks of value on the aureus and argenteus identify them as fractions of a pound of gold and silver respectively, a significant difference of approach; the aureus and argenteus now, as the solidus later (*Cy* 10, 72, 5), were worth just their metal content, the large laureate silver-bronze coin was valued in terms of denarii and heavily over-valued. For the silver content of the coin see now L. H. Cope, *NC* 1968, 115 (with unacceptable conclusions, see n. 13).



APHRODISIAS: DIOCLETIAN'S CURRENCY REFORM (see p. 171 f.)

I. PHOTOGRAPH OF a. 2, 3. PHOTOGRAPH AND SQUEEZE OF b.

Photographs (1, 2) by NYU Expedition, (3) by F. B. Sear from squeeze by David MacDonald. Copyright reserved



APHRODISIAS: DIOCLETIAN'S CURRENCY REFORM (see p. 171 f.)  
PHOTOGRAPHS (1) OF *c*; (2) OF *e, f* AND SMALLER FRAGMENTS; AND (3) OF *h*  
*Photographs (1, 2) by J. Reynolds, (3) by E. Alföldi-Rosenbaum*  
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The position after the reform of 301 is then as follows:

|                              |               |
|------------------------------|---------------|
| Small laureate bronze        | = 2 denarii   |
| Medium radiate bronze        | = 5 denarii   |
| Large laureate silver-bronze | = 20 denarii  |
| Argenteus                    | = 100 denarii |

All previous schemes have to be rejected, which is not really surprising since they were based primarily on comparisons of metal content, an unreliable method when we do not know by how much the bronze was over-valued. That it was overvalued under Diocletian's first reform of 294, in relation to precious metals and presumably also to goods and services, is now clear, and the problem will not have been helped by the enormous numbers of pre-Diocletianic base-metal coins absorbed into the Diocletianic system; hence rocketing prices and rising values of precious metal coins in terms of denarii. The change in 301 represents a not unprofitable attempt to face these facts (see above p. 175 with n. 7). The context for the fixing of prices in the Price Edict in terms of denarii can now be seen, namely an attempt at stabilization of the coinage. And the combination of this Currency Reform with the Price Edict raises Diocletian's economic policy somewhat above the level of absolute naivety which is frequently attributed to it. What doubtless happened is that, once the official tariffing of the argenteus introduced in 294 could no longer be maintained, a variety of rates were quoted; hence the need to restore *una aestimatio*, a permanent obsession of the fourth-century Emperors.<sup>24</sup> *Exempli gratia*, fragment *c* can perhaps be restored on these lines:

Quare nec [dena]rio[rum nec argenteorum nec aureorum summam iustam  
debitores nunc]  
[posse prae]bere compertum; et credi[tores hac nummorum iactatione damno adfici non placet. Sed  
debita o]  
[mnia penden]tia ad quae unam aes[timationem adhiberi oportet huius legis observantia solvi  
possunt. Q]  
[uam aestimatione]m etiam in aereas ad[hiberi monetas placet.

But despite these brave words Diocletian by his measure of 301 perhaps only endorsed existing unofficial practice.<sup>25</sup>

<sup>24</sup> Compare *CTh.* 9, 22; *CJ* 11, 11, 2 and indeed the whole of 11, 11, 1-3.

<sup>25</sup> Compare the retariffing of the denarius in

c. 141 B.C., M. H. Crawford, *The Roman Republican coinage* (Cambridge, forthcoming), Ch. 6.