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Watson, G. R.

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## ABSITRACT

This work is divided into two partis. Part I examines the system of documeniation practised in the Roman Army from the foundation of the Empire to the accession of Jiocletian. This examination includes a discussion of the administrative personnel and their functions, and of the documents they issued and received.

In Chapteri I the orderly-room stafts are considered in ascending order of seniority. This method has the advantage of proceeding from the simple to the complex, and is perhaps better adapted than the opposite order for illustrating the gradual elaboration of the organization.

In Chapter II complete texts, with variant reacings, are given of the more important documents, in the order in which they might appear in the documentation of an imaginary soldier from the day when he first considers enlistment to the day of his discharge. These documents fall into three ${ }^{\text {b }}$ broad categories. One contains those which belong to the period when the soldier is a recruit or would-be recruit, and consists of letters of recommendation, posting orders, etc. The second includes matriculae of various types, the acte. diurna, pridiana, and other administrative documents. The third category is limited to financial documents, mainly soldiers' pay accounts and military receipts.

Part II contains, besides the notes to the first part, a summary catalogue of Roman, "military documents, arranged in order of the media on which they were writiten, papyrus, parchment, wax tabiets, bronze tableta, and ostraca. Inscriptions on stone are excluded. The catalogue includes not only such documents as are obviously official, but also a number of others which bear indirectly unon the general problem.

## ROMAN MILI'IARY BOOKKEEPING

Thesis submitted in candidacy for the Degree of Master of Letters
in September 1953

by<br>G.R. WATSON<br>of

University College, Durham.

# ROMAN MILI'IARY BOOKKEFPPING 

## PARII I.

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- The study of the Roman arruy has in many of the details of its organization and procedure been pursued with the utmost vigour and clarity of insight by many famous scholars over an extended period: one minor, but not unimportant branch, the system of military documentation, has, apart from the so-called diplomata militaria, to which an entire volume of the Corpus Inscriptionum Latinarum has been dedicated ${ }^{1}$, been left in comparative neglect. The reason is not far to seek. The majority of the scholars who have worked on the problems of the Roman army have been epigraphists, prosopographers, and archaeologists: the material with which we are concerned is mainly papyrological. In any case, until the publication by Mormsen in 1892 of the pridianum of the First Cohort of Lusitanians ${ }^{2}$, now more conveniently referred to as BGU II 696, the study of Roman military bookkeeping could proceed only on a theoretical basis, and was too dependent on the late and confused evidence of our ancient sources. Vegetius, it is true, contains a good deal especially in the well-known passage in II, 19-and there are scattered references in the Life of Severus Alexander in the Historia Augusta ${ }^{3}$, Tyrannius Rufinus ${ }^{4}$, the legal Codes and Digest5, and Isidore of Seville ${ }^{6}$, but the majority of these are late, and of very doubtful validity for the pre-Diocletianic army. A single point of nomenclature
confirms this: our authorities make frequent mention of the term brevis and matricula; 7 the papyri do not attest these in the period from Augustus to Diocletian, but have introduced to us the word pridianum, which was previously unknown ${ }^{8}$.

Since 1892 an increasing number of Latin military documents has been published. The majority may be omitted in this brief survey, but mention must be made here of two publications of outstanding importance: the appearance of Nicole and Morel's "Archives militaires du Ier siècle" (Geneva, 1900), which were especially valuable for the light they threw upon everyday procedure at century level ${ }^{9}$, and the publication of Comparetti's liber litterarum missarum in Mélanges Nicole $57 .{ }^{10}$
$=\quad$ The gradual accumulation of papyrological evidence was reduced to order by Mitteis and Wilcken in their "Grundzulge und Chrestomathie der Papyruskunde.", which appeared in 1912, but continual publication of additional material, apart from the interruptions caused by two world wars, has by now made a new edition a matter of urgency. Such documents as affected Egypt, and in the case of the papyri this meant nearly aill, were used by Lesquier in his "L'Armée romaine d'Égypte" (Cairo, 1918), with outstanding results, in spite of an apparent aversion to the publication of documents in the original. Since that
date, however, the extension of the field of discovery of papyri to Dura-Europos, and the chance finding in Egypt of a document relating to Moesia ${ }^{11}$; have made our documents more representative of the empire as a whole. The latter document indeed, in content at least, is of equal importance with BGU II 696, to which it forms an almost perfect complement, the one being largely a record of accessions and the other of losses from strength. Moreover, these are the only pridiana that have so far been identified with confidence. ${ }^{12}$

It was not until 1934 that research was directed specifically towards the general principles of Romen military bookkeeping: in that year Robert 0 . (now Professor) Fink was awarded the degree of Ph.D. by Yale University for a thesis entitled "Roman Military Accounts and Records". This thesis is as yet unpublished ${ }^{13}$, but some of its conclusions have been made known in subsequent articles ${ }^{14}$. He made full use of all the major Latin military documents then known, including one unpublished at the time ${ }^{15}$, and of one or two of the Greek documents. ${ }^{16}$ His approach was essentially that of a papyrologist, and his subsequent work has followed the same line.

The outstanding development of recent years has been the gradual publication of the Dura papyri, originally in tantalising frggments in the Preliminary Reports, and more
fully, in some cases, in more recent publications. The Final Report, which is in the course of preparation, will mark a most important advance. Apart from Fink, the major contributors in this particular field have been E. T. Silk and C. B. Welles ${ }^{17 \text {, who were responsible for most of the }}$ preliminary reports, and J. F: Gilliam, who has recently made a more detailed examination of certain of the documents. 18 Mention, too, should be made of the Michigan Papyri, especially volumes III, edited by J. G. Winter, VII, which is entirely devoted to Latin papyri and contains some very important documents, edited by H. A. Sanders, with contributions by J. E. Dunlap, and VIII, by H. C. Youtie and J. G. Winter, which contains some very interesting soldiers' letters. Other publications of note have been made by Leiv Amundsen, especially P. Oslo III 122, E. G. Turner ${ }^{19}$, Medea Norsa ${ }^{20}$, and A. Calderini ${ }^{21}$. The first publication of a new series, The Antinoopolis Papyri, Part I, edited by C. H. Roberts, (London, 1950), contains an interesting fragment, no.41, which the editor describes as perhaps a pridianum. Of great value, also is the comprehensive list of Latin documents and manuscripts recently published by Marichal ${ }^{22}$. Finally, the new edition of the Fontes Iuris Romani Anteiustiniani, especially the third part, Negotia, edited by V. ArangioRuiz, has made many documents available in a more accessible
form. 23
Not all military documents, however, are papyri. The other media, stone, bronze, waxed (and sometimes unwaxed) tablets, and parchment, all have their importance. Those on stone, inscriptions proper, sometimes, as in the case of lists of discharged soldiers ${ }^{24}$, are valuable for their indirect evidence, because they must have been prepared from records made on some less permanent material, probably papyrus. Bronze is best known from the diplomata militaria, now collected in CII XVI. Of these more than 160 survive. 25 . Waxed tablets were used mainly for private documents, wills, leases, sales, loans and birth certificates, but have a special importance in that, like the bronze diplomata, their distribution is not confined to Egypt and Syria. Parchment seems to have been used buit rarely - at least, only one parchment is of military importance for our period, that published by Cumont from Dura. ${ }^{26}$

The aim and purpose of the present study is to reconstruct, so far as is possible from the extant material, the procedure followed in the orderly-rooms and offices of the Roman army, and its variation or elaboration from the foundation of the Empire to the accession of Diocletian. The starting-point has been chosen because before that date the army was not properiy secured upon a permanent
basis with a definite establishment, and the terminus ante quem because the reorganization of both the civil and the military administration of the empire at that period was so far-reaching that to continue further would require a completely fresh start under a different plan. This project will involve an examination of the personnel of the various officia, and their functions, and the documents they issued and received.

## CHAPTER I.

## THE ORDERUY-ROCM STAFFS.

To the historian of the Romany army the importance of the military documents lies not so much in their palaeography and format - important though these are - as in the light they throw upon the life of the people mentioned in them, and upon their writers and recipients. In this respect the evidence of the papyri acts as a valuable check upon studies based purely on inscriptions. Inscriptions are normally laudatory in origin, and present a carefully selected picture; the papyri for the most part were not written with an eye to the reactions of posterity, but simply to deal with the matter in hand. . Apollinaris' naive gratification because since his promotion to principalis he had no longer to cut stones like the rest of the men, but could now move about doing nothing 27 , is not the sort of remark that would ever be inscribed upon a memorial tablet; but is none the less valuable as revealing a presumably common attitude of mind. on the other hand, the papyri have the drawback from the prosopographical point of view that there is often an inordinate number of words to a bare minimum of matter, and they labour under the further disadvantage that there is as yet no satisfactory corpus. 28

Domaszewski's famous study, "Die Rangordnung des rbmischen Heeres" (Bonn, 1908), remains the most complete and authoritative work on Roman military organization, in
spite of modifications in points of detail by subsequent writers. In its very completeness, however, the chief weakness of this work consists. Perhaps because of his pronounced bias egainst the emperor Septimius Severus and his belief in the 'barbarization' of the army in the third century ${ }^{29}$, he tends to assume that the complex organization which he records existed before that date in full perfection, and then gradually decayed. This attitude may be clearly discerned in a note of his on CIL III 8047 (Die Rang., p.43): "Nach C.III 8047 scheint es, dass unter den Philippi der Pesserarius nicht mehr bestand. Die schriftliche Ausgabe der Befehle war für ein Heer, in dem Offiziere wie Soldaten gleichmessig Analphabeten waren und die Kenntnis der lateinischen Dienstsprache ganz erlosch, bedeutungslos geworden". How untrue the latter part of this statement is, 30 is shown by such documents as Dura Papyrus inv. 3 verso, a record of cavalry horses of AD. 251 or shortily thereaf'ter, which its editor describes as 'drawn up by a: company clerk in a frontier post'. 31 Moreover, that Domaszewski was mistaken, or at least guilty of considerable exaggeration, seems certain in the light of later history. The military organization of Diocletian was bureaucratic in the extreme. That this did not merely correspond to the personal inclinations of the emperor
is proved by its continuance afterwards. We have the conftirmation of Vegetius, who, writing in an age of collapse when illiteracy had become much more common but stili by no means universal, urged the deliferate recruitment of skilled clerks. It is significant that he uses the present tense.

Vegetius, de re mil., II, I9: Sea quoniam in legionibus plures scnolae sunt, quae literatos milites quaerunt, ab his, qui tirones probant, in ominibus quidem staturae magnitudinem, corporis robur, alacritatem animi, convenit explorari: sed in quibusdam notarum peritia, calculandi computandique usus eligitur. Totius enim legionis ratio, sive obsequiorum, sive militarium numerorum, sive pecuniae quotidie adscribitur actis, maiore prope diligentia. quam res annonaria vel civilis polyptychis adnotatur.

Domaszewski, of course, was not alone in his view. As Denis Van Berchem pointed out 32 , it was heid for a long time that there was a radical distinction between the Eariy and the Late Empire: the first, created by Augustus, faded away in the anarchy of the third century; the second was the work of Diocletian. Modern studies have proved this dichotomy to be invalid: Grosse has traced the origins of the military system of Diocletian and

Constantine to the innovations of Septinius Severus, Gallienus and Aurelian. 33 Van Berchem himself finds the origin of the annona militaris in the attempt of Septimius Severus to offset the effects of the late second century inflation. 34 The third century now. appears not only as an age of crisis and collapse, but also as the medium in which institutions which flourished in the more settled conditions of the early fourth century, were first tried and tested. It is not unreasonable to suppose that bureaucracy within the army was a gradual growth, which began with Augustus, was developed by Hadrian, extended by Severus, and completed by Diocletian and his successors. If we may trust the biographer of Severus Alexander, that emperor also must have given no little encouragement to the paper-minded by his fondness for reading military returns.
S.H.A., Alex., 21: Milites suos sic ubique scivit, ut in cubiculo haberet breves et numerum et tempora militantum <indicantes add. Casaubon, continentes add. Kellerbeuer $\rangle$ semperque, cum solus esset, et rationes eorum et numerum et dignitates et stipendia recenseret, ut esset ad omnia instructissimus. denique cum inter militares aliquid ageretur, multorum dicebat.et nomina. de provehendis etiam sibi adnotabat et perlegebat cuncta pittacia et
sic faciebat diebus etiam pariter adnotatis et quis quo esset insinuante promotes. 35

Any attempt, however, to show how the organization of the official became gradually more complex during the first three centuries A.D., could hardly be successful as yet if based upon the papyri alone. By some freak of survival too high a proportion belongs to the second century. From Egypt we have only a few military documents earlier than the reign of Domitian, or later than the middle of the third century. 36 Most of those from Dora are of the early third century. The papyri, therefore, seem to present a more static picture than we are justified in assuming existed. On the other hand, an examination of the diplomata in CHI XVI shows how conservative the Roman military style really was. 37 Between Dipl.1., issued during the reign of Claudius in A.D.52, and Dipl. 156 - the last diploma in this collection, no. 157, is too fragmentary for a useful comparison - issued under Diocletian in A.D. 298, the differences in form and phraseology are much less than one would naturally expect after two and a half centuries. The Table of Brigetio of A.D. 311, though not strictly comparable, shows a far more pronounced difference of style. 38

Domaszewski's account of the official, therefore, should be accepted with some reserve, as showing a
completeness and complexity that was perhaps never attained at any one time. 39 In any case, the official establishment would not infrequently be considerably in excess of the actual strength, whereas only occasionally, and for short periods, would a unit be overstrength. In this connection, it may be significant that no more than 40 men were available for duty in a century on one day in A.D. 90 in Egypt, and of these only 31 were available for training. 40

It may be advantageous to examine the orderly-room staffs in the reverse order from that adopted by Domaszewski, i.e. from the bottom upwards. In this way we shall proceed from the simple to the complex. The lowest rung of the bureaucratic ladder - the company office - is not treated by Domaszewski, who confines himself to the officia of tribunes and above, 41 but is well illustrated by a Geneva papyrus, which attests for a single century both a librarius and a cerarius. 42 The former was probably the senior of the two, though both would be technically immunes, 43 and on the lowest of the three grades of pay44. The ranks of immunis, librarius, and cerarius, can hardly bear differentiation of function, except that immunis is frequently used in a non-clerical connection. Tarruntenus Paternus in a fine catalogue gives an almost complete list of immunes.

Dig., 50,6.7: Quibusdam aliquam vacationem munerum graviorum condicio tribuit, ut sunt mensores, optio valetudinarii, medici, capsarii, et artifices et qui fossam faciunt, veterinarii, architectus, gubernatores, naupegi, ballistarii, specularii, fabri, sagittarii, aerarii, bucularum structores, carpentarii, scandularii, gladiatores, aquilices, tubarii, cornuarii, arcuarii, plumbarii, ferrarii, lapidarii, et hi qui calcem cocunt, et qui silvam infindunt, qui carbonem caedunt ac torrent. in eodem numero haberi solent lani, venatores, victimarii, et optio fabricae, et qui aegris praesto sunt, librarii quoque qui docere possint, et horreorum librarii, et librarii depositorum, et librarii caducorm, et adiutores corniculariorum, et stratores, et polliones, et custodes armorum, et praeco, et bucinator. .hi igitur omnes inter immunes fabibentur.

In the century, then, the chief clerk, with the rank of librarius, would be responsible for documentation, and may have had an assistant with the rank of cerarius or immunis. It was probably the libraril who recorded in the first instance the deposits made by individuals, either from donatives or pay, 45 in spite of Vegetius, who ascribes this function to the signiferi.

Vegetius, II,20: Illud vero ab antiquis divinitus institutum est, ut ex donativo, quod milites consequuntur, dimidia pars sequestraretur apud signa et ibidem ipsis militibus servaretur, ne per luxum aut inanium rerum comparationem ab contubernalibus posset absumi. plerique enim homines et praecipue pauperes tantum erogant quantum habere potuerint. sepositio autem ista pecuniae primum ipsis contubernalibus docetur adcommoda; nam cum publica sustententur annona, ex omnibus donativis augetur eorum pro medietate castrense peculium. miles deinde qui sumptus: suos scit apud signa depositos, de deserendo ninil cogitat, magis diligit signa, pro iliis in acie fortius dimicat, more humani ingenii, ut pro illis habeat maximam curam, in quibus suam videt positam esse substantiam. denique decem folles, hoc est decem sacci, per singulas cohortes ponebantur, in quibus haec ratio condebatur. addebatur etiam saccus undecimus, in quem tota legio particulam aliquam conferebat, sepulturae scilicet causa, ut si quis ex contubernalibus defecisset, de illo undecimo sacco ad sepulturam ipsius promeretur expensa. haec ratio apud signiferos (ut nunc dicunt) in cophino servabatur. et ideo signiferi non solum fideles, sed etiam litterati homines diligebantur, qui et servare deposita
et scirent singulis reddere rationem.
Vegetius clearly represents the signiferi as
operating at cohort level - decem folles, hoc est decem sacci, per singulas cohortes ponebantur - whereas modern opinion seems divided between those who posit a signum, and hence a signifer, for each century, and those who believe that there was a signum to each maniple oniy. The latter view was maintained by $A$. von Premerstein, 46 following Domaszewski, and by H.M.D. Parker, 47 who denied that the cohort had a standard of its own, and held that the manipular signa survived in the post-Marian army. This belief was shared by Durry 48 in respect of the praetorian guard. On the other hand, as Marichai 49 points out, P.S.I. IX 1063 attests six signiferi for a cohors guingenaria, i.e. one to each century. We need not, however, assume that the legions and the auxilia had the same establishment of signiferi to the cohort. On the whole it seems probable that there was a signifer to each century. What, then, are we to make of the Vegetian system of the decem folles? Did he mean that one particular signifier was the chief signifer of the cohort, with the other five subordinate to him and responsible for the safekeeping of the deposita, or are we to imagine that each century had its own signum, but that in time of peace they were all brigaded at cohort level, and the
deposita, therefore, were kept in a cohort chest? Both explanations are inconsistent with the evidence of P.S.I. IX 1063. Perhaps an examination of those documents which concern soldiers' pay accounts may assist us in finding a solution.

Individual pay accounts are found on four papyri, two of which, P.Gen. lat. 1 recto, part 1, and P.Gen: lat. 4, are concerned with legionaries, 50 whereas the others, P.Berlin inv. 6866 and P.Fay. 105, deal with auxiliaries. 51 P.Gen. lat. 4 contains one man's accounts only, and does not concern us here; P.Gen. lat 1 recto, part 1, which is also arranged under individual headings, is too short for us to determine on internal evidence only the size of the unit to which it refers, but certain of the other parts of the same archives may confidently be assigned to a century. Besides the parade-state to which reference has already been made, 52 we have a duty roster which specifies the individual tasks of 36 men. 53 In view of what we know of the unit's strength, we may be certain that this is the duty roster of a century. The other sections of this papyrus, a record of the employment of individual soldiers on detachment or special duty, 54 and a document with consular dating, followed by a list of four men containing tria nomina, filiation, tribe, and origin, 55 are quite consistent with the view that
these archives as a whole are those of a single century. Definite conclusions may be made, also, as to the origin of the two documents which concern auxiliaries. P.Fay. 105 is the consolidated account of an ala, arranged by turmae; 56 it must have been based upon a series of personal accounts like P.Berlin 6866, which Marichel has justifiably concluded to be those of a century. 57 We may conclude, therefore, on the basis of the papyrological evidence, that individual pay accounts were kept in extenso at century level, and in consolidated form in the tabularium principis. 58 it may be noted that this procedure is not dissimilar to that adopted in the British Army today. We should naturally expect the company clerks, the libraril, to be responsible for the keeping of the records.. It may well be that they were not responsible for the safekeeping of the money, but that this was entrusted to the signiferi for them to keep apud signa. The most probable procedure, and the one least inconsistent with either the literary or the documentary evidence, is that the signa were normally brigaded at formation level, under the charge of the princeps in the case of a legion, and of the centurio princeps or decurio princeps in the case of an auxiliary unit, and that the duty of guarding them was assigned to the signiferi in rotation. With the signa there may have
been a chest (cophinus) which was guarded in the same manner. The interpretation of P.S.I. IX 1063, then, is that the draft conducting officer, in this case the centurio princeps, handed over to the signifer of each century the total sum standing to the credit of the recruits assigned to that century, and obtained from each a receipt, but that he would deliver to the librarius of each century a statement of the personal account of each of the recruits posted to that century. It is not likely that any receipt would be required for this. Further, this function of the librarii may well account for the term librarii depositorum used by Tarruntenus Paternus in the passage from the Digest cited above. 59 Since the practice had changed long before Vegetius' day, when it was customary for soldiers to carry their savings in their belts and to trust no bank, 60 he may be pardoned for his slight confusion. In the third century, at least, certain inscriptions seem to show that in the auxilia and the numeri the deposited funds were placed in a quaestura. ${ }^{61}$ It is possible that a certain amount of interest was earned, but it is more probable that the phrase ex usuris used in an inscription of the time of Severus Alexander ${ }^{62}$ means 'from profits' generally. All military units require some sort of regimental fund.

There appears to have been no officium at/egionary level. The cohort, in fact, was essentiaily a tacticail,
not an administrative unit. It is true that in the second and third centuries, when vexillations were commonly 500 or 4000 strong, it may have been convenient to send entire cohorts, but such officia as the vexillations possessed were ad hoc formations, and in no way reflected any permanent f'eature of legionary organization.

It was to the tabularium principis that the century made its returns. As the name implies, it was under the command of the princeps, a centurion of the first cohort subordinate in rank only to the primipilus. 63 The establishment of the tabularium is given by Domaszewski (loc.cit.) as consisting of the optiones of the first cohort and certain librarii or adiutores. The latter are two in number in the case of legio III Augusta. It is probable that the fịst cohort, which was double the size of the others, ${ }^{65}$ owed its greater numbers to the inclusion within its establishment of all the administrative personnel attached to legionary headquarters. In this respect it would be paralleled by the $H Q$ company of a battalion in the British Army. Except on active service, when, no doubt, some of the administrative staff $f$ remained in camp, it could hardly function as a normal cohort, and this perhaps explains why it was possible for the optiones, who in other cohorts would be kept fully
occupied within their own centuries, to be spared for purely administrative work.

The duties of the princeps are conveniently summarized by Vegetius ( 11,8 ): (princeps) ad quem in legione prope omnia quae ordinanda sunt pertinent. In other words, he had full responsibility for the daily routine and organization within the legion. It is perhaps to the work of the tabularium principis that Vegetius refers in 11, 19:

Quotidianas etiam in pace vigilias, item excubitum, sive agrarias, de omnibus centuriis et contuberniis vicissim milites faciunt; ut ne quis contra iustitiam praegravetur, aut alicui praestetur immunitas, nomina eorum qui vices suas fecerunt brevious inseruntur. quando quis commeatum acceperit vel quot dierum, adnotatur in brevibus.

The basis of such records would be century parade-states similar to P.Gen.lat 1 verso, forwarded to the tabularium for consolidation. 66 At first sight it might appear that this arrangement would leave the primipilus free to concentrate on being technical adviser to the legatus legionis, and responsible for the training programne within the legion. This division of responsibility would roughly correspond to the distinction between ' $G$ ' and ' $A$ ' branches on British army staffs. Our ' $Q$ ' branch, that is, the
supply and maintenance of equipment and materials, would then be the responsibility of the praefectus castrorum. But though Vegetius provides us with a reasonably complete catalogue of his duties (II,10) it is probable that his definition applies to the pre-Claudian situation only, and is not really indicative of the position afterwards. The primipilus, in fact, was essentially the chief centurion, and remained in charge of his century: the praefectus castrorum, usually a more experienced officer, was in a better position to advise the legate on technical matters. ${ }^{6}$ Vegetius' definition is, however, well worth repetition: Erat etiam castrorum praefectus, licet inferior dignitaite, occupatus tamen non mediocribus causis: ad quem castrorum positio, valli et fossae aestimatio pertinebat. tabernacila vel casae militum cum impedimentis omnibus nutu ipsius curabantur. praeterea aegri contubernales et medici, a quibus curabantur, expensae etiam ad eius industriam pertinebant. vehicula, sagmarii, nec non etiam ferramenta quibus materies ferratur vel caeditur, quibus aperiuntur fossae, contexitur vallum, aquae ductus item ligna. vel stramina, arietes, onagri, ballistae, ceteraque genera tormentorum ne deessent aliquando, procurabat. is post longam probatamque militiam peritissimus omnium legebatur: ut recte doceret alios quod ipse
cum laude fecisset.
It would appear that Domaszewski is not justified in ascribing to the praefectus castrorum the keeping of pay accounts also; 68 this duty is notably absent from Vegetius' list. The officium rationum mentioned.in CIL III 1099 is not necessarily to be equated with the officium of the praefectus castrorum. 69 Moreover, Vegetius' remark 'praeterea aegri contubernales et medici, a quibus curabantur, expensae etiam ad eius industriam pertinebant', surely means that the costs of the valetudinarium, which in any case was under his supervision, were the responsibility of the praefectus, not that he had any general concern for financial matters. 70

Domaszewski bases his views of the establishment of the other main legionary bureau, the tabularium legionis, mainly upon the inscriptions from Lambaesis. 71 These must be used with some reserve, and are possibly not representative of the army as a whole, since the army in Africa was in a peculiar administrative position. As Domaszewski himself writes, (op.cit.p.73f) "Nur die Stellung des Legatus legionis III Augustae als Statthalter hat dazu geführt, in Lambaesis die cura tabularii legionis dem praefectus castrorum zu Übertragen, was die Zutejiung des cornicularius legati in sein Officium nach sich zog". He makes its head a cornicularius, supported by an actarius,
librarij and exacti. ${ }^{72}$. This establishment we may accept as probably universal, with the proviso that the actarius does not seem to be attested in the legions before the time of Severus. 73 But for the existence of this rank within the auxilia we have the evidence of BGU III 741, a document of A.D. 143-144, which contains the phrase mopa Noukfou
 moditâr 'Pupaíav Éкatortaplias 'Amolivapiou . 74 It may well be that the rank originated in the auxilia, and became customary in the legions at a later date. The creation of the special post of actarius is significant of the gradual separation of the administrative staff from the rest of the army, which gathered momentum during the third century and was completed by the fourth, when, as Seeck points out, the actarii were purely civil officials? 75 To the period of transition belongs also the canaliclarius, a rank attested by a limited number of inscriptions of the third century. 76 Whatever the origin of this title, 77 there can be no doubt that the duties of its holder were in every way identical with those of the cornicularius, which rank appears to have been temporarily replaced. 78

The tabularium legionis, therefore, would normally be under a cornicularius, assisted in the third century by a semi-civilian actarius. If our suggested division
of duties between the praefectus castrorum and the princeps is correct, 79 this cornicularius would be directly responsible to the praefectus.

Besides the orderly-room and clerical statfs ailready mentioned, each of the officers within the legion, as well as those serving on higher formations, had his complement of beneficiarij. Thatethese stood in a close relation to the officer on whose stat'f they served is shown by Vegetius (II,7): beneficiarii ab eo appellati quod promoivebantur beneficio tribuni. Domaszewski believes that the number of appointments was strictly proportionate to the seniority of the officer concerned, and expresses this as a general principle: "Die Zahl dieser Principales in jedem Stabe bestinmt sich nach dem Range des Offiziers". 80 The tribunus laticlavius possessed a cornicularius also, at least from the time of Severus. 81 Or perhaps we should rather assume that such a laticlavius was acting conmander of the legion. 82 There remains the problem of the tribunus semestris. For this tribune alone a commentariensis is attested, and it would appear that Domaszewski reconciled this quasi-magisterial position on the governor's staff with the command of the legionary cavalry, which he also attributed to this officer on the somewhat flimsy evidence of Statius. ${ }^{84}$

From the legion the 'usuai channels' led to the head-
quarters of the provincial governor. His staff consisted of both military and civilian elements, and even the military section possessed certain non-military functions. Most provincial governors had three commentarienses on their staffis, 85 who ranked immediately below the cornicularii: the commentarienses were the officials responsible for the administrative work in legal cases involving the governor's jurisdiction. In CIL II 4179 ( $=$ ILS 2384), from Tarraco, we find even a commentariensis ab actis civilibus. The same man, L. Gargilius Rufus, had previously served as a speculator in legio VII Gemina. 86 Premerstein 87 points out that a commentariensis had in any case nothing to do with the governor's military functions, and explains the addition of the attribute ab actis civilibus as distinguishing the official responsible for civil suits from the one responsible for criminal cases. If we confine ourselves to the military powers of the officers on the governor's staff, we shall see that the appointments resemble very closely those of a legion, but naturally on a more complex and elaborate scale. The governor normally possesses no less than three cornicularii, and the officium itself is called the officium corniculariorum. 88 Yet here, even more than in the case of the legion, we may feel chary of accepting the whole of Domaszewski's detailed scheme. The greater part of the
evidence belongs to the period following the Severan reorganization. 89 Beneath the cormicularii and commentarienses rank the speculatores, who are peculiar to the staffs of officers with the jus gladii. 90 They were responsible for executions. ${ }^{91}$ Other ranks were the beneficiarii; 92 frumentarii, 93 stratores, 94 singulares, 95 and various kinds of immunes, including librarii, exacti, exceptores, and even interpreters. 96 We find most of these officials stationed even in provinces where no legionary units were serving. The proconsul of Africa, for instance, possessed a military officium formed from men seconded from legio III Augusta at Lambaesis in Numidia. ${ }^{97}$ Similar officia are found in Dalmatia and other non-legionary provinces. 98

At the head of the governor's staff Domaszewski placed the princeps praetorii. 99 He used as evidence IGRR III
 [fyeporias] Ilouliou Earoupreivou [mperßeuroû [ $\quad$ Eßaroaut] ávriorparíyou. The objection of Picard and Bonnet 400 that this depends largely on restoration, and does not support the vital word jyepovins is now refuted by Lopuszanski, 101 who points out that Domaszewski's restor-

 $k T \lambda$. and is supported by IGRR I, 629: "piyki $\begin{gathered}\text { ó申ךкiou }\end{gathered}$
\{ytMóvos . He continues: "Le titre de princeps praetorii devine par Domaszewski a ete decouvert dans une inscription d'Algerie, A.E., 1933, 57". ${ }^{102}$

Other centurions placed by Domaszewski on the governor's staff are the centurio strator ${ }^{103}$ and those responsible for the equites singulares. ${ }^{104}$ In CIL XIII 8203 (Cologne), a dated inscription of A.D. 164, the pedites singulares as well as the stratores are under the command of M.Verecundius Simplex, (centurio) leg(ionis) XXX Ulp(iae). This proves also that those centurions who were seconded for duty on the staff still remained on the legionary establishment. Domaszewski ${ }^{105}$ believes that this is the explanation of CLL VIII 18065 (aILS 2452) which attests 7 centurions. in the first cohort, 8 in the sixth, 7 in the eighth, and XIII 680 which shows 11 centurions in the first cohort alone. Of these inscriptions, the first belongs to the time of Marcus Aurelius, the second to the age of Severus. The additional centurions, Domaszewski maintains, served on the governor's staff: He draws the conclusion that Severus granted to all centurions of the staff the higher pay and rank of primi ordines. ${ }^{106}$ This may or may not. be true, but Brunt 107 has shown that the basis of this nypothesis, that when Severus increased legionary pay 108 he did not make any corresponding increase in the pay of the centurions, but only increased the number of primi
ordines so as to offer better prospects of promotion, lacks evidence and is in itself improbable. So far as the earlier inscription is concerned, Domeszewski gives no explanation why the centurions on the staff should have been retained on the rolls of particular cohorts, and, if so, on what principle. ${ }^{109}$ There could hardly have been more than six centuries to each cohort, or a plurality of centurions within the century. It was Mommsen's view that the additional centurions were on the point of leaving the legion and had already been replaced. ${ }^{110}$ While we may admire a military organisation which could fill vacancies before they became effective, it would seem essential, as Picard and Bonnet point out, ${ }^{111}$ for some indication to be given as to which centurions were leaving and which remaining. There is no such indication, except that in cohort IIII we find M. Antonius Clemens mis (sus?). If this expansion is correct, we may consider this requirement satisfied, but in the wrong instance. For this is in a cohort which is not over-strength. Moreover, in the ninth cohort there are only five centurions attested. Therefore, unless we are to assume that the replacements were sent to the wrong cohorts, we have to deny Mommsen's view. : The most reasonable solution would appear to be that of Cagnat, followed by Picard and Bonnet, 112 that the extra centurions were
seconded for speciei duties and remained only nominalily on the strength of the legion, in which they retained their substantive rank and seniority at the level of their previous appointment (e.g. sextus hastatus prior). The other text usually held to attest additional centurions, CLL XIII 680d, is, as Picard and Bonnet rightiy axtirm, 113 too mutilated to be satistactory evidence. On the basis of this hypothesis we can now expiain CIL VI 1110 (Rome), a third century inscription from the castra peregrinorum, which mentions both centuriones deputati and centuriones supermmerarii: it is probable that the former were outside the legionary establishment whereas the latter remained on the strength. 114

We have now completed our review of the ladder of promotion from the humblest librarius to the princeps praetorii, i.e. from the company clerk to the chief of staf'f of the army commander. The more elaborate officia have all been found to contain within themselves the simple basic organisation of cornicularius (and later actarius), beneficiarii, and librarii. But so far our inquiry has concerned legionaries only: if we examine the auxilia we shall find a similar situation. 115

The auxiliary cohort did not admit of so uniform an organization as the legion, 116 but certain general principles. may be formulated. These principles held also for the
alae, 117 and even, with modifications, for the numeri. 118 The officium of the praefectus alae, praefectus cohortis, or praepositus numeri, was headed invariably by a cornicularius. ${ }^{119}$ He was supported, certainly from the middle of the second century, and possibly earlier, by an actarius. ${ }^{120}$ Beneficiarij ${ }^{121}$ and librarii ${ }^{122}$ are attested for subordinate positions in the auxilia, and librarii ${ }^{123}$ in the numeri. The equivalent of the legionary tabularium principis was commanded in the auxiliary cohort by the decurio princeps ${ }^{124}$ or the centurio princeps, ${ }^{125}$ and in the ala by the decurio princeps. ${ }^{126}$ It would be reasonable to assume that in the numeri a centurion or decurion performed the same function.

The officia in the other military units, therefore, were in principle similar to those found in the legions. How attractive a career on the staff was to the more literate recruit may be judged from the correspondence of Apollinaris. 127 In A.D. 107 he joined as a recruit a legion (unmentioned, but probably VI Ferrata ${ }^{128}$ ) at Bostra, and within a very short time was anxious to transfer to the clerical staff. The hard manual labour involved in the construction of roads and fortifications in the new province of Arabia no doubt prompted his anxiety. 129 As Youtie and Winter translate ${ }^{\mathrm{T} 30}$ : "Indeed I asked Claudius Severus the consularis. ${ }^{131}$ to make me a secretary on his own staff
and he said, 'There is no vacancy, but meanwhile I shall make you a secretary of the legion with hopes of advancement'. 132 With this assignment, therefore, I went from the consularis to the cornicularius:" " Whether he did obtain a further promotion or not, is not clear. In another letter written a month earlier, he describes himself as a principalis, ${ }^{133}$ which according to Domaszewski's hypothesis wuld strictly refer to the taktische Chargen and the higher administrative posts to which they led. 134 Domaszewski ranks the librarius consularis in the same pay grade as the taktische Chargen and the librarius legionis in the grade below. 135 Apollinaris, however, was probably describing his new appointment by the most flattering term, and need not be taken too seriously. It seem improbable, at any rate, that if he had been promoted to be librarius consularis he would have failed to mention the fact. In general, however, it would be natural for the higher ranks of the clerical and administrative staff to be filled by promotions from the lower grades.136. The logical consequence was the development in the third century of a purely administrative career, which culminated in the separation of the administrative service, the officiales, from the 'military" branch of the axmy. 137.

## CHAPTER II.

Let us now consider the documentation of the individual soldier from the time when he first considers enlistment, through the several vicissitudes of his it auxiliary, clans:arius or praetorian, military career, to that distant day when,/ now a veteran with a diploma in bronze, he settles down once more into civil life, not without a tinge of nostalgia for the days that are pest.

If he is wise, he will first arm himself with a letter of introduction. This he will most easily obtain from one of his father's friends who has seen service himself in the type of unit he desires to join. . In the Roman world no less than in the modern, letters of recormendation had considerable value at all levels of society and in ell walks of life. We have numerous examples in the surviving letters of Cicero and Pliny: Pliny, in particular, was always prepared to use his not inconsiderable influence in procuring equestrian appointments for his friends and acquaintances. 138 We may be sure that so eminently respectable a man would not lightly countenance any requests which he thought improper or unconventional. In the lower ranks of the army, also, the use of testimonials and letters of introduction was universal. This we may gather from the general tone of a letter from a serving sailor to his father (P.Mich. VIII 468), a letter of the early second-century in which the writer expresses
in semi-literate Latin his dissatisfaction with service in the fleet, and a desire to transfer to a cohort, and declares that letters of recomendation are useless unless a man helps himself.

35 et si deus
volueret spero me frugaiiter
[v]iciturum et in cohortem
[tra]nsferri. hic a[ut]em sene aer [e]
[ ni ] hil fiet neque epistulae com-
40 mandaticiae nihil vai〈eb〉unt nesi
si qui sibi aiutaveret.
"And if the god wills, I hope to live economically, and be transferred to a cohort. Here nothing will be dore without money, and letters of recommendation will have no value uniess a man helps himself".

How such a letter of recommendation might read we may see from a surviving example, a second-century letter to a tribunus militum legionis from his beneficiarius. P. Oxy. I $32^{139}$

I [u] lio Domitio tribuno mil (itum) Leg(ionis)
aì - Aurel(io) Archelao benef (iciario)
suo Salutem
iam tibi et pristine commen-
5 daueram Theonem amicum
meum et $\bmod \left[\begin{array}{ll}0 & q u\end{array}\right]$ oque peto
domine ut eum ant $\langle e\rangle$ oculos habeas tanquam • me - est enim - tales omo ut ametur a te reliquit enim su[0] a [e]t rem suam et actum et me secutus est - et per omnia me se [c]umum fecit - et ideo peto a te - ut habeat intr[0]itum • at te - ut omnia tibi referere potest $\cdot$ de actu[m] nostrum • quitquit $m[e d] i x i t ~ \cdot ~[i] 1-$ [Iu]t et fact [um ..........] . [...] amaui $h[0] \min [e] m[\ldots . . . . . .$. $m[\ldots .$.$] set de .[.........]$ $a[\ldots . .]^{\prime}$. dominin $\left.e . . . . . ..\right]$ $m[\ldots . ..] \ldots$ id es $[t \ldots . . .$. $\mathrm{c}[\ldots . . . .]^{\mathrm{d}}$ hab [.............] $]$ h[.........] et tor.t..[...]ico [............] illum - ut [...]upse [.....] intercessoris $u[t i] l l u m$ co[mmendarem] estote felicissi[mi domine mul-] tis annis cum [tuis omnibus] ben:[e agentes.
hanc epistulam ant〈e〉ocu-
los habeto domine puta[t]o

> me tecum loqui
uale.
verso 35 Ioulio Domitio tribuno militum leg(ionis) $a b{ }^{\bullet}$ Aurelio Archelao b(eneficiario).

This letter was in Latin, as such letters usually are, even when, as in this instance, the writer's command of the language is by no means certain, because Latin was essentially the military language, and the use of it was felt to give a letter an air of authority.

Armed, therefore, with his letter of introduction, the would-be soldier had them to present himself for his probatio (ÉníкpiबIs), in Egypt an examination held on the authority of the Prefect, in other provinces presumably by order of the governor. This $\in$ fíxpiris is to be distinquished from other examinations of the same title held in Egypt, such as that held at the age of fourteen to determine a boy's right to memberiship of the gymnasium-class, or the Éníkpisis of veterans. 140 This probatio probably concerned itself with the determination of the legal status of the applicant, and hence his eligibility for service, and in addition contained a medical examination. The legions, the auxilia, and the fleets had different standards: it was necessary to discover for which branch of the services each applicant was fitted and qualified. The legions required as qualification for entrance the
possession of full Roman citizenship; exceptions could be made, however, in the case of some of legionaries borncastris, and, therefore, technically illegitimate. The auxiliary recruit, in Egypt, had to prove membership of the Graeco-Egyptian class of society: the native Egyptian could be accepted only by the fleets of Misenum and Ravenna. The physical standards required are not definitely known for this period, though a standard for height is given in the Epitome rel militaris: that this was more in the nature of a pious hope than a hard and fast regulation is clear from the context. ${ }^{\uparrow 41}$ We know, however, of one applicant who was rejected, or perhaps found unfit after provisional acceptance. A copy of his medical certificate survives, dated A.D. 52.142
P. Oxy.I 39
'Avríypcupor sn rodúsews
ह́tous i $\beta$ Tißepion Khrudíon
Kaísкpos $\sum$ eßartoî Гepparikioù

 Karítwr[os] tout jyemóvos
zu申оге́p wv.
Tpú申wr $\Delta$ iovnoíon yépdios, Emo $\langle k \epsilon\rangle$ Xu pévos od 'you $\beta \lambda \epsilon$ 'mas,


$$
\begin{aligned}
& \text { En } n<\rho^{\prime} i \theta(\eta) \text { er } A_{\lambda} \in \xi_{\alpha r \delta} \delta\left(\rho \epsilon^{\prime} \underline{q}\right) \text {. } \\
& \in \pi \in \operatorname{kpi} i \theta(\eta) \text { ध́r } A \lambda \in \xi \alpha r \delta(p \in i \alpha) \text {. }
\end{aligned}
$$

$$
\begin{aligned}
& \text { є́r } A \lambda \epsilon \xi_{\alpha} r \delta \rho \in i ́ q .
\end{aligned}
$$

The editors are no longer of the opinion that this document refers to rejection from the army, and prefer to regard it, with Wessely, as referring to a discharge from a liturgy of some kind. 143 This can be no more than surmise. We may be fairly certain, however, that whether this particular certificate represents a discharge from military service or not, a genuine army discharge after medical examination must have given rise to a very similar document. It is noteworthy that this certificate was issued in Greek, not Latin, because it was intended for production before the civil authorities in Egypt, where Greek was the official language at lower civil service levels. 444 The document we have is not the original, but a copy: the original would be retained in the prefect's office, and a copy only given to Tryphon. The editors are doubtless right in ascribing the repetition of the phrase $\in \pi \in \operatorname{kgi} \theta(\eta)$ ir $A \lambda \in \xi \alpha r \delta\left(\rho \epsilon^{\prime} \underline{q}\right)$ and the slight
 different officials in the original document of which this is a copy.

This brings us to a cardinal principle of Roman
military bookkeeping, and, in fact, of all documentation everywhere. Each letter or certificate issued had to be made at least in duplicate, and a copy retained. The equivalent of the modern file was a roll of original letters or copies thereof:' pasted together, and could be described as a liber litterarum missarum (or acceptarum, as the case may be). An example is P.Flor. II 278.145 Similarly, P.Hamb. 139 consists of receipts for fodder allowance written by, or on behalf of, troopers of the ala Gallica. 146

Once he had passed his probatio the recruit would receive an advance of pay and be sent to a unit. We have two examples of documents which were written'in such circumstances. The first is from the Prefect of Egypt to the commanding officer of the Third Cohort of the Ituraeans, and is dated by the sixth regnal year of Trajan to A.D. 103. (This essentially Greek method of dating, instiead of the normal Roman dating by consuls, can be seen also in P. Aberd. 61, a Latin receipt quite in the Greek style). 147
P. OXy. VII $1022^{148}$

## ce.

$\left\langle\mathrm{m}^{2}\right\rangle$. [C.] Minucius Italu[s c]elsiano suo
sal $[u]$ tem.
Tirones sexs probatos a me in

5 con(orte) cui praees in nume-
'ros referri iube ex XI
kalendas Martias: nomi-
na eorum et icon[i]smos
huic epistulae subieci.
10 Vale, frater karissim[e].
C. Veturium Gemellum
annor (um) XXI sine $i$ (conismo),
C. Longinum Priscum
annor(um) XXII, $i(c o n i s m u s)$ supercil(io)sini(stro),
1.5 . C. Iulium Maximum ann(orum) XXV,
sine i(conismo),

- Lucium Secundum
ann(orum) XX sine $i$ (conismo),
C. Iulium Saturninum
$20 \cdot \operatorname{ann}(o r u m)$ XXIII i(conismus) manu sinistr(a),
M. Antonium Valentem
ann(orum) XXII i(conismus) frontis
parte dextr(a).
$\mathrm{m}^{3}$ accepta VI k (alendas) Martias ann(o) VI
25 imp(eratioris) Traiani n(ostri) per
Priscum singul (arem) .
Avidius Arrianus cornicular(ius)
con(lortis) III Ituraeorum
scripsi authenticam

30 epistulem in tabulario cohortis esse.

We may notice several points of detail. In the first place, the recruits are placed upon the nominal roll of the cohort, not on the day on which the letter was received, 24th February, which most probably was the day on which they reported to the unit, but with effect from 19th February, which presumably was the day of the probatio. The details given are the name (the tria nomina without filiation, tribe or origo - they have not the citizenship), age (in years only), and distinguishing marks (if any). It is probable that at the time of the probatio some document was drawn up which described these men in greater detail: the information contained in the Prefect's letter need not be taken to be exhaustive, it was intended only to enable the recipient to have a rapid check made on the arrival of the recruits. Secondly, this letter is a copy of an original, which the cornicularius certifies is in the tabularium of the cohort. The question naturally arises, "Why, then, make a copy?" To this we may give two answers. Either the copy was made for inclusion in a roll of letters received from the Prefect, which would make for convenience of reference, or, more likely, because the original was felt to be a personal letter of regimental interest, of which an
official copy was required. Premerstein ${ }^{149}$ well cites S.H.A., Thirty Tyrants, X, 9: Extant epistula divi Claudio tune privation ..... qua ego repertam in authenticis inserendam putavi; fuit enim publica. Thirdly, we may note the presence of no less than three hands in so short a document. It is probable that the rather mysterious letters $\frac{c e}{-9}(?)$ in the first line were in practice written last, and were the annotation of some person who later inspected the document. The other two hands are easier to interpret: the copy was not made by the cornicularius, but presumably by one of his clerks, but it was necessary for the cornicularius himself to write the certificate which vouched for the letter.

The other document of interest in this connection is an Egyptian papyrus ${ }^{150}$ of A.D. 1.17 which contains the the receipts issued by the signifier of/six, centuries of cohors I Augusta Pretoria Lusitanorum to the centurion $\mathrm{fm} /$ Longinus Tituleius of the same cohort, who is also described as ix poos. These are all receipts for the deposit of recruits newly arrived from Asia. P.S.I. IX 1063.

Col.;
 Mougitavair $x$ Tiroutigiou A[g]vyeívic
 ［Sy］rápia rerpanófia cixooir［pia］opotois $\kappa$

世＇́koण1．＂E rous 屯iko 3．9． 117 äpíftou Kaíбapos toù rupíou，$\theta \dot{\psi}[\theta] \bar{s}$.
 10 Kpgokavios Movyeiva Tiroulgír Xp Xaipeir．





Col．it






 kupiou，$\Theta \omega \theta$ 浆行．







Col．i；；

 ［orteipns rj̀s ajürjs Xaipeiv．＂Elap［ov napá rou］
 Syio［नír］ou［ri］párwr＇A［नु］arãr fiotpi［poí］ruvr

 シハホ
 Mongitarã́r X Maryeiavoí Maryeíva
 ＂Elapor rapá sou Syráaia ékatĩr
40 ívergkorrafóo ópo〈tois〉 tikost Sntip Sy－





The editors rightly consider the receipts to be listed in order of seniority by century, which means that the centurion Longinus Tituleius, who also appears as centurion of the. first century, may properly be titled centurio princeps. It would be in this capacity that the draft-conducting-officer whom we must suppose /existed, for a party of 126 men must have been under some sort of command on their way from Asia, handed over to Tituleius the men's deposita - perhaps the unspent portion of their viatica. The centurio princeps would then see to the distribution of the money between the different centuries, and exact receipts from the respective signiferi. It is noteworthy that there are considerable differences both in the sums involved, and in the literacy of the several signiferi. One signifier - perhaps it is no wonder that he belongs to the least senior century - can hardly be called literate at all, so individual is his spelling. The amounts of money involved may perhaps be seen more clearly from the following summary table. Averages are given to the nearest obol. However we expand the amount in the fifth century it is clear that the sums saved by men posted to the three junior centuries were considerably less than those saved by men posted to the three senior centuries. It is unlikely that the recruits were assigned to centuries before they reach/ the unit: it would be
reasonable for the more intelligent recruits to be posted to the senior centuries. Perhaps the explanation of the differences of money deposited is that the more promising recruits were also the more careful spenders.

Centurion's Name. No. of Recruits. Total sum. Average.

| Tituleius | 20 | 423d. 20 ob. 21d. 5 ob . |
| :---: | :---: | :---: |
| Crescens | 17 | 232d. 4 ob. 13 d .18 ob. |
| $\mathrm{C}[\mathrm{ele}$ ? $]$ r | 20 | 452d. 2 ob. 22d. 15 ob. |
| Ta... | 22 | 2i1d. 26 ob . 9d. 17 ob . |
| Agrius | 24 | 21id. 3 ob. 8d. 22 ob . |
|  |  | 3iid. $30 \mathrm{ob}. \mathrm{12d.27} \mathrm{ob}$. |
| Longimus | 23 | 192d. 20 ob . 8d. 11 ob . |
|  | 126 | 1723d. 19 ob. 13 d .19 ob. |
|  |  | 1823d. 19 ob. 14d.13 ob. |

Once the recruits had reported to their units and been posted to centuries, various entries would be made in the nominal rolls of the unit. Such nominal rolls are usually referred to as matriculae. This was undoubtedly what they were called in the fourth century, but whether they were given the same title in earlier centuries is not so certain: I have argued elsewhere that the simple term matrices was used before the diminutive. 151

An early example of part of a matricula, probably of legionaries, is BGU IV 1083, ${ }^{152}$ which is ascribed by the editor, Viereck, to the first century A.D., but which, on
account of the absence of cognomina，may with reasonable certainty be dated before the end of the reign of Cl audios． This fragment，of which only fifteen lines survive，contains the nomina（the fragment is not complete on the left and－ almost certainly originally contained the praenomina also）， filiation，tribe，and origin of fifteen soldiers．No indication of rank or century is given：these details are almost invariably included in similar documents，and their absence suggests that the men are private soldiers， a conclusion supported by the lack of any date of attest－ ation，another detail normally given．．It seems probable that a consular dating preceded this particular fragment， and that the men all began service in the same year．This would not have been so likely if the men had been N．C．O．s or principales．

BGU IV 1083.
Jenucius ${ }^{\bullet}$ C：f•Aem Pesinuntem
C］anidius • Cf．Pom［］Ancyra．
］Baebius • Q．f．［P om Ancyra．
JCornelius•Sex•号•PqM Ancyra•
5．【〕Sulpicius•L•f•Aem Pesinuntem】
］．lis． $\mathrm{M} \cdot \mathrm{P} \cdot[\mathrm{C}] \mathrm{I} \mathrm{a} \cdot$ Cremona．
Jranius ．$\bullet$ • Rom ．．．．．．a
Jails $\quad Q \cdot f \cdot$ Rom Spam $[\mathrm{e}]$ a
0］ct－avius • A•I Rom Adrymeto．


This document contains several interesting features. Mention has already been made of the absence of cognomina: to this may be added the presence of filiation, tribe and origin in full Roman form. All these details point to an early date: we are reminded of the group of four names in the third part of P. Gen. lat. 1 recto, 153 where, however, cognomina are given, as is usual in documents of the late first century. It seems fairly safe to date this papyrus before the reign of Claudius. In second and third century lists mention of the tribe becomes increasingly infrequent, possibly because the predominance of castris 0 , the origo made membership of the tribe Folia overwhelmingly common. A further point of interest is that one of the names, that of Sulpicius in line 5, has been struck out. For this there are two possible explanations. Either the name was included in error in the first instance, or, as is perhaps more probable, the soldier in question had left the unit, by transfer or death, after the list was compiled, and his name was
eliminated on a subsequent revision. 'In a papyrus published by Wessely two nemes are similarly treated 1.54 Wessely, Schriftt., 8 .

## Gol. i.

LEG III CYR
onero

## 7. Noni Rufi

Cereli Rufi
5 Cocceus Clemes
$\theta$ 【Iulius Maximus】
Cliadius Antonius
$\operatorname{tr}$ [Iulius Cutratus]
Fanius Rufus
107 Subur (ani) Fanii
Claditus Zenon
te Cladius Feanus
te Flaus Gerfennus
tr Antonius Maximus
15
Gra[t]ius ..eanus
Salius Capiton.
te Bius Longon
Flaus Clemes
LEG XXII onro
207 Upi Pei

Col. ii.
Bariton
7 Aufri Acul(i)
Iulius Ruticus
Petuceus otaus
25 LEG III CYR
7 Antoni Longini
Antonius Satuni[lus
Domitius Germa.[nus
Balini Ecat. us
Capito Fena
Licin(ius) Loce (ius)
7 Aufri Aculi minor(is)
Cladius Agabo
LEG III
35.7 Antoni Longo

Paconi Egnati
Iulius Niger
tetates
407 Pompei Epane

41 Cladius Clemes
Cladius Apulinar(is)
Antonius Vales
Upis Satunilus
45 Upis Alexa(nder)
4. read Cerelilius Rufus; for a similar error cf. 36. 5. read Cocceius Clemens. 6. Wessely, O L'Ecriture latine; cf. JRS.XLII, p. 57. 7. read Claudius. So also in $11,12,33,41,42$. 8. read Quadratus. 9. read Fannius. So Fannii in 10. 13. read Flavius. So in 18. 20. read Uipius Pius ? 22. read Autieri Accolei Wessely, Aufri Acculei Dean (Cognomina, p. 128), Aufelli Acculei Lesquier. So in 32. 23. read Rusticus. . 24 read Peducaeus Octavus. 27 and 44 read Saturninus. 29 reai Belleni ? Wesseiy, or Varini Lesquier. 30 read Lucceius? 35 read Longi. 40. read Eppani. 42. read Apoldinaris. 43. read Valens. 44 and 45 read Ulpius.

The significance of the striking-out of the name is made clear in this document by the presence of marginal annotations in several places. te may be expanded as . te(ta) ( $=$ theta), of which the plural, tetates, occurs in line 39, where it refers to the six names following; tr admits of the expansion tr(anslatus). Compare BGU II 696,155 1 lanine 22: translatus ex coh (orte) I FI (avia) Cil(icum); and line 25: item translatus; also P. Lond.

2851 ${ }^{156}$, line 44: translatus in exercitum Dacicum. Whether we read $\theta$ (theta nigrum 157) in line 6 with Wesseny, or $\underline{o}$ (for $\underline{o(b i i t))}$ ) with the editors of L'Ecriture latine, we still have the same sense, 'killed' or 'died'. The fact that there are several instances in this papyrus of both te and tr without hastation shows that the presence of marginal annotation in both cases of hastation is purely coincidental. We must conclude, therefore, that the two names were crossed out because they should never have been included. - The highly individual spelling of the majority of the names, the rather immature hand and the hasty layout suggest that errors of omisision and insertion were only to be expected. It seems likely, therefore, that the names were crossed out, not because the men had been killed or transferred, but because they had not been killed or transferred." Whatever its purposea. casualty-return ? - the present list must surely be a preliminary draft, because in a formal return one would naturally have expected the names after the sub-heading IEG III CYR in line 25, and those after LEG III in line 34, to be consolidated with the names of members of the same legion in the first column. Note that there is no reference to the other legion between the two references to legio III Cyrenaica in the second column. Even the four names at the head of column ii refer to soldiers in
legio III Cyrenaica, as is shown by the interesting. addition minor(is) in line $32 .{ }^{158}$ Apparently this legion possessed two centurions of the same name Aufrius Ac(c)uleius 8 - of which the junior was distinguished by the addition of the title minor. The senior centurion is mentioned in line 22, (centuria) Aufri Acul(i), which means that the other names in this group at the head of the second column must surely refer to members of the same legion. Had they been in different legions little confusion would have arisen, and there would have been no need to distinguish them in this way. It may be mentioned that the papyrus is complete on the left and appears so at the top, but is broken off on the right and at the bottom.

Wessley assigned this document to a dete between A.D. 43 and i08, relying on Meyer's date for the departure of III Cyrenaica from Egypt. ${ }^{159}$ The editors of L'Ecriture latine have been able to bring the terminus antequem as late as A.D. 120, i.e. shortiy after 4th August A.D. 119, when XXII Deiotariana was still at Alexandria. ${ }^{160}$ The terminus post quem can also be brought much later. The names Upi Pei, Upis Satunilus and Upis Alexa(nder) (lines $20,44,45: \equiv$ Ulpius Pius 0, Ulpius Saturninus and Ulpius Alexander) surely rule out/the question a date before the beginning of the reign of Trajan. Dean 161 has
found only two examples of the nomen Ulpius in the names of legionaries in inscriptions which can be dated in the first century, and one of these has been corrected to Pulpidius. ${ }^{162}$ The appearance of other imperial nomina in the list, Cocceus: and Flaus ( $=$ Cocceius and Flavius) reinforces this conclusion. Flayius, though in the second and third centuries one of the commonest of nomina, is rarely found in inscriptions earlier than the reign of Vespasian. Perhaps we may hazard a still closer dating. This document would appear to be a casualty return, or a preliminary draft for one. In any case it records a high proportion of casualties. If these casualties were incurred in Egypt, as it is reasonable to suppose, the most likely occasion would be during the Jewish revolt of A.D. 116. The document, therefore, may be dated to the years 98-120, with indications in favour of A.D. 116.

Lists such as the preceding are often called matriculae. This is a convenient term with which to describe a wide variety of nominal rolls, and in any case we have littile knowledge of the precise technical terms used in. connection with such documents during the early empire. So we find the term applied to such diverse documents as lists of men on special duty, lists of men recommended for promotion, lists of principales
of various ranks, in fact to almost any kind of military register. Apart from the single instance of the term pridianum, which occurs in the title of BGU II 696, 163 and also in $p_{\text {. Lond. }}$ Le51, ${ }^{\text {i. } 64}$ but is remarkably absent from our literary authorities, we have to depend for our knowiedge of technical nomenclature on such late sources as Vegetius, the Theodosian Code, and the Digest. In these sources it seems probable that the term matricula was used in the particular sense of the nominal roll of an entire unit, arranged in order of rank and seniority, probabily by centuries. 165 In any case the term was probabiy not used at all during the earily empire. 166 Under the circumstances, however, it is/convenience to adopt the current practice of applying the term to any nominal roll.

A particular variety of matricuila of which we have examples in various forms is that which lists principales and other officers by their ranks. A very interesting document of this type has recently been published by Fink, ${ }^{167}$ This is a fragment of papyrus in Roman cursive with a single sub-heading in rustic capitals.
P. Princeton (Garret Deposit) inv. 7532.
$] 7 \mathrm{~s}$ (upra) s (cript-) Vaierius Tus $[\mathrm{t}]$ ianu $[\mathrm{s}$
]7 in pil pos Iunius Martial[is
].7 iilii pr pr Aurelius Caecilia[nus
]/ vi pr pos Aurelius Mailio[
5[] 7 v pr pos. Helvius P. [ertin] ax []
$] 7$ viili pị pos Flavius Ulpia.[nus
]7 ii pr pr Vibius Pr(a)esen[s
]/ ii pr pos Fuscianius Demo[stenes ?
]7 vi pr pos Iulius Alexander [
$10 \quad 17 \mathrm{v}$ pr pos ive [r]atius Firminus. [
] 7 viiii h pos Aurelius Maximus. [
A.D.21y] 7 x pr pos Astorius Maximus Sacer [dote cos] A.D. 221 ] 7 ii pr pr Aurelius Demostenes Grat [0 cos] A.D. 221 ] s (upra) s (cript-) Aurelius Theocles $G[r]$ ato cos A.D. 221]7 ii pr. [po]s. Aurelius Titus [c]os s(upra) s(criptis) 16 CORNICULARIORUM X
A.D. 217] $7 \times \mathrm{h}$ pr Vibius Faustinus $\operatorname{Pr}(\mathrm{a})$ esente co[s]

Jds 7 in pr Flavius Severianus Sab(ino) cos A.D. 216 A.D.216]7 ii h pr Aurelius Apollinaris Sab(ino) cos
$20] 7$ iii pr pr Ulpius Quirinus Sab(ino) c[o]s A.D.2.16 1. Is.s.ianu [s Fink. 10. Me.asius, perhaps Ne[r] atius Fink. 12. Assorius, perhaps Artorius or Astorius Fink. 15. i pr pr Fink. 16. M[ Fink, who adds, "The letter at the right edge looks superficially like X ; but it could be M or $\mathrm{A}^{\prime \prime}$.

This document must have been written after A.D.221, the latest date in the surviving fragment, but how long after will depend on our interpretation of its contents.

Fink points out that it is unlikely to have been written after A.D. 236, that is, twenty years, the normal period of legionary service, after the earliest date, A.D. 216. This is certainly true, but at the same time, if the names in the first fifteen lines of the list refer to comparatively senior officers or N.C.O.s, as seems certain, we may expect to find a fairly high average length of service. Cornicularii, at any rate, would hardly be appointed in the earlier years of their service, and those enumerated in the last four lines of the document have only a few more years of service than the last, and therefore the most junior, in the preceding section. A date approaching Fink's terminus ante quem would appear the most probable.

The first question to be decided in the interpretation of this document is the expansion of line 16. Fink himself rejects the apparent reading, $X$, and of the alternatives that present themselves, $M[$ and $A[$, prefers $M .[$ - This he chooses to expand as M[ATRICULA. The subheading, therefore, might be translated as 'Register of Cornicularij'. The objections to this reading are threefold: firstly, it is hard to reconcile the surviving traces of the last letter in line 16 with $M[; 168$ secondly, it is doubtful whether the term matricula was current at the time the document was written; 169 thirdly, there would
appear to be hardly room in the column even for the completion of the letter $M$, not to speak of so long a word as M[ATRICULA. Fink himself writes in description of this papyrus, 170 "It is complete at the bottom and perhaps, but not probably, on the left side and the lower part of the right". The photograph clearly shows that the lower right at least coincided with the end of a column: if the incomplete letter at the end of line. 16 was followed by other letters, those letters must have projected considerably beyond the limits of the other lines in the column. The first and last of these objections apply with equal force to Fink's alternative suggestion M[ERCURI, which he proposes on the analogy of his restoration of P. Rylands I 79.171 An interpretation is called for which takes account of the fact that there is no room for more than a single letter. To the apparent reading $\frac{X}{!}$ Fink objects that only four names follow, and, depending upon the expansion ( $\frac{X}{?}$, $\frac{X V}{\square}$, or $\frac{X X}{\bullet}$ ?), there must have been at least six more. This objection may be overcome if we postulate another column. Fink's other objections, however, carry more weight: that the genitive case of corniculariorum requires a noun rather than a numeral to follow, and that according to Domeszewski a legion had just four cornicularii. 172 Since the only legion stationed in Egypt at the time was

II Traiana, it would follow that the four names on the list were those of the four cornicularii of II Traiena, unless the papyrus came originally from some other province. ${ }^{173}$ He adds in a note ${ }^{174}$ that one of the cornicularii of the legion is given by Domaszewski to the service of the legatus Aug. pro praetore. "Such an official," Fink explains, "did not of course exist in Egypt; but the cornicularius was doubtless needed to perform the same tasks for the prefect of Egypt". This latter statement is not supported by the Rangordnung: Domaszewski's own words were, 175 "Die Statthalter haben stets eine Mehrzahi von cornicularii, daher das Bureau, an dessen Spitze sie stehen, officium corniculariorum heisst, C. III 10437, und der adiutor als adiutor officil corniculariorum bezeichnet wird." For the provinces where the number is known, three cornicularii are usually attested. ${ }^{176}$ It is reasonable to assume that the Prefect of Egypt, whose administration had a complexity far beyond that customary in other provinces, possessed at least an equal number. In an appendix to which Fink does not refer, Domaszewski mentions a cornicularius of the idiologus; ${ }^{177}$ this official may or may not have been included among the cornicularii of the prefect. In an earlier chapter ${ }^{178}$ the view was expressed that the most reasonable explanation of inscriptions which attest a
superfluity of centurions within the cohort is that the additional centurions were seconded for special duties and remained only nominally on the strength of the legion, in which they retained their substantive rank and seniority at the level of their previous appointment. The same principle may hold good in the case of the cornicularii: those seconded for duty with the prefect's administration may have retained their rank and seniority within the legion but have been replaced in practice by new appointments. A cornicularius who had been attached to the staft of a provincial governor would in any case not expect to be recailed to service in the legion on the completion of his term of office: that would be a downgrading. 179 He would rather expect promotion to the centurionate. 180 If this view is correct there may well have been as many as ten cornicularii on the rolls of II Traiana, though not all the number would be serving at legionary headquarters. Fink's objection to the size of the number would then be overcome. To his other objection, that the genitive case of the word cornicularij requires a noun rather than a numeral to follow, the answer may be given that sucin a noun may have preceded the first sub-heading on the list. The list may have been arranged as follows: summa centurionum ...., followed by a nominal roll of centurions, corniculariorum

X, followed by a nominal roll of cornicularii, and so on. The interpretation of the $\underline{X}$ in line 16 as a numeral, therefore, presents less difficulty than is maintained by Fink.

It is by no means certain, however, that such an interpretation would be correct. The sign may well be some symbol or check-mark. ${ }^{181}$ A similar problem arises in connection with P. Oslo III 122, and further consideration of the question may be deferred to the discussion of that document. ${ }^{182}$

Another problem which demands solution before the purpose of the list as a whole may be made clear, is the exact meaning of the centurial sign at the beginning of each of the lines. The sign 7 sometimes means (centuria), sometimes (centurion). ${ }^{183}$ Usually the meaning of the symbol is perfectly clear from the context, as no doubt it would be in this instance also if we possessed the previous subheading. Fink first examines the list on the hypothesis that the sign should be expanded as (centurio): the document then becomes a roster of centurions, and the four names after the sub-heading cornicularii in line 16 would apparently have to be regarded as those of centurions who had been, but no longer were, cornicularij. The whole list would then become one of promotions to the centurionate, and the
upper part of it would contain the names of principales of some other grade who had been promoted. ${ }^{184}$

For two reasons, however, Fink rejects this theory. In the first place, the one papyrus which is undoubtedly a list of promotions., P. Mich. III 164, ${ }^{185}$ is quite different in style and composition: in that document each man's name is followed by his date of attestation, previous rank, exact date of promotion to the decurionate, and the name of the prefect responsible. Our present document, on the other hand, as we may judge from the lest four lines, which appear to be complete, contained only the centurial sign, the title of a century, nomen and cognomen, and a date of attestation, in each entry. There is no indication of any promotion. Secondly, both line 7 and line 13 begin with ii pr pr, and the use of the abbreviation supra) s(cript-) in line 14 means that there were at least three entries all referring to the same century. Other instances of duplication are lines 4 and 9 with vi pr pos, lines 5 and 10 with v pr pos, and the use of the abbreviation supra) s(cript-) in line 1, which implies a repetition of the title of the century in the previous line. Fink, assuming that only one centurion could be centurion of a given century at any one time, asserts that acceptance of the present text as a list of principales who had received promotion to the centarionate
would involve supposing that the men named in lines 7 , 13, and 14 were appointed to identical posts in three different legions. ${ }^{186}$ This Fink will not accept, though he does admit its possibilizty. ${ }^{187}$

Fink, therefore, favours the expansion of the centurial sign as (centuria), and regards the list as one of principales indicating their assignment to various centuries within the legion. This means that the men listed in lines $1-15$ must have been principales of a rank just above or just below that of cornicularius, perhaps optiones. He adds that the presence of several principales of the same rank in the same century is well attested in the inscriptions and in P. Dura inv. $12 .{ }^{188}$

The chief objection to Fink's hypothesis is betrayed in his own phraseology. He writes, 189 "The men listed in lines $1-15$ must have been principales of a rank just above, or just below that of cornicularius, perhaps optiones." 'According to Domaszewski, the cornicularii are the senior principales, and optiones as a class are subordinate to them by several grades. ${ }^{190}$ It is true that there was a special category of optiones who were called optiones ad spem ordinis and were promoted directly to the centurionate, being senior even to the cornicularii.
But the infrequency of known cases of this rank, in comparison with that of cornicularius, would suggest
that it was not a post in the establishment, but only a temporary appointment made specifically until a particular centurionate should become vacant. The number of names in lines 1-15 would appear to imply on this hypothesis that a high proportion of the options in the legion were on the point of being promoted to the centurionate. 191 If, however, the principals in the earlier part of the list are junior, not senior, to the cornicularii, the order of the list would be the reverse of the normal. The standard procedure of the Roman army, as of modern armies, in compiling lists was to begin with the most senior and continue in descending order of seniority until the list was completed. In the case of this particular document, the dates of attestation in lines 12-15 are in the normal descending order of length of service. The exception to this in line 16 is, more apparent than real, because the comicularil took seniority according to the rank of the officer beneath whom they served. 192

If, however, the men listed in the earlier part of this fragment are neither optioned ad sperm nor principales junior to cornicularij, they con hardly be other than centurions. In this case we should have to interpret the centurial sign differently in the two parts of the document. In the first part we should expand it as
(centurio), in the second part as (centuria). This in itself seems quite possible. On the other hand, the centurions would apparently be listed according to length of service, and certainly not according to any known system of seniority by centuries. Domaszewski's elaborate account of the grading of centurions is today no longer generailly accepted, and the arrangement of this document may perhaps be compatible with the view of Bruncke and Wegeleben that all centurions were equal in rank until they received promotion into the first cohort, and thereby became members of the primi ordines. ${ }^{193}$ in this connection, the reading of line 15 assumes considerable importance, since if Fink's reading is correct the line would read I i pr (incip-) pr(ior-) Aurelius Titus [c] os s (upra) s(cripto). The princeps could hardily have been the junior centurion of the legion, and this objection would be decisive against the interpretation of the names as those of centurions. An examination of the photograph, however, shows that the letter read as the p of pr (incip-) is not formed in a continuous stroke as in the other cases, but has a definite join at the top: it is possible to read ii pr pefore the lacuna caused by a tear in the papyrus. The traces that remain of letters above and after the tear are as consistent with the reading [pod s as with Fink's reading
$\frac{\mathrm{pr}}{9}$ - The reading il $\mathrm{pr}[\mathrm{y}] \frac{\mathrm{r}}{6}$ of course, would be out of the question in view of the ii pr pr of line 13 and the Is (upra) s (cript-) of Line 14. To the other apparent objection that in certain cases we should postulate two, and in one case three, centurions on the establishment of the same century, we may give the same answer as earlier on the question of the cornicularii. 194 The additional centurions may have been seconded for special duties and remained only nominally on the strength of the legion, retaining the rank and seniority of their previous appointment.

The purpose of this document, therefore, would seem to be that of a nominal roll of the officers of the legion, and our fragment would appear to contain the centuries, names and dates of attestation either of centurions and cornicularii, or of options and cornicularii. There are difficulties in the way of each alternative. The discovery of a similar document would almost certainly solve some of these problems.

Before we leave the discussion of this fragment, there is one minor point which demands discussion. Fink is doubtful whether to consider the letters ids in the margin of line 18 as the end of a very long entry in a preceding column, or as an abbreviation, such as d(e)s(ideratus) or d(e)s(eruit). 195 He adds that the
reading at least appears reasonably certain. . An abbreviation would seem to be quite likely, since marginal annotations are quite common in military documents. In any case, it is difficult to imagine what sort of entry would have ended with the letters dis. Perhaps a more probable expansion, however, would be d(i)s (positus). 196
P. Oslo III 122 has also been mentioned in connection with the Princeton document. 197 This is a papyrus of approximately the same date, but dealing with members of an auxiliary unit, not with legionaries. Like the Princeton list it is mainly in Roman cursive, with a single sub-heading in rustic capitals.
P. Oslo III 122.


AdD. 228 5干 Titi Modesto cos
[Lu] Lius Horigenes pant
A.D. 230 干 Flamini Agricola cos

A.D. 230 F........[.A]gricola cos
1.0
[Aur]el(ius) [A]rtem[idorus pant]
$[\mathrm{SES}]_{Q U \perp}\langle\mathrm{P}\rangle \mathrm{LICIAR}$ (II) X[
$\left.\begin{array}{cc}\text { A.D. } 217 & \text { F Ammoniani Cosa Praesente cos } \\ \text { Aelius Sarapion }\end{array}\right\}$
${ }^{1}$ et passim. $7=$ (turmae) or (in turma). 2 et passim. pnt Fink, cdot Amundsen. 11. SES] QUI $\langle\mathrm{P}$ IIICIAR (II) $\times[$ Amunasen, SES $]_{\mathrm{QUI}}\langle P\rangle \mathrm{LI} C 1 \mathrm{AR}$ (IORUM) M[ Fink.

This document can be comparatively closely dated. The style of the consular date of line 18, Divo Alexandro cos, proves that the list was compiled after the honouring of the memory of Severus Alexander in A.D. 238. Further, unless the two soldiers named in the entries of lines 1.2 and 20 were serving beyond the customary term of twenty five years - a possibility that cannot be fully excluded - we may find a terminus ante quem in the year A.D. 242. A date between A.D. 238 and 242 would, therefore, appear to be indicated.

The purpose of the document is to a certain extent
clear. The sub-heading SES]QUI〈P〉LICIAR(II) $X$ [in line 11 shows that it is a list of principales, some of whom were sesquiplicarii, and others, those in the earlier part of the document, presumably duplicarii. Its ultimate purpose is not quite so clear. Amundsen is doubtful whether to classify this document as a matricula or a pridianum. The number of sesquiplicarii; he finds, is smaller than the normal as described by Pseudo-Hyginus: on the other hand, as a pridianum, it would record either the appointment of an unusually high number of principales on one occasion, or the absence of about one-half to twothirds of certain clesses of NCOs on some common task (a vexillatio?). Neither hapothesis does he find attractive, and prefers to consider the text as a fragmentary copy of a brevis or matricula. ${ }^{199}$

In this he is certainly right. His chief difficulty, the number of sesquiplicarii, is not serious. We need not suppose that units in the Roman army, any more than in modern armies, were invariably up to establishment. The Geneva archives revealed a century to be grossly under strength. 200 The numeral is, in any case, not necessarily complete. That is, if it is a mumeral. The analogy of the Princeton document with a very similar heading might suggest that it is some special sign or symbol, or perhaps a check-mark. 201 The document, then, is a list
of principales. Since the ones mentioned in the lower part of our fragment, and therefore presumably junior to those in the upper portion, are sesquiplicarii, we may assume that the first five names are of dupilcarij 202

Presumably the names are in order of seniority. However this seniority was determined, it could not be by date of attestation, for on such a system the second entry in the first section should have been the first, and in the second section considerable re-arrangement would be required. We may note, however, that an approximate order of length of service is maintained, suggesting that, other things being equal, the soldiers with the longest service would normally have the highest rank. The order of ranking could not be by turmae either: unless we assume that there was more than one decurion in the unit nemed Armonianus - in which case we might have expected the addition of alter or minor to the name of one of them ${ }^{203}$ - the first and last entries in the remaining part of the list of sesquiplicarii should have been grouped together. In any case the sequence of the turmae is variable: that of Titius in line 5 has precedence over that of Flaminius in line 7, but the position is reversed in the case of the entries in lines 14 and 18. This last point is decisive. If then, the order of seniority was neither by date of
attestation nor by century, it must have been by date of promotion to the present rank, or by recommended order of promotion to the next higher rank. Of these alternatives the first would appear the more natural and reasonable explanation: the other is put forward only as a possible consequence of one suggested expansion of the abbreviation pnt, which apparently occurs at the end of each entry in the first part of the list.

This abbreviation, which is seen at the ends of lines 4, 6 and 8, and is probably to be restored at the ends of lines 2 and 10 also, was read by Amundsen as cdot. The resolution of this strange abbreviation he not unexpectedily finds doubtful, and can only suggest $c$ (ivitate) do(natus) $t$ (estatus), which hardiy has the ring of probability. Fink, recalling S.H.A., Alex., 21, 8: de provehenais etiam sibi Alexander adnotabat ... diebus pariter adnotatis et quis quo esset insinuante promotus, ingeniously suggests pht, which he expands as p(romotus) $n$ (ominante) t(ribuno). 204 These notes, he adds, may have been added as aids in revising the list. This leaves unexplained, however, the fact that the abbreviations are confined to the first ten lines of the list. The men in these entries are, of course, presumabiy of higher rank than the sesquiplicarii, and are probably duplicarii. But even the rank of duplicarius
does not seem exalted enough to merit such special treatment. Surely principales of both these grades would be promoted to these ranks in much the same way. It would appear much more probable that if these notes were, as Fink suggests, added as aids in revising the lists, they did not record the actual promotion of the respective men, but rather the tribune's recommendation. of the possible promotion of duplicarii to the decurionate, a recormendation which presumably had to be forwarded to higher authority. We are reminded of the system adopted in the British Army, whereby it is customary for the officer in cormand of a unit to state in regular confidential reports whether in his opinion each of his subordinate officers merits promotion to the next higher rank. The equivalent in the present case would be the recommendation of a senior NCO for a commission. The probabilities appear in favour of this analogy, and the possible expansion, $p$ (romovendus) $n$ (ominonte) t(ribuno). The list of men recommended for promotion to the decurionate would be, in Egypt, forwarded to the Prefect for his consideration. 205 Our document then shows that a distinctive mark recording the making of such a recormendation was made on the roll of subordinate officers.

At this point we may well examine another third-
century document, again dealing with auxiliaries, which contains a list of men so promoted. This is a papyrus fragment, first published by Sanders, which contains a partial list of the decurions of two auxiliary units, one of which was the Third Cohort of the Ituraeans. 206 The provenance of the document is not known. The list is incomplete, and probabiy formed part of a roll with several columns of writing. We may hazard the suggestion that the whole contained a complete list of decurions in units under command of II Traiana, or of the Prefect, since at this date the legionary command and the prefectiure would be conterminous. 207 The earliest date on the list is A.D. 217, a date of attestation: the latest, a date of promotion to the decurionate, is A.D. 242. It seems likely that the document was drawn up not long after the latter date. 208
P. Mich. III 164.

Date
1 AUJ FIDIUS VICIORINUS
2
P] raesente et Extrica[too] c.[0]s factus deć ex q(uaestionario) leg(ionis) [
3 a Bas]i. [1]eo praef Aeg II Nonas Apriles Attico et Praet [extato cos] 242
4 C]ORDIUS PETOSIRIS
5

$$
] \operatorname{Grat}\left[\begin{array}{ll}
0 & e
\end{array}\right] t \text { Seleuco c.[0]s }[f a] \text { ctus }
$$

6 [et praep] osit(us) cohor(tis) et praefec[tus] 242-5 arcis a Basileo p[raef Aeg
7 A] ntonius ammonianus
8

$$
\begin{aligned}
& \text { ]. Maximo et Urbeno }{ }_{\text {ex }} \text { cos factus deć } \\
& \text { ex alae }[
\end{aligned}
$$

a Ba] sileo $\mathrm{v}^{\prime} \mathrm{p}^{\prime}$ prae[f Ae]g XVI Kal' Novembr Attico et $\operatorname{Pr}$ [aetextato cos]
10 IU] LIUUS CHIERAX
i1
ex dupl alae Gall Gor [d
12 a Basileo praef Aeg ...].]. Oct Attico et
Praetexta[to cos]
242
13 ]US ORIGEN [E]S
14
].. $F[u]_{\text {sco }} I[I$ et Dextr]e cos $f[$ actus $]$
d [ec] $]^{\prime}$ ex sesq[' alae
15 ab Honoratia] no py praef A[eg ..... N] Jove[mbr
Se] ver.[0 et quintiano cos]
16 COH III ITURAE[0]RUM $M$
1.7

OR D
$18 \quad \mathrm{C}[\mathrm{AL}]$ EFOFES HIERAX
19
$\mathrm{Ag}]$ ric $[0] l a$
ctus dec ex $[$
20 ab Hon]or $\langle\mathrm{at}\rangle$ i $\langle\mathrm{a}\rangle$ no praef Aeg' III Kal Sept
Agricola et $M[$ [aximo cos

# 23 Maximin］o et Afr［icano cos］（？） 

$$
8 \text {.......]s Sanders. } 10 \text { JtyUS Sanders. } 14 \text {..........]us }
$$

Sanders． 20 ．．．．．］$]$ orino Sanders，Hon］ori $\langle a\rangle$ no （ $=$ Honor〈at〉i〈a〉no）stein．${ }^{209}$ Sanders． 22 ．．．．．．．］．］．
Sanders． 23 ］a et Aes［Sanders．
One of the consular dates in this document is of more than ordinary interest．Sanders interpreted with－ out comment line 20，Agricola et M［aximo cos，as AD． 234 ． But it would be remarkable for a clerk to use two different methods of dating the same year in the space of a few lines in a single document．In line 8 we have Maximo et Urbano cos，which Sanders also understands as A．D．234．Barbieri，therefore，proposed to refer the date Agricola et $M$［aximo cos to the year A．D．233．The consuls for that year were L．Valerius Maximus and Cn． Cornelius Paternus，for the following year M．Clodius Pupienus Maximus II and ．．．ius［Su？］Ila Urbanus．${ }^{210}$ Stince it appears that I．Valerius Maximus also is named as consul for the second time in CIL III 3427 （ $=10380$ ）it is not clear to which year the Maximo 11 et Agricola of CIL III 5460 refers．The present document would appear to suggest that it is A．D． 233.

Sanders believed .that the unnamed unit to which the first five decurions belonged was also a cohort. The details of careers given, however, make this improbable. In line 6, for instance, we find a decurion employed as praepositus cohortis, on appointment which would naturally be filled by a decurio alae. ${ }^{211}$. Similarly, three of the five decurions concerned had served as sesquiplicarius or duplicarius of an ala, and in one case the name of the unit is given, the ala Gallica Gordiana. ${ }^{212}$ of the other two decurions, one was an ex-legionary who had served as quaestionarius on a governor's staff, 213 the other had been a sesquiplicarius, probably also in an ala. It is more than possible that four of these promotions were internal promotions within the ala Gallica Gordiana itself, and that it is to this unit that the first part of the list refers. . As for the decurions of the cohors III Ituraeorum, we have no evidence of their former ranks, but it is worthy of notice that one of them is entitied ord(inarius) dec(urio), which seems to be a transitional form. 214

When we compare this document with the Osio papyrus we can see what sort of future career the men recommended for promotion in the other document may have had. We can also see that in the case of decurions, and therefore presumably of centurions also, a record was kept, not only
of the year of their promotion, but even of the very day. Thus we have (lines 8-9) factus dec(urio) ex sesq(uiplicario) alae [Gallicae Gordianae ? a Ba] sileo v(iro) p(erfectissimo) prae $[f(e c t o) A e] g(y p t i)$ xvi Kal. Novembr (es) Attico et Pr [aetextato cos $]$. The beginning of the entry is preserved in no case, and its reconstruction is by no means certain. Sanders believed that each entry began with some such word as probatus, and seems.to have recognised traces of the final letters of this word in lines 8, 1.4 and 22.215. Whatever this word was, it was followed by the date of attestation. Dunlap; however, believes that the entries began in a manner similar to that employed in P. Mich.VII 447 recto. 216 In the latter document, which may be a nominal roll of clerks, 217 the individual entries begin in an unusual manner, by placing before the consular date - that of attestation - the nome of the current Prefect in adjectival form. Thus we have (line 3 of the British Museum fragment) Petronian Tor [q] uato et Iuliano cos. M. Petronius Honoratus was Prefect of Egypt from a date between April and August in A.D. 147 to a date between 11 th November, A.D. 148 and 17 th March, A.D. 150.218 The consular date refers to A.D. 148. Dunlap's explanation of this system, which is accepted by Stein, is that a word such as acta or commentarii is understood, and that the individual entries begin by
referring to the particular section of the provincial archives which contain the records of the man's enlistment, and continue with the date of his attestation. ${ }^{219}$ In the present document the entries would then add the details of his subsequent career up to his promotion to the decurionate. Sucin a system would naturaily be confined to Egypt, a province of which the administration Was more complex and systematized then elsewhere, and may or may not have continued to the third century. We must wait for additional evidence before we attribute permanence to a system revealed in an isolated example in the second century. Sanders' simpleị hypothesis, that the entries begin with the word probatus, or some similar term, followed by the date of the probatio, would be applicable to the generality of provinces.

The documents which we have just examined may ail be classed as matriculae, but they are not such records as would immediately concern our imaginary recruit, well though they illustrate the principles of documentation. Promotion to the decurionate would not be his for some considerable time: in the case of the document last under discussion we saw that a legionary soldier had twenty-five years ${ }^{*}$ service before he became decurio alae, '2'20 and not many legionaries could aspire to such exalted rank. Our recruit would be more likely to find
his name on some such list as the following, though this is probably concerned with auxiliaries, not with legionary soldiers. 221 This is another Michigan papyrus published by.Sanders, and may be dated to the late second century, probably between A.D. 189 and A.D. 198. 222 It consists of entries of the following form arranged in order of seniority by length of service:-
(i) Year of attestation.
(ii) Name (s.) of soldier(s). (iii)Place(s) of origin. P. Michigan III 162.

Recto

|  |  |  | Date |
| :---: | :---: | :---: | :---: |
|  | Sev [er]o e[t] Pompeiano cos |  | 173 |
|  | Lucofron H [....]liri | Lucop |  |
|  | Gallo e[t] Fl [acc] $0_{0}$ cos |  | 174 |
|  | Iulius Ammonianus | castr. |  |
| 5 | Eponuchus Apollinarius | cast |  |
|  | Pisone et I[u]liano cos. |  | 175 |
|  | Claudius Apollinarius | Lucop |  |
|  | Quin [ti] 110 cos |  | 177 |
|  | Cassius S. [...] mi | Soeni |  |
| 10 | Aurelius Victor | Lucop. |  |
|  | Orfito et Rufo cos. |  | 1.78 |
|  | Fortius $\mathrm{FO}[\mathrm{r}]$ tius | $\operatorname{Pr}[0]$ So |  |

Praesente II cos 180 Pl[u]tilu[s]Piuti[l]us LucopVictorino II cos
Cassius Heronianus cast

cast
Mark [1] lo et Aeliano cos ..... 184
delius Hieronymus cast

asCrispino et Aeliano cos
20 Julius PaniscusFusciano II cos
Rufus Cassiani cast
Pompeius Sarapionis ..... cast

Silanis duobus cos ..... 189
25 Sarapion Isidori183187Coptit188
coptit

Anti.
verso

2 et passim, Lucop(olites). 4 et passim, castr(is). 9 Soeni (ter) (cf. $\Sigma u \not{ }^{\prime} \vee \eta$ Sanders). $12 \operatorname{Pr}[0] s o p(i t e s)$. 20 Coptit(es). 25 Anti(noites).

In reviews of the original publication of this document discussion centred largely on the relationship of the Greek address on the verso to the Latin text on the recto. Suggestions made by Bell and Wilcken that the address was proper to some letter now lost, either on the recto or the verso, have been shown by Sanders to be inadmissible. 223 The Greek address, therefore,
cannot well be separated from the Latin list. As ịt stands, however, the Latin document is not self-explanatory, and must certainly, as Sanders points out, have been preceded by some brief form of letter, as in P. Oxy VII 1022. 224 The use of the Greek language in the address was simply due to Egyptian conditions; we have another example in P. Mich. VIII 469, a private letter in Latin addressed to a certain Tiberianus, who in the Greek address is given his military title of speculator. From another letter (P. Mich. VIII 472), we learn that he was attached to the Prefect's staff and was concerned with the transmission of official mail along the routes of the cursus publicus. 226 While it is usual for military despatches to be addressed in.Latin, even in Egypt, we need not be surprised at finding an occasional Greek address, especially if the.letter is being sent to some central headquarters, where there might be some civilian staff. The recipient's name and addressire unfortunately illegible: we are told, however, the name of the sender, Aplonarius. This unusual name appears in the genitive case, and has been taken by some to be the woman's name, 'Amhwíápiov, which is attested in P. Oxy. XIV 1676. Sanders seems absolutely right, however, in maintaining
 though there appear to be no other certain instances. 227

It would be almost impossible to give eny sensible explanation of the document otherwise. In the same way we must assume that the word $\dot{\alpha} \delta \in \lambda \phi[0 \hat{u}]$ is used in the address in its military sense of 'brother-officer' 228 We may once more compare P. Oxy VIl 1022, where the recipient is addressed as 'frater karissime'. :

The purpose of the list remains obscure. The consular dates are presumably dates of attestation, in accordance with normal practice. In that case we have. a selection of men with varying years of service, so careful a selection that it must have been intentional. No ranks are given, and it would seem probable that all the men are private soldiers. We must assume that some detachment was called for on some special duty which would require a due proportion of experienced soldiers, others not quite so experienced, and some comparative recruits. Not all the names are fully Latinized, and the men are probably auxiliaries. There may possibly be a hint of alphabetical arrangement in this list, inasmuch as in the only three cases where two soldiers have the same year of attestation, the man given precedence has a second name alphabetically senior to that of the other, i.e., in lines 4-5, Ammonianus precedes Apollinarius, 9-10 $\frac{\mathrm{s}}{\mathrm{O}}[\cdots] \frac{\mathrm{mi}}{\square}$ (a father's name in the genitive) is treated as before Victor, 22-23 Cassiani
precedes Sarapionis (both names of fathers). This is probably no more than coincidence.

The most complete example of a matricula so far discovered is undoubtedly p. Dura inv. 12 , which is described as a lerge roll in a very mangled condition, containing about eighteen columns of Roman cursive on each side of the papyrus. ${ }^{229}$ At the time of the preliminary report only the exposed columns had been deciphered, and in part published by way of illustration. Since then an additional portion has been published by Fink. ${ }^{231}$ It is good to hear that the Final Report will shortly be published. 232 The brief portion of this important document that has so far been made public consists of excerpts from col. $x$, both recto and verso, and from col. xxxiii recto, and appears to be a list of auxiliaries with their dates of attestation, and with marginal annotations against a number of the names showing the nature of any special duty or absence. The whole, therefore; is probably a matricula of an auxiliary unit, the Cohors XX Paimyrenorum.
P. Dura inv. 12 .

|  | col. $x$ recto |  |
| :---: | :---: | :---: |
| 3 | Victo[rino cos | A.D. 200 |
|  | Aurel(ius) Iulius |  |
| 5 offic(iales) | Aurel(ius) Iulius |  |




Cauma

Becchuf

Aurel (ius) Ma[1c] hus Nisamsi
divo [s]evero II cos A.D. 194
Aurel(ius) Iuli[us] Iulianus

In the Preliminary Report the editors stated that the latest date in the part of the document then photographed was the consulship of Messalla in A.D. 214. They added that the roll probably fell between that dateiand A.D. 225 when the soldiers who enlisted in the consulship of Victorinus (A.D. 200) should have been discharged. 233 These limits have now been narrowed. Fink has shown that the recto must have been composed between A.D. 219 (the latest date read) and the accession of Severus Alexander on March 13/14, A.D. 222. The verso he finds was composed shortly after that date. 234 The document falls, therefore, not many years after the publication of the so-called Constitutio Antoniniana, as might have been guessed from the peculiarities of the nomenclature. The procedure adopted in this unit at least seems to have been to place the name Aurelius in front of the existing name, regardless of whether the name was already Latinized or merely in the usual peregrine form with the father's name in the genitive.

The annotations in this document are rather puzzling in its present partielly published form. Those which state the nature of a special duty are self-explanatory:
those which are town-names are not so obvious. If they are to be taken as indicating the places of origin of the soldiers in question, as the editors tentatively suggest in the Preliminary Report, ${ }^{235}$ some reason must be given for the absence of the origo in the other cases. .Were all the rest born castris? It would seem more probable that these annotations refer to the absence of men on detachment. This difficulty will probably be solved in the Final Report. The use of the punctum, also, sometimes several times repeated, before certain of the names in the list is not quite obvious. It must have been used as a check-mark, but on what principle remains to be seen. 236

Various other papyri from Dura may be classed under the general heading of matriculae. We need not concern ourselves with the majority of these at this juncture, since most of them, such as P. Dura inv. 15 and P. Dura inv. 16, are as yet unpublished. 237 The style of both these documents, however, is reported to be very similar to that of P. Dura inv. 11 , excerpts from which have been published in the Preliminary Report. 238 This document consists of two large fragments, which together contain on the recto a list of. soldiers in columns arranged by centuries, and traces of similar lists on the verso, 239 The verso bears the date pridie Kal (endas) Decembres

Iupo cos (A.D. 232).
P. Dura inv. 11 a recto.
col. ii
22.7 Marci Muciano co[s]
A.D. 201 ord(inarius) Iul(ius) Marcus Erucio [Claro cos] A.D. 193
25 Malchus S.[ col. iii
$9 \quad$ Iul(ius) Domittius

Iarabolus Themarsa
Geta Seniore II cos A.D. 203
Marinus Barachi col. iiii
Sabino. [II] cos
A.D. 216

11 Aurel (ius) Zabdas
Aurel(ius) Apollonius
Aurel (ius) Bassus
Aurel (ius) Flavius
15 LII
7 Antonini Victorino cos
ord (inarius) Domittius Antoninus A.D. 200
Erucio Claro cos
Malchus Anini

From these excerpts the form of this document is apparent. The roll of each century is headed by the centurion's name with his date of attestation. Presumably the centuries are listed in order of seniority, but without the dates of promotion to the centurionate we cannot be certain how this was reckoned. It should be noted that the date of attestation of Iulius Marcus in col.ii, 22 was a year later than that of Domittius Antonimus in col. iiii, 16. After the centurion's date of attestation there follows in each case a list of soldiers with the date at which each soldier or group of soldiers entered the service. At the end of the list is found the totai strength of the century. In col. iiii, 15 this appears for one century as LII. It is interesting to note that the four most junior members of this century, who all enlisted in A.D. 216, have the name Aurel(ius).

Another document of this general class is P.Rylands I 79. ${ }^{240}$ This is a second-century document on papyrus that contains nemes of men in order of length of service, and with a sub-heading that recalls the papyri from Oslo and Princeton already discussed. 241 The whole of this document, and not merely the sub-heading, is in rustic capitals. Accents are written above the $\underline{0}$ of the ablative where it occurs. 242


10 ]lib(ertus ?) MERCur[I editors, ]lib(Rariorum) mercury [I Fink, [ITEM EX ?] Lib(URNA) MEROUR[Ió Gilliam. 13 Fortasse GAil] canó.

The editors compare this document with BGU II $6960^{243}$ But whatever purpose this list served, it was certainly not part of a pridianum: at least, it does not resemble any portion of either of the pridiana that we possess. 244 The list is divided into two parts by a subheading, the correct expansion of which has been in dispute. 245 In the
first part we have fragments of the names of five men, who were of widely differing lengths of service. . In three cases the consular dates are followed by a single name, in the remaining case by two names. The part after the sub-heading appears to continue on much the same principle, although, as we might have expected, the consular dates are rather earlier. In no case is the name of a century or turma given.

If the list refers to men in a legion or an auxiliary unit, certain facts may be deduced about the men concerned. In the first place, they must all be members of the same century or turmas since otherwise the names of their various centuries and turmae woula have been entered as necessary aids to identification. In the second place, they cannot well be principaies, as Fink believed, ${ }^{246}$ since the names are arranged in order of seniority by length of service: had they been principales, their.seniority within the same rank would have counted by date of promotion. 247 But if these men are immunes of the lowest class, how can we explain the suib-heading? If we adopt Fink's suggested expansion. ]LIB(RARTORUM) MERCUR[I, which is both ingenious and attractive, we shall have at least two, and probably more, of this ciass of immunes separately classified on the rolis of a single century or turma. The Geneva.
archives have shown that this is not impossible, but it does not seem very probable. 248

Gilliam's expansion of line 10 solves most of these problems. He reads [ـTEM? ]or [ITEM EX ?] LIB(URINA) MERCUR[IÓ, which means that the list is part of a naval roster. 249 The absence of centuries is thereby explained, and the nature of the document becomes reasonably certain. Our fragment contains parts of a list of crews from two different ships: the whole document may or may not have concerned more ships. One ship, named in line 10 , is called Mercurius, which Gilliam describes as a typical ship's name. 250

One further point may be noted. This is clearly not a document which contained complete nominal rolls of ship's companies. ${ }^{251}$. On the basis of the normal naval engagement of twenty-six years Gilliam estimates that a list containing only five names, and those the most junior, but covering as many as nine years of service (lines 1-9), could have contained no more than twelve or fifteen names in all. 252 Gilliam adds that the absence of the names of the ship's officers at the head of the men from the "Mercury" leads to the same conclusion. In this last point he seems to be overstating his case: the last few lines of the papyrus, those names at the head of the list of the men from the "Mercury", are so
fragmentary and incomplete that. we cannot really make a guess at their full expansion, and we cannot say definitely that they did not contain the names and ranks of the ship's officers. We can say, however, that if they did, they included only dates of attestation and not dates of promotion as might have been expected. 253

We have two short fragments of papyrus which are very similar in style to the documents we have been discussing. One is P. Bura inv. 41 recto, 254 a scrap of papyrus with a few lines in cursive and one subheading in rustic capitals, in the manner of the Princeton and the Oslo documents. This fragment may have been part of a matricula of principales of an auxiliary unit probably the Cohors XX Palmyrenorum- 255 and may be found to belong to a more complete list on some other papyrus in the Dura collection. The fragment contains an uncertain cansular date, the expansion and interpretation of which depends upon linking this fragment with some other piece of evidence.
P. Dura inv. 41 recto.
-[.]..... [
Iulius Proculus
[A]urel (ius) Th [e]marsa
$\operatorname{Maxim}\left[\begin{array}{lll}0 & \cdots & 0 \\ \text { ino } & \stackrel{?}{?} & \cos \end{array}\right]$
5
[A]urel (ius) Quin.[

The date may be read as A.D. 207, 223, 227, 232, 233, 234, 253 or 256.256

The other fragment, originally published by Wessely, has been recently republished. 257 Like the Rylands papyrus it is written entirely in rustic capitals. Rainer Collection (Wessely, Schrifttafeln, 9)
col. i
]. NERO INIT ET DO!
].IS DIONYSIUS LUCAs[
RAN HERACLILANO [
TORQUATO II ET A[NNIO COS 128
5
$] \cos$
C. ANTONIUS PRI[MUS

BERING C[
MARCELLA II ET [KELSO II COS 129
C. JULIUS FRONT T
]COS CUM EPISTRA[TEGO
Wessely read the fourth line of this document as TORQUATO II ET A[TRICO COS, and gave the date in conequince as A.D. 143. The recent editors point out that in that year the designation of the first consul should be TORQUATO $X$, not TORQUATO II, and read instead TORQUATO II ET A[NNIO COS, which means a date of A.D. 128. But certain of the Fasti, and perhaps at least one inscription,
describe C. Bellicius Flaccus? Torquatus as consul for the second time in A.D. 143, and Wessely's reading would not be on that score impossible. 258 . That the consul concerned is, however, the L. Nonius Calpurnius Asprenas Torquatus who was consul for the second time in A.D. 128, seems confirmed by the other dates in the document, which we should naturally expect to be in chronological order. Even so, this interpretation is not without its difficulties. We should expect to find the consulship of M. Annius Libo commemorated by his cognomen as LIBONE rather than by his nomen as $A[N N H O$. In fact, all the consular dates in this short fragment are unusual. In the first line we have very plainly VERO III ET D.[, but the only Verus III known is in A.D. 126, when the consuls were•M. Annius Vero III and C. Eggius Ambibulus. 259 The $\underline{D}$, however, which begins the name of the second consul in that line is possibly the clearest letter in the entire document, the whole of which is remarkably legible.

Further, in line 7 we have the normal order of the consuls reversed, and we should rather have expected CELSO II ET MARCELLO II COS. But inversion of this sort is not uncommon. Obviously the scribe was not very certain in his consular dating.

A fragment recently published in the first volume of papyri in the Antinoopolis collection is described by
its editor' as a 'fragment of a military register, perhaps a pridianum.' 260 The document is written in rustic capitals with traces of cursive on the left. On the verso is part of a letter in Greek, which the editor finds of especial palaeographic interest because, though it is written in Greek, 'the writer is clearly more accustomed to Latin' ${ }^{26 i}$ When compared with the other documents which we have discussed, however, this papyrus is seen to be not a pridianum but a fragment of a matricula, probably a nominal roll of an auxiliary cohort. The use of the name $M$. Aur (elius) as a mere prefix before such names a Lollius, Iulius, and possibly even Aurel (1)ius, indicates that the list contained auxiliaries with Latin names who became citizens after A.D. 212. This would mean that the roll was drawn up sometime about A.D. 220. P. Antinoopolis I. 41.

## Recto

- $\mathrm{AU}[\mathrm{R}$ (ELIUS)] LON [GUS ?
M. AURRELIUS [
]iri M M•AUR(ELLUS) LOLLLiú[S
ALB [I] NO ET [AEMILIANO COS A.D. 206
5 ].i M. AUR(ELIUS) IULIUS .[
M. AUP( (思JUS) AUFELLII [US

AUR(ELIUS) IUL(IUS) HILA[RUS
M. GUR (ELUL) ANTIN(OUS) Verso

$$
\begin{aligned}
& \text { ]. [.....] }[
\end{aligned}
$$

$$
\begin{aligned}
& \text { ] } \left.A \lambda_{\epsilon}\right\} a r \delta \rho \epsilon^{\prime} \omega^{\circ} \operatorname{\pi od}[ \\
& \begin{array}{l}
\text { ]rj̀r épautai yunúngr [ } \\
\text { ] ai toils apaypat[ikois }
\end{array}
\end{aligned}
$$

## Recto.

1 Lon [GUS vel LonGINUS : 2 et passim m'Roberts.
6. AUFELLI [US (vel fortasse APNEI [US) Roberts,
fortasse scribendum est AURELLII [US . 9 ANTINg (OUS) VEL ANTIN (OTTES) Roberts.

## Verso.

2 fortasse $\left.\phi_{[1 p]}\right]_{\text {poos }}$ Roberts.
This point would seem the most proper for the
discussion of a mangled fragment recently published by Miss Norse, 262 which has been the subject of an interest-ing note by J. F. Gilliam. ${ }^{263}$ Miss Norse was tempted to call her fragment a pridianum, but sensibly added 'ma il nostro papiro è piccolo e mancante, ed anche il sue contenuto appare tutu' altro che cento' . 264 What the
document does appear to be is a series of naval ranks, each followed by a name or names: in order of length of service with the inevitable addition of dates of attestation. It may therefore be classified under the general heading of matricula, though, as Gilliam admits, ${ }^{265}$ its precise character remains obscure. In the following version spacing has been introduced between the sections to make them more easily distinguishable. P.S.I. XIII 1308 .

$$
\begin{aligned}
& \text { ].terr. } \\
& \text { Severo e]t Claro it (erum) •cośs }
\end{aligned}
$$

$$
\text { A.D. } 146
$$

].ius Apolinaris
]. gub(ernatores) Avito cos A.D. 144

5 ] . . Firmus Glabrion] e et $\mathrm{Hom}(u l l o)^{\circ}$ coś A.D. 152 ]Valerius Rufus

$$
\text { ]. } \mathrm{fab}(\mathrm{ri}) \cdot A u g \cdot n \cdot
$$

Iulius Maximus

10
]........us Apontinus

$$
\begin{aligned}
& \text { Jascita• } \\
& \text { JVolusius Seneca }
\end{aligned}
$$

$$
\begin{gather*}
\text { ] caligati• } \\
\text { Torquato] et Attico•cos } \tag{ADD. 143}
\end{gather*}
$$

1.5
].us Nechutus
]. Pacha
Imp. ]Anton [i nd [co] s'
AdD. 145 ?
]... Nechu[tus
H] omullus.
7. 1. .e Hom•coś Norse. 1.4 Aspero ${ }^{\circ}$ cos Norse.

This papyrus was assigned by Miss Norse to the third century on the basis of certain consular dates: Avito cos (line 6), which she referred to A.D. 209, Aspero.cos (line 14), which she assigned to the year of the duo Asperi in A.D. 212, Antion [in] [c od (line 17), which she ascribed to a consulship of Caracalla (Antonio IIII cos - A.D. 213). This left two dates unexplained, namely, Claro it (arum) • cos in line 2, and Home cos in line 6. The first might possibly have been referred to A.D. 193, but in that year Erucius Clarus was consul for the first time, not the second, and in any case this would leave too long an interval before the next date (A.D. 209) . Gilliam 266 has solved most of these difficulties by taking Claro it (erum)-cos at its face-value (A.D. 146), and making these other identifications: Avito cos, A.D. 144;

could be a consulship of Antoninus Pius as well as of Caracalla: he prefers; however, to read Anton [in] us, simply a soldier's cognomen. Antoninus Pius' fourth consulship, A.D. 145, seemaiso much the date that is required that it is hard to:believe it is not right in this instance. The remaining date, Aspero cos', is more puzzling: Gilliam goes so far as to write that it is hard to reconcile the reading Aspero with what can be seen on the photograph. 267 The initial A seems certain: a possible reading which would give good sense is Attico cos (A.D. 1.43).

The ranks mentioned are obscure: caligati (line13) designates a special category of milites, ${ }^{268}$ but the other ranks, if rightly read, appear to be naval. At least there can hardly be any expansion of gub in line 4 except gub(ernatores), and fab(ri) in line 8 may also be a naval rank. 269 The expression fab•Aug•n•, however, seems odd. In a military list one would have expected
 is supported by the clearly read heading in line 11 , ascita. This word is otherwise unknow, 270 but must surely be derived from ascia, and just as an ascia is an instrumentum fabrorum, ${ }^{27 \dagger}$ so an ascita may be a specialized type of faber. If, then, this document is a naval text, it is to be classed with P. Rylands 179 as a representative
of a very rare type of document. ${ }^{27^{2}}$ These documents do prove, however, that the system of bookkeeping practised in the army was standard in the navy also.

Another fragmentary document of the same general class, but this time perhaps dealing with an auxiliary cohort, 273 has been published by Sanders. 274 He describes it as 'certainly military and probably a camp document like a pridianum'. While it could conceivably be a mutilated fragment of some part of a pridianum, it seems much more probable that it was a nominal roll of some sort. Parts of three columns would appear to survive. P. Mich. III 163.

$$
\begin{aligned}
& \text { ]i.t.: } \\
& \text { ]cos } \\
& \text { ]Donatus }
\end{aligned}
$$

Antonino IIII et Balb]ino II cos A.D. 213

5
] Antoninus

| Extricato II e t Presente cos | A.D. 217 |  |  |
| :--- | :---: | :---: | :---: |
| Ins | Clemens | $\operatorname{Iu}[$ |  |
| Jnus | Syrion |  |  |

Caesarion
Isidorus
Monimus.
Apollinaris.
..deramus

$$
\operatorname{Re}[
$$

Eudaemon

Marcellinu[s] sesq in coh[
A.D. 2i7 Extricato II et P]raesente cos item[
hi cas [ ] it[em
Corneliu $[\mathrm{s}] \quad$ it [em

1. fortasse Pompeiano et Av]ito: $[\cos$ (A.D. 209).

4 Commodo IIII et Victor]ino II cos Sanders.
6 ]ceretentei cos Sanders. 16 Condiano et P]raesente cos Sanders. $17 \mathrm{hi} \operatorname{cas}[\operatorname{tr}(\mathrm{is})]$ ?

Sanders dated this document to the end of the second century. He expanded line 16 as Condiano et P] raesente cos which meant a date of A.D. 180. This involved expanding IIne 4 as Commodo IIII et Victor ino II cos (A.D. 183). This interpretation would mean that the sequence of dates was not in chronological order. A further objection is that Bruttius Praesens was consul for the second, not the first time, in A.D. 180. 275 If Sanders" expansion were correct, we should expect rather Condiano et p $]$ raesente II cos, especially as we have an ]ine II cos in line 4, which shows that the scribe was not indifferent to iteration. The year A.D. 217 (Extricato II et Praesente cos) seems to fit the situation better. This enables a reasonable restoration of line 6 to be made, where Sanders reads ] ceretentei cos and. makes no attempt at elucidation. If Sanders' other dates were correct, this could only be restored with any
degree of probability as Condiano eft Present II cos (A.D. 180), a restoration even more pointedly in contravention of chronological order, coming as it does immediately after the supposed A.D. 183 of line 4. If the early third century dates are correct, however, it is tempting to find an additional consular date in the first line, and read Pompeian et Av $] \frac{\text { ito }}{}$ cos (A.D. 209). The nomenclature does not rule out a date after the Constitution Antoniniana, because the evidence of certain other lists of this date which refer to auxiliaries shows that although the regular practice was to prefix Aurelius before the existing nome, sometimes this addition was taken for granted and was not in fact written. 276

Another military document published by Sanders may be discussed at this stage. 277 This is a third-century list of men who belonged to a unit which, from the frequent use of the sign $\mp$ (= turma) must have been a cavalry one. A complication is the mention of an hordinatus, an infantry centurion. The unit was therefore either a humerus peditum et equitum or a cohors equitata: it was probably a humerus because certain of its members appear to have been transferred from other humeri. 278 P. Mich. VII 454. col. i col. ii Jus $\mp \quad$ cr $[$
］．．．．．
］．crus
JVarius
5

干 Maxims
Aurelius Seren〈u〉s
item sagit．（Lari）ex $\bar{n}$ Emesenor（um）
Aelius Marines hordinatus．
item fortis［ores］cas［trenses
$\mp$ saturnini
Aurelius Tsidorianus：
107.

10
］．ocrus
］darius
5

15

Iulifus Sempronius M［a］ternus sues［y
$\mp$ Ruti
Murenus Taeni
item ex $\bar{n}$ Or〈i＞entaitum
－$\mp$ Rut
Julius Vaiens
8 item sagit（tarii）ex $n$（umero）Emesenor（um）Gilliam， item Sacot［．］ix Femosenoi Sanders． 9 Aelius Gilliam， Au］relics Sanders（ p .92 ）；hordinatus Gilliam， hordinacus Sanders． 10 es［q（uipilcarius）Gilliam， scr［iba Sanders． 13 Orontalum Sanders．

The nature of this document may be most clearly seen in the second column：col．i is too fragmentary to make any judgment of its content possible，but col：il concerns new enrolments．These are divided into categories， each with its own sub－heading，item etc．How many sub－ headings there were in the complete list we cannot tell，
but we have three surviving in col. ii, and at least one more must have preceded. The first of these categories (line 3: item forti ores cas trenses) seems to be concerned with recruits from the camp villages: there are two, each named Aurelius, an indication of third-century date, and one is posted to the turma of Saturninus, the other to that of Maximus. The next category is of men transferred from the numerus Emesenorum, perhaps the numerus of this title which was stationed in Numidia during the third century. 279 Three men are received from this numerus, but only one of them: is posted to a turma; of the other two one is already a centurion, 280 and the other a sesquiplicarius. ${ }^{281}$ The third category consists of one man only in the surviving fragment, a soldier who is transferred from the otherwise unknown numerus Orientalium (or Orontalium) ${ }^{282}$ and posted to the turma of Rufus. The whole document, therefore, would appear to be a list of accessions to the strength of the unit, with indications of the unit (if any) from which each man had been transferred: since such records would require dating, we may feel certain that consular dates, and probably days of the month also, were in the parts of the columns which have not been preserved.

A document in many respect similar to this last is a fragmentary papyrus published by Wessely. 283 This is a late third-century document in three fragments.

Wessely，Schrifttafeln 23．

$$
\begin{array}{ccc}
\text { fr. } 1 & \text { fr. } \\
\text { RID ID } & \text { AUG G]US[T }
\end{array}
$$

fr． 3

$$
\stackrel{f}{\mathrm{~A}[u] \mathrm{reli}[\mathrm{us}}
$$

Aelius
item

> al 〈a〉e.

Iul［ius

## august［

lac［ A］Prodito eat item b［
Didym．le［hin
item cercesdite ea［ se］menus Aurelius干 Sereni

$$
] \operatorname{lil}[
$$

lac［ ］bani
Aureli i［ ］odis［

$$
] . \mathrm{v}[
$$

In spite of the mangled state of this document we can see traces of subheadings remaining－item etc．－ followed by names of turmae，which can be paralleled in P．Mich．VII $454 .^{284}$

There is one document 285 which falls under the general heading of matriculae which has a method of dating unique in military records，unless we accept Dunlap＇s suggested restoration of this method in P．Mich．

III 164. 286 The system employed is to use the normal Roman consular dating, but to place before it the name of the Prefect in adjectival form. For instance, we read Petronian Torquato et Iuliano cos, referring to A.D. 148. This system finds an obvious parallel in the double-dating frequently employed in civilian official documents in Egypt. Dunlap, however, has a rather different explanation. "Petronian," he says, 287 "may refer to a levy of troops made under the authority of Petronius. Such levies did not, as a rule, constitute new bodies of troops, but were normally made for purposes of replacement in established army units. Under such conditions the identity of the levy would be preserved only in the records of the prefect's office. The abbreviation petronian may therefore be expanded into some form such as Acta Petroniana or Commentarii Petroniani, and the consular date assumes significance as indicating a division by years of the records of the prefecture of Petronius". This explanation appears unnecessarily. ingenious: the proper expansion of Petronion is quite probably Acta Petroniana, but there would seem to be no need to limit its use to preserving the identity of the levy. It is quite possible that all records and files kept at the Prefect's headquarters were listed under the nome of the Prefect responsible for their content. This
practice would have obvious advantages from the administrative point of view, whereas a system of filing under consular dates alone would not have the same immediate relevance to the authority ultimately responsible. In this document the consular dates extend from A.D. 1.47 to 163, which means that it was most probably compiled between the latter date and A.D. 172, a period of twenty five years; the normal term of auxiliary service, after the first date given.
P. Mich VII 447 recto.
col. i.
Date
[Praesente et Rufino cos ?]

[..................ab 0] ptato 7
[Sempronian Commodo e]t Laterano cos


[item Severo et Sabiniano] cos 155
[..................] (eiusdem?) a Forte 7
10 [item Silvano et Au] gíurino cos
$[\ldots \ldots . . . .$.$] celerinus ab optato 7$ col ii
(lines 1-4 missing)
5 Fur [ian Quintillo et Prisco cos] $159 ?$
[-...............................................
A[LA (?)Syriaci[an Frontiniano et Rufo cos]162im [.....................
10 item [Laeliano et Pastore cos] ..... 163im [.....................
P. Lond. inv. 2723 recto.
col. i

col ii.
Proclian [Avito et Maxim] : cos ..... $144 ?$im Nepheros [ $\ldots.]_{\text {] }}$ [....] is a Forte 7
Petronian Tor[q]uato et Iuliano cos148
Im Onnopher Nili - item
5 Munatian Gallicano et Vetere cos ..... 150
im Apollos [0]sirisar[a]pion[is] a Tiber(ino?) ..... 7
Praesente et Rufino cos153
im Arrius ionis a. Victore 7 .....................IAEcol iil
"The left strokes of three initial letters.
remain. It is impossible to determine what the letters
were, though A and.M.seem most probable." (Dunlap, 1.c.) P. Mich. VII 447 r.
col. 1. 1. Cf. P. Lond. inv. 2723 r , line 7. 5.
A]ntiochi ee Dunlep. 9. n (fortasse $=$ item) Dunlap, (eiusdem) scripsi. P. Lond.inv. 2723 r. col. i1. 1. Proclien [....................]. cos Dunlap. 6. Vel Tiber (iano).

This document survives in two fragments of papyrus which were acquired separately by the British Museum and the University of Michigan. The verso of both fragments contains the remains of a treatise on gramar, written in the third century, and now most conveniently referred to as P. Mich. VII 429. 288 The two fragments must have originally formed part of a roll, but it seems clear that the positions they occupied were not adjacent. As far as the verso is concerned, Dunlap argues that the Michigan fragment probably preceded that of the British Museum, since the discussion of diphthongs which it contains would naturally belong to the introductory part of the treatise, whereas the other fragment is concerned with parts of speech, which in the traditional order of works on Latin grommar would come later. 289 The order of the verso is important for our purpose because the writing is in the same direction on both sides of the papyrus, and in the absence of other considerations one would naturally
assume that the order of the verso was also the order of - the original military list on the recto. : The consular and prefectural dates, however, would appear to support the reverse order, since not one of the dates in the Michigan fragment is earlier than any of the dates in the British Museum fragment. Moreover, within each fragment the dates are consecutive in spite of a break caused by . a sub-heading in the second column of the Michigan fragment? Dunlap's argument, therefore, that the consular dates cannot be regarded as valid evidence for the reverse order, because a break in the chronological sequence of the entries is suggested by the sub-heading at the close of the British Museum fragment, is invalidated by the internai evidence of the Michigan fragment itself. Dunlap's own note ${ }^{291}$ may be of interest in this connection:. "The chronological order of the entries is not interrupted by the subheading, although reversion to an earlier date at the beginning of a new section of the document might have been expected". It is difficult to support a thesis based upon a purely theoretical argument when an exception has to be made in the only case where that argument.can be tested. Granted, then, that the treatise on the versos is in one particular order, and. that the writing on the rectos is in the same direction as on the versos, we can still suppose that in the interval, perhaps fifty to one
hundred years, between the two sets of writing the original roll became torn, and was repasted in a different order. So far as the consular dates in the document are concerned, it is tempting to supply the consuls' names for A.D. 153 in the vacent first line of col. $i$ of the Michigan fragment. This date occurs in the last item of the second column of the British Museum fragment, where, exceptionally, there is no prefectural reference. This may be an oversight, but Dunlap's other suggested passibility, 292 that there was a vacancy in the prefecture - owing to the assassination of Dinarchus ? 293 - and that reference was made by the names of the consuls alone, seems to be the more probable. If the close chronological sequence of the beginning of the Michigan document is to be followed, therefore, it seems best to supply no prefectural reference in this first line.

At the beginning of the second column of the British Museum fragment Dunlap reads Proclian ......... - cos, and in his text correctly gives the date as A.D. 144-147. In his note, however, ${ }^{294}$ he states the dates of the prefecture of L. Valerius Proculus as A.D. 145-147, and considers the names of the consuls for these three years only. He recognises an a as the first or second, or with little probability, the third letter of the lacuna. None of the combinations of consuls' names
for the three years satisfactorily fulfils his conditions, and he leaves the date doubtful. But Proculus is first attested as Prefect in A.D. 144, 295 and the names of the consuls for that year, [Avito et Maxim] cos ; fiti the space comfortably, and satisfy the requirement of the initial E. $^{\text {. }}$

In the first column of the Michigan fragment (line 6) we have a line ending in the two letters if, or possibly ee. The obvious interpretation of this, $f(i l i i)$, Dunlap hesitates to adopt, mainly because, he says, 296 it would be a natural requirement of a list of this kind that each soldier's name be separately, entered. But that would automatically limit each year to the entry of a single soldier, unless we had the consular date repeated, of which there is no sign in this document. In any case, the entry in question takes three lines, whereas the others, presumably all single entries, take two lines only. The reading ff, for $f(i l i d) ;$ seems therefore well supported. Dunlap reads ee, and frankly admits'297 "the doubling of the letter does not indicate plurality, but I can offer no satisfactory interpretation of it". The father whose (two?) sons enlisted in A.D. 154 seems to have had another son enlist in the following year. This seems to be the most reasonable explanation of a curious mark in line 9, which Duniap reads as $\underset{\underset{\sim}{\mathrm{h}} .298 \text { This is a character consisting }}{\text { a }}$
of one or possibly two letters, which has been partially lost because of a hole in the papyrus. There is no trace of writing before this character, or between it and the following a Forte 7: the character itself consists of a tall stroke crossed by a bar. This may have been an n, but it is difficult to give any explanation for it if it is. Dunlap's alternative suggestion seems far more likely, that it is a compendium formed of $\underline{i}$ and $t$, representing the word item, and standing in place of the father's name. 299 It is in accordance with this suggestion that the reading (eiusdem?) has been adopted in the text. The document as a whole is interpreted by Dunlap as a list of soldiers recomended by their centurions or decurions for promotion to the grade of immunis. 300 The abbreviation im occurs before each soldier's name in that portion of the document where the beginnings of the lines are legible. Gilliom in his review 301 objects that it seems doubtful that the men are being made immunes at this time or that they are all being promoted to the same grade. If they were, he asks, why should men from the same century be found in separate lists? Neither Dunlap's hypothesis nor Gilliam's objections seem wholly convincing. . Both largely ignore the now fragmentary sub-headings. 302 These sub-headings may have been either titles of units, as in Wessely, Schriftt, 8:303

LEG III CYin and LEG XXII, or names of ranks; as in P. Oslo.III 122: ${ }^{304}$ SES $]$ QUI $\langle P\rangle$ LICIAR(II) X[. The former seems the more probable, since in the Michigan fragment, cal. ii, line 7, we have the initial letter of one of these sub-headings, a clearly written A in rustic capitals. The expansion $A[L A$ suggests itself at once. There are the last three letters of another sub-heading surviving at the end of the second column of the British Museum fragment. These letters, ] TAE; again in rustic capitals, would suit the ending of the title of a cohort or ala in the genitive case. If then the British Museum fragment preceded the Mi chigan fragment, as seems probable from the dating, we have at least three different units concerned in this document, one of them probably an ala. 305 The document was therefore probably drawn up at higher formation level, perhaps even in the Prefect's office. For what purpose would a list of this sort be required? . Surely not to record promotions to the grade of immunis in the ordinary way, especially since the duties performed by immunes were of such extreme variety. 306 Moreover, the men are listed in order of seniority according to length of service regardless of the unit to which they belonged. Can we imagine that some official at a headquarters really required a consolidated list of all immunes, or of men recommended for promotion to that rank, from several auxiliary units,
arranged in order of individual seniority? Domaszewski has shown 307 that the term immunis can often conceal librarii and exacti: it would seem possible that if this is a list of immunes, it is really a nominal roll of librarii and exacti, together with the names of the officers responsible for their appointment to these grades, either directly or by recommendation. It would be not unreasonable for a higher bureau to prepare a nominal roll of men performing clerical duties in units under its command:
a list of men performing a wide variety of unrelated duties would be almost useless.

We may conclude this selection of matriculae with two short fragments which probably belonged either to legionary matriculae or to preliminary drafts. The first of these is included in the recto of that most famous of all military papyri, P. Gen. lat. 1.308. This consists of five lines which presumably were excerpted for some purpose from the complete roll of the legion. P. Gen. lat. 1, recto, part 3.

IMP DOMITIANO XV COS M[ C AEMILIUS C F POL PROCULUS ...[
Q IULIUS Q F COL PONTICUS CA.[ C VAIERIUS C F POL BASSUS CAS (TRIS) M ANTONIUS $M$ F POL ALB[U]S C[AS (TRIS)

1. $M$ (issi) $H$ (onesta) $M$ (issione) de Villefosse, $A U[G$
editores, fortasse $M[A T R I X$ vel $M[$ [ATRICULA. 3. CAI... Premerstein, ... editores. lege GA[DARA vel CA[ES (AREA) Premerstein. 5. M F Premerstein, F editores; ALB[IN] US oditores, $A L B[U] S$ CAS Premerstein, $A L B[U] S$ C $[A S$ legi.

The second fragment is described by Turner 309 as a scrap from a Latin document of the second century, written across the fibres with the recto blank and interpunctions between words. Parts of six lines remain: he gives the reading of two.
P. Aberdeen 150 .
L. Valerius L. fil. Cru(stumina)
coh. VIII.
Military documentation is not merely a matter of drawing up lists of nomes: it is even more important to have some record of the ditails of each man's service. The basic requirement is the daily duty-roster of the century. We are fortunate in that one of these has survived in the Geneva military archives. ${ }^{310}$ This is quite an elaborate chart in chequer-board arrangement with spaces for the daily duties of 36 named soldiers during the first ten days of October in some year early in the reign of Domition. This duty-roster, like all the documents which comprise the Geneva archives, 311 is concerned with legionaries, and may represent the entire strength of a century at that particular
time, except for those ranks which in the British Army we should call non-commissioned. At least, the adjacent document on the verso, ${ }^{312}$ which is part of the paradestate of a century, shows a total of 40 men, nine of whom are engaged on special duties, leaving a total of only 31 available for general duties. In our duty-roster also many men are absent for periods of several days on tasks outside the camp (e.g., line 11, exit cum Asino.; line 22, exit vi No(nasi) cum .....; 313 line 30, exit ad [frumen] tum Neapoli), while others are engaged in other centuries (in 7 Heli, in 7 Sereni etc.), besides other duties connected with the camp administration. It seems necessary to conclude that the legion was in a depleted condition, and that some centuries, of which this was one, were being used to keep the others up to strength. The possible abnormality of the circumstances, however, does not affect the value of this document as evidence for the method of documentation within the century. We may assume that some such roster, though perhaps not always in so elaborate a form, was regularly compiled in order to plan the work of the century for a few days in advance, and, as Vegetius says, 314 ut ne quis contra iustitiam praegravetur, aut alicui praestetur immunitas.

The daily duty-roster is essentially a preliminary document, drawn up in the expectation that certain duties
will be performed, but not actually recording the performance of those duties. There is need in any military system of some methodical recording of what is actually done each daỳ. This may be called the daily $\log$, and is best compiled at unit headquarters. We have certainly three, and possibly more, documents of this kind surviving to illustrate the Roman practice: one is from Dura, 315 and concerns the Twentieth Palmyrene Cohort, another has been recognised by Gilliam in two Michigan papyri, PeMich. VII 450 and 455,316 and the third is a document recently published by Medea Norsa. 317 Apart from these we have one document which represents an intermediate stage, P. Gen. lat. l, verso, part $4,{ }^{318}$ which is the daily parade-state of a century. It is from parade-states such as this that the unit report would be compiled.
P. Gen. lat. 1, verso, part 4.

\[

\]

10 X

III

15
$I$

20 II
I
XI
I

## II

25
m
mus

## IX

30....7 I
equites II
c] ornelius
Crispus

Librarius et ce[r]a〈r〉iu[s] II Curiati[us ]s Aureli[us ]s
supranumerari[us] Do[mitius
stationem a[ge] ns
I Domitius [


RELIQUI XXXI
\ Premerstein. 16. I Premerstein, $x$ edd. 24.I Premerstein, om. edd. 22. XI edde, I Premerstein. 23. I edd., $s$ Premerstein. 24 II edd., 8 I premerstein. 26. m Premerstein, .... edd. 27. mus Premerstein, imus edd. $30 \ldots 7$ I Premerstein, VII edd. 32 Cornelius edd., C]ornelius Premerstein. col. b. 6. Plotimus premerstein, Sivinius edd. 7. tri [b Do] mitius legi, tri....tius edd., tri.nutius Premerstein. 8. custos 《Domi iti》 Domiti(us) Staius legi; custos domi ...iti.... Staius edd., custos domi ...ibi..... Staius Mommsen, custos domi iti Sallusti Staius Premerstein. 9. et ce $[r] a\langle r\rangle$ iu [s] Premerstein, et [discens edd. 12. supranumerari[us premerstein, supramumer[arius edd.

The Dura Acta Diurna; as published by Gilliam, 319 consist of four papyri of different dates in the second quarter of the third century. Two of these are of considerable length, the other two are merely fragments. The title acta diuma or acta cotidiana is due to Rostovtzeff 320 there is no ancient authority for the term, but this class of document must have been included under the general term acta by Vegetius (II, 19): totius enim legionis ratio, sive obsequiorum sive militarium munerum sive pecuniae, cotidie adscribitur actis.
P. Dura inv. 3 recto.

1 VI Kal Apr [iles n(umerus o) p(urus e) mil (itum) ca] (igatorum) DCC̣C̣XIIII in his [0]ra(inati) VIIII dupl(icarii) VIII s.[esq(uiplicarius)] I drom(adarii) XXXIIII in his sesq(uiplicarius) I eq(uites) CCXXIII in his dec(uriones) $V$ dupl(icarii) VII sesq(uiplicarii) IIII
2 coh(ortis) XX [Palmyrenorum S] everianae Alexa[nd]rianae
 $s$ (ancti ?) ex sep $[t]_{\text {ezon }}[i]$ s.
4 [mis $]_{s i} \cdot[\ldots \ldots.] \cdot[\ldots \ldots \ldots .]_{\text {min (ites) } y \text { in his }}$ drom(adarii) II 7 Mariani Aurel (ius) Licinnius
7 Pudentis A...l(ius) Demetrius 7 Nigrini Aurel (ius) Romanus Aurel(ius) Rufus $\mp$ Antion(ini) Iarhabolus Odeati
 ......[...]. 干 Tiberini

## (vacat)

(vacat, 2 lines)
$6 \quad T_{i}[$ [mi] nius P[aulinus decurio] admissa pronuntiavit. - [30-35] et ad omnem tesseram parati eirimus (sic) excubare ad signa $D$ (omini) $N$ (ostri) Alexandri Aug(usti) 7 deç(urio) T[iminius Pauli]n[u]s á.[ed(ituus) A]urel(ius) Sị [Ivanu]s [30-35]. Vabalathi curator Aurel (ius) Rubathus .i Iarhaeus Mal chi curator $\operatorname{ll} \mathrm{Cl}$ (audius) Agrippes eq(ues)
8 [...] ... [15] ...[.]s...i...[.]. [30-35] (vacat)

## (vacat, 2-3 lines)

9 [V Kail Ap]riles $n$ (umerus q. $p$ (urus ?) $m[i l(i t u m)]$ cal (igatorum) D [C]CCCXI[III in his ord(inati) VIIII dup] (icarii) VIII sesq(uiplicarius) I drom(adarii) XXXIIII in his sesq(uiplicarius) I eq(uites) CCXXIII in his dec(uriones) V dupl(icarii) VII sesq(uiplicarii) IIII
10 [co]h(ortis) XX $P_{0}[\mathrm{a}]$ ][m(yrenorum)] Severianae Alexand [rianae 11 [Iulius Rufi] a[nus tribunu]s [...].....[...].....e.ex septezonis.
12 . $30-35]$.. Antonius 7 Anton(ini) Aurel (ius) Marinus【Aurel(ius) Heliodorus] 7 Gaiani Iarhabolus Iarhaei $7 \mathrm{Nig}($ rini) Aurel(ius) Apolinarius
13 [르. 10]... [10] ........ [...i']. [15] . [..] ... Gaianus Iarhabole (vacat)
14 [员. 7 Be]cchuf.[...] .ex[... mi]il(es) I 7 Gaian[i ..]. [. .]. [10] (vacat)

16 T [imin] $]_{\text {ius }}$ [Pau] linus dec(urio) admissa pronun [tievit 18] IIII Keil April (es) expungentur duplicarii. II novicili et ad omnem tesseram parati erimus
17. excuba:[re] ad signad(omini) $N$ (ostri) Alexandri Aug(usti) dec(urio) [Timinius Paulinus] .... Aurel (ius) ....s aedit(uus) Aurel(ius) Silvanus sig(nifer) Cl (audius) Natalius lib(rarius) Aurel (ius) Capiton
.i Anton(ius) Val(entinus) opt[io]n II Ogelus Malchi eq(ues)

18 [ca. 10] Mal chus Zebida eq(ues) Ael (ius) Heliod [orus ...] ..... Cl (audius) Iul (ius) Menander . [.] ......i
3. cf. Gilliam, op.cit., p. 239. 5 et passim. vel $q$ (uondam) $\alpha(e) p$ (utati), cf.Gilliam, op,cit., p. 238 16. expungentur duplicarit II novicii supplevi, expungentur .oplic...i.i.novi.i. Gilliam, expungentur pupl (ice) coti(dian)o in novitio sugg. Wilcken. . expungentur replicatio(ne) in novitio(ne) sugg. Schubart. col. ii

1 IIII Kal April(es) ñ(umerus ?) p(urus 2) mil (itum) cal (igatarum) DCCC [CXIIII in his etc.
2 coh(ortis) XX Palm(yrenorum) Severia.[na]e. Ale[xandrianae
3 Iulius Rufiamus tribunus [...]........[.]...[
4. missi ad hord(eum) comparandum m[il(ites) ..] in h(is) eq(uites) ...[
5. missi in prosec(utionem) hordiator (um) mil(ites) [•] $]$ Marieni -[
6 reversi $q$ (uondam ?) $d($ is.) $p$ (osti $p$ ) ad Atha mil(ites) II 7 Nigrini Iul(ius) Zabdibolus [
7 . reversi q(uondem $\boldsymbol{q}$ ) $d(i s) p(o s i t i$ ?) ad praes (idium) praesidis cum epistul [i]s m[il(ites)
8 Z reversus ex q(uondam ?) d(is)p(ositis ?)
cum eis ad praes (idium) praes (idis) ex coh(orte) II eq(uitata) $[$
9 missus lig(nator) bainei mil(es) I 7 Nigrini Zebidas Barnei [
10. 【reversus】

11 Timinius Paulinus admissa pronuntia [vit
$1: 2$ dec(urio) Timinius Paulinus aed (ituus) Aurel (ius) Silvamus - [
1.3 III Aurel(ius) Bessus IIII Aurel(ius) Heliodorus[ (vacat, 3 lines)
14 İI Kal Apriles n(umerus of) $p$ (urus ?) mil(itum) cal (igatarum) DCCCCXIIII [in his etc.
15 con(ortis) XX Palmyren $[0] \underset{\substack{r}}{[u] m}$ Alex [andrianae Severianae
16 Iulius Rufiamus $\operatorname{tr}[1]$ b[u] nus . [.] i.o[
17
(vacat) ....[.] in $\ldots[$
18 hemanserunt mil(ites) IIII 7 .[
19. 7 Mariani .......[...] Themarsa ][

20 non comparet [.....] eq(ués) I[
21 mutati ... ex q(uondam ?) d(is)p(ositis ?)
[.....]e..merin.[
$22 \mathrm{~m}[u]$ tatus ....e.ex [..........]. [
8. Z. of. D. Perg. 6, line 4. 321
P. Dura inv. 17 recto.
$i$ [27]. [

2 [25]... ? Pudentis Ptolaemeus . [.
(vacat, 1 line)
3 [av coh(ortis)] XX Palm[y]renorum Severianae Al[exandrianae
4 [12]. Maximo et Pa [tern]o cos et proficisci ad castra prae.e..da.. [
5 ]. [.....] . [......] .a pridie $N[0]$ nos Septembr[e]s Maximo et. $\mathrm{Pa}[t]$ erno cos
(vacat, 2 lines)
6 [6]as quod imperatum fuerit facie[m]us et ad [0]mnem te[sseram parati etc.
7 [8] Demet $[r]$ ius mag (ister) campi Bellaeus 0.a - og Malchus Zebida [.

8 [20]........l adbonos .[.....] Aurel (ius) .... a Aurel(ius) ...ot... [
(vacat, 1 line)
9 [30]. eq(uites) cxx in his dec(uriones)[.
(vacat, 2 lines)
$10[35]$. sign $[u]$ m Iovis [
(vacat, 3 lines)

1. Fortasse $]$ [ Gilliam. 2. Fortasse $]$ elii 7 Pudentis

Gilliam. 4. ad castra praeeepi da[ sugg. Gilliam, fortasse legendum est ad castra praes (idis) et ad A[tha.
P. Durea inv. 9 recto.

1 [Aurel(ius) G]ermanus ord(inatus) principis (sic)
 fuerit facemus (sic) et ad omniam (sic) tessera[m] parati erimus excubare ad [sig]nai D(omini N(ostri) [Imp(eratoris)]
Marci Antoni Gordiani Pii Felicis Invicti A[u]g (usti)
[0]ra(inatus) Aurelius Germ[enus] ...n.. singnif(er)
(sic) Ulpius Maria[n]us buc(inator) Aurel(ius)
Priscus. [sacer] dos Themes Mocimi tess (erarius) Aurel (ius) Mocimus $\ddot{\eta}$ Ulpius Silvanus signif(er) II Flavius Demetrius alt (er) signif(er) III Aurel(ius) Ma [lohus] disc(ens) mens (orer [.... A] urel(ius) Iarhaboles: ..
[-Kal Iun(ias) sun]t in hibe[rn]is coh(ortis) XX Palm(yrenorm) Gor [dian] ae n(umero ?) p(uro ?) - [......] om DCCLXXXI in his ord(inati) VI dupl(icarii) V[I]II sesq(uiplicarius) I drom(adarii) XXXVI Ein his sesq(uiplicarii) (?) eq(uites) ccxxxili i]n his dec(uriones) IIII dupl(icarii) VI sesq(uiplicarii) II $[\mathrm{coh}$ (ortis) X]X Palm(yrenorum) Go [rd]ianae s.m [o..]. $[\ldots . . \mathrm{p}]$ erma ${ }^{[ }$nserun] t (vacat)
[ ca. $\cdot 17$ ] Avitus 7 leg(ionis) praep(ositus)
[.]l..u [..........]nivit signum Securitatis misit (vacat, 5 lines)

Aur $[$ el (ius) Germanu $]$ s. $[0]_{\text {rd }}^{\text {d (inatus) princeps }}$ [ad]missa pr [onu]ntie $[v]_{i}[t .$.$] e[. qu] od imp(eratum)$ fuerit facemus (sic) et ad omnem tes[se]ra[m $\mathrm{pa}]$ r [ati er] imus excubar(e) ad [sig]na $D$ (omini) N (ostri) Imp(eratoris) M(arci) Antoni Gordi[a]ni.
 or [d(inatus) Aurel (ius) Germ]anus sig (nifer) Ulp(ius) Mari [anus buc(inator) Aurel(ius)] Pri[scus sace $]_{\mathrm{y}}$ (dos) Themes Mocimi [te]ss(erarius) Aurel(ius) [Mo]cimus [弟 Ulp(ius)] Silvanus s[ig(nifer)] I! FI (avius) [Deme] triio [u]s sì [gni]f(er) I[II] Aurel (ius) Malchus disc(ens) m[e]ns (orem) ....
coh (ortis) [XX Palm(yrenorum) Gordiana]e . [......... om]nes permanserunt (vacat)
13 Aurel(ius) I [arhaboles] .. et ad .[.]nis .[.........] ......[........] $]$

- Kal Iunf(ias) [s]unt [in hiberni]s coh(ortis) XX Palm(yrenorum) [Gordian] ae n(umero ?) p(uro ?) bccix [xXI in hi] s ord(inati) VI dupl (icarii) VIII se[sq(uiplicarius)] I drom(adarii) XxX[VI in his sesq(uiplicarii) (?) eq(uites) c]cxxxIII [in] hi [s] d $[\mathrm{e}] \mathrm{c}$ (uriones) $\mathrm{II}[\mathrm{II}]$ d[u] pl (icarii) VI sesq(uiplicarii) I! ... [... Avitus 7 le $]_{g}$ (ionis) praep(ositus)
[••.] $]_{\mathrm{m}}[\ldots . . . . . . . . .]_{\text {nijivit }}$ signum Iovis Dolicheni
$s$ (ancti ?) mis:it
14 ]tirones probati ab [.....] nio $v$ (iro) c(larissimo) $c(n) s$ (ulari) $n$ (ostro) n(umero) II [12]abb.si...? Aurel (ius) Germanus ex VI Idus Maias D(omino) N (ostro) Gord [ian] a Aug(usto) cos (vacat) .. [8 tirones] duos quorum nomi [na 15]. Item staturas subici pr [a]ecepi ar. [0]. sagita..e.... [.]. probatos [.] ... in c[0]h(ori'em) XX Palm(yrenorum) Gor[d]ianam [.0]..


## Fragments

d A [urel(ius)
IIII Kal Iunias sunt in [hibernis
e $\quad$ ]s quod imp(eratum) fuerit [
].. Aurel (ius) [
]. s ssus[
$\mathbf{f}$
].[.]. 1 [
co] h X $[\mathrm{XP}$ ] alm(yrenorum) $[$
coh X] X Palmyrenorum Gord [ianae
]s Avitus 7 prepos(itus) coh(ortis) $\cdot[$
$\mathrm{g} \quad \mathrm{P}] \underset{\rightarrow}{\text { riscus sacer }}$ (dos) Them $[\mathrm{es}$
par]ati sunt [

n
Au] rel(ius). [G]erman[us

$$
\begin{aligned}
& \operatorname{or}[\text { (inatus) }] \text { aurel(ius) [G]erm [anus } \\
& ] \cdot[-.] \cdot[\cdot] . e .[
\end{aligned}
$$

1. liege princess. 2. fortasse Germ[anu] sinnif singnif(er) Gilliam. 6. fortasse sum[ma . . Gilliam. 14. ...VI vel -0.7 Gilliam. 15. cf. P. Oxy. VII 1022.322
P. Duran inv. 22 recto.
(vacat; 2 lines)
1
ert] mus excubare ad signal Dominic N(ostri) Imp [..] ......[

2
]........... Aural (jus) ....[...]....... Gaius Sal[
3 ]Heli[0]dorus ..a.......... ..val..... III.[
(vacate, 2 lines)
4 ]drom(adarii) XXXII in his sesq(uiplicarii) II aq[
5 ].
(vacant)

1. fortasse $\operatorname{Imp}[\mathrm{er}]$ atori[s Gilliam. 2. of. Aus (elius)

Gaius evoc (III Aug) (Lambaesis) CIL VIII 2636.323
The various sections of the Dora anta diurna well
illustrate the formulaic nature of Roman military bookkeeping. The items included in the daily entry, the strength of the unit, the signum, and the pronuntiatio, 324 were all written in routine phraseology, though P. Duran $3 r$ is dated to the reign of Severus Alexander (A.D. 222-235), P. Dura 9 to the end of May, A.D. 239, P. Dura 17 to A.D. 233. P. Dupe 22 is undated. In the: daily strength return na account is taken of the precise ranks of the
principales, 325 such as signifer, optio and tesserarius, but all are classified according to their grade of pay, and described as duplicarii or sesquiplicarii. 326 We may compare the British Army practice of listing a C.S.M. as a W.O. II, and on R.S.M. as a W.O. I. The matriculae which we have been considering also adopt this system to a. certain extent, as is attested by the sub-headings DUPLICIA[R found in P. Dura inv. $41 \mathrm{r}, 327$ and SES] QUI $\langle\mathrm{P}\rangle \mathrm{LICLAR}$ (II) X[in P. Osio III 122.328 It may not be coincidence that these instances are of thirdcentury date; ${ }^{329}$ on the other hand, the Moesian pridianum, ${ }^{330}$ which has a Trajanic-Hadrianic date, employs the same system as the acta of Dupia. Traditionalism was so strong in the Roman army that we need not suspect a frontier outpost of adopting any revolutionary bookkeeping practices. This same conservatism is seen in the choice of the signa, so far as they can be read. We find Me[ [rc] uri s(ancti ?), Iovis, Securitatis, and Iovis Dolicheni s(anct1 ?) .331

It is in the pronuntiatio, however, that we see most clearly the repetition of the regular formula, in spite of occasional curious vagaries in spelling and grammar. 332 The use of formulae, of course, makes the task of restoration of lacunae much more easy and certain. There is only one instance of the regular sequence being
upset, in Pa Dura 3 r, line 16, where Gilliam reads: T[imin] ius Pau] linus dec(urio) admissa pronun [tiavit 18 ] IIII Kal April (es) expungentur . oplic..ei.i.novi.i. et ad ormem tesseram parati erimus etc. The phrase inserted into the usual formula, IIII Kal April (es) expungentur -oplic.oi.i.novi.1. , however explained, hardly accounts for the omission of the regular guod imperatum fuerit faciemus unless we suppose with Gilliam that this omission is simply a mistake. 333 . We may assume that the interpolated phrase concerned some event of special importance, coming as it does between the pronuntiatio and the oath that follows, Gilliam is content to remark that without the context and the subject expungentur is somewhat obscure. 334 "It presumabiy means," he writes, " "will be removed", or 'will be checked off'. "He suggests that the subject is perhaps nomina. Wilcken and Schubart seem to have a similar meaning in mind when they expand, expungentur pupl(ice) coti(diano) in novitio, and expungentur replicatio(ne) in novitio(ne), respectively. $335^{\circ}$ But in P. oxy: 1204 '́koфourytúerv was interpreted:by A.S. Hunt as meaning "to discharge". 'To discharge, strike off the roll', is in fact the usual meaning of this verb. Thus we have in the Digest ( $49,16,15$ ), ex ceusa desertionis notatus temporis, quo in desertione fuit, stipendiis expungitur, 'is deprived of his pay for the period in which he was a deserter".

Meinersmann ${ }^{336}$ cites BGU 435, a second or third century letter of a recruit from Alexandria, in which we find the
 entlassene (Soldat)'. It would seem possible, therefore, to read in this document ( $\mathrm{P}_{\mathrm{c}}$ Duran 3 r , col. i, line 16) IIII Kail April(es) expungentur duplicarii II novicii, 'with effect from 29th March two newly-created duplicarii will be struck off the roll (of principales ?)'. Such an action by the commanding officer would no doubt feature prominently in the admissa or orders of the day, 337 and we may well imagine its being given priority even over the military oath.

Certain abbreviations and annotations in these documents perhaps merit discussion. One is gdp which occurs several times'in $\underline{P}_{\text {。 Dora }} 3$ recto, sometimes in the form ex gdp. 338 Gilliam, following a suggestion of A. vo Premerstein, 339 expands $q$ (uondam) d(e)p(utati) and ex quondam) d(e)p(utatis). He compares Vegetius (II, 19): ad obsequia ... deputabantur milites; and (II I,8): per contubernales deputatos ad monera. . He notes, however, that when the men in the papyrus are sent off on some detail; they are missis and not deputati, and suggests d(is)p(ositi) as another possibility. The expansion d(is)p(ositi) is supported by P. Duna 12, col. xxxiii, line 7,340 where d] ispos(itus) occurs as a marginal
annotation. 341 The distinction in practice between deputatus and dispositus may be that the former term was used in connection with duties inside the camp, the latter for duties outside. . The proper expansion of gdp and ex gdp would therefore seem to be q(uondam) $d$ (is) p(ositi) and ex $q$ (uondam) d(is)p(ositis). In P. Dura 3 recto there are two instances of a mark read by Gilliam as of or pi, which must represent the title of a rank. ${ }^{342}$ It occurs in col.i, lines 7 and 17. We may safely eliminate all but one of the other ranks mentioned in the same context, namely dec(urio), aed(ituus), curator, sig(nifer), 1ib(rarius) and eq(ues). The exception is optio, which occurs once only (line 17), but as opt[io] nI. This implies the presence of an optio I, presumably either .....Aurel (ius) .....s or . 1 Anton(ius) Val (entinus ?), the latter being one of the instances of ci or pi. Gililiam 343 states that the traces of letters before Aurel (ius) .....s cannot be reconciled with optio. It would seem worthwhile, therefore, considering whether the marks read as ci or pi before the name Anton(ius) Val (entinus e) can be read as a badly-written op(tio). Another abbreviated title which remains puzzling occurs in P. Dura; 9, in lines 3 and 9. It is read by Gilliam as $\dot{\eta}$. In this case the ranks which may be eliminated are ord (inatus), signif(er), buc(inator), sacer(dos), tess(erarius), and disc(ens) mens(orem). of the other ranks possible, the
most likely would seem to be im(aginifer), and the sign printed by Gilliam wald appear to be a not impossible contraction of Im .

The only marginal annotation of nate in these acta is found in P. Dura 3 recto, col. ii, line 8, where we read $Z$ reversus ex gdp cum eis ad praes (idium) praes (idis) ex coh (orte) II eg [. Why this soldier from another unit should have returned to Dura with the men from the Palmyrene cohort is not stated. Gilliam is undoubtedly right in suggesting that the sign opposite the beginning of the line was perhaps to remind the clerk to take some further action in regard to the item. 344 A modern clerk would be more likely to use the letter $X$ for this purpose. This same mark, $Z$, is found in another document from Dura, a parchment fragment published by Cumont, 345 which is possibly part of a preliminary draft of a pridianum. D. Perg. 6.


Toti m..
10

> ...........el numerare
.end

It is in the last two lines of P. Dura 9 recto that we see:?how our imaginary recruit would first impinge upon the acta diurna. The phraseology recails P. Oxy.VII 1022346 a letter in which the Prefect of Egypt assigns recruits to a cohort.

14 ]tirones probati ab [......]nio v(iro) c(larissimo) co( $n$ )s (ulari) n(ostro) $\underset{\circ}{n}$ (umero) II [12] abb.si.... 7 Aurel (ius) Germanus ex VI Idus Maias D(omino) N (ostro) Gord[ian] o cos
15 . $] \ldots$ [8 tirones] duos quorum nomi[ $n$ na 15] . item staturas subici pr[a]ecepi ar. . isagita..e $\ldots$.... [.] . probatos [.]... in c [0]h(ortem) XX Palm(yrenorum) Gor[d]ianam [..].:
As in the Oxyrhynchus papyrus, and also in BGU II 696,347 the recruits are first approved by the provincial governor, whose name is here almast entirely lost, and then sent on by him to the units to which he assigns them. Line 15 is a direct quotation from the governor's letter, 348 as is shown by the person of the veribs subici - compare the nomina eorum et icon [i] smos huic epistulae subieci of P. Oxy. VII 1022 - and pr [a] ecepi: It is tempting to read
nomi [na et iconismo $] \frac{s}{1}$ item staturas , or something slightly longer, to fill the lacuna in line 15. Gilliom states that he cannot read any form of sagit (t) arius; 349 which makes the restoration of the central portion of this line difficult. In discussion of P. Oxy. VII 1022 it was noticed that certain essential details conceming the recruits were not included in the Prefect's letter, and it was surmised that at the time of the probatio some more elaborate form of document was drawn up which contained these details: ${ }^{350}$ the present document attests that. at least the hieights of the recruits were officially registered.

Another probable example of a document of this class is one recently published by Sanders as two separate papyri, P. Mich VII 450 and 455.351 Gilliam recognised that both these are parts of the same document: ${ }^{352}$ nothing is said about their provenance, but he notes that the inventory numbers are close. 353 There are several coincidences of content on both the recto and verso of both papyri. Sanders dated P.Mich. VII 450 to the second or third century, P. Mich VII 455 to the third century: it may be best to date the whole roll of which both documents probably are fragments to the third century. Gilliam notes that the hand of 455 verso resembles Dura hands of the time of Severus Alexander. 354 All the fragments are in cursive except the strength-return in P. Mich VII 455a recto, lines

7-10, which is in rustic capitals.
P. Mich. VII 450.

Recto
] ${ }_{0}^{\frac{0}{0}}$ civitatis Fa [ $\left.\left.\ldots.\right]_{0}[0]\right]_{0}[0] \mathrm{m}[$
]c [i] vitatibus quarum $\cdot$ [
]? Sarapioni (s) Orap [11] on 7 [. .
]to praesen [tes ...
5 ]primorum fru [.....] bus
]Arrio Ammonian[0.] c.[.] signum stt $[$

[0...............................]
]opsit frustinuibu[s
]vigili t [0.] sistum $[$
]\&[.....]ne[
Verso
col. 1
]sui ${ }^{\circ}$
$]_{\mathrm{g}} \mathrm{ib}(\mathrm{u}) \mathrm{s}$
Jsensus
]suman [.0] errim
5 ]p[0]ures
]perste [....] rrim
]firves
]anteri [....]s
Jiustic erronequs
col. ii
$V$ Idus Aug[
ab leg I[ITr. Fort. perfor[tes perfec [ti

10 Jeius
]eos t [.]a[.]ui [..] sus
Recto
3. II Sarapioni Orapo[11] oni [•• Sanders.
6. Jarricam monian [-0] c[.] signum st. [... Sanders.

Arri. Ammonian [ Gilliam.
P. Mich. VII 455 recto.

Fragment a
] $-.1[$
]admittenda pronunt [iavit
]VII excubare.[......
]Amoniani hor [dinati
(vacat, 1 line)
5. ca]melorum stenoco[riasils ?

IIsidori demissu [s
(vacat, 2 lines)
]V RELIqUI Prae[SENTES
]TES CuSTODIAR[um
]DROM (ADARIUS) I RELIQ[UI
10 JIN HIS 7 IV DEC(URIONES) I[
(vacat, 3 lines)
]....... numero $x$ [
]erelio Ammoniano 7[
]Dioscorus Didumanti[s.
(Vacat, 1 line:):

$$
\begin{aligned}
& \text { ad]mittenda pronuntiavit [ } \\
& 15 \text { ] Gyme. Arrius Amonianu[s } \\
& \text {............]menti Amm[onion } \\
& \text { ]ex } \operatorname{tyr}[0 .] e
\end{aligned}
$$

Fragment b

$$
\begin{aligned}
& \text { ]....... mil(ites) } \\
& \text { [.... } \\
& \text { ]s qui praesentes [ } \\
& \text { custo]diarum bal(listarii) II [ } \\
& \text { ]reliqui ad sign[a. } \\
& 5 \text { ]in his } 7 \text { III de[c(uriones.) } \\
& \text { ]. [0]hors I Nom [idarum } \\
& \text { s] everianus [ }
\end{aligned}
$$

## Fragment a

3. hor[dinat Gilliam, Hos $[$ Sanders.
4. ${ }_{0}$ Dioscorus Didumanti[s Gilliam, ]dioso Rossi Dumanti[ Sanders.

## Verso

Fragment a

$$
\begin{aligned}
& \text { et .. eq(uites) } \\
& . \operatorname{VI~I[dus~A]ug~ad~} c[
\end{aligned}
$$

IIII Idus Aug
singul(ares) p[
5
7 Marci pre[

$$
\begin{aligned}
& \text { emansion[ } \\
& \text { singul(ares) ex[ }
\end{aligned}
$$

acti (onum ?) e(xemplum) e(pistulae) [
Illedi Eumar [
10
.vel feriatae [
inseruit in chortem [.
interfuit et critie [
intersit detrim [ent-
in aedem Aqu[ilae
15
C(ilicum) E(quitatae ?) putat est. [
fuit vel inusti[
hora II vanor [
nuntiantes sibi[
perlusivit actuitum[
sitirasemm in Siria[
$C$ (ivium) $R$ (omenorum) $S$ (cutatae ?) $/ \%$ usque si[
-.].pemfis reversus test [atus est
in legionariorum defection[
ad [e]os prosedit ille pra[e
257 At.tae transseuntes in il
Ala $v$ (eterana) Gall (ica) et ille praefe [ctius
tes voverent actuitum [ ]in[
bus militibusque et pro[nuntia] vit e[t quod
im [p]eratum fuerit faciemus
Fragment b
vi]rtuti:
]nibus XII

$$
\begin{aligned}
& \text { ]equites) LXXXXI } \\
& \text { ] } \mathrm{gg} \cdot \mathrm{II} \text {. } \\
& 5 \text { ]s . nimbus pius VII } \\
& \text { ]s }
\end{aligned}
$$

Fragment a
5. 7 Marci pro[ Fink, 干 Farsi ire[ Sanders. 8. exemplum) e(pistulae) Gilliam, $s$ (upra) s(criptae) Sanders. 28. ]aus Iniutliusque et pro[ ]rete.[ Sanders. 29. in [p]eratum fuerit faciemus Gilliam, ]. . in [.]eratur fient et si $[\quad$ lemve Sanders.

## Fragment b

4. fortasse in his se]sg(uiplicarii) II .

In this group of documents certain points spring to notice. Firstly, P. Mich. VII 450 verso contains a date V Idus Aug: 455 verso has the date IIII Idus Aug. This coincidence, first noticed by Gilliam, 355 is reinforced by the frequency of the appearance of the name Am (ii) onianus in the respective rectos. So far as the recto of P. Mich. VII 450 can be read, it appears to be a military document. We have praesen [toes in line 4 , which suggests a strengthreturn, the name Arrio Ammonian [ 0 , which must surely refer to the centurion of P. Mich. VII 455 recto, and the words signum in line 6, and possibly vigili in line 10. The whole of this text requires further examination: The recto of P. Mickie. VII 455 is more obviously part of the anta
diurna, especially lines 2 and 14, admittenda pronunt [iavit] and adjmittenda pronuntiavit, recall the admissa promuntiavit of the Dura acta. 356 The difficulty of relating the recto of 450 to this more regular document, in spite of the probable military character of the former and the appearance in both of Arrius Ammonianus, may perhaps be resolved by supposing the former document to contain a letter concerning some local event - hence the words civitatis (line 1) and $\mathrm{c}[\mathrm{i}] \frac{\mathrm{vitatibus}}{\circ}$ (line 2) - which was thought important enough to merit inclusion in the acta. This is certainly what happened in the case of the versos. P. Mich. VII 450 verso has two columns, the second of which contains the beginnings of four lines of the entry in a log-book for $V$ Idus Aug. The first column, which consists of the ends of lines only, is as yet unintelligible. If we examine the verso of P. Mich VII 455 we find that lines $1-7$ present a normal appearance, and the last two lines, 28-29, may be restored to contain the pronuntiatio, 357 but that the main body of the document, lines 8-27; is apparently concerned with some disturbance, and in line 23 we find the ominous phrase, in legionariorum defection [e. Gilliam's suggestion that this may be the copy of a letter, 358 introduced by the abbreviation e(xemplum) e(pistulae) in line 8, seems sound: it is not unreasonable to give the same explanation for col. i of P. Mich VII 450 verso, which
appears to have been written on the very same day. In that case, the entry on 450 verso would refer to the civil effects of the disturbances, that on 455 verso to the military upsets.

The Michigan and Dora actg all belong to the third century: the earliest document extent which may be attributed to this some class is a papyrus recently published by Medea Norse, which she dates on palaeographic grounds to the first century. 359 This dating is supported by the nomenclature: a high proportion of the names are without cognomina. In this papyrus parts of two columns survive, but in col. i only the last few letters of the lines are preserved, and in col. ii perhaps half or more of the lines are missing. Naturally the sense is not easy to follow. Gilliam has published a valuable note on this document: 360 in particular, he was able to recognike the centurial sign in several cases where Miss. Norse had read $i(n) .361$ other contributions of his to the reading of the papyrus will be found in the critical notes. PSI XIII 1307.

$$
\begin{aligned}
& \text { ]pibus }[\ldots .]^{\prime} \text { col. i } \\
& \text { ]... aus }[\cdots \cdot] \\
& ]_{s} \text { bucina }[\text { tor }]
\end{aligned}
$$

5 Jin 7 Lepidiani.
Jous
]con..be tutius
]lii sit tu $[t]$ ius
$\begin{array}{ll} & \\ 10\end{array}$
].inacis
]...us..
].u. referes
Jiam 7 possi
15 ]
]t.la.s..
]
1
].aris
20 q] ua anulus
]rentes:
]ad decuma
]ma. a[nul]us.
]
25 ].d..
5. ]mi Lepidian. Norse, Im 7 Lepidieni Gilliam, fortasse lin 7 Lepidiana. 11. fortesse Per]tinocis . 14. Iiam i(n) possi Norse, Jiam 7 possi (?) Gilliam, fortasse Jiem 7 Tusci.
col. ii.

Longino ad li[t]ara [con] vales cen[tes
et tirones spectatum duxit Lepid[ianus ?
legi[o]nis dua $:[$
${ }_{\bullet}[a \cdot]$ ebius $T u[s c]$ us hastatus primus int $[$
Minicius. Iu[s]tus princeps ad m[acelli pondera: ?
quem et hodie habuistis recog[nitam ponderunt ex eis qui ad cunios[
in castris non sunt. non enim[
10 -si. et $i[n]$ totum saepius recogn[
vigilias deduxit $\mathrm{Va}[\mathrm{r}]$ ius $]$ ad aquile: $[\mathrm{m}$
duas in vallo exciit singula o[
ad pondera macelli duos ad ca[
unam quaibus signum .u.[
15 vigiles ad nomem (sic) recognitos 7 N [eri ?
Hassus $7 \mathrm{n}[\mathrm{u}]$ mero XXXV1II。[
excubuerunt ad aqu[i]lem et sig[na
7 Ner [i] Antistius 7 Servili Sem[pronius ?
7 Vari Turranius et tesser[ari
20
Domitius signifer ad valetudinari[um
vigilias • .. omu..nt... Varius 7[
$\times \quad 7$ Firmi Lucretius [
[...] . [.] a frumento Neapol [is
5. has.tatus Gilliam, habeatur Norsia. 11. Va[r]ius ima qui
$\therefore[$ Norsa, fortasse $\mathrm{Va}[\mathrm{r}]$ ius 7 Gilliam. 15. adnomera vel adnomem Norsa. 15. recognitos in[ Norsa. 16. i(h) Norsa, 7 Gilliam. 17. ad aqu[u]lam et si $\mathrm{q}[$ uis Norse, ad equ[i]iam et sig[na Gilliam. 18. iners Antistius 1 ( n ) servili ser[ Norsa, 7 Ner[i] Antistius 7 Servili Sem[pronius (P) Gilliam. 19. iuari Norsa, 7 Vari Gilliam. 21. $i(n)$ Nor sa. 7 Gilliam. 22 turatu Norse, 7 Firmi Gilliem.

Gilliam compared with this text an inscription from Coptos which lists centuries from III Cyrenaica and from a second legion, possibly XXII Deiotariana. $362^{\circ}$ This inscription belongs to the early first century (Augustus or Tiberius). Among the eighteen centuries of the second legion mentioned are (centuria) Firmi and (centuria) Vari. Another inscription of uncertain date 363 relating to XXII Deiotariana includes a (centuria) Neri. Though he admitted that since the two names in the dated inscription are so cormon it cannot be assumed that the legion in the papyrus is necessarily the second in the Coptos list, he felt that the two documents were more or less contemporary. A more fruitful method of dating the papyrus, however, would appear to be suggested by a well-known name in col.ii. Minicius Iustus, 364 the princeps of col. ii, 6 may possibly be identified as the praefectus castrorum of the same name, who is mentioned in Tacitus, Hist., III, 7: et Minicius

Iustus praefectus castrorum legionis septimae. If this identification is accepted, we may place Minicius Iustus' service as princeps in an Egyptian legion late in Nero's at latest/ reignk our papyrus, therefore, would be of Neronian date. This seems quite acceptable on palaeographic and general grounds. 365

On account of the early date of this document we need not expect any close similarity between it and the other examples, both third-century, of the acta diurna which we possess. We have, however, one striking parallel. The Dura acta abound with the phrase parati erimus excubare ad signa Domini Nostri; the word excubare occurs in the fragmentary P. Mich. VII 455 recto; 366 and in the present document we have the statement excubuerunt ad aqu $[\underline{i}]$ ]am et sig [na. Granted the necessary difference between legionary and auxiliary requirements, we have further evidence of the conservatism of Roman military bookkeeping practice. Gilliam cites an inscription of A.D. 216 from Aquincum, 367 which mentions an excubitorium ad tutel (am) sign(orum) e[t] imagin(um) sacrar(um). For the first century we have the evidence of the daily duty-roster of the Geneva military archives, which assigns a man signis for a day. 368 There is no need to stress the importance of the signa in the life of the army. 369
Fas Parallels with the Geneva archives, which are
only slightly later in date, 370 and refer to the same province, and possibly even to the same legion, are more to be expected. The most striking instance is to be found in the very last line of our document, where we read a frumento Neapol [is . We are reminded of the phrase exit ad frumentum Neapoli which occurs more than once in the Geneva archives. ${ }^{371}$ It is seen, for instance, in the following document, which is a record of the employment of individual soldiers on special duty. 372 P. Gen. at. I_ recto, part 2.

Date
M. PAPIRIUS RUFUS C[AS (TRIS) ?

Exit ad frumentum Neapoli ex ep[istula T. Suedi
Clementis praef. castrorum anno iiii [imp. Titi .... 80
octobres. R(edit) anno eodem xil K. Februaria[s. . 81
$5^{\text { }}$ Exit ad frumentum Mercuri anno $i$ imp.Domitiano .. 81/82
$R$ (edit) anno eodem ili Idus Iulias. Exit c[um .... 82
...a anno iv Domitiani xi K. Maias. [R(edit) anno v? 85
... Ma[ ]as. Exit ad frumentum Neapoli [anno ...... 86 (?)
...] R(edit) anno eodem Nonis Iulis
10 • [.0.] . . AaM V V [.].. [.
T. FLAVIUS SATUR[NINUS

Exit ad hormos confodiendos [anno
xix K. Febrarias (sic). R(edit) ann[0
Exit cum Timinio pr [
$R$ (edit)]
fe] brua[ries] anno eodem iv K. Dece[mbres.

Domiti Exit cum Maximo Lizer [ali anno T. FLiAVIUS VALENS[

Exit ad chartam confici endam anno xilx K. Febrarias (sic). $R(e d i t)$ ann $[0$.
Exit ad moneta anno [ $R$ (edit) anno] eodem xvi•K. Febrarias (sic). [Exit ad anno] imp. Domitiani Idibus A[prilibus. R(edit) anno Exit ad frumentum Mercur [i anno $R$ (edit) anno eodem pr(idie) Idus Iulias. [Exit ad]
25 chora anno vii Domitiani xiii K. Octob[res.]
87 T. FLAVIUS CELER [

Exit ad frumentum Nea[poli anno
iii Idus Februarias. $R$ (edit) anno e[odem
Exit cum potamofulacide [anno
30
R (edit) anno eodem ix K. Iunias. [Exit ad anno $i$ imp. Domitiani vii [ ] $R$ (edit)[anno eodem ? x K. Marṭias. Exit cum frum[entariis anno il ? Domitianif xvii K. Iulias. R(edit) anno iii Do[mitiani ...... 83/84. 2. ex ep[istula Mommsen, exep[tor Nicole-Morel.
8. $M[$ arti $]$ as vel $M[a i]$ as. 22. A[prilibus vel A Uggustis. [anno eadem suppl. Nicole-Morel.

This document proves that individual as well as consolidated records were kept at unit levels. Such individual records of service would be required for many purposes, such as pay, promotion, and discharge. Presumably
when a man was transferred from one unit to another his record of service would follow also. We may be certain that in the case of senior officers similar records were kept at higher formation headquarters. 373

This would appear to be a convenient point at which to examine the most remarkable, at least in appearane, of the documents in the Geneva archives. This is the daily duty-roster of a century for the first ten days of October - here named after the emperor - in an unspecifiled year in the reign of Domitian. . The papyrus is arranged in chequer-board formation with a square for each man for each day. The soldiers names are on the left, the days of the month at the top. The writing is in cursive, except for the names, which are in rustic capitals. The clerk, however, seems to have wearied towards the end of the column and. resorted to cursive for the names also. The majority of the items are self-explanatory, and include such duties as stations, fatigues (ad stercus), acting as batmen (ornatus Hell), and various details outside the camp, including the familiar exit ad [frumen]tum Neapolis. The entries are carefully arranged in the appropriate spaces. In one case (line 22), an outside duty has been placed a day too som - to begin on the Kalends instead of on the following day ( V Nones Dom.) - and the entry ingeniously corrected by writing exit vi Nio(nas) cum .... . . We must

reluctantly abandon H.M.D. Parker's interpretation of this entry, 373a "Another has the more popular duty of bringing in the wine (exit vino)."
P. Gen. lat. 1, verso, part 5.
(For text see opp. page).
I, 9: b(eneficiarius) pre(fecti), com(meatu) Morel;
quod recte dubitat Blilmner (p. 440). b (eneficio) pre(fecti) com(meatus) Premerstein, quod sic interpretatur: "Urlaubt durch Vergunstigung des Prdfekten" (p.36). Cf. I, 10. 1,10: C(onmeatus) Premerstiein, om. Nicole-Morel. II, 2-3: cf. S.H.A., Hadr.o, 17,2. ,
II, 7: g[l]oss (ocoma) Nicole, gon $f$ Morel; gon-i Premerstein. II, 9 et passim: ballio ad balneum refert Premerstein, (p. 38), haud scio an recte. (Cf. Cicero, ad Att., 2, 3, 3: balnium M, cum rasura post 1). ball (istari) o Morel ${ }^{2}$ (p.28): cf. Inm in Thes. LoL. s.v. 'ballio'.
II, 10: Hel Nicole, leti Morel.
III, 3: ad cunic 7. Premerstein, ad cunic Morel, ad clinici Nicole.
V, 1-5: pra quintanesio Morel, pro quintane clo Nicole. X, 1-5: pro quintanesio Morel, pro quintane sco Nicole. XIII, 1-2; de nene trib ( $=$ de 〈b〉ene(ficio) trib(uni)) Premerstein, de ....e trib Nicole-Morel.
XIV, 4: pagane cultus Nicole, pagano cultu Morel.
XIV, 7: com(es) $\operatorname{tr}$ (ibuni) Premerstein, com... Nicole-Morel.

XV, 2: [statio]n(e) princi(pis) ed., ................. princi
Nicole, [sta] tion[e] princi[p] Morel.
XV1, 2: armementa ed., pr....us amentia Nicole, ar[ma]menta Morel.

XVIII, 2: comes ed., ...ones Nicole-Morel.
XVIII, 6-9: pro quintenesiio Morel, pro quintan sci Nicole. XIX, 1: comes) pili legit Nicole, explic. Premerstein, prim(i)pili [7] Morel.
XIX, 2: [ster] caus ed., ...ecus Nicole, can Morel. Cf. XXXI ,6. XXII, 1-2: exit vi No(nas) Nicole, exit in Oss.....ne. Morel, exit vino Parker.
XX, 7: pr(imi)pili 7 Morel, papili Nicole. Xxv, 3: [via] Nyc ed.; ....ic Nicole-Morel.

The entries made in the anta - and with these.
we may for convenience include the service-records of men in the unit - would remain at unit headquarters, and not be forwarded in that form to higher command: the formation commander would not be interested in petty day-to-day details. A regular report in consolidated form would contain sufficient information on matters of routine to enable adequate administration to be maintained. We do not know how many formal reports and returns were made during the year: we do know, however, that at least once a year a comprehensive report was made which included in its items a complete summarized parade-state and a list of
ail accessions to and losses from sitrength during the past year. We even know the actual term used to describe this report: at was called a pidienum - 'a New Year's Eve Report.' Two pridiana have so far been discovered, apart from possible fragments, the Berlin pridianum published by Mommsen, 374 and the London pridiamum. published by A. S. Hunt. 375

In his original and subsequent publications of his "Laterculus cohortis I. Lusitanorum" - to use his own title - Mormsen held that not one, but no less than three pridiana were compiled during the year, on the lest days of the months of April, August, and December, respectively? 3.76 In this he was influenced by the anology of the quadrimenstrui breves of the Theodosian code, 377 and expressed the belief that the pridiana were drawn up in connection with the payment of the three stipendia, 378 and were intended to show the exact number of men entitled to payment. The publication, eight years later, of the Geneva military archives, with their pay accounts divided into stipendia, 379 no doubt helped to establish this belief, and it was not queried until Fink re-edited BGU II 696 in 1942.380

Fink pointed out that not only did the pridiana make no reference to pay, which would be a surprising omission in documents intended to show the number of men entitled to payment, but that funt's pridianum details
absences - men unfit for duty because of illness etc. which are only of a temporaxy nature and of no consequence so far as the stipendia are concerned. Moreover, he has argued in connection with the "Feriale Duranum" 381 that the stipendia were actually paid, not on the days assumed by Mormsen, but on vii Idus Ianuarias, vi Idus Maias, and vii Idus Septembres. Presumably they would be paid according to the actual strength on the day of payment 382 Fink maintains 383 that in the case of BGU II 696 the date of the document is given in line 13, PRIDIE KAL (ENDAS) SEPTEMBRES, and the title in the first two lines, PRIDIANUM COH(ORTIS) I AUG(USTAE) PR(AEFORLAE) LUS (ITANOREGU) EQ(UITATAE) MENSIS AUGUSTI. The document is therefore the pridiamum mensis Augusti but the list of accessions begins: 384 ET POST KAL(ENDAS) IANUARIAS ACCESSER (UNTI). He argues with reason that if there had been a pridianum for April the accessions should have been reakoned from the Kalends of May and not from the Kalends of January. Further, three of the recruits mentioned in the document enlisted before the end of April, and had there been a pridianum made at that date, their enlistment should have been recorded in that and not in the present one. By the same argument there must have been a pridianum made on the last day of December, since none of the items is concerned with accessions before that date 385 Hence this particular
unit drew up two pridiana in the year, one on the last day of August, and the other on the last day of December. This he belleves was due to the peculiarities of the Egyptian administration. "The Roman year", he writes, 386 "ended on December 31; and just as with us this date would have been the normal time for taking inventories and making reports. In Egypt, however, the year ended on August 29th. For that province, accordingly, a second accounting was necessary; and this, in the army, was naturally approximated to the end of the Roman month. It is possible that this second pridianum was intended only for the use of the provincial administration." • In this last comment Fink appears to have overstated his case: the August pridianum refers back to that of December, not to the previous August, and cannot be fully understood without reference to the December pridianum. The provincial administration cannot, therefore, have required merely an annual report at the end of August, but must have had access to, and copies of, the December reports also. We have no evideace for the content of the December report in Egypt: it may, of course, have been a truly annual report, covering the entire year - in which case Fink would be right - but more probably, in order to avoid unnecessary complications, it merely continued from where the report of the previous August left off. In any case, if the pridiana
had to be sent outside the province without consolidation which is doubtful 387 - it would be quite possible to send the two reports together if the December report was not comprehensive. It is clear that the pridianum served the purpose of an annual - in Egypt a twice-yearly report. We may suppose that at least three copies would be required; one to be retained in the unit for reference, one to be held at formation headquarters, and one to be forwarded to higher authority.

GU II 696
col. 1.
Date
PRIDIANUM OOH (ORRIS) I AUG (USTAE) PR (AETORIAE)
LIS (ITANORUM) ER (UITRATAE)
MENSIS AUGUSiIT' SILVANO ET AUGURINO COS . 156
QUE HIBERNATOR CONIRAPOLIO-
NOSPOLI MAIORE THEBAIDIS EX VIII

| 5 IDUS IULIAS PONTIANO ET RUFINO COS | 131 |
| :--- | :--- |
| PRAEFECTUS M JULIUS M.F.TRIBU |  |
| $\therefore$ QUIR (INA) SILVANUS DEMO THUBURSI- |  |
| CA MILITARE COEPIT EX IX KALe. MA- |  |
| IAS COMMODO ET LATERAN COS |  |

10 LOCO ALI PUDENRILLI

PRIDE KALi. SEPTEMBRES
SUMMA MIL (TUM) PR] XML

# 15 IANUARIAS IN IS (CENTURIONES) VI DEC(URIONES) III EQ(UITES) CXIV DROM(ADARII) SVIIII 

PEDITES CCCUXIII

ET POST KAL(ENDAS) IANUARIAS ACCESSER(UNT)
20 FACIUS EX PAGANO A SEMPRO- 7 I
NIO LIBERALE PRAEF (ECIO) AEGUPT (I)
Silvano et Augurino cos 156
Sextus Sempronius Candidus ex iv Kal (endas)
Maies
25 REIECCIUS AB ALAE I THRAC(UM) DEC(URIO) I MAURETANIAE AD VIRCAM CHOR-

TIS
Vibio Varo cos
134
A. Flavius Vespasianus ex vi Nones

Marties

## TARI A SEMPRONIO LIBERALAE

PRAEF (ECIO) AEG (UPII) IN IS EQ(UES) I DROM (ADARIUS) I
in 7 Herculani Silvano et Augurino cos 156
35 Philon Isi...is ex .. Nonas Maias A $[p]$ ollos ....min.. ex Idibus $s$ (upra) $s($ ériptis) II [i]n 7 Marci eodem cos

Anubas Amm[oni ex].i inonas
s(upra) s(criptas) I
40 in 7 Gaiani [eodem] cos

C Sigillius Valens [ex I]
in 7 Semproniani eodem [cos] Armonius [ . ex

156
I]
10. ALLI Fink, ABELI Mommsen. 14. SUMMA A[GPR ${ }^{X}$ KAL Mormsen, SUMMA AD PR. KAL Mallon, Marichal, Perrat, SUMMA MIL (ITUM) [ PE$]_{\mathrm{RF}}^{\mathrm{RF}}$ (ECTA) KAL FInk. 25. ALA $/ / 1$ ( $=$ ALA II) Mormsen, ALAE I Cichorius. 35. [AD] oIloni [u]s ..is Mommisen, Apollonius ....is Mallon, Marichal, Perrat, Philon Isiognis Fink. 36. Idibus .... Miomnsen, Idibus ...is Mallon, Marichal, Perrat, Idibus s(upra) s(cript)is Fink. 39. s(upra) s(cript)as Fink.
col. ii
in 7 Ga [iani]
C. Iulius [ $\left[\begin{array}{ll}\text { Nonas } \\ \text { Idus }\end{array}\right]$

Ian[uarias 1]
Silvano et A[ugurino cos]
Heraclammon Is[ ex ] 5 Heraclarmon Is[ ex $\begin{array}{cc}\text { enties } & ] \\ \text { N.onas Maias } & r]\end{array}$
tos/ in turma Atpemidor [i eodem cos] .i56 eq(ues) Hermacisapyni[ ex ]

Apriles [ I]
ro in turma Salviani eode[m cos]
Apriles [ I]
drom(adarius) ...nis Barbasatis ex [ ]
Kai (endas) Maies [I]
ACCEPII EX LEG(IONE) II TR(AIANA) FORT[I]
DATI AB EODEM PRAEFECT[0]
in 7 Lappi Condiano et Maximo cas ..... 151
Valerius Tertius ex viii Kal (endes)
Apriles
in 7 Candidi Torquato et Iuliano cos ..... 148
20 Horatius Herennianus ex iv Idus
Novembres
TRANSLATUS EX COH (ORTE) I FL(AVIA) CIL(ICUM)
in 7 Dandidi Conm [odo] et Pompeiano cos ..... 136
Mae'vi' us Margellus [ex
25 Itiem translat[I ex
in 7 Lappi Severo [et S.tloga $\begin{aligned} & \text { Sabiniano cos] }] .\end{aligned}$ ..... 141
C. Longinus Apollo [ ex ]
Idus $\mathrm{Feb}[$ ruarias]
in 7 Sempronia [ni]
30 Commodo et $\left[\begin{array}{l}\text { Pompelano } \\ \text { Laterano }\end{array}\right.$ ..... $\cos ]$ ..... 136
154
Eros e[x
ITEM FACTI [EQUITES
in turme Arte[midori]Severo e[t $\left.\begin{array}{l}\text { Stloga } \\ \text { Sabiniano } \\ \text { cos }\end{array}\right]$141155
35 Ision Petsirea [ex
in turma S[aiviani ? $]$Glabr[ione et Homullo cos]152
5. Heraclarmon Us[ Mormsen, Heraclanmon Q[ Fink. 8. .o. Hermacisapyni[ Manmsen, in 7 Hermacisapyni[ Mallon, Marichal, Perrat, eq(ues) Hermacisapyn [ Fink.
11. ..ccinius Barbaiatis Mommsen, Nuocrinis Barbaiatis Mallon, Marichail, Perrat, dro(medarius) Cronius Barbasatis Fink. 33. EQUITES rest. Cumont ex D. Perg. 6, 7. 35. ..spon Mormsen, Ision Fink.

Fink was responsible for a number of most important corrections in the readings of this pridianum. In line 10 , for instance, he recognized that the nomen gentilicium of Pudentillus, the former praefectus cohortis I Lusitanorum, was Allius, and suggested a possible identification of this man with the Q. Allius Q.f. Col (lina) Pudentillus who is attested as augur curiae xxiiii and-minister Larium Aug. in a Sardinian inscription. ${ }^{388}$ Mormsen had read Aeli Pudentilli, but, as Fink points out, the photographs show that the second letter of the nomen has exactly the form of the third. ${ }^{389 .}$ Secondly, after the date in line 11, pridie Kal. Septembres, we have a brief statement of the total strength of the cohort at the beginning of the year, followed by a list of the accessions to strength since that time. It is line 12 which contains what may be called the balance brought forward from the last pridianum; unfortunately, though the beginning and the end of the line can be clearly read, the middle is very doubtful. Mormsen read SUMMA A [D PRA KAL, and interpreted the mysterious $X$ as a. mark of punctuation: the editors of L'Ecriture latine read SUMMA AD PR. KAL. Fink casts doubts upon the Latinity
of this expression 390 - though in this respect his own reading is equally open to criticism 391 - and reads instead SUMMA MIL(ITUM) [PE] RF(ECTA) KAL, which at least makes excellent sense, if we allow that the scribe either omitted PR(IDIE) before KAL(ENDAS) in error, or wrote KAL(ENDIS) IANEARIAS by mistake. In support of his reading Fink claims that Mommsen's $\underline{X}$ is really what remains of an $\underset{F}{ }$ or $\underline{E}$, and that the traces of letters after SUMMA appear very difficult to reconcile with $A D$, though they suit $\underline{M}$ very well. He cannot find any exact parallel for SUMMA MIL(ITCMM) [ PE$] \frac{\mathrm{RF}}{\circ}$ (ECTA), but he compares the religui numero pure and summand vera of Hunt's pridianum, ${ }^{392}$ as well as the abbreviations np mil cal and np which occur frequently in the Dura anta diurna, 393 and which he conveniently expands as $\underline{n}$ (umerus) p(erfectus) mil(itum) cal(1gatorum) and $n$ (umero) perfecto). In fact, Mommsen's $\underline{X}$ can hardily be anything other than $X$ : the examples of $F$ and $\underline{E}$ which Fink cites in support of his argument 394 are quite unlike the mark in question. Fink's other claim, however, that SUMMA is followed by an $\underline{M}$, seems more justified. What can be read in the line seems to be SUMMA MIL P [-] $\mathrm{X}_{\text {HAL }}$ - It might still be possible to salvage Fink's reading as SUMMA MIL(ITUM) P [E(RFECTA) $]$ KAT, leaving the $\underline{X}$ to be a check-mark made on revision of the document, 395 but the more natural interpretation of $\underset{\rho}{P}[\cdot]$ GAL
is $\frac{\mathrm{P}}{-}[\mathrm{R}$ (IDIE) $] \underline{K A L}(E N D A S)$. The most likely reading, therefore, appears to be SUMMA MIL(ITUM) P [R(IDIE)] X XAL(ENDAS) The X may mean that the scribe wanted to check the December pridianum.

A more important contribution to the understanding of this document was Fink's recognition of the centurial sign in col. i, 20. Mommsen had understood the sign merely to be a mark intended to separate the numeral I from the rest of the line: Fink's reading, which is undoubtedly right, means that Sextus Sempronius Candidus began his service in the cohort as a centurion. In view of this the meaning of the phrase factus ex pagano (centurio), as applied to Candidus, becomes a matter of consequence. Monmsen, who believed that Candidus was merely an ordinary recruit, had taken the word paganus in its normal sense of 'private citizen". Fink will have none of this and seeks a new explanation; "since it is obvious that the term as used here means more than simply 'private citizen'" .396 He recalls the phrase pagane cultus, which is applied in P. Gen. lat. I to a soldier on active service. 397 Premerstein had explained that this meant that the man went about in plain clothess as a member of the secret police (Geheimpolizist). 398 Fink concludes that Candidus entered the army as a centurion directly from the secret service of the rivilion police.

Gilliam, in an interestingnopte, 399
has pointed out the objections to this attractive theory, the most cogent of which is that pagamus and pagane cultus can hardly be taken as equivalents in any context. In fact, as he says, the latter phrase probably implies, as it does in the only text where it appears, that the person so described is not actually a paganus. Moreover, the imperial secret police seems to have been drawn almost entirely from the army. 400 Candidus, however, cannot have had any previous military service. His date of appointment as centurion is April 27th, and the year of his attestation is that in which the papyrus itself was written. An enlistment between Jamuary ist and April 26th and subsequent promotion to the centurionate is out of the question, as Gilliam says, 401 because he was not transferred from another unit; April 27 th , the day of his accession to the cohort and also of his appaintment as centurion, must therefore be the day of his enlistment. As a civilian, Candidus could properly be entitled paganus: there are no grounds for believing that he had been a member of any Gestapo.

Gilliam adds that it is the statement that
Candidus was appointed centurion directly from civilian status that gives this entry its real interest. He compares the legionary centurions who were appointed directly to the centurionate, often ex equite Romano. 402 Nothing is known
either of the antecedents or that later career of this Sextus Sempronius Candidus, but Gilliam notices that the prefect who gave him his centurionate was also a Sempronius, and suggests that it is possible that they were related or connected in some way. 403 In this connection an item in another Berlin papyrus may be of interest by way of comparison:404 [ 4$] \in \mu \pi \rho \omega$ ríw 'Ep $\quad$ еírw


Stein suggests that this Herminus was indebted for his civitas to the prefect. 405 Sempronius, however, is not an uncommon nomen, and these examples are by no means conclusive.

A rather odd point arises in connection with col. i, 25. Mommsen read the papyrus as REIECTUS AB ALA KI THRAC(UM) DEC(URIO) I MAUREIPANIAE AD VIRCAM CHORTIS The unit he took to be the ala II Thracum Augusta pie fidelis, which is attested by a diploma ${ }^{406}$ to have been stationed in Mauretania Caesariensis in A.D. 107. He $\operatorname{explained} \frac{/ /}{E I}$ as a mistake for $\frac{/ 1}{I I}$, a sign which actually occurs in col. ii, 13, ACCEPTI EX LEG II TR FORT [I. in col. ii, 22 we clearly have TRANSLATUS EX COH IU FL CIL, and the same sign I can be read, though not so clearly in the very title of the pridianum, PRIDIANUM COH $\overline{I \prime}$ AUG PR LUS EQ (col. i, 1). The sign above the line, therefore,
merely served to distinguish a numeral I in rustic capitals from the letter of similar appearance. The crux of the reading is whether MAURETANLAE is a proper noun or a confused form of the proper adjective. For there is also an ala I Thracum Mouretana, which was in Egypt at the time, and Cichorius prefers the identification with this unit. 407 The irregular construction, AB ALAE .. MAURETANLAE, is no stranger than that of line 32, A SEMPRONLO LIBERALAE, and of other parts of the papyrus, 408 and can in any case be paralleled elsewhere ${ }^{409}$ Fink is no doubt right in preferring ALAE I. A further difficulty is caused by the word REIECTUS. The remainder of the line clearly means that Vespasianus, who had been decurio alae now became decurio cohortis. According to Domaszewski ${ }^{410}$ this would be a reduction in rank, and it is true that reiectus often has a derogatory meaning. 411 Fink's own explanation, in which he acknowledges' his indebtedness to Professor Rostovtzeff, is that Vespasiamus had previously served in the con. I Lusitanorum, was then transferred. to the ala I Thracum, perhaps after service in some other corps, and is now being returned, with a promotion to the decurionate, to his original cohort. The chief objection to this attractive hypothesis is that reiectus seems a strange word to use after so long an interval as is implied by this argument. We should
rather expect a neutral term such as translatus: unless we accept a derogatory meaning for reiectus, which the mere fact of his remaining a decurion surely forbids, 412 the word must imply a return with all possible speed. The explanation which seems called for is that Vespasianus was serving as decurio coh. I Iusitanorum when he was seconded for some reason to an ala in the same province, and was returned to his own regiment as soon as possible. Perhaps he acted as decurio alae during some unexpected vacancy, which was eventually filled in the normal way. He was a fully experienced officer with 22 years' service, and probably fully capable of taking over any duty in an emergency, but perhaps too old to change his arm of service.

In the first line of col. ii Fink restores in 7 Ga〈ia>n[i, Severo et Sabiniano cos] (A.D. 155), adding that the repetition of the names of the consuls for A.D. i.56, Silvano et A ugurino cos], in line 4 of this column, instead of the usual eodem cos, 413 shows that the entry in lines $1-3$ is to be dated in the preceding year, before the Kalends of January. It is difficult to accept his reasoning. In the formal heading at the beginning of col. i we have the date expressed in the form EX IX KAL MALAS COMMODO ET LATERANO COS: 414 in all the later entries in this column the order of month and year is
reversed. It is not unreasonable to assume that the same procedure was adopted at the beginning of the second column, and to restore $\left[\begin{array}{l}\text { ex } \cdots \text { Nonas }\end{array}\right]$ Ianuarias Silvano et A ugurino cos]. To have written eodem cos here would have required reference back to the preceding column: to repeat the names of the consuls in full would seem to be the more convenient bookkeeping practice. In any case to restore the names of the consuls of the preceding year in line 1 would be to introduce material which would properly belong, not to the pridianum of the month of August, but to that of the previous December. It would seem better, therefore, to read in line 1 merely in 7 Ga[iani $]$. The last two entries in this column are both examples of short lines of this type. 4.15

The Berlin pridianum, though incomplete, is
lagical in its presentation, and presents surprisingly few difficulties of interpretation. . We should have liked, of course, to possess the second half of the document, in which the deductions from the cohort's strength would be listed. In the absence of this part of the pridianum it is not possible to draw definite conclusions about the internal structure of the cohort or the establishment of a cohors quingenaria equitata during the second century. The London pridianum, however, the only-other that we certainly possess, 416 is by no
means so straightforward. No accessions are recorded in it (except possibly in line 49: restitutus ex Tyon secutis) and the document is solely concerned with losses from strength. This would still present no problem, if we could feel satisfied that an earlier part of the document, now jost, contained a list of accessions. 417 But although the papyrus as we have it begins in the middle of a section, that section also appears to be concerned with losses from strength, if recesserunt in line 19 is read correctly. The title of the document, however, seems to be given in line 24 and not before, pr $]$ id $\left[\frac{i}{i}\right]$ anum coh(ortis) I Hisp(anorum) vet(erana) d (omo) Stobis: The natural place for a title is at the head of a document and not in the middle: we may reasonably conclude that a new document, a pridianum, begins in line 24, and that the previous 23 lines belong to some other document. This other document seems to have had a very similar nature to the one that follows and may be part of a pridianum eilso. Compare especially line 19:
 the other hand; the entries in lines 10-18, of which only the endings - a mumeral $V$, and a series of consular dates and places of origin - survive, are of a type which finds no counterpart in the remainder of this papyrus, but are very similar in structure to certain of the line endings
of the Berlin pridianum. 418 This brings us to a cardinal point of difference between the two pridiana. In the Berlin pridianum we are given full details in all the entries; for instance, the recruits approved by the Prefect of Egypt ${ }^{419}$ are listed with all due form: we have first the total number, VIII, which is then divided into categories (in is eq(ues) I, drom(adarii) II), and in the lines that follow we have the centuries or turmae to which the men were assigned, their full names and dates of attestation, and even in each case a repetition of the year, though, of course, it was that in which the pridianum was compiled, and was the some in all cases. On the other hand the London pridianum from line 24 onwards the section with which we are concerned - does not go into such detail, but gives first.a summarized.table of losses. from unit strength (col. i, 26 to end), which is followed by a fuller statement of these losses, without; however, giving the names, dates: of attestation, or dates of leaving the unit, of the soldiers concerned. This fuller statement occupies the whole of the second column, and is unfinished. We can only guess how the document might have continued: it would not seem reasonable, however, to expect a third statement at even greater length, this time containing the names of the soldiers concerned and the other items which we should expect to find associated
with these names. Yet such a document must at some time have been compiled to be the necessary foundation for the present summary: lines $1-23$ may even be the end of such a document, though this seems doubtful. In any case, it also seems to be concerned with losses from unit strength, and therefore was intended to convey information of much the same nature as that contained in the document that followed.

The entire papyrus may now be described in respect of content. It contains three distinct sections : lines 1-23 of col. i, the remainder of col. i, and col. ii. The first section, the first nine lines of which are illegible, begins with a list of soldiers whose centuries or turmae must have been included in the parts of the lines that are now lost. Only the endings of the lines survive; we have first a numeral $\underline{V}$, three lines ending cos, four ending Stobis, and one ending Nic [o]pol(i). From line 20 it appears probable that this is a list of men who received the honesta missio at this time; all had enlisted in A.D. 77 (Vespasiano VIII cos.). We can therefore restore these lines after the analogy of the Berlin pridianum somewhat as follows: P. Lond. 2851.

10 [ITEM MISSI h(ONESTA) M(ISSIONE) PEDITES ? ] V [in 7 .......... Imp. Vespasiano VIII et Tito] cos

anna ..t J XVI K (alendas) octobres. The date with which this section ends is presumably that on which the entries were made. In the. name ]arius optatus perhaps we may see the name of the officer responsible for issuing the document. If this reconstruction is correct, this document may be a formal record preserved in the archives of the cohort of the discharge of these men after the completion of their service, and is not necessarily, or even probably, a copy of a pridianum. This record appears to have been made in September, whereas the pridianum would be drawn up on the last day of December. The record would, however, provide the data essential for the proper construction
of the pridiamum when the time for that should fall..due. The next section, which consists of the remainder of col. i.is a.summary of losses from unit strength, though it.s title, pr $]$ id $\left[\frac{1}{[ }\right]$ anum con $[\underline{I}]$ Hisp vet d Stobis, would seem to claim that it is a normal pridiamum. In fact, it would rather appear to be a summary of a pridianum, title and all. The chief objection to this theory is that only losses are recorded, and in the case of the Berlin pridianum it was accessions which came first; and losses which, presumably, followed. It would not seem, however, to make a great deal of difference which the scribe treated first, accessions or lossedy; he would eventually have to deal with both. So this section becomes a precis of half a pridianum. P. Lond. 2851 (cont.).

24 preid [i] anum con [I] Hisp vet d(omo) Stobis [date ....] arron [..] anus praef(ectus) [summa mil(itum) p]r(idie) K. Ianuaria(s) DXXXXVI
27 [in is 7 VI dec(uriones) II] II eq(uites) cxix [ 1 ] n is du (plicarii) [ II$]$ sesq(uiplicarii) III ddupl (icarius) ped(es) I. sesq(uiplicarii) V[I] et decessemun $[\mathrm{t}$ p] ost K. Ianuarios
30 [Pedone et Vip]stano [ $\cos$ (?) II 115
neme of soldier ..] us
[Imp. Domitiano XV e]t [Nerva II] c[0]s (?) 90

# ].t.......[.]....... [VII] <br> [restitutus ex Tyon] secutis <br> [ $\left.{ }^{[ }\right]$ <br> 35 [summa de] cesserunt $i[n]$ is eq(uites) [ ]I <br> [reliqui numero puro] <br> DXXXVI 

25. Hunt suggests V$]$ arro $N[$ ic $]$ anus: Another possibility is Arran $[\underline{t i}]$ anus.

The restorations in this section are admittedily highly conjectural. The vital questions concern the date to be assigned to the document. The reference to Vespasian's eightih consulship in line 20 of the first section provides us with a probable terminus post quem of A.D. 102, since if as seems likely the passage refers to the discharge of time-expired men, that would be the date reached after the normal term of years. On the other hand, as Hunt points out, 420 the mention of Boridava in line 64 implies a date posterior to the outbreak of Trajan's Second Dacion War. A date towards the end of Trajan's reign would therefore be indicated. The dating can probably be brought within narrower limits by consideration of the manner in which a document belonging to the archives of a regiment stationed at Stobi and with detachments at various points in Lower Moesia could be brought to Egypt. A librarius, or some other member of the cohort who had access to the archives, might have taken the document to Egypt with him, on retirement or transfer.

But this case is not really parallel to that of P. Hamb. I 39, in which a summus curator, stationed in Egypt, took his receipt-book with him to the Fayoum on retirement. 421 The summus curator may have wanted to be able to protect his own interests in the event of a.court of enquiry, or to remove the evidence which might cause such a court to be formed: we can imagine no reason why anyone - save possibly a spy - should wish to abscond with a regimental pridianum. It seems far more probable that the cohort itself was transferred. This brings us to the question of the identification of the cohort. The title vet(erana) clearly indicates coh. I Hispanorum veterana, which is attested by Dipl. 44 to have been in Lower Moesia in A.D. 99, and by Dipl. 75 to have moved to Lower Dacia by A.D. 129. I.t is possible, though not certain, that this cohort can be identified with the coh. I Hisponorum which was stationed in Egypt until at least A.D. $98 .{ }^{422}$ Nesselhauf ${ }^{423}$ prefers to identify this iatter cohort with the coh. I Hisp. pia fidelis which was stationed in Upper Moesia and Dacia during the early second century, and finds the origin of the coh. I Hispanorum veterana in the coh.I Hispanorum which is attested by Dipl. 4 to have been in Pannonia-in A.D: 60. The whole question awaits further evidence. It seems probable, however, that coh. I Hispanorum veterana, which was definitely in Lower Moesia
in August, A.D. 99, was transferred for some reason to. Egypt, where it lost part of its archives, and returned to the Danubian theatre in time to be in Lower Dacia in A.D. 129. Within these limits the obvious occasion for sending reinforcements to the Egyptian garrison is the outbreak of the Jewish revolt in A.D. 116, when the Eastern armies were fully engaged elsewhere. If the cohort could be identified with the one that had recently served in Egypt, and therefore contained a proportion of men enlisted there who were nearing the end of their service, there is all the more reason why a man discharged in that province should remain there, and this document with him. These considerations, therefore, would suggest that the most probable date for this document is about A.D. 116. According to Stein, the date can be more precisely defined. 424 In line 30 of this particular section he concludes that ].ostano... [ is what remains of a consular dating, which in its full form - which was certainly not used in this case - would be L. Vipstano Messaila, M. Vergiliano Pedone cos. (A.D. 115). The conjectural restoration, Pedone et Vip]stano [ cos, while not absolutely certain, seems reasonably justified. This would imply that the pridianum was drawn at the end of December, A.D. 115, to record the losses from strength from January 1 s.t of that year. At least, this appears to be the explanation of lines 29-30. Hunt had
suggested ${ }^{425}$ the possible identification of the procurator, Latinianus, of line 62, with the Cornelius Latiniamus to whom Hadrian addressed a rescript. 426 Stein accepted this identification, and believed it reinforced the probability of his restoration.

The next section, which comprises all the remainder of the document, appears to be an expansion of the items presented in summary form in the section which has just been under consideration. Lines 37 to 39 repeat lines. 27 to 28, apparently without change; lines 40 to 54 present in greater detail the substance of lines 29 to 35; "the remainder of the section is concerned with the temporary absences of men still on the strength of the unit. This detailed account in col. ii seems to be a copy, verbatim except for the names, centuries, and dates of attestation of the soldiers concerned, of that part of the annual pridianum which dealt with losses from strength, and was appended to the foregoing summary as documentary evidence. P. Lond. inv. 2851.
col. ii
37 [in] i[s 7 V$]$ I $\operatorname{dec}($ uriones ) IIII eq (uities) in is dup(licarii) II se[s]q(uiplicarii) III [CXIX dup(licarius) [ped(es) I s]esq(uiplicarii) [VI
40 EX EIS DECEDUNT

$$
[\cdot] \ldots . . . c a n e .[. . .] \text { ade..am... Vin }[i] \text { us Verecun[dus }
$$

[......].[....]....Ss........us in is eq(uest) I[ $\ldots[\ldots] \ldots[\ldots \text { i } \ldots n \text { is eq (ues? })^{\prime}$ I remissus ad [-0].rec....um Saturninum translatus in exercitum Dacicum
perit in aqua
occisus a patron[1]bus $\theta$ etati [in] is eq
summa decesserunt in is [eq(uites) I[] [XI
50 restitutus ex Tyon secutis reliqui numero puro
in is 7 VI dec(uriones) IIII eq(uites) in is CX[ dupl (icarii) II sesq(iuiiplicarii) III dupl(icarius) ped(es) I sesq(uiplicarii) VI EX EIS ABSENTES
in Grecia vest[itum]Tyrae in praesidio in is eq(uites)
in Dardenis ad metalla
summa apsentes extra provinciam in is eq(uites) III[ INTRA PROVINCIAM
singulares ex .....I leg(fone ? ${ }^{\text {ati }}$ ? ...tarus Dece[ officii Latiniani proc(uratoris) Aug(usti) [ Piraboridavae in praesidio

Boridavae in vexillatione .
trans Danuvium in expeditionem in is 7 I de[c CI
eq(ultes) XIII sesq(uiplicarii) ped(ites) II
item tra $\langle n\rangle s$ ad annonam $r$ [edim] endem it [e]m exploratum cu[m]..vino 7 eq (uites ?) [ ..a.ario ad naves frumentarias in is dec I ad practorium cu[m] librariis ad Haemum ad armenta addu [cenda in custodia Iu [......]..[....].o[ item in custodia $A[. . . . . . . . . . . . . . . .] e.[$ summa vera qu〈a〉e absen[s erat in is 7 I dec(uriones) III eq(uites) in is ; $s_{\bullet}[e s]$ (uiplicarii) ped(ites) II reliqui praesentes [
In is 7 II dec(urio) I eq(uites) in is $C X[$ d[up(licarii) ..] sesq(uiplicarii) .[.. dup(licarius) ped(es) I ses q(uiplicarii) IIII ex eis aegri in ìs [

The list of permanent losses from the unit which occupies the first part of col. ii is interesting because of the use of the word Detati in line 48. This word, which means 'theta-ed', 'killed', may be compared with the tetates of Wessely, Schriftt. 8. 427 As a verb it was no doubt limited to military jargon, though the sign itself, in various forms, is quite common in civilion dedications in Pannonia and Noricum, and is not unknown
elsewhere.
Of still greater interest, ${ }_{\text {g. }}$ however, is the list of temporary absences in the remainder of the column, on account of the light it throws on the administration of the province and the internal organization of the cohort. The cohort itself was stationed at Stobi: other places named are Tyra, which is extra provinciam, and Boridava and Piroboridava, which-are intra provinciam: Moreover, troops on an expedition trans. Danuvium are listed as within the province. If the province is Lower Moesia, most of the data are satisfied, but Stobi, the conort's station, remains puzzling. The only Stobi known is in northern Macedonia, a long way from the Danube, and to posit an otherwise unrecorded town in Lower Moesia would be a last resort. On the other hand, the item in Grecia vest [itum (line 55) suits a Macedonian station well. Hunt"s suggestion ${ }^{428}$ is that the cohort was temporarily at stobi on its way from the north, after being hastily called away, possibly for service in Egypt, and had had no time to await the arrival of its detachments in such distant stations as Piroboridava and Tyra. In these circumstances, he writes, the term provincia might be used, intelligibly enough, in relation to the station recently vacated. The effect of this haste, it may be noted; is that of the four decurions actually on the strength of the unit only one was present
at Stobi: the others were with the expedition trans Danuvium and with the supply-train that had gone ad naves frumentarias. The most serious objection to this hypothesis is that the occurrence of Stobis in four instances out of five at the beginning of col. i, presumably as the place of origin of men discharged, suggests that the cohort had enjoyed a long stay in that area.

The London pridiamum, though superficially
similar to that published by Mommsen, has been shown to exhibit considerable divergencies from the Berlin pattern. It seems to consist of three closely related documents: a record of the discharge of certain soldiers, a summary statement of losses such as might be found in the heading of a pridiamu, and a more detailed explanation of these losses, without, however, some of the items which we should expect to find in a full pridianum. The whole would appear to be, either a brief report, from which a pridianum might then be constructed by the addition of certain details, or an abridgment of a completed pridianum. The peculiar nature of the document, which is exclusively concerned with losses from strength, makes the latter explanation seem the more likely. The entire papyrus, therefore, may have belonged to a roll of records of absences and discharges which was kept in the archives of the cohort, in the preparation of which excerpts from the annual pridiana
wouldprov:ide convenient summaries.
The documents that have so far been under discussion have mainly concerned establishments and records of service. A large proportion of military documents would, however, be concerned with pay and accounts. Perhaps the Roman pay accounts that survive are fewer in number than might have been expected, but their size and importance more than compensate for this. For legionary pay we havé the evidence of P. Gen. 1at. 1. rectó, part 1, 429 and P. Gen. lat. 4,430 both of the reign of Domitian, and which may be dated before and after his increase of the pay, respectively. ${ }^{431}$ Ror the auxilia we have P. Berlin 6866,432
a statement of the balances of members of a century of an auxiliary cohort at some time between A.D. 192 and 196, and also P. Fay. 105, 433 which contains the balances of soldiers of the ala veterana Gallica about the year A.D. A75. Besides these we have a camp record of inheritances, involving the vicensime, made in Egypt about the time of the Jewish revolt of A.D. 116, 434 and a considerable number of military receipts. 435
The first of these documents, P. Gen. lat. 1,
recto, part 1, presents several problems, the most striking of which are the peculiar amount of the stipendigum,248 drachmae, and the perhaps even odder characteristic that neither sóldier apparently spends a single drachma outside
the camp.
P. Gen. lat. 1, recto, part 1.
col a
. L. ASINIO COS A.D. 81
Q. IULIUS PROCULUS DAM (ASCENUS)
[Accepit] stip(endium) I an(ni) III do(mini) dr coxlviii Ex eis
5 [faen]aria dr x
in [vic]tum
$d r$ lxxx
caliga[s] fascios dr xii
[Saturna] licium K.
dr xx
[in vesti] torium dr $1 x$

10
[ixpen]sas:
dr clxxxii
[reliqua]s deposuit dr lxvi
et ha [b]uit ex,prio[re]
$\mathrm{d}[\mathrm{rc} \mathrm{c}]_{\mathrm{xxxv}}$
fit su[mma].
dr ccil
$\left\langle\underline{m}^{2}\right\rangle \quad$ Accepit $\operatorname{stip}(e n d i u m)$ II anni eiusd (em) [dr cc]xivili
15
Ex eis
faenaria
$d r x$
in victum
$\mathrm{dr}[1] \mathrm{xxx}$
callgas fascies
$d r . x i i$
[ad] signa
20

Expens as
reliquas deposuit
et habuit ex prio[re]
dr iv
$\left[\begin{array}{lll}\mathrm{dr} & \mathrm{cvi}\end{array}\right]$ dr cxlii
$\mathrm{dr}[\mathrm{cc}] \mathrm{ii}$
fit summa omnis $\mathrm{dr} \mathrm{ccoxi}[\mathrm{iv}]$ $\left\langle\underline{m}^{3}\right\rangle A[c] c e[p i t . \operatorname{stip}(e n d i u m)]$ III a[nni] eius $\left[\begin{array}{lll}d & d r & c c\end{array}\right] \times \operatorname{liviii}$ 25 [ Ex eis]
faenaria
[in vict]um
[caligas fascias]
[in vestimentis]
[E] xpensa[s]
habet in deposito

- $\mathrm{dr} x$ ]
[ar 1xxx]
[ar xi1]
$\left[\begin{array}{ll}\mathrm{ar} & \operatorname{axlvi}\end{array}\right]$
[arc]exlviii
dr $\operatorname{ccc}[x l i v]$
T. ENNIUS INNOCENS

2. DAM (ASCO) Seymour de Ricci apud Premerstein, OMI. (?)

Nicole, GAN(GRIS ?) Morel, COMA(MA) Nicole apud Cagnat.
3. an(ni) III do(mini) (i,e. Titi) Premerstein,

Do(mitiani) Nicole-Morel.
32. T. ENNIUS Nicole-Morel, L. ENNUQS Mormsen, RENNIUS

## Premerstein.

$$
\mathrm{col}, \mathrm{~b}
$$

C. VALERIUS GERMANUS TYR(IUS)

Accepit stip(endium) I an(ni) III do(mini) dr ccxlviii
Ex eis
faenaria $d \mathbf{r} \mathbf{x}$
in [ vi ] ctum
caligas fascias
dr 1xxx dr xii
Saturnal [iciu]m K. dry $x x$
in vest.ime [ntum]

Expens as
reliquas deposuit
et habuit
fit summa omnis
Accepit stip(endium) II anni eius [d] Ex eis

15 Iaenaria
in victum
caliges fascias
ad signa.

## Expens as

r[eliqua]s deposuit
habuit ex [pr]iore
fit summa omnis
dr cexxii
dr xxvi
$d r$ [ $x x]$ dr $[x] l v i$ dr coxlviii
$d r x$
dr lxxx
$d r \times 1 i$
$d[r i] v$
drecvi dr cxl.[ii] dr xivi dr [clxxxviil]
Accepit stip(endium) III ann [i eius]d dr ccxlviii Ex eis

25 Pae[n]aria
in victum
[cali]gas fascias
in vestimentis
habet in deposito
[drex]
[dr 1xxx]
dr xii
dr cxlvi
dr clxxxviii

1. ITYR (O) Mommsen, CYR(ENIS) Nicole-Morel.

This document was dated with great probability by Premerstein ${ }^{436}$ to A.D. 81. He identified the Asinius mentioned as consul for the year with the Asinius Pollio

Verrucosus, who was consul under Titus in A.D. 81. Earlier editors had expanded line 3, accepit stip I an III dö, as Accepit stip(endium) I an(ni) III Do(mitiani) (= $=29$ th August A.D. 83 to 28th August A.D. 84) . Premerstein suggested that a more suitable expansion, which would make the consular date explicable, would be stip(endium) I an(ni) III do(mini). Since A.D. 80/81 wes the third imperial year of Titus, there need then be no discrepancy with the consular dating at the head of the document. Discussion of the difficulties involved in the interpretation of the document may perhaps be pos.tponed until a comparison of the document with our other legionary pay account, PeGenimate 4., is possible, since this document contains many related characteristics. The date of P. Gen. lat. 4, unfortunately, cannot be determined exactly, because the greater part of the document is missing. It seems certain, though, that it was drawn up after the increase of pay under Domitian, which is usually attributed to A.D. 8.3. On palaeographic grounds it must be regarded as more or less contemporary with the document of similar nature in P. Gen. lat. 1 , and may, therefore, be dated approximately to the period immediately after A.D.: 83/84. Nicole suggested the eutumn of A.D. 96, but hardly on sufficient grounds. This date appears in any case rather too late.
P. Gen. 1at. 4.
$i{ }^{1}$ QUJ ADRATUS

> I bis [summa depositorum

2 written in error ?
3 [Accepit stip I anni (?) Do]
4 [faenaria]
5 [in victum]
6 [caligas fascias]
6 bis [in vestitorium (?)]
7
8 [expens] as
9 [fit summa numm] o(rum)
10
$\left\langle\underline{m}^{2}\right\rangle$
12
13
14
15
16
17
18
19
20
24
[faenaria]
22 [In victum]
dr] Ivii
[d̈r]. cc.al $[1 \times x x x]]_{\cdot 0}[i]$
dr cexcvii
dr xiil
dr cxxxix
dr xvi
dr lii a ii s
dr 1xxxxiii a iii
dr cccxiv a iiiiil s
dr $\operatorname{xxxx} \llbracket v \rrbracket$ ii a iil $s$
dr lxxxx
dr ccxcviii
dr xiii
dre
dr xvi
$d r x x$
$\mathrm{dr} \mathbf{c x}$
dr cxviii
dr xxxxy a i.ijiiij
dr coxcvii
[dr coxcvii]
đr xili
dre

23 - [caligas fascias]
dr xvi
[ad signa]
[in vestitorium]
25 bis [fit summa nummorum]
26 [summa depositorum]
[Accepit stip IIII anni eiusd $d r$ ] ccxevii
2. vita 7 d..lxxxx.. (les 5 chiffres raturés) Nicole.
6. .r xvi Nicole. 7. .r Ixxxxiii a...i (ou s) Nicole.
8. us ccoxiy a ..i.is Nicole.
9. o dr xxxxii a iiii (ou s) (le v raturé et surmonté des traits verticeux) Nicole:
10. . IUm dr lxxxx a .. Nicole. 11. $d r$ coxcv.. Nicole.
17. ssum dr cx.... Nicole. 18. dr xxxxv.... .Nicole, dr xxxxv a $v$ Johnson. 19. dr cc........ Nicole. 20. . . . . . Nicole: "We suggest that the amount in line 20 was erased originally". (Johnson): 24. .....iii a y (?) Nicole. [i] iii a i Johnson. 25. ......... $\mathrm{r}_{6}$ clxiii a 1is. (?) Nicole. 26. .........ccx a iil (ou s) Nicole.
27. .ccxc.ii Nicole.
In P. Gen. lat. 1, recto, part 1 the stipendium wes the peculiar amount of 248 drachmae, and neither soldier spent a drachma outside the camp. In P. Gen. lat. 4 the stipendium is the even more awkward figure of 297 drachmae, a sum not even divisible into tetradrachms,438
and once again, if our attempted reconsitruction of an admittedly doubtful document is at all sound, ${ }^{439}$ there is no reason to suppose any withdrawal for personal expenses. It is not unreasonable to consider these two abnormalities together: yet the hitherto accepted practice has been to find a plausible, if perhaps over-elaborate, explanation of the first, but to make no serious attempt at finding a satisfactory one for the second. It is true that Brunt, 440 for instance, expresses surprise, and is not sure how far the accounts may be taken as typical, and that Johnson ${ }^{441}$ fears that the men lived on tips and irregular exactions, but no convincing explanation has been suggested. Once, however, we assume, as we surely must assume, that the soldier did in fact.receive some pay in the local currency to spend on the normal pleasures of soldiers out of barracks, we have to admit that P. Gen. lat. 1 does not, as usually interpreted, tell the whole story, and that there must be some concealed payment. The orthodox theory is that the equation of the denarius with the Egyptian tetradrachm was effected to the disadvantage of the soldier. The 300 drachmae of the full stipendium (equivalent to 75 denarii) were deemed to be copper drachmae of 6 obols each, and therefore equivalent to only 62 billon tetradrachms of 29 obols each. 442 Johnson and others 443 go further and accuse
the Roman authorities of charging exorbitant amounts for food and clothing, and therefore mulcting the unfortunate legionary even more. "The army in Egypt", writes Brunt, 444 "locally recruited to an extent that was unusual in the first century, and isolated; was not in a position to endanger the Government's security: we need not conclude that similar chicanery was practised elsewhere". Yet in another context Brunt writes, 445 "The soldier cannot have been expected to live at or just below the mere subsistence level. It. was nothing to the government if the peasant was half-starved: but a hungry soldier would not have been an efficient fighting man". Such statements are hard to reconcile: the ration-scale used by Johnson as a norm, 446 and here Brunt is following Johnson, 447 was that of slaves and unskilled labourers.

If we admit for the sake of the argument that this chicanery in the amount of the stipendium is arithmetically possible in the case of P. Gen. lat. 1 , how are we to account for the figure of 297 drachmae in P. Gen. lat. $4 ?$ It is generally, and, as will appear, rightly understood that the document should be dated to the period very shortly after the increase of pay under Domitian. 448 Domitian, we are told by both Suetonius and Dio, 449 increased the total pay by a third. But there is no such simple arithmetical relation between the numbers 248 and
297. How then are we to account for the increase? Brunt, 450 following Johnson, 451 says simply, "In a later account of Domitian's reign, presumably after he had raised the pay, the four-monthly instalment had risen to 297 drachmae: it looks as if the legionaries in Egypt did not receive the full increment. of one third". Then on what grounds was the figure of 297 drachmae arrived at? But if this figure cannot be explained away as financial trickery, the case is weakened for believing chicanery to have been involved in the 248 drachmae of the other document. Premerstein 452 believed that the 297 drachmae were copper drachmae of 6 obols each, and therefore in value almost exactly equivalent to the 248 drachmae of P. Gen. lat. 1. Since he recognized only three stipendia in P. Gen. lat. 4; this led him to date the document before, and not after, the increase of pay under Domitian. In this he has not been generally followed, and it would have been a remarkable system which caused legionaries to be paid in two distinct forms of currency more or less at the same time. Indeed, it seems probable that military accounts in Egypt were always kept in silver drachmae, since the billon tetradrachm was apparently recognized as the equivalent of the denarius, which was the basis of military pay. 453

What, then, is our explanation? The soldier's
full pay should have been 75 denarii, or the same number of bilion tetradrachms, of 28 or 29 obols each, each stipendium: once we admit that he must have received some part of this amount in cash to spend on personal pleasures, there is not. longer any reason to suppose that he was the victim of semi-legal fraud. We may interpret P. Gen. lat. 1 in the following way. of the 75 tetradrachms that were his due, as many as 62, equivalent to 248 drachmae, were retained in the unit to cover his debts for various necessities supplied from official sources, the balance of these, if any, being applied to his credit. The remainder of the stipendium, less probably 2 , or perhaps 3, drachmae, which we suggest represented commission on the exchange, was handed over to the soldier in cash as pocket-money. . The entry of 248 drachmae as s.tipendium in the first Geneva papyrus, therefore, represents only that portion of the pay which was retained in the unit: the document is, then, not so much a record of payments made by the paying authority to the men, but the record kept by the persons in charge of the deposita of individual soldiers, and is intended to show the amounts standing to the men's credits. Presumably the men were entitled to
draw on their credirs depositss if necessary, 454 but the good soldier should have been able to menage quite comfortably on about 150 drachmae a year for out-of-camp expenses. 455

In P. Gen. lat: 4 we see a slightly different system. By the time that/document was drawn up, 456 the annual pay had been increased by the addition of a complete stipendium, and payments were made every three months. 457 A change had also been made in the mode of issue and the whole amount of pay was entered on the sheet: withdrawals were made from the balance, or credit payments added to it. Thus we have a balance of 42dr. less 3 obols at the end of the first period, 458 which had been converted into a bilance of 90 dr . before the next entry. Perhaps Quadratus had been fortunate at the Romen equivalent of 'houseyhousey'. 459 This fortune does not seem to have been maintained, for we find that his next balance of 118 dr . is reduced to a mere 45dr. less 5 obols before the next stipendium. His luck turns once again, and we find at the end of the next period an even greater rise, from 46dr. less $2 \frac{1}{2}$ obols to 210 dr . less 3 obols. It is true that Johnson writes, 460 "The amount of the depositum in lines 1, 10, 18 and 26 indicates that the accounts belonged to different men"; but this is to ignore the evidence of the format of the document, which has the soldier's name in the customary rustic capitals 461 at the top of the sheet, and no trace of any other such heading amid the cursive script of the accounts.

One further point may be noted. If we are right
in supposing that the four accounts are those of a single person, it is reasonable to assume that they refer to four different stipendia within a single year. It would be most exceptional to mix the accounts of different years, a practice for which no surviving document furnishes an example. It is true that Briunt writes, 462 "P. Gen. lat. 4, probably referring to legionary pay after the increase (sc. under Domitian), shows three equal instalments, each of 297 silver drachmae". But the actual text of the document appears to suit four stipendia much more easily than three. It was Brunt's contention, of course, that Suetonius was not strictily accurate in writing (Dom., 7,3), "addidit et quartum stipendium militi, aureos ternos", and that what really happened was that "Domitian gave his troops the equivalent of a fourth stipendium". 463 The language of Dio, 464 whom Brunt prefers here to Suetonius, $\pi \in ' v T E$ yip kai
 Ék'́deue $\delta i \delta_{0} \sigma \theta_{6}$, need mean no more than that he was describing Domitian's action in terms of third-century procedure. Domaszewski's theory, therefore, that the amount of the stipendium remained at 75 denarii till the time of Severus, and that increases of pay were effected by increasing the number, and not the amount, of the stipendia, is not yet refuted. 465

The Geneva pay accounts are concerned with
legionaries only: for the auxilia we have the evidence of two documents recently edited by Marichal, one for the first time, the other a republication of a papyrus first published by Grenfell and Hunt in 1900. The former document, P. Berlin 6866, had already been used by Lesquier in his great work, $L^{\prime}$ armee romaine $d^{b}$ Egypte, and in part published by Mallon, Marichal and Perrat in L' Ecriture latine. The other papyrus was published by Marichal as a necessary complement to the former. P. Berlin $6886 A^{466}$

ex eo coll]latio $*$ IIII ob XXII[Is(emis)
reliquos tul] it * LxXIX ob XXI [(quadrantem) habet in dep(osite) $] * \mathrm{c}$, in viatico $* \operatorname{LX}[\mathrm{XV}$ APRO II ET P] OLIIONE II COS
]..THOHUS • CASTR (IS)

Lorictitis in dep(osito) $*$ ] c, in viatico $*$ LXXV accepit stipendi] * LXXXIV ob XV (dodrantem) ex eo collati]: $\because$ IIII ob XXII $s$ (emis) reliquos tulit] * LXXIX ob XXII $s$ (emis) habet in dep(osito) $* \mathrm{c}$, in] viatico $\times$ LXXV COMMODO ET] QUINTIL. [LO COS
25

Loric]titis in dep(osito) $* \mathrm{C}$, [1] n viatico ${ }_{\circ}$ LXXV deb] et ex priore ration(e) $* \operatorname{XV}[I I I]$ ob XXIV $s(e m i s)$ ite]m collatio (secundo) stip(endio) $\forall I[I]$ II ob XXII s $f$ (iunt) quos debet. $*$ XXIII ob XIX
30 habe]t in dep(osito) $* c$, in viatico $*$ LXXV debet $X \operatorname{XXII}[\mathrm{I}]$ ob XIX

1. complevi. 3. et passim $*=$ denari(os).
2. (dodrantem) v. p. 222 infre.
3. ]o.THOHUS Marichel, T] ITHOEUS Lesquier.
4. IMP(ERATORE) LUCCIO COMMODO ET] QUINTILL[ [LO CO] S. suppl. Marichal.
5. (secundo) v. p. 221f. infra.
col. i1.

## LUCCIVS AGILWIVS•CASTR(IS)

Lorictitis in dep(osito) $* \mathrm{C}$ in viatico $*$ LXXV accepIt stipendi $*$ LXXXIV ob(olos) XV (dodrentem) (35) ex eo col[la]tio $* \operatorname{IIII}$ ob(olos) XXII s(emis) reliquos [tuli]t * LXXIX ob(olos) XXI (quadrantem) habet in dep (osito) $[*] \quad C$ in viatico $[*]$ LXXV ORFITO ET RVFO COS
POLION: [ ]DIOSCORI •CASTR (IS)
(40) Iorictitis [i]n dep(osito) $* C$ in viatico $* L X X V$ 10 accepit $s[t i]$ pendi $\neq$ LXXXXIV ob(olos) XV (dodrantem) ex eo c [ol] latio 长 IIII ob(olos) XXII's(emis) $r$ eliquos [tuli]t $犬$ LXXIX ob(olos) XXI (quadrantem) ha] bet in $[\operatorname{dep}(0 \operatorname{sito}) *]$ C in $v[i] a[t]$ ico $*$ LXXXV ].S.[ ] PANTARCHVS -CASTR (IS)
15 Lorictiti]s in dep(osito) $*$ CLXXXXV ob (olos) VIII s(emis). in via[tico *IXXV
accepit] stipendi $* L X X X[I V$ ob(olos)] XV (dodrantem) ex eo] c[0]llatio * IIII ob(olos) [XXII] s(emis) in qua] esturam pro contuctione
(50) ............]..cellucuo ubi laterit $*$ LII [III
$f_{0}$ (iunt) relicta $*$ LVIII ob(olos) XXII s (emis) reliqu]os. tulit $\not \subset \mathrm{XXV}$ ob(olos) XXI (quadrantem) habet in $]$ dep(osito) $* C L X X X X V$ ob (olos) VIII $s$ (emis) in viatico $*$ LXXV
]S MAXIMVS •CASTR(IS)
（55）Loricti］tis in $\operatorname{dep}(0 s i t o) *$ in viatico $*$ LXXV 25 de］bet ex priore ration（e）$*$ XVIII ob（olos）XXIV s（emis） item collatio（secundo）stip（endio）$\forall$ IIII ob（olos） XXII s（emis）
$f(i u n t)$ quos $\operatorname{debet} *$ XXIII ob（olos）XIX habet in dep（osito）$*$ C in viatico $*$ LXXV （60）debet $夫$ XXIII ob（olos）XIX
30 PRESENLE II ET CONTIANO II COS
Rinoc（orurae）PATHERMUTHIS．PTOLEMEI－HELIOPOL（ITA）
Lorictitis in dep（osito）$* \mathrm{C}$ in viatico $*$ LXXV
accepit stipendi $*$ LXXXIV ob（olos）XV（dodrantem）
（65）ex eo collatio $x$ IIII ob（olos）XXI（quadrantem）
35 reliquos tulit＊LXXXIX ob（olos）XXI（quadrantem）
$\mathrm{h}[\mathrm{a}]$ bet in dep（osito）$* \mathrm{C}$ in viatico $夫$ LXXV
ostraci（nae）P．［．］．VNVS PHLEI• ANTEOPOL（ITA）
Lorictitis in dep（osito）$*$ CCVI in viatico $*$ LXXV
（70）accepit stipendi $*$ LXXXIV ob（olos）XV（dodrantem）
40 ex eo collatio $*$ IIII ob（oilos）XXII $s$（emis）
reliquos tulit K IXXIX ob（olos）XXI（quadrantem） habet in dep（osito）$犬$ CCVI in viatico $\times$ LXXV
49．qua］esturam Lesquier． 50 in$]$ castello cuo（＝quo）ubi laterit reiecit Marichel，O．c．，p．59．
col. iij.

Heraclus IV［

$$
\begin{array}{r}
\text { Lor }[\text { ictitis in dep(osito) } . \\
\quad a[\text { ccepit stipendi } \ldots
\end{array}
$$



80,85,93. The consular dates are required.by.the lacunae,
cf. Marichal ad loc.

## P. Berlin 6866 B.

## Frag. C.

$$
\mathrm{HE} \cdot[\cdot
$$

(100) Loric.[titis in dep (osito).
 reeliquos tulit .................. habe $[t$ in dep(osito).
(105) T] haub (asti) $M[$

5

$$
\text { I. }[
$$

## Frag. A.

Col. i.
Lorictitis in dep(osito) $* C$ in viati] co [ $*$ LXXV accepit] sti $[p]$ endi $\left[\begin{array}{ll}* \\ L X\end{array}\right]$ XXIV ob(olos) XV [(dodrantem) e.] x eo collat [io *] IIII ob(olos) XXII $s$ (emis)
(110) reliqu]os tulit $*$ LXXIX ob(olos) XXI (quadrantem)

5 nabet in d]ep(osito) * $C$ in viatico * LXXV IMP. COMMODO VI ET SE] PII-

MIANO II COS
TIBERIS [•]THIN(ITES).
Lorictiti]s in dep(osito) $* \mathrm{C}$ in viatico $*$ LXXV debet]. ex priore rati on(e) $*$ VI ob(olos) XXII s (emis 10 item collatio (secundo) stip(endio) $x$ I] III ob(olos) XXII $s$ (emis)
$f$ (iunt) quos debet $X$ ] XI ob(olos) XVII habet in dep(osito) $* C$ in viat]ico $*$ LXXV debet $*$ XI ob(olos)] XVII
(120)
]. S:C(IVIS) H (OMANVS)
15 Lorictitis in dep(osito) * ..in.viati] co * *. LXXV accepit stipendi $*$ LXXXIV] ob (olos) XV (dodrantem) ex eo collatio $*$ IIII] ob(olos).XXII.s(emis) reliquos tulit $*$ LXXIX ob(olos)].XXI (quadrantem)
(125) habet in dep(osito) $*$. in viatico] $*$. LXXV.

20
] CASTR(IS)

Lorictitis in dep(osito) *. . in viatic] 0 * LXXV
debet ex priore ration(e) *] IX ob(olos) XVII s (emis) item collatio (secundo) stip(endio) * I] III ob(olos) XXII $s$ (emis)
(130) $f($ iunt $)$ quos debet $*$ XIV 0$] b$ (olos) XII 25 habet in dep(osito) * . in viatico $*$ ] $\operatorname{LXXV}$

Frag.A. 105. Either M[ARVLLO ET AELIANO COS (184) or M[ATERNO ET ATPICO COS (185) . cf. Marichal ad loc. col. 1i.

- [

tra... [
(135) item an.. [


144. accepit sus.[ Marichal. 144 bis. ...... praesi(di.) Marichal. 154. poss[ Marichal.

Frag. D (to be placed after Frag. C, before Frag. A)
ex eo collatio * IIII ob(olos) XXII] s(emis) rellquos tulit $X$ LXXIX ob(olos) XXI] (quadrantem)
habet in $\operatorname{dep}(o s i t o) X$. in viatico $*$ ] LXXV
4
]II(ES) (?)
Lorictitis in dep (osito) $*$. in viatico $\forall$ LX] XV Ogbo $[$
(160) accepit stipendi $*$ LXXXIV ob(olos) XV] (dodrantem) s[ ex eo collatio $X$ IIII ob(olos) $X X]$ II $s(e m i s)$ reliquos tulit $*$ LXXIX o]b(olos) XXI (quadrantem) nabet in dep(osito) $X$. in viatico $*$ ] I $[X] X V$ 10 CA] $\operatorname{SITH}$ (IS)
Lorictitis in dep(osito) $*$. in viati]co $*$ LXXV
(I'66) accepit stipendi $*$ LXXXXV ob(olos)] XV (dodrantem) ex eo collatio $*$ IIII ob(olos) ]XXII s(emis) reliquos tulit. $*$ LXXIX ob(olos) X] XI (quadrantem)
15 habet in dep(osito) $*$. in viatico $*$ LXX] !
(170)


Lorictitis in dep(osito) $*$. in vijatico $\neq$ LXXV Os[traci(nae) ? accepit stipendi $\forall$ IXXXIV ob(olos) XV] (dodrantem) ex eo collatio $*$ IIII ob(olos) XXII] $s(e m i s)$ 20 reliquos tulit $*$ LXXIX ob(olos) XXI] (quadrantem)
(175) habet in $\operatorname{dep}(o s i t o) *$. in viatico]* IXXV


Frag. E (after Frag. D, before Frag. A).

## ]nvs oxyr[Ynchita

Lorictitis in dep(osito) ${ }^{*}$ CLXXXVII $s$ (emis) in $v[$ iatico

* LXXXV
(180) ex eo collatio $\forall$ IIII ob(olos) X[XII s(emis) 5 reliquo]s tulit $*$ LXXIX ob(olos) $X[X I$ (quedrantem) nabet in dep(osito)] * CLXXXVII $s$ (emis) in viatico [ $*$ LXXV

$$
\begin{aligned}
& \text { Co]s } \\
& \text { ]NIVS } \cdot[
\end{aligned}
$$

## Frag. F. (after E, before A)

(185) item collatio (secundo) stip(endio) * III] I ob (olos) XXI[I s (emis)
$f$ (iunt) quos debet $*$ - o]b(olos) XII habet in $\operatorname{dep}($ osito $) *$. in viatico $] *$ LXXV

Frag. G (after F, before A)
IV. $[$
-] erro
Lo [rictitis in dep(osito)
(190)
a. [ccepit stipendi
[ex eo collatio
[reliquos tulit
h [abet in dep(osito)
THE
[.

Loric[titis in dep(osito) a[ccepit stipendi
Frag. B


Marichal argues that the papyrus represents the remains of a roll of at least eight columns. 466 Eight fragments now survive, the largest of which 6866A, covers parts of cols. i, ii, and iii, and carries the dates 171. (?), 172, $176,177,178,180,181$ (?), 182 (?), 183 (?). The other seven fragments belong to 6866 B ; of these two bear dates. Marichal places in col. iiii.frag. C, which carries the date 184/5 (?): frag. A is placed in cols. vi and vii, and carries the dates 190 and 192... He interpoletes a col. $v$ to cover the year 187-8. . The other five fragments are undated. Marichal argues that frag. B belongs to a summary at the end of the document, and places it in his
col. viii. This appears to be extremely probable. The other four fragments, $D, E, F$ and $G$, he adds, 'peuvent se placer indifférerment sous les frag. $C$ et $A$, ou dans autre toute colonne que $1,2,3 . .^{\prime}$. In practice, it would appear that a little can be added to Marichai's statement: frag.

A is of a type different from the rest, and would appear to be concerned with recruits who had lately joined. At
least this would appear to be the explanation of the entry in lines 144 et. bis, which may be expanded as accepit su[bsidium ex]praesi(de) Bab yloniae, 'received an advance of pay from the praeses of Babylonia.' (a town on the right bank of the Nile above Heliopolis.). ${ }^{467}$ In addition to the advance of pay, there is a deduction for cincturae, on article of equipment which would be required at the outset of a soldier ${ }^{t}$ s career. ${ }^{468}$ Moreover, the last entry in this fragment consists of the beginning of a proper nome PIN.[. followed in the next line by poss [, which suggests the expansion poss idet . To understiand this entry we may recall PSI IX 1063, which concerns receipts for the deposita of recruits newly arrived from Asia. poss [idet may then refer to an amount thus credited to a recruit on arrival. These details are not conclusive, but would at least:explain the differences in style and content of these particular entries from those of the remainder of the document. If, therefore, this fragment dealt with comparative recruits,
the undated fragments, which are of the conventional form, would necessarily be anterior in date. Fragments D, E, F and $G$, therefore, may be placed before $A$ and $B$ in our arrangement of the papyrus. To avoid confusion, however, the numeration adopted by Marichal has been retained.

To this papyrus may now be added P. Aberdeen 133,469 which at one time was thought to be a scrap from a literary papyrus, but has now been recognised by its editor, E.G. Turner, as belonging to the same roll as P. Berlin 6866. Turner adds that it is not possible to assign the fragment to its proper position in P. Berlin 6866, for the possiblities are too numerous. It could be placed in any of six of Marichal's eight columns. The various positions suggested by Turner are: col.i, just before Marichal's line 13; col.iii, line 80 or 85 or 93; col.iv, (P.Berlin $6866 \mathrm{~B}, \mathrm{fr}$. C), line 105; col.v, in any position; col.vi, at the top; coll.vii, at the top. P. Aberdeen 133

Joss
].s - heliopol(itanus)
Lorictitis in dep(osito) *., 1]n viatico * IXXX[V] Marichal convincingly rejected Lesquier's dating of the Berlin papyrus (180-183), and proposed a new dating, A.D. 192-196. He argued that since the first legible date is A.D. 172, and another, illegible date precedes, the
earliest date cannot be later than A.D. 171.470 If these dates are dates of attestation, as we may reasonably assume, we have at least one of the men concerned already serving in A.D. 171. If we take the normal term of twenty-five jears as his length of service, this gives a terminus ante quem of A.D. 196. The latest date of attestation in the document is A.D. 192; the date of composition, therefore, is between A.D. 192 and 196. This date is probably correct, but the reservation may be made that it is not iunknown for soldiers to serve beyond the customary term; and a date of a year or two leiter than 196 need not necessarily be excluded. In practice, Marichal is inclined to believe that our earliest fragment was preceded by another column with dates of attestation ranging from perhaps 167 to 1.70471 He therefore favours a date very soon after A.D. 192. The, main interest of the document is in the light it throws upon the pay of the auxiliary soldier. For this, as Marichal claims, it is the only document which has preserved the actual amount received. 472 The figure of 84 denarii $15 \frac{3}{4}$ ob., is not without its own difficulties, however. We may be certain that this was not the theoretical annual sum, which almost certainly was a round number. In the case of legionaries we know that the annual amount in the reign of. Augustus was 225 denarii, or three stipendia of three aurei $(=75$ denarii) each. After the quartum
stipendium was added by Domitian, 473 , the total annual pay reached 300 denarii. Domaszewski's' assumption of an increase of pay under Cormodus has been adequately refuted by Brunt, 474 but an increase under Severus appars certain, and was probably made after the victory over Clodius Albinus in A.D. 197.475 The new figure may have been 500 denarii, again a round number. One would naturally expect the auxiliaries to have received proportionate increases at the same time as the legionaries: one might reasonably assume a total annual sum consisting of a round number of denarii, and preferably divisible by 25, so as to be payable in gurei. 476 Apart from this papyrus, our other information about the size of auxiliary pay is meagre, but is capable of being used to support a reasonable hypothesis constructed in accordance with these principles. This was attempted by Domaszewski, 477 who produced a basic figure of 75 denarii, or three aurei, for the annual pay of the auxiliary infantryman in the time of Augustus. Domaszewski, however, belleved that a stipendium was essentially a payment of 75 denarii, and continued as such until the time of Severus; all pay scales, therefore, at least in the basic grades, 478 had to be based on multiples of 75. (In the case of the praetorians, Domaszewski's stipendium was 250 denarii, or ten aurei; for the urbaniciani 125 denarii, or five aurei. 479) He found confirmation of
this theory in the request of the Batavian auxilia in A.D. 70 for duplex stipendium, which he interpreted as a demand that they be paid in two instalments, each of 75 denarii, instead of a single annual payment of 75 denarij. 480 Their request would in this case have been the not unreasonable one of an increase to an annual 1.50 denarii at a time when the legionaries were receiving 225. The request was refused, and Domaszewski leaves obscure what increases, if any, the auxiliaries received when the legionaries' pay was eventually increased under Domitian, and, on his theory, under Commodus. ${ }^{481}$

In stating a figure of 75 denaril for auxiliary.
pay under Augustus, Domaszewski would appear to have been right, We know that in the auxilia the equites were paid more than the pedites, and alares more than equites cohortales. ${ }^{482}$ Moreover, it was considered a promotion for a legionary to be appointed duplicarius alae. ${ }^{483}$ A sesquiplicarius alae, therefore, probably received the same pay as the legionary, 225 denariji in the time of Augustus. In that case an eques in an ala would receive 150 denarii. An eques in a cohort received more than a pedes, and was probably in the same pay grade as the sesquiplicarius pedes; since the eques alaris received more than the eques cohortalis he also received more than the sesquiplicarius pedes, and probably the same as the
duplicarius pedes. The duplicarius pedes would then receive 150 denarii, which would mean that the pedes would receive only 75 denarii. This is Domaszewski's figure, but we need not follow him in assuming that the sum was paid in one single annual instalment. The actual totals of denarii arrived at on this reasoning for cohorts, alae, and legions, are 75, 150 and 225, or in the proportions 1:2:3. We know that the legionaries were paid in three instalments each of three aurei: prima facie, pedites cohortales and alares would be paid in three instalments. of one and of two aurei respectively. After the addition of the quartum stipendium by Domitian there would be four instalments instead of three; and the annual pay in the cohorts would rise to 100 denarii, in the alae to 200. The figures arrived at by this argument may be tabulated as follows:-

## Annual Pay in denarii.

|  |  | Augustus |
| :--- | :---: | :---: |
| Legions |  | Domitien |
| 1. milites |  |  |
| 2. sesquiplicarii | 325 | 300 |
| 3. duplicarii | $337 \frac{1}{2}$ | 450 |
| Alee | 450 | 600 |
| 1.: equites |  |  |
| 2. sesquiplicarii | 150 | 200 |
| 3. duplicarii | 225 | 300 |

1. pedites ..... 75 ..... 100
2. equites:
seauiplicaril pedites.$-112 \frac{1}{2}$150
3. sequiplicarii equites ? 150 ..... 200duplicarii pedites
4. duplicarii equites225300

It will be noticed that in the cohorts the sesquiplicarii equites have been equated with the duplicarii pedites, though strictly they should have received not twice, but 24: times the basic rate. An annual rate of $168 \frac{3}{4}$ denarii, however, would have introduced an unnecessary complication into the scale, one that we may feel sure would have been avoided by the essentially practical Romans. Marichal, following the traditional interpretation of the Geneva pay accounts, believes that the figure of 84 denarij $15 \frac{3}{4}$ ob. which is the regular amount of stipendium in the Berlin papyrus was due to the operation of the exchange-rate in the favour of the Treasury. 484 In the case of the Berlin papyrus, the system, he believes, would work as follows. 84 denarii $15 \frac{3}{4}$ ob. represented a total of $2367 \frac{3}{4} \mathrm{ob}$. on the scale of 28 ; obols to the denarius; which was equated with the tetradrachm: $2367 \frac{3}{4}$ obols on the Treasury scale of 24 obols to the tetradrachm represented 98 denarii $15 \frac{4}{4} \mathrm{ob} .$, or 100 denarii less commission
on the exchange. It has been shown above how this.
explanation is unsatisfactory in the case of P. Gen. lat.4: in the case of the Berlin papyrus even more serious objeclions are evident. The normal figure of depasitum is 100 denarii, of viaticum 75 denarii. In a very few instances the depositim is a higher sum; 486 the viaticum is invariably the same figure. But. why should the exchange be exploited to the detriment of the men in the case of stipendium alone, and not in the case of depositum and viaticum? It may of course be argued that 100 denarii was in this unit at least. the minimum sum that could be retained on deposit: 487 this explanation will not cover the viaticum, which seems to have been at a standard rate. Further, the figures themselves are illuminating: 75 denarii represents the annual stipendium before the increase under Domitian, 100 denarif the stipendium after that increase. The viaticum seems to have been fixed during the first century and to have remained unchanged. We are reminded of BGU II 423, the letter of Apron the recruit in the Misemum fleet to his father in Egypt: 488 (lines 8-10) oft Eíŋ̄toor eis My/rquoús,
 Avion, therefore, received his three aurei ( 75 denarii) on arrival at Misenum: we may imagine that the auxiliaries in the Berlin papyrus received theirs, or rather had them placed to their credit, on joining the unit. BGU II 423
is second-century, and seems to attest that the scale of viatica was the same for the fleet and for auxiliary cohorts. What is important in the present connection, however, is that if the $24 / 28$ obol exchange system had been worked in the case of the viaticum, the actual sum credited would have been not 75 denarii, but 64 denarii 8 obols. If, on the other hand, the viaticum was paid according to a straightforward system of exchange and the stipendium on a roundabout one, there should surely have been on outcry from the troops. A more acceptiable explanation must be found for the odd figure of 84 denarii 153 $\frac{3}{4}$ obols.

In our discussion of the Geneva accounts we reached the conclusion that in the case of P.Gen. lat. I the amount of stipendium entered represented only that portion of the pay which was applied to the man's credit, the remainder being paid over to the soldier in cash as. pocket-money. 489 We estimated that the amount so paid in cash mould usually be about 150 drachmae in the year, or the equivalent of 37 denarii 14 obols. This was only a small sum, but nothing need be deducted from it for food, clothing and accommodation; it was pocket-money. If we compare the Berlin papyrus we find that nothing is added to the men's deposits, only a small contribution (collatio)
is levied for some regimental purpose, which probably as

Marichal suggests corresponded to the ad signa of the earlier document, and that all the rest, 79 denarii $15 \frac{1}{4}$ obols is taken in cash by the men concerned. This is a large proportion of their total pay, and is to be explained by the fact that these men are not stationed at a camp, but are dispersed in various detachments throughout Lower Egypt. 490 .Their expenses, therefore, would be fairly high, especially on food, though their accommodation would no doubt be provided and a proportion of the residue of 15 denarii $12 \frac{1}{4}$ obols which they did not receive in cash would be applied to the upkeep of their arms and equipment.

The auxiliaries, therefore, would be receiving a wage on which a reasonable life could be litved but saving was impossible. This may account for the uniformity, with two exceptions, of the amounts of deposita and viatica. The latter may be dealt with first. The 75 denarii which were given to recruits as an advance on enlistment were, in this type of unit at any rate, retained in the regimental funds and earmarked to the men's credit as a kind of compulsory saving. The 100 denaril which in most cases is the amount in deposita may be explained from a passage in Vegetius 491 which, if Schenk 492 is right, probably has its source in Tarruntemas Paternus who was praefectus praetorio when some of these men enlisted, and is therefore
roughly contemporary: Illud vero ab antiquis divinitus institutum est, ut ex donativo, quod milites consequuntur, dimidia pars sequestraretur apud signa et ibidem ipsis militibus servaretur, ne per luxum aut inanium rerum comparationem ab contubernalibus posset absumi. The 100 denarii, therefore, may be the half of a donative. If so, as Marichal points out, it must be later than A.D. 190, because the same sum appears entered to the credit of an old soldier, who began his service between 172 and. 176, and a comparative recruit, who began his service in 190. Perhaps we may suggest that the accession of Severus was a suitable occasion. This would imply that before this donative was granted the majority of men in the unit had nothing to their credit except their viatica.

This view of the amount of the auxiliary pay depends upon treating the Berlin papyrus as referring to an entire year, and not merely to a pay-period. Marichal, following Domaszewski, believed that in the case of the auxiliaries stipendium meant annual pay. This accords with the theory that the annual pay of the auxiliaries was 100 denarii after the reign of Domitian and before the increase under Severus. Brunt finds this figure much too low, arguing that it creates too great a disparity between the wage of the legionary and that of the auxiliary, and would reduce the soldier's standard of living to a point
at or just below the subsistence level. Instead he proposes to understand stipendium as an instaiment of pay, not as an annual total. Since he believes that even after Domitian there were still three annual instaiments of pay, he postulates a total annual amount of auxiliary pay of 300 denarii. To overcome the objection that according to his own hypothesis - he discounts the increase under Commodus which was assumed by Domaszewski - this would place the auxiliaries on a parity with the legionaries, he supposes that the papyrus may belong to a year after Severus had increased the rates of pay. 493 This leads him to cast doubt upon our authorities who place this increase after Albinus' defeat in A.D. 197.494 This interpretation would make the auxiliary pay stand at 300 denarii at a time when the legionary pay was 500 denarii, a proportion of $3: 5$ which Brunt considers reasonable. He does not explain how he would preserve the differentials of the various classes between these limits: ${ }^{495}$ it would appear to be a difficult task to construct a scale which would take cognizance of them all without having a wide margin between the upper and the lower limits. Further, since he has to assume that the auxiliaries' pay had been raised pari passu with that of the legionaries, he supposes that the auxiliaries' pay was 135 denarii before Domitian, and 180 between Domitian and Severus 96 This means that
when the Batavian auxilia asked for duplex stipendium they were demanding a total of 270 , or considerably more than the legionaries were receiving. Brunt forestalls this objection by understanding their demand as a demand for parity with the legionaries, or an increase of from 135 to 225 denarii, but this explanation seems equelly improbable. Brunt"s argument that the standard of living of the auxiliary foot-soldier would have been at or near the subsistence level if his pay had been 75 denarii a year is so near to the truth as revealed in the Berlin papyrus as to defeat its own ends: the soldier was poor, and had no hope of saving, unless he became a conductor, 497 but was preserved from the fear of destitution by the compulsory savings made on his behalf, savings which in any case were not made out of normal income. It is noticeable that apart from Pantarchus, the conductor; only two other soldiers had more than 100 denarii on deposit. Marichal recognized in P. Berlin 6866 two features of exceptional palaegraphic interest. One is an abbreviation found in lines 28 and 57, and which must be restored from the context in certain other places, which he interprets as (secunda). 498 The appearance of the sign is fio, and its meaning was unexplained before Marichal. Van Hoesen had proposed scr(iba), but not only is the $\underline{x}$ impossible palaeographically, but the meaning would not
suit the context. 499 element was the numeral II, with the customary bar of abbreviation, and the second element an $\underline{O}$, representing the last letter of secundo. Abbreviation by contraction is common from the fourth century onwards but otherwise unexampled at so early a date, the normal system of abbreviation at this period being by suspension. 500 True contraction, however, would have resulted in something like scdo; Marichal sees in the substitution of the Romen numeral for the actual inftial consonants of the word a device that represented an intermediate stage on the way to genuine contraction. The other feature is his recognition of the abbreviations for quadrans and dodrans. 50 ! The former is represented by the sign $3^{-}$, the latter by the sign $\varepsilon$ - These signs are similar to those found in various medieval manuscripts, 502 but Marichal explains that signs formed on the same system are used as abbreviations for bes and triens in the graffiti of La Graufenesque in the first century. 503

The Berlin pay account is concerned with members of an auxiliary cohort: the identity of the particular cohort remains obscure. We are more fortunate in the case of the other auxiliary pay account which we possess, P. Fay. 105.504 This document is concerned not with a cohort, but with an ala, as seems probable from the repeated
use of the abbreviation for turme, 505 and is confirmed by the marginal annotation in lines 69-70, translati in alem prima (sic). The original editors of this document, Grenfell and Funt, could not at that date identify the particular ala to which the soldiers belonged: discoveries since 1900 have made the task comparatively simple, and Marichal has been able to identify the unit concerned with the well-known ala veterana Gallica. 506 The approximate date of the papyrus is clear from the Greek address on the verso. The officials of the marious subdivisions of the Arsinoite nome appear frequently in the papyri, and though our lists are by no means complete, they are well on their way towards being so. 507 Among the orparjyoi 'Hpacheifou $\mu \in$ pi ${ }^{\prime}$ os in the period A.D. $150-200$ we have only two whose names would suit the letters remaining on the verso. These are Apollonius (A.D. 176-179), and Apollotos (A.D.186). There is also a basilicogrammaticus, Apollonius, in A.D. 179. 508 One of these officials must surely have been the recipient of the letter for which the document was used as an envelope. 509 Since the document could hardly have been so used until its contents had ceased to be of importance, the period.A.D. 176-186 mau be regarded rather as a terminus ante quem than as the actual date of the document. For this reason Marichal believes that the actual date is around A.D. 175, and not A.D. 180 as the
original editors supposed. 510 The date of composition may really have been earlier still, since a considerable interval must have elapsed before the contents of a financial document could have been so out-of-date that the papyrus could be used as wrapping-paper. . If Seymour de Ricci is right in his conjecture that the man Turbon listed as killed in col. iii, 26 received his cognomen through being born during the prefecture of $Q$. Marcius Turbo in A.D. 117,511 we can hardly date the document later than the middle of the second century. Marichal's date of about A.D. 175 would imply that a man serving as an eques in an ala was close on sixty years of age. This is not impossible; but must surely have been uncommon in the extreme.

During the period A.D. 176-180, the only two alae stationed at Alexandria were the ala veterana Gallica and the ala I Thracum Mauretana; ${ }^{512}$ moreover, at that date the ala I Thracum Mauretana was the only ala. I stationed in Egypt. We have a document of considerable length, P. Hamb. I 39, of the year A.D. 179, which contains a series of 62 receipts issued by members of the ala veterana Gallica to a summus curator, I. Iulius Serenus . 513 Many of the names in this document are repeated in P. Fay. 105; some of these names are of course quite common, but the duplications include some of the rarer names, such as Pasion

Horus, Nepheros, Apoilos, and Gemellus. Because of this close agreement in nomenclature Marichal believes that the two dacuments are strictly contemporary. 514 Finally P. Fay. 105 was discovered at Karanis, where it is known that a detachment of the ala veterana Gallica was stationed. 515 The identity of the unit whose members' accounts are listed in P. Fay. 105 is therefore reasonably certain, though the actual date can be stated only approximately, as some time from about the middle of the second century to about A.D. 180, with the probabilities in favour of the earlier part of this period.
P. Fay. 1.05.

## Col. i.

* J XVIIIII (obøli) XXV $s$ (emis)
(3 lines missing)
5
(oboli) I ys(emis)
(3 lines missing)

> (oboli) ]IIII s(emis)

10 Be. [
Apol [1] inar (is) $[* .]$.V (oboli) XIII $s(e m i s)$
Longinus $\quad \therefore$ XXV
Dioscorus $\quad *$ XXV

| viaticorum | $*$ XX[VI]I (oboli) XII s (emis) |
| :--- | :--- |
| $15 \quad$ Pasion | $*$ II (oboli) XII s (emis) |
| Crispus | $*$ XXV |
| debitores | $*$ CCCXVI (oboli) XVI (quadrans) |


recessa depositorum

Dionusius
item debitores
(30) Capiton

5 Apollos
Pasion
Ammonius
Protas
(35) Hermaiscus
10. Muntanus

Serenus
Gemellus
Serenus
(40) Nefotian(us)

15 Eponuchus

* MCCCCLVITII
* D DCLXVI
* [....] (oboli) $\operatorname{XXV}[I]$ I s(emis)
* 
* 
* 
* 
* 
* 
* 
* 
* 
* 
* 

[.] XXI (oboli) XII
[.] VII (oboli) XII
LXXI (oboli) XXVII.
$L[X X]$ VII (oboli) XVII $s$ (emis)
IIII (oboli) XXVII $s$ (emis)
LXV (oboli) XIII s(emis)
IIII (oboli) XXVII $s$ (emis)
IIII
LXXII (oboli) XX $s$ (emis)
IIII
(oboli) XXVII $s$ (emis)
IIII (oboli) XXVII $s$ (emis)

Fabianus
Apollinar(is)
$\left\langle\mathrm{m}^{2}\right\rangle$ item armorum Dionysi
$\left\langle\mathrm{m}^{1}\right\rangle \pm$ sunt recessa.
col. iii.
$\left\langle\mathrm{m}^{3}\right\rangle \quad \mathrm{M}$ LONG $[\mathrm{I}] \mathrm{NVS} \cdot[$

> Camariusis [

Baibulas [
Posidonius [
5 Helius[
(5i) Valerius.
Horus [
Paninutas [
Chares [
10 Publius [
(56) Amonius [

Galates [
[An]tonius $h$ (abet) $\quad[d$ (epositos)
Argotius $h$ (abet) [d(epositos)
15 Neferos [h(abet) d(epositos)] $A$
(61) Alexandrus $h$ (abet) d(epositos) *

DCXV [
D

Collutes $\quad \mathrm{h}$ (abet) d (epositos) *CCCCLXXXXVII ob II s
Claudius $h$ (abet) $d$ (epositos) $*$ CCXXVIII
Ptolemeus [h(abet)] a(epositos) *
D
20 Antonius $[h$ (abet) $]$ (epositos) $*$ CCCCXVII
(66) Rufinus [ h (abet)] $\alpha$ (epositos) $* \quad D$ Longinus $[n(a b e t)] \cdot d$ (epositos) $*$ CCCLII (obolos)XXIII Salvius $\quad \mathrm{h}$ (abet) d (epositos) $*$ CcixxXV ob XXVI s translati in Saturninus $h(a b e t) d$ (epositos) $*$ xXXVIII
Alam prima Longinus $h(a b e t) d$ (epositos) $\% \quad C C L X V$

(72) summa depositorum $*$ XICXXVIIII ob(oli) X s(emis)
(74) viaticorum $*$ MCCCCXVI ob(oli) $X X[I$

30 fit summa nummorum $*$ XVICLXXII (oboli) VI s(emis)
(traces of four obliterated lines)
Verso
 col. i.

17, 18. (quadrans) Marichal, s (emis) (quarta?) editores. 26. $\mathcal{F}$ ( $=$ in toto) editores, (turmae) Marichal. 11. Apol[I]inar(ius) alii.
col. ii.
17. Apollinar(ius) alii.
P. Fay. 105 does not assist us to calculate the pay of the equites alares: it is not concerned with the stipendium directly, but only with deposita, seposita, and viatica. In the general level of deposita and viatica it is very different from P. Berlin 6866, though that document is ailmost contemporary, and refers to the same province.

Whereas in the Berlin papyrus the amounts held on deposit were monotonously similar, in the great majority of cases being 100 denarii, in the present document we have a wide range of amounts, varying from a mere 38 denarii in the case of Saturninus (line 69) to a withdrawal by Dionysius of no. less than 1459 denarij (line 28 ), which with the addition of the sum of 103 denarii spent on arms (line 44) implies a total saved of at least 1562 denarii. The size of some of these amounts makes it clear that in comparison with the cohortales the alares were well paid. It is equally clear that Domitian's restriction on the amount of savings to be kept on deposit ( 250 denarii) , either did not apply to Egypt, or had fallen into desuetude. 516 A further point of contrast with the Berlin papyrus is that withdrawals from the viatica appear to have been allowed: the considerations which apparently caused this to be forbidden in the case of the cohort of the Berlin papyrus would not carry the same weight in a unit relatively so affluent.

Perhaps the chief centre of interest in this document is the entry (summa) sepositor $[\underline{u}] \underline{m}$ in line 73. The distinction between seposita and deposita is not dram in P. Berlin 6866, but that such a distinction existed can be deduced from Vegetius (II, 20). He uses the term sepositio to describe that very system of retaining half
of each imperial donative in the soldier's credit account in the regimental savings-bank which we have noticedin connection with the deposita of the Berlin papyrus. 517 His words are:

Sepositio autem ista pecuniae primum ipsis contubernalibus docetur adcommoda; nam cum publica ent sustent/ur annona, ex omnibus donativis augetur eorum pro medietate castrense peculium. Miles deinde qui sumptus suos scit apud signa depositos de deserendo ninil cogitat, magis diligit signa, pro illis fortius dimicat, more humani ingenii, ut pro illis habeat maximan curam in quibus suam videt positam esse substantiam.

The term deposita by itself would appar to include all the amounts left apud signa, whether voluntarily or not; at least, in the Berlin papyrus the word seems to have been used in this way. When contrasted with seposita, however, the deposita will be the sums voluntarily saved, the seposita those sequestrated from the imperial donatives. In the Berlin papyrus, of course, the level of voluntary saving appears to have been so low as to make superfluous a bookkeeping system which distin-. guished between the two forms of saving. On the other hand, the cavalrymen of the ala veterana Gallica, who seem to have had the means to enjoy a far higher standard of
living, may well have benefited from the fullamplication of the system, with its separate categories of deposita and seposita. The amount saved by Dionysius, 1562 denarii, is the equivalent oi several years' entire pay, 518 and though it probably represents the accumulated sgvings of twenty-five years, both deposita and seposita, it at least proves that it was possible for a soldier in an ala to amass a considerable fortune during the course of his service. The legionary, with his higher pay, must have been able to save still more.

It will be remembered that in the Berlin papyrus the amount of the viaticum was invariably 75 denarii, and comparison was made with the letter of Apion, the recruit to the fleet at Misenum, whose viaticum was of the same amount. ${ }^{519}$ Further, it was argued that in that papyrus this sum was retained as a compulsory saving. There was no need, therefore, to make a separate category of credits in seposito for the members of that unit. In P. Foy. 105, however, where there was such a separate category, the viatica could apparently be drawn upon. The average sum remaining undrawn, in fact, amounts to no more than 54 denarii a head. This need cause no surprise, as it does to Marichal, $5 ? 0$ who writes, "On ne voit pas pourquoi les cavaliers de $1^{\prime \prime}$ ala veterana Gallica, qui ont une solde supérieure, auraient un viaticum inférieur a celui des
fantassins du P. Berlin." The obvious answer is that the cavalryman had other savings, both voluntary and obligatory, which made sequestration of their viatica unnecessary: when funds were short, therefore, they would draw on their viatica, but the repayments, when made, would be deposita. The general level of the viatica in this unit, in fact, so far from giving cause for surprise at its lowness, is so high as to prove that withdrawals from the viatica were not often necessary.

In P. Fay. 105 one man, Turbon, was listed as dead: 521 we have a document which show.s how the balances of deceased soldiers were treated. Two documents published by Sanders, and recognized as one by Gilliam, show that the vicesima was deducted and a record made. 522 P. Mich. VII 435

## col. 1

$i$
. Diophanius Op.[

- Claudi Romani sa[lutem
drachmas centum[ - ucit dr nonagen[ta

5 ... repleunt ressi.[
...osito IV Non [as Iulias
ii L.II [I] cúr o I Egrililus optus Iuli [o cognomen optio]nị 7 Cloudi Romani
salutem. Fate[0]rm[e accepisse hereditatis ? i $]$ nstar
-...............
a Pulio Maximo 7 Ter $[$
]i
ex quibus deduci-
tur vicensim[a

5 non [a]ginta qui [nque
... drachma.
]
Aug IV Nonas
Iulias.
optioni
7 Maximi [salutem. Fateor me ] accepisse legato
 defuncto
drachumas V [ ex quibus dedu] cuntur vicensima [nered. dr. ducentae sexagint] a quinque. reliquae drac[humae quae sunt ?] quinque mil-
d lia LXXXXV dan[tur
in depos] itt?
IIII Nonas Iul[ies
iv Leg II Tr $[$

> col. ii

Xij


Col. i.
i, 2. Romani sa[lutem Gilliam, Romani $f$ [ Sanders.
ii,2. salutem. Fate[0]r m[e accepisse Gilliam, Satureti Tatera[ Sanders: hereditatis. (?') i] nstar .................... ed.,
i] nstar
Gilliam,
i] nstar
dr P [t] ol Aug

MDC drachmarum Sanders. 3. ex quibus deduci- Gilliem, ex quibus DC deductr Sanders. 4. ... drachma. Gilliam, . cet drachmes Sanders. 5. non $[a]$ ginta Sanders, ... [.]ginta Gilliam.
iii, I. read co]h I C(ilicum) E(quitata) : Petro[nianus Gilliam,
Petro[nius Sanders. 2. 7 Maximi [salutem. Fateor me]
accepisse Gilliam, 7 Maximi [ se]accepisse.
Sanders. 5. cf. Gilliam, A.J.Ph. LXXIII, p. 404, n. 36. P. Mich. VII 440

1
]io 7 quarti pri[ncipis
s]alu te m. Fatior me a.[ccepisse
].r. vicesima $\mathrm{dr}_{\circ}[$
reli]q. ua s ques Id [ibus (?)
testa] mento ...[
] aug IV Non [as Iulias
〈 $\mathrm{M}^{2}$ ) ii 7 Fl$]$ avi (?) Antoninị. $\cdot[$
Fa]tior me accepi [sse
Antoni]ni Iust [ini (?)
reliq]uis qu[
i.l. ]ịo 7 quarti pri[ncipis Gilliam, io 7 o[.]anti pra[ Sanders, Antonius Iustinus opt] io 7 ofjanti pro[curatori vicesimae hereditatum Arangio-Ruiz.
2. s]alu[te]m. Fatior Gilliam, salut]em [dic] it. Fatior: Arangio-Ruiz, ]ene [...]it fatior sanders.
3. vicesima dr [ Gilliam, ]tro vicesima qu [ Sanders,
]pro vicesima Arangio-Ruiz fortasse deduci]tur vicesima dre [. 5. testa]mento Arangio-Ruiz, ] mento Sanders.
6. Aug IV Non [ Gilliam, A]ug. Iunio R[ustico II et Plautio Aquilino cos. Sanders.
ii,l. ]..avi (Flavi ?) Antonịị - [. Gilliem, ]arat si Antonius Iu[stinus Sanders, isdem cos. eadem die deci] arat se Antonius Iu[stinus Arangio-Ruiz.
2. Fa]tior me accepi[sse Gilliam, ]t eront et ccet o[ Sanders, op]tio 7 0vanti accepi[sse drachmas Arangio-Ruiz. 3. Antolni Sanders.

It is unfortunate that this document is so poorly preserved that many of the readings are extremely doubtful. Its date, however, can be defined within narrow limits.

No fewer than three units are mentioned, and we may assume that other units were included in the complete roll. These units comprise two legions, III Cyrenaica and II Traiana, and a further unit, restoree by Sanders as cof h I C(ilicum) E(quitata). 523 We know that III Cyrenaica was transferred to Arabia soon after A.D. 119,524 and the earliest date at which II Traiana is attested in Egypt is A.D. 109. . Sanders would go still further, and suggest that the fourth day before the Nones of July, A.D. 116, was the date of the first three entries, 525 on the rather slight ground that the deaths of so many at the same time would require a military cause, and this is to be found in the Jewish revolt of A.D. 115-1.16. We may doubt whether the few entries that we possess do constitute an unusual number of deaths in the cemp at Nicopolis at the same time, but the dating A.D. 109-1i9 seems certain, and Sanders: suggestion may well be right.

Before we examine the nature of the document we may perhaps điscuss certain interesting annotations contained in it. These are $\theta$ (theta nigrum) and $o(=0$ (biit), a variant of theta nigrum, 526 in Pap. 435,iii, 1 and ii, 1 , and the marginal notation $\underline{d}$ in Pap. 435, iii, 7. Sanders in undoubtedly right in suggesting that the last-mentioned sign represents d(epositum). His as sumption, however, that it was put there "to indicate what entries and which
line of the entry noted a deposit, or even that the deposit had been recorded in the ledger of the soldier", 527 seems less reasonable: this explanation would hardly account for the absence of the mark before the other entries. Perhaps a more likely explanation is that it was added by the clerk to remind himself that the ledger entry had still to be made. We are reminded of the marginal annotation $\underline{Z}$ in P. Dura 3 recto, 528 and D. Perg. 6,529 which in both cases seems to have been used to remind the clerk to take some further action.in connection with the entry.

Palaeographically the document is interesting because of the light it throws on the danger of dating a document by the style of hand alone. Sanders states that without further evịdence one would date the 'careless, crude hand' of the first two entries of Pap. 435 to the second... century, or even late second century, but naturally assign the third and subsequent entries, in "a majuscule cursive of considerable ease and elegance', to the first century. 530 In the case of Pap. 440, which Sanders believed to be a different document, he recognises two different second century hands, of which the first "is slightly larger, while the second is more elegant, but also has more ligatures". 531 It is fortunate that we know that all four hands are strictly contemporary.

The type of entry is perhaps shown most clearly
by Pap. 435, ii which may be translated as: "Third Cyrenaic Legion. L. Egrilius Optus to Iulius [........], optio, of the century of Claudius Romanus, greeting. I admit that I have received in the form [of an inheritance 532 (?)] from Pulius Maximis, of the century of Ter [•••], [a sum of drachmas], from which are deducted as inheritancetax [...] drachmas. [The remaining drachmas], ninety-five, [are placed on deposit for the heir.] The fourth day before the Nones of July, [year]."

The chief interest of the document, apart from the light it throws upon the vicesima hereditatum, which is hardly within the scope of this inquiry, and has been fully treated by J.F. Gilliam, 533 is the evidence it offers on comp administration. The Geneva archivesis and the pay accounts of P. Berlin 6866 and P. Fay. 105, were all concerned with one particuler unit: this document contains items from at least three units, and possibly more. The conclusion must be that it was prepared either at the camp at Nicopolis or at some central record-office. The former alternative seems preferable, if we bear in mind that the concentration of two legions within the same camp must have required a considerable headquarters staff, and that there is other evidence to suggest that auxiliary units tended to be grouped under legionary command. 534 It might appear at first sight that the receipts in this
document are not originals but condes, since in one case three, and in another two, are in the same hand. In these cases, however, it would seem that the hand is that of the official before whom the declarations were sworn. In Pap. 435 the second entry is made before a Iulius [....].] optio of the century of Claudius Romamus: the first entry is also made before some member of the same century, and, since the hand is the same, presumably the same person. The remaining entries of this papyrus are in the same way to be understood as made before an optio of the century of Maximus. These last four entries, moreover, concern at least two units, coh, I C(ilicum) E(quitata) and leg. II Traiana: their being sworn before the same person, who presumably belonged to one of the legions, confirms that the inheritances were dealt with by the headquarters staff in the first instance, and not by unit administration. The individual entries, however, must have had duplicates in the unit ledgers, probably in individual pay accounts such as P. Gen. lat. 1. In the case of a large camp it was probably found convenient to have the various administrative staffs brigaded within the same building, so that the transference of entries from camp to unit records and similar cross-postings would present no difficulty. 535

The Geneva pay accounts and the two documents
which deal with the accounts of auxiliaries, P. Berlin 6866 and P.Fay. 105, illustrate how a record was kept of the pay. and credit of each individual soldier from the day of his enlistment until his discharge or earlier death. But just as earlier, in the case of the pridiana, we saw how annual consolidated returns depended upon data obtained from other more ephemeral records, 536 so we may assume that these annual accounts were based upon receipts and records for occasional payments and issues. Many of these receipts survive, and, as might have been expected, the majority are not on papyrus, which would have been too expensive a medium to use for a temporary record, but on ostraca. What may be at first sight surprising, but on closer consideration is not so, is that these occasional receipts are normally written in Greek, and follow the customary Greek formula. 537 It is true that Latin was the official language of the army, and that adequate knowledge of Latin must have been an indispensable qualification for promotion to the higher ranks, but it must be remembered that the majority of men serving in Egypt, both in the legions and the auxilia, had Greek as their native language and must have been far more proficient in that tongue than in camp Latin, of which many must have had only...a smattering. However essential it may have been to use only Latin for documents intended for transmission
to higher formations or to other units, it must have been found in practice more convenient to use Greek for records intended for circulation within the unit administration only. In this connection we may recall the regulation of so-called Gnomon of the Idios Logos which allows soldiers to make wills in either langufage: 538 we may be sure that this concession would not have been granted had not many minor official military documents been in Greek also. PSI IX 1063 is' an example of a document of some importance within the unit and yet was written in Greek. 539 Receipts of less importance are almost exclusively in Greek. Representative of this class are the ostraca from Pselcis published by wilcken, 540 with a more recent supplement by Evelyn-White. 541 These acknowledge the issue of wine or dry rations, or money in lieu, to troops from whose pay the price was deducted. They are in Greek, and follow the customary formula. A number contain the statement that the author of the receipt was illiterate and that the receipt was written for him by another named person. It should be sufficient to give two examples of this type of document:-

## CR XXXIII (1919), Ostr. 8 -


 Xaipair. 'Elanor napa' sou oírou rotóforiv

5 Aupj́tios ' $\Omega_{\rho i w r ~ E x p a \pi i n v ~ x p p u ́ p w(v) ~}^{\text {ún }}$ koúбтwp Éypaua $\varepsilon(n e ̀ \rho)$ auroi pì idóros


7. $L=($ érous ).

CR XXXIII (1919), Ostr. 14.
Tpíros Taxutos imecus
F. Epp єivou 'Anodोótr kel-
papiárwpi Xápeiv. 'Edapor
"ара́ боu áro rinjs фккоU каi «idós кגi óztos fyrápi-.
x rérorepa ópodoi
okгá. Ly // Tôß у

$$
\langle\epsilon\rangle \text { ypo }(\psi \alpha) .
$$

The ostraca published by Wilcken are similar, but differ in that they are addressed to an optio, and not, as in these examples, to a cibariator. 542

A far more elaborate system of filing soldiers ${ }^{\text {t }}$ receipts is found in an important papyrus roll discovered in the Fayum. This is P. Hamb. I 39, the receipt-book of the ala veterana Gallica。 543 This roll contains no fewer than 24 columns (the majority containing three receipts each), of which two are unused; and two only
partly used. The columns were numbered, 544 and contained in chronological order 62 receipts issued by soldiers of the ala veteran Gallica to the summus curator, L. Julius Serenus, who apparently took the roll away with him on his retirement as an ex-decurion. 545 The receipts acknowledge the receipt of kpórors (faenarium) during the period 9 January to 10 April in the Egyptian year A.D. 178/179.

The majority of the receipts were written on the roll itself by the recipients, or by their representatives, if the :issuers: of the receipts were.illiterate: two receipts, however, were originally written on a separate sheet which was afterwards pasted on to the roll. 546 one receipt is entirely lost, but of the remaining 61 there are 44 issued by individuals, and 17 which are collective receipts. All the receipts were issued in the camp at. Alexandria. Two examples will serve to illustrate their style.
P. Hamb. I 39. 10 ( $=$ A Col. III 20).








20: Aelius Capita. 21 '/oudín. 25. The date is 15 Jan.179. Our other example, a collective receipt, shows superior spelling. On the whole when the authors of the receipts were illiterate they had them written by comrades of above the average standard of literacy. In this case they selected a signifier. An interesting point is the employment in this receipt of dating in both the Greek and the Roman styles.

## P. Herb: I 39, 63 ( $=\mathrm{BB}$ )




 éke gros if in dquaipia bikol néret of ípgs.
L. $\theta$ Aipjhiur 'Artwvivou kali Koppódou vanir kup[Jur Aürokpatópur

 7-8 The date is 17 Jan . 179.

Meyer, basing his inquiry upon nomenclature,
finds that out of a total of 93 members of this ala below the rank of decurion, no less than 33 possessed Roman Citizenship, of whom 9 were illiterate and 1 semiliterate. of the 60 peregrini the majority were illiterate, and only 16 literate and 2 semi-literate. 547 The decurion apparently all possessed the citizenship except one, Eepp̄res Médaros ( $=$ Medrv2ros ). Studies based on nomenclature are full of pitfalls, but these receipts would
point to the reasonably safe conclusion that it was the literate soldier who was the more likely to receive promotion and the citizenship.

- With these soldiers' receipts in Greek we may compare one in Latin. 548 . Perhaps less then half of the receipt survives, and it is not possible to be certain what was really contained there. It does, however, seem probably that it was written by, or on behalf of, a sailor who had received an advance of pay. It may, on the other hand, simply be the acknowledgment of a loan, with a promise to repay the amount. out of pay. . The receipt bears the remains of a regular consular date. P. Mich. III 161.

$$
\begin{aligned}
& \text { ]c[0]s XII K. Martias[ } \\
& \text { ]scribsi me accepisse[ } \\
& \text { ]classis Aug. Liburn[ } \\
& \text { ]s ex stipendio et e[ } \\
& \text { ]actum Caesareae [ } \\
& \text { ]io } \\
& \text { ]......it...... Capito }
\end{aligned}
$$

7. . Ja......itisrgg Capito Sanders.

The document.s which we have examined so far have been essentially 'military', that is to say that they have been produced purely for internal administration within the army: The Roman army, however, in particular in the
second and third centuries - the fourth century is outside the province of this inquiry - had dealings of many kinds with the civilian population and with civilian officials, especially concerning the procurement of supplies. For the early second century we have a receipt for hay supplied to the ala veterana Gallica: 549 this document, of A.D. 130, is entirely in Latin, though a rather irregular Latin, and contains a nominal roll of the men for whom the hay was intended.

## P. Lond. 482.

Alae vetrane galliga turma
Donaciani Serenus procurator conductoribus fenaris salute(m).
Accipi fenum contur[m]alibus
5 meis mensis Iuni et naulum
su [stu]li per me et tibi fiunt.
eccutes triginti* Catulino
et Afro cos.
A.D. 130

Alafes
Solas
Iulius.
Platon

Germanus Ecatus
Damittius Bitsius

Aululamus

|  | Cocas |  | Felix |
| :---: | :---: | :---: | :---: |
|  | Atestas | 30 | [.0.]urinus |
|  | Gaianus |  | D...por |
|  | Paulus |  | T.b.s |
| 20 | Nilas |  | Te[re]ntius |
|  | Bitecus |  | ...ulis |
|  | Aululanus |  | Maximus |
|  | Dolens |  | Acill [i]us |
|  | Domittius |  | Sarapion |
| 25 | Serenus |  | Androstenes |

## 32 Tubas Bell.

With thisdocument we may compare a papyrus of the Oxyrhynchus collection, published by Grenfell and Hunt, 550 which is dated A.D. 205, and contains a similar nominal roll in Latin. Here, however, the similarity ends, for the receipt - to a deputy procurator for 50: artabae of wheat - is this time in Greek. Presumably this is a copy of the receipt which was filed in the unit's archives: the nominal roll was probably not sent to the deputy procurator, but added to the receipt in the unit's records to account for the distribution of the wheat.
P. Oxy. IV 735.
col. i.
Onily a few Latin letters (apparently belonging to names) remain of the line-endings.

12. fortasse item pedites in 7 Belei.

We may conclude this discussion of military
accounts with another papyrus from the Oxyrhynchus collection, P. Oxy. XII 1514, which has been described by its editors as a Latin military account. 551 This document consists of two fragments, written in two large cursive hands with additions in a smaller third hand. An indication of its
date is given by the use of the verso for a document in Greek. 552 This document may be dated to A.D. 247: our document, therefore, must have been written appreciably earlier. The column is complete at both top and bottom, but the beginnings and endings are lost, and the length of the lines cannot be established.
P. Oxy. XII 1511.

Frag. 1.
Pr]aef(ecto) coh(ortis) Apame[norum
].lano tabu[1ario
$\left.5\left\langle\mathrm{~m}^{2}\right\rangle \quad\right] .0^{\prime}$ Marino praef (ecto) legio[nis
$\left.\left\langle m^{3}\right\rangle \quad\right]$ data emeritó LIIII e.. [

> ]Maxcimó [
]xvi ....[
]aptus ...... [
$\left.10\left\langle\mathrm{~m}^{2}\right\rangle \quad\right]$ irrió Proximo tabular [io
]ferino $p$ [rae]f(ecto) alae[
]. .bacus [
Frag. 2.
There are traces of two lines in the third hand. Perhaps it was the mention of tabularii (lines 4, 10) and the use of the numbers LIIII and XVI (lines 6, 7), which persuaded the editors to describe this document as an account.

It does not resemble in style or character any of the military accounts we possess. A clue to its nature is given by the mention of a praefectus cohortis Apamenorum, a praefectus legionis, and a praefectus alae. These officers are surely the recipients of different letters. In that case, the whole is just part of a roll or copies of letters sent, a liber litterarum missarum. 553 The tabularii mentioned in lines 4 and 10 can hardly have been the originators of these letters. Their function must rather have been to testify that these were true and correct copies. We are reminded of P. Oxy. VII 1022554 in which a comicularius writes, "scripsi authenticam epistulam in tabulario cohortis esse". The plurality of tabularif (confirmed by the presence of no less than three different hands) suggests that the document belonged to some large central office. 555 The record-office of the Prefect of Egypt would seem the most likely. $55^{\circ}$ The document does not, therefore, seem to be an account, as the editors describe it. The words data emerito in line 6 would suggest rather a series of letters on the lines of ILS 9060.557 This would make the roll a collection of letters to commanding officers authorising the discharge of individual soldiers. But this is only a possible interpretation, since the document is so fragmentary.

This last document has brought us to the question
of discharge, the end or goal of a soldier's career. At this point it may be as well to recapitulate our treatment of the documentation of the individual soldier. We saw how he would begin, if wise, by arming himself with a letter of introduction, 558 before presenting himself for his probatio. 559 on acceptance he would normally receive an advance of pay and be posted to a unit. 560 on his arrival at his unit, the balances to his credit would be transferred by the officer in charge of the draft to the signifer of the century to which he was assigned. 561 From that point the recruit must be considered as a member of his unit, the documentation of which falls naturally into two main divisions, which we may call the administrative and the financial.

Under the first heading, we saw how his name might be entered on various types of matriculae, ranging from a straight-forward nominal roll 562 to more elaborate documents, which may have contained recommendations for promotion, 563 or even the record of his promotion to the decurionate. 564 We saw examples of matriculae for various units, ranks, and arms of service. Besides the matriculae, we examined a quite elaborate duty-roster, of which no modern company-office need be ashamed, 565 a parade-state 566 various examples of the acta diume, 567 and, finally, the two most important documents of the administrative group,
the pridiana of Berlin and London. $568^{\circ}$ Many other documents which might justifiably have been included in this section will be found listed in the summary catalogue of Roman military documents in the next chapter. The inclusion of them all would have made the section disproportionately long. Special mention may be made here, however, of a series of documents from Dura recently published by Gilliam, relating to cavalry horses, which prove that it was not men alone who were the subject of meticulous documentation. 569

Under the second heading we may include our discussion of soldiers' pay accounts. 570 It is fortunate that these cover three types of unit. legion, ala, and cohorty. even without their evidence, however, we should have been in little doubt of the essential uniformity of Roman militeary bookkeeping. At the end of this section we examined a few examples of soldier's receipts. 57!

It is the receipts which perhaps are the most individual of all the documents we possess. We have seen how the quite complex and intricate bookkeeping system of the Roman army demanded for its operation a nucleus of highly-trained men, the litterati homines of Vegetius. 572 In the receipts we see how the individual soldiers who were not themselves concerned with the running of the administrative machine, fall sharply into two classes, the literate
and the illiterate. 573 We may imagine how important a knowledge of reading and writing seemed to an ambitious recruit who had visions of promotion. Apollinaris" promotion to principalis ${ }^{574}$ must have been paralleled in the case of many other literate recruits.

Finally, we return to the question of discharge. ILS 9060 is a document as yet without parallel. 575 It has still to be proved that it was a general practice for a provincial governor to issue to men on discharge a tabula honestae missionis. The peculiar conditions of Egypt, a province with a civil administrative system all of its own, where a veteran might be cailed upon to present himself for émíkpiois, may have been responsible for a departure from the procedure followed in other parts of the empire. On the other hand, there is abundant evidence from ail parts of the Roman world for the issue of the bronze diplomata militaria to ex-praetorians, ex-auxiliaries, and ex-sailors. 576 The diplomata need no description: they have the honour of a volume of the Corpus Inscriptiomm Latinarum to themselves. 577

In conclusion, we may ask what general principles of Roman military bookkeeping have emerged from our study of documentation. These general principles prove to have been little different from those in vogue today, in spite of the changes caused by typewriters, carbon paper, and
duplicating machines, to say nothing of the printed form. The Roman military clerk had still to make copies of ietters sent and received, to compile returns, nominail rolls, and pay sheets. Minor differences are due to his age: the soldier was know, not by his number as in the British Army, but by his name, filiation, origa, and year of enlistment. To these details might be added his century (or turma) and unit: for century we should substitute company or its equivalent. The Roman clerk may have been more economical in the use of the medium on which he wrote - at least in the case of papyrus 578 but economy seems to have been no bar to the keeping of detailed records. Where Roman military bookkeeping was different from the modern was in the method of presentation, and in this the difference was only superficial. Whereas the modern army supplies a printed form with spaces to be filled in with typewriter or pen, the Romen army clerk had to create his own form. This he did by using rustic capitals for his headings, and cursive for the remainder of the document. The Berlin pridianum is perhaps the best example of this style of lay-out, but other documents attest it to a lesser degree. 579

Many documents have had to be omitted from detailed consideration in this study for lack of space: .it may be thought desirable to include a comprehensive list by way of
appendix. The construction of such a list would, however, demand an exact and precise definition of what is meant by a 'military' document. Should we include, for instance, only purely administrative documents issued within Roman army units? If so, our list would be lacking in many items of great human interest and of considerable indirect military value. Examples of the type of document which would be excluded by the adoption of too strict a definition may be found in the papyri of the Tiberianus archive recently published in Michigan Papyri VIII..$^{580}$ on the other hand, if we stretich our net wider to include soldiers' letters, loans and similar items, we run a double risk of including too mach that is not strictly apposite, and, secondly, of omitting a host of items perhaps just as worthy of inclusion in our list. Nevertheless, the added benefit to be obtained from a more liberal definition of the term 'military' far outweighs the loss of comprehensiveness which inevitably follows once the boundaries of the field become uncertain. The catalogue in the following chapter, therefore, contains, not only those documents which are obviously 'military', but also a number of other items of various types, which may be thought to cast some indirect light upon the general problem. The selection of items in this last category is necessarily subjective, and the list can lay no claim to comprehensiveness or
finaility.
The catalogue has been arranged in order of media: papyri, parchment; wax tablets, bronze tablets and ostraca; Inscriptions have been excluded: their inclusion as indirect evidence would have thrown the list quite out of proportion.

The bibliographies are not intended to be comprehensive, but merely to facilitate reference. It is hoped, however, that besides the original publications the more important and more easily accessible republications and discussions have been included.

