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ORGANIZATION
OF ROMAN BRICK PRODUCTION
IN THE FIRST AND SECOND CENTURIES A.D.

An Interpretation of Roman Brick Stamps

BY
TAPIO HELEN



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This book is an outcome of the study which I began in the Finnish Institute in Rome ten years ago. I was part of a group directed by Professor Jaakko Suolahti which made an inventory for publication of brick stamps found at Ostia. I wish to express my deep gratitude to Professor Suolahti for his continuous encouragement and constructive criticism; he helped me over many difficulties in all phases of my work. The themes of this study were discussed within our group during the working periods at Ostia and on many occasions later, I owe much to my fellow tegulologists Tauno Huotari, Jussi Kuusanmäki, Mirja Lahtinen, Henrik Lilius, Helena Pyötsiä, Päivi Setälä, Hannele Soini and Margareta Steinby, and to the mineralogists Hannu Appelqvist and Antti Savolahti.

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Tapio Helen

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Note: *Decorative elements and ligatures occurring in the stamps are not marked in the reproductions of stamp texts in this book (except in note 96 on p. 138).*

I Introduction

1. Study Material

Conditions prevailing in the Roman brick industry (in the city of Rome itself) during the early Empire are the theme of this study. A study of this kind is made possible by the preservation of a coherent set of evidence: the stamps which were impressed on bricks before firing. These stamps provide the only opportunity of examining the Roman brick industry, and any study of this subject becomes – in practice if not in principle – an interpretation of Roman brick stamps.

These stamps have long been available in printed form to students. The main collections are Heinrich Dressel's *CIL* XV, 1 of 1891 and Herbert Bloch's *Supplement to Vol XV, 1 of the CIL*, 1947.¹ Stamps not published in these collections, but forming part of my material, are further to be found in *CIL* XIV *Supplementum* I (No. 5308). The indexes made by Bloch for these three collections are an indispensable aid in dealing with the subject-matter.

The original brick stamps were the starting point for my studies, however. At Institutum Romanum Finlandiae I was part of a group directed by Professor Jaakko Suolahti which made an inventory for publication of brick stamps found in excavations at Ostia. We examined the stamped bricks found in early excavations and stored in the Castello of Ostia, the bricks stored in the Horrea Epagathiana within the ancient city, and some stores of smaller size; also brought for our inspection were bricks from excavations still in progress. Almost 9,000 stamped bricks were studied by us; there were some 1200 different stamps, which account for over 1/3 of the brick stamps discovered in the region of Rome and on the coast of Latium. They included some hitherto unpublished stamps, but these did not add greatly to the material. From the control of material standpoint, however, the work done at Ostia was important, for it is difficult to obtain a clear understanding of such material from publications alone.²

Chronologically I have confined myself to the first two centuries. The composition of the material is the reason for this. Brick stamps are divided into two clearly distinguishable time groups. The last stamps of the earlier group are from the reign of Caracalla, and the first of the later group from the time of Diocletian; between these lies a blank period of several decades without any datable stamps. The earlier group, which will be examined in this study, is by far the greater, comprising

almost 10 times as many stamps as the later group. In themselves both groups are very coherent entities, but great differences are found between them: in the later, for instance, names of persons are almost entirely absent, as are the words '*figlinae*' and '*prædia*'. It is clearly apparent that during the third century a great change occurred in the organization of brick production, part of the same process which affected economic life as a whole in the Empire of that time. It would be interesting to study how the transition of the third century is reflected in Roman brick stamps, but this would require a precise analysis of stamps preceding and following the transition, and a comparison of results. In my view this is too far-reaching a task, and I have therefore confined myself to the earlier period.

Remaining outside the study, accordingly, is *CIL* XV, 1, *caput iv* "*lateres urbani aetatis Diocletianae et posterioris*" (*CIL* 1540-1731; S. 597-615).³ Because the object of study is the brick industry, *pars ii* "*dolia, pelves, arcae*" (*CIL* 2416-2557; S. 467-567) was also excluded from the material. And because the subject, to be precise, is the brick industry whose products were used for construction of the urban district of Rome, in particular Rome itself and the ports of Ostia and Portus, I have omitted stamps which are not encountered in the urban district but only in the bordering areas of the Campagna Romana. Omitted on these grounds are the sections of *CIL* XV, 1 "*lateres Tusculani, Albani, Lanuvini*", "*lateres Praenestini*" and "*lateres Tiburtini*" (*CIL* 2224-2395; S. 445-459),⁴ and also "*lateres externae originis*" (*CIL* 2396-2415; S. 460-466).

Remaining are the *CIL* XV, 1 sections "*lateres urbani aetatis melioris*" (*CIL* 9-1539; S. 3-408, 568-596), "*lateres Ostienses et reliqui litoris suburbani*" (*CIL* 2156-2223; S. 409-444), and the stamps which actually exist from section "*lateres urbani fracti vel male excepti*" (*CIL* 1732-2155).⁵ Also included are the *CIL* XIV S I stamps which are missing from *CIL* XV and its *Supplement*, and the new stamps found at Ostia.

Some difficulty has been caused by the tendency of many stamps to appear in several variants. Dressel in *CIL* marks the variants known to him with the letters *a*, *b*, *c* etc. I have included only one variant of each stamp in my set, where one unit may therefore represent several variants. Because Dressel and Bloch are not always consistent in their division of stamps into "independent" and variants I have here and there departed from their practice, usually by treating certain stamps as variants of the same stamp which Dressel and Bloch have treated as independent. I define a variant as follows: Stamps whose texts express the same matters in the same words are variants of the same stamp. Thus two stamps which differ only in shape, in form of writing (abbreviations and ligatures), or in *signum* are variants of the same stamp.

The set of stamps defined in this way contains 1815 stamps. These stamps form the basis of my calculations. In Chapter IV, where the subject-matter of stamp-texts is examined, and to some extent elsewhere, the figures showing the division of the whole body of stamps were thus obtained by calculating from this set of stamps.

2. Description of Brick Stamps

Brick stamp texts are sparingly worded and contain more abbreviations than are usual in inscriptions. This complicates understanding and interpretation of the text, but this is counterbalanced by the stereotyped character of the subject-matter and the tendency of the same word to appear shortened in one stamp and more complete in another. Many difficulties are removed by comparison.

Texts vary a good deal in length, which is due partly to the development of stamps in the course of time. Stamps with little text are earlier on the average than those with much. The form of stamps and the composition of texts also changed with time, and a certain regularity is noticeable in the changes.

In Chapter IV I examine the form and content of stamp texts historically. By means of the following stamp I shall present the components of texts; this stamp is chosen as a specimen because its text is as complete as possible: it is not, in fact, a typical brick stamp text.

EX·PR·M·A·V·OFFIC ANNI ZOS FIG

CERM·PONT·ET ACIL

a. 135

COS

CIL 245

ex praedis M. Anni Veri, (ex) officina Anni Zosimi, (ex) figlinis Cermanianis (?); Pontiano et A(t)iliano consulibus

The text contains two names of persons and their head words '*praedia*' and '*officina*', the word '*figlinae*' with a qualifying proper adjective, and a consular date. The preposition *ex* at the opening shows that the text describes the situation prevailing in brick production, and does not refer, for instance, to the use of bricks at a construction place. The stamp declares in whose *praedia*, whose *officina*, in which *figlinae* and at what date the brick was made. Many stamps carry a word signifying the brick itself, e.g. '*opus doliare*'; it is missing from this stamp, as from many others.

When the organization of brick production is examined, the names of persons appearing in texts are important. The specimen stamp above contains two names (if names of consuls are disregarded). I call such a stamp binominal and its persons *dominus* (= *dominus praediorum*) and *offinator*. The specimen stamp *dominus* is M. Annii Verus and the *offinator* Annii Zosimus. There are 650 binominal stamps (from a total of 1815), the others having one name of person or none at all.

The earliest stamp with a consular date is from the year 110 (CIL 18) and the latest from 164 (CIL 1369). A consular date appears on 398 stamps. Its manner of

appearance is highly inconsistent: more than half the dated stamps (207) carry the names of consuls for the year 123, next in order of frequency is the year 134 (39 stamps), and the remainder are divided unevenly over the other years. Building historians in particular have given much reflexion to the purpose of dating bricks, but a satisfying explanation has not been found.⁶ Brick stamps with consular dates have been met with elsewhere in Italy,⁷ indicating that this dating is not a special Roman feature like the words '*praedia*' and '*figlinae*' and the mention of two persons.

Some stamps bear the greeting '*valeat qui fecit*'.

Stamps are usually round in shape, with a raised pattern (*signum*) in the centre, which seems, in some cases at least, to have an informative function. The present study will make no attempt to elucidate this possible information.

3. Dating of Brick Stamps

One reason for the source value of brick stamps is that they can be dated more precisely than inscriptions in general; they interest building historians for this feature only. Dating methods can be divided in two groups: some are based on the characteristics and subject-matter of stamps, others on the fact that the stamps are on bricks that have been used as building material.

Internal dating criteria, the consular dates and persons known from other sources (of whom there are many among the *domini* of brick stamps) are certainly the most reliable and leave least room for interpretation. The chronology of stamps has improved with the increasing knowledge of prosopography and the *fasti consulares* of the early Empire. The period 120–150 is on the whole the best documented for brick stamp chronology. The earlier or later from that time one proceeds, the more uncertain and inexact the chronology becomes.

Dressel evolved a more general system of dating for his publication. He started from the observation that clearly differing stamp types existed, and assumed that stamps of different type had been used at different times. In order to find out how matters had proceeded he collected as many stamps as possible that could be dated by means of the above-mentioned internal criteria; the main body of stamps which could be certainly dated on the basis of names of persons appearing in them was composed of the stamps of *gens Domitia*.⁸ From this material Dressel drew up a chronology of stamp types which was suited to general application, and by this means dated the stamps of *CIL* XV, 1. The criteria generally used by Dressel, apart from consular dates and names of well-known persons, are '*sigillorum forma atque litteratura*'.

The place of discovery of a brick gives a possibility of external dating also. Bricks found in a building can be dated if the time of construction is known. For brick stamps this time is in principle merely a *terminus ante quem*, because old

bricks might have been used in construction; on the other hand the construction time need not be even *terminus ante quem*, because the bricks may have originated from later repairs. Secondly: if certain stamps often occur together in the same buildings they must be regarded as contemporaneous or nearly so.

Dating criteria for buildings contain many factors of uncertainty. The history of early Imperial buildings went through many phases. After the repairs, demolitions and re-use of material which occurred in antiquity buildings became mines of material and, from the 18th century onward, archaeologists have moved this material from place to place. A place in which brick is found by excavation today is by no means always the place where it was originally left. However, the greater the number of observations referring to stamped bricks found *in situ* in buildings, the more reliable the datings on building-historical grounds may be considered to be. Bloch in particular has emphasized the importance of dating from the history of buildings.⁹

Literary and archaeological sources place the *terminus post quem* for all brick stamp material in Rome somewhere in the Augustan period. Dressel – who is followed by other literature on the subject – believed that brick stamping ceased in the Roman region at the beginning of the third century, to be resumed under Diocletian. The basis for this assumption is that internal criteria pointing to the third century are missing from the stamps. There are no consular dates after 164, and the last well-known person to be mentioned in early stamps is the Emperor Caracalla. Absence of criteria, however, does not necessarily mean absence of stamps. "Timeless" stamps with the name of a person only may belong to any period after *terminus post quem*; to the "empty period" of the third century may also belong the stamps in which the only person mentioned is the Emperor without an individual name.¹⁰

4. The Study of Brick Stamps

Brick stamps have been a source of interest to students for two main reasons: they enable gaps to be filled in the prosopography of the early Empire and the chronology of buildings in the area of Rome to be explained.

From the mid-16th century onward collections of stamps have been published.¹¹ The most important before the appearance of *CIL* XV was the collection of Gaetano Marini, which was completed in manuscript during the 1790s but printed only in 1884. It contained some 1500 stamps. In these old publications research was contained in commentaries for each stamp. Names of well-known persons occurring in stamps were the object of special interest. Among the *domini* appearing in stamps are all Emperors from Trajan to Caracalla, also several members of Imperial families, senators and knights. Efforts were made to identify these persons by comparing brick stamps with other sources. Also explained was the time at

which the pairs of consuls mentioned in stamps were in office.¹²

Dressel's work *Untersuchungen über die Chronologie der Ziegelstempel der gens Domitia*, in which he developed his method of dating brick stamps, appeared in 1886. Systematic excavations were then in progress in the Roman area, and it was hoped that brick stamps would provide help in the dating of buildings. Archaeologists and historians of buildings wished to know how precisely the buildings excavated could be dated by means of brick stamps. There was disagreement in particular on the significance of the consular dates: is the year marked on the stamp the year the brick was made, or does a dating mean something else? Bloch's work *I bolli laterizi e la storia edilizia romana* (henceforth abbreviated to *BL*) deals with these questions. Bloch's conclusion was that the year declared on the stamp is the year when the stamp was impressed on the brick, and that buildings can be dated very reliably with the aid of brick stamps.¹³

Giuseppe Cozzo's work *Una industria nella Roma imperiale* contains a fresh viewpoint: he uses brick stamps to study the brick industry itself and the persons employed by it. Cozzo interpreted the *signa* of stamps as religious symbols, and on this basis drew conclusions on the spread of mystery cults to the capital city; on the same basis he explained the regularity which was observed in the evolution of the form of the stamp. He also proposed far-reaching corrections in the chronology of brick stamps, but after Bloch's critique the chronology of Dressel is again generally accepted.¹⁴

A major contribution to the study of Roman brick stamps will be made by the members of the above-mentioned group. Studies on the following topics are in preparation: location of the *figlinae* mentioned in Roman brick stamps by Tauno Huotari; Imperial persons as *domini* in brick stamps by Jussi Kuusanmäki; terminology by Mirja Lahtinen; private *domini* by Päivi Setälä; palaeography by Hannele Soini; *signa* of the stamps by Margareta Steinby; brick stamps of the Late Empire by Professor Suolahti; results of mineralogical analysis of ancient Roman bricks by Hannu Appelqvist. – Two studies of brick stamps by Margareta Steinby will appear shortly: *Ziegelstempel von Rom und Umgebung* in *RE Suppl.* XV, and *Cronologia dei bolli laterizi romani* in *Bullettino comunale*.

5. The Problem

My starting point is the conviction that brick stamps contain information on the Roman brick industry and persons working in it. No special study of brick stamps has been written from the standpoint of economic history. The reason may be that the indexes of *CIL* XV, 1 appeared only in 1948, and before then it was difficult to obtain an adequate knowledge of brick stamps without long scrutiny of the *Corpus*.

General works on the economic history of Rome, however, contain conclusions drawn from brick stamps.¹⁵ The picture given of the organization of brick produc-

tion and its development is as follows: At first the industry was in the hands of small enterprisers, but from the early second century onward great capitalist interests appeared, members of the senatorial and equestrian orders. Among the new enterprisers was the Emperor himself. During the second century his share of total production grew steadily, until during the time of the Severi the brick industry had become in practice an Imperial monopoly. The considerable part played by members of the senatorial order – senators were not normally concerned in business life as enterprisers – is explained by the fact that the brick industry was regarded as part of agriculture, which was an appropriate senator's livelihood.

The main part of my study, Chapter IV, is an analysis of brick stamp texts, criticism of the sources from the historian's standpoint; my aim is to find out what is said in the stamp texts and, consequently, what conclusions can be drawn from the stamps. I then examine the relation between the persons of the stamps, *dominus* and *officinator*, and the relation of these persons to the brick industry.

The source value of brick stamps – and stamps of other commodities – is affected by their mechanical reproduction. Several copies of the same stamp exist. The representativeness of brick stamps must be estimated in a different way from that of 'normal' inscriptions. Now that Roman brick stamps have been collected and published for 400 years there are good grounds for assuming that almost all stamps which were used in their time are known, whereas, for instance, the student of epitaphs must start with the knowledge that only a fraction of the epitaphs originally composed are at his disposal.¹⁶ The student of brick stamps, unlike the student of epitaphs, need not consider what proportion of the original material has survived and what has vanished. Thus in research of philological type, when applied to brick stamps, the material is largely complete; time has not reduced the material in such a manner as to distort the internal relations it originally possessed. Matters are different, however, when the reality is examined of which brick stamps form part. Did all producers stamp their bricks? How large a proportion of bricks were stamped? If not all producers stamped their bricks, what was the character of producers who did so? If we knew the correct answers to these questions we should be able to estimate how the Roman brick industry is reflected in Roman brick stamps. But we do not know the answers: the stamps are not so stereotyped as to enable us to say why the bricks were stamped and for whom the message of the stamp was intended. For this reason conclusions reached on the evidence of brick stamps must be treated with reserve.

Notes to Chapter I

- 1 Bloch's *Supplement* does not attempt the same completeness as *CIL* XV: it omits the provenance of stamps and the numbers of exemplars discovered, for instance. Bloch states his purpose as follows in the Preface to the *Supplement*: "It must be strongly emphasized that this Supplement to *CIL* XV, 1 does not settle the question of a new edition; that its purpose is only to gather, for the time being, all brick-stamps not published in *CIL* XV, 1 into a usable system." (*Suppl.* p. 4)
- 2 The results of the work of Professor Suolahti's group are forthcoming as Vol. VII: *Lateres signati Ostienses* of *Acta Instituti Romani Finlandiae*.
- 3 In referring to *CIL* XV numbers I use the abbreviation *CIL* before the number without the number of volume; the letter *S.* before the number of the stamp signifies Bloch's *Supplement to Vol. XV, 1 of the CIL*. – The *CIL* XV table of contents is *Suppl.* p. 125–127.
- 4 In *CIL* XV Dressel counts as non-urban the stamps encountered only in a limited border area of the Campagna Romana, e.g. in Palestrina ("lateres Praenestini") or Tivoli ("lateres Tiburtini"). The section "lateres urbani" includes stamps found either in Rome only or in Rome and elsewhere.
- 5 This section contains: 1) Stamps seen and copied by Dressel himself, but "fracti" to such an extent that he was unable to place them in other sections. These are present in the set of stamps used by me. 2) Stamps which are "male excepti", mainly stamps previously known and published elsewhere in the *CIL* XV, 1 but so vaguely recorded in the sources that Dressel could not identify them; these are omitted by me.
- 6 See Bloch, *BL* p. 20–26 and 316–327; Boethius, *Eranos* 1941 p. 152.
- 7 E.g. *CIL* XI 6673.
- 8 See below, p. 100. In his work *Untersuchungen über die Chronologie der Ziegelstempel der Gens Domitia*, Dressel elucidated the chronology of this group of stamps.
- 9 See Bloch, *BL* p. 1–2 and 7–9.
- 10 Absence of stamps also does not necessarily signify absence of bricks. The Aurelian wall, surely the city's largest separate structure of brick, was built in a period to which no brick stamps have been dated; it is difficult to believe that the wall was built only with materials obtained from the demolition of old buildings.
- 11 Bloch gives a brief history of brick stamp publications, *BL* p. 3–7; a slightly longer exposition appears at the beginning of Descemet's work. *CIL* XV, 1, however, omits the survey of manuscripts and publications included in most volumes of *CIL*.
- 12 The years of two pairs, *Severo et Arriano* and *Iuliano et Costo*, are still unknown.
- 13 See particularly *BL* p. 341 –.
- 14 Bloch's critique of Cozzo's theories are given in *BL*, p. 14–26.

15 The conclusions to be presented here appear already in Dressel's paper, *Bull. dell'Ist.* 1885 p. 103–107; then more fully in Frank's *Economic History* p. 227–9 and *Economic Survey* p. 207–210 and in Loane's work p. 101–105. The course of development is most fully presented by Bloch, *BL* p. 334–340. Extensive comments on brick stamps have also been written by Gummerus, *RE* IX, 1460, and Shtaerman, p. 80–82. They have a somewhat different notion of the organization than the first-mentioned writers.

16 Out of almost 9,000 stamped bricks examined by us at Ostia, for instance, very few were previously unpublished if variants of different degrees are disregarded. Bloch, who examined the Roman excavations more widely than we, made similar observations. See *Suppl.* p. 94.

II Pre-conditions for the Brick Industry

1. Use of Brick as Building Material

From the work of Vitruvius and the results of archaeological research we know with fair accuracy when brick was first used as building material in Rome. Vitruvius, who wrote his work in the time of Augustus and worked as an engineer in Rome during the periods of Caesar and Augustus,¹ is certainly aware of the employment of fired brick, but his exposition makes clear that Roman builders were not yet using it at the time he wrote. The material for great public buildings was concrete and the stone species of the Roman region, particularly tufa. The framework was made of these, and for facing purposes tufa, travertine and marble were utilized.²

Vitruvius speaks of building materials in the second book of his work. He devotes a chapter to each of the following: sun-dried brick (*lateres*), sand (*harena*), limestone (*calx*), pozzolana, stone (*lapis*), wood (*materies*). In Vitruvius the words '*later*' and '*latericius*' mean sun-dried brick,³ and he discusses this material extensively (2, 3 and 2, 8, 9-17). For fired ceramic Vitruvius uses the words '*testa*' and '*testaceus*'. In the chapter on wall structures (2, 8) he mentions only *opus incertum* and *opus reticulatum*, but not *opus testaceum*; the use of *testa* is mentioned briefly in connection with *opus latericium* (sun-dried brick) as a building method which cannot be used in the city of Rome (2, 8, 18-19). Only for outer roofs is brick, i.e. tile used regularly.

In the time of Vitruvius most of the Roman building output consisted of *insulae*, rented houses of many storeys in which the majority of the city's population, possibly a million people already, lived.⁴ Sources of the late Republic and early Empire indicate that housing production was subject to the most ruthless speculation.⁵ The aim was to build cheaply, and costs were held down by sacrifice of quality. Because land for building was expensive, *insulae* were built as high as possible. These many-storeyed *insulae*, cheaply built of poor material, were a positive danger to residents. Collapsing houses seem to have been a common event, and frequent floods of the Tiber may have played a part in it; several great fires are also mentioned.⁶

Nothing has remained of the rented houses of Rome from the end of the Republic. Excavation has produced nothing on which an investigation of building methods and materials might be based. The account of Vitruvius reveals, however, that a great deal of wood was used.⁷ Some, at least, of the weight-bearing structures were of concrete. Of wall structures Vitruvius uses the word '*craticii*', which may mean that a wooden framework functioned as a support and that it was plastered on the outside. Intermediate floors were of wood.

Vitruvius severely criticises such building practices. He says directly that poor construction is the result of speculators' lust for profit:

Vitr. 2, 8, 20: *craticii vero velim quidem ne inventi essent. quantum enim celeritate et loci laxamento prosunt, tanto maiori et communi sunt calamitati, quod ad incendia uti faces sunt parati. itaque satius esse videtur impensa testaceorum in sumptu quam compendio craticiorum esse in periculo.*

Vitruvius condemns the use of *craticii*. They have their advantages, such as saving of time and space, but their use should be abandoned because of the danger of fire. Vitruvius proposes the replacement of wooden structures by brick (*testacea*). He notes that this would increase building costs, but demands that builders give up part of their profit for the public good.

Vitruvius, in fact, demands that the public good be considered in building.⁸ He was certainly not alone in this. The stabilization of conditions in Rome and throughout the Empire at the end of the civil wars must have been a decisive turning point here. One of the chief aims of the peaceful activities undertaken by Augustus was the transformation of Rome into a capital worthy of an empire. We know that on the initiative of Augustus a water supply system was organized for Rome (*curator aquarum* and his subordinates), also a fire service (*cohortes vigilum*) and a staff whose duties included protection of the city from Tiber floods (*curatores riparum et alvei Tiberis*). The innovations brought about by Augustus and his followers were not confined to great public constructions: norms were also set for private building work.⁹

Building statutes of the first Emperors have been preserved. Augustus directed, for instance, that no building in the city should be more than 21 metres high; Trajan reduced this to 18 metres. In no statute known to us is building material spoken of, but here too the Emperors must have imposed certain minimum standards. Presumably the adoption of fired brick is connected with the regulative influence of the Emperors on private building.¹⁰

Vitruvius does not consider the stone near Rome particularly suitable as building material. In the seventh chapter of his second book he enumerates the bad qualities of these stone types.¹¹ Speaking of the *lapidicinae Anicianae* stone from south of Lake Bolsena, which was too far from Rome to be worth bringing there, he says: "*Quae si prope urbem essent, dignum esset, ut ex his officinis omnia opera perficerentur.*"¹² The poor quality of the building stone most easily available may explain the fact that brick soon became prevalent when once its use had been adopted. Clay suitable as a raw material for bricks is of such common occurrence in surface soil that it was possible to site brickworks in places favourable for transport purposes, which in the Roman region meant along the Tiber and its tributaries. The replacement of stone with brick thus reduced the cost of transport.

Vitruvius appears to have considered the use of fired brick expensive. This is seen from the extract above, and the same is apparent from the following

words discussing the material to be used for a city wall:

Vitr. 1, 5, 8: non enim, uti Babylone abundantes liquido bitumine pro calce et harena ex cocto latere factum habent murum, sic item possunt omnes regiones seu locorum proprietates habere tantas eiusdem generis utilitatis, uti ex his comparationibus ad aeternitatem perfectus habeatur sine vitio murus.

Vitruvius holds the theory here that in every locality the "natural" building materials found on the spot should be used; fired brick was not a "natural" building material in Rome. Three hundred years later, however, the city wall was built of fired bricks joined with mortar made of limestone and sand; evidently the organized production of bricks and mortar had developed in the Roman area by then to such an extent that these materials had become cheaper to use than "natural" materials of the locality.

Ostia is a splendid monument of Roman architecture in brick.¹³ The buildings of this city indicate how the use of brick spread during the first century. Development in Rome was undoubtedly the same as in Ostia, but in Rome less material for observation has survived. In the words of Rostovtzeff, Ostia was "a Rome in miniature".¹⁴

The use of brick increased throughout the first century and reached its maximum extent in the second, when brick, with concrete, was the building material most in use. One reference by Vitruvius shows that in his time already pieces of ceramic objects such as roof tiles (tile had long been used for outer roofs) and amphorae were used in place of tufa for the facing of concrete walls.¹⁵ Brick first came into general use for this facing purpose, but later it displaced other materials in more vital constructions. It is visible at Ostia that weight-bearing structures such as columns and pillars supporting roofs were made of brick; it was also used for floors and for the pavements of streets and courtyards. "The most impressive features of Roman building, the arch and the vault, are associated with this material", as Frank Granger says in his Introduction to the Loeb edition of Vitruvius.

2. Demand for Bricks and Market Structure

We do not know the precise location of the brickworks which marked their products with Roman brick stamps. The distribution of the stamps leads us to conclude that the works were within suitable transport range of the city of Rome. Rome with its surroundings formed a natural market area. It is truly surprising that the builders of coastal cities in north Africa, present-day Tunisia and western Libya, also used bricks made in the area of Rome.¹⁶ I do not know whether brick was used as much in Carthage, for instance, as in Ostia – probably not – but in any case this export is a fact to be noted when the total output of the Roman brick industry is estimated.

The market area thus included the urban centres of Rome, Ostia and Portus, also Carthage at a greater distance. There have been many attempts to estimate the population of Rome, but results have varied widely.¹⁷ The figure was greatest toward the end of the second century – so much is unanimously agreed. Picard's calculations put the population at over a million at the beginning of the Empire, while Kirsten reaches a figure less than a million. Literary sources indicate that in the third century Carthage was the second largest city of the Empire,¹⁸ with a population of some 300,000 at its height, according to Picard.¹⁹ Frank puts the second century population of Ostia at 100,000, Ostia then being considered an extensive area which evidently included Portus; estimates of the population in the area bounded by the walls of Ostia vary between 21,000 and 58,000.²⁰

City populations increased vigorously in the first and second centuries. Kirsten estimates the combined population of Rome and Ostia at the death of Augustus as some 500,000, and 150 years later as double that figure.²¹ Carthage did not begin to flourish again until the time of Augustus, when a colony was founded there and the right to practise trade was given back to the citizens.²² The development of Ostia into a great city began after the harbour of Claudius was completed.

The population of the market area and its development does not yet tell us much regarding brick production; it would be necessary also to know the density of living conditions and the extent to which brick was used compared with other building materials. Density was certainly great, but brick was a highly favoured building material.

The above information leads us to conclude that brick production in the Roman region was very large even by modern standards. Demand and output grew until the second century. Growth was due partly to advancing urbanization and population increase, and partly to the increasing use of brick instead of other materials.

Something may also be said of the distribution of total demand between builders, though information is scanty in the extreme. The Emperor was the biggest builder, but the share of public building should not be overestimated. The monumental public constructions are best known to us because of literature and excavations, but private building as a whole was undoubtedly greater in extent. Surviving lists from the 4th century tell us that in Rome there were 46,602 *insulae* and 1790 *domus*.²³ These houses were privately owned, and it must be presumed that private builders erected them.²⁴ Public construction work was also frequently assigned to private contractors during the Empire as in Republican times.²⁵

What was said above on the structure of the Roman brick market on the demand side is mainly speculation, since the sources are silent. On the supply side, however, and on connections between producers and builders there is more reliable information available thanks to brick stamps. If we assume, with Bloch, that the frequent occurrence of the consular date of the year 123 signifies a stamping of bricks in that year by almost all producers appearing in the market of Rome,²⁶ then the stamps of 123 serve as a cross-section of brick production. In stamps for that year there appear 54 *domini*, which means that production units were functioning on the estates of at least 54 landowners; because many of the *domini* owned land on

a large scale, several independent units may have been located on lands belonging to the same *dominus*. In the year 123, therefore, more than 54 producers appeared in the brick market of Rome.

To judge by places of discovery of stamped bricks, brick producers and users were not in direct contact: between them there existed a complex system of transport and marketing. Facts suggesting this are: 1) the same building always yields several different stamps from several producers; 2) the same stamp may appear in several buildings far from each other (e.g. Rome, Ostia and Carthage).²⁷ We may assume that transport was mainly by water, and that transport and brick storage in Rome and other centres of building activity was not in the same hands as brick production or utilization.²⁸

There were, then, several producers of bricks and several users located far from each other and with an independent distribution system existing between them. This seems like a modern market structure. But in conditions prevailing in the urban area of Rome it is impossible to imagine builders themselves manufacturing the bricks they needed, bricks produced and utilized within the same economic unit; the oft-quoted words at the table of Trimalchio, "*omnia domi nascuntur*" (Petr. Sat. 38), are not applicable to the units which operated in the Roman brick market.

Notes to Chapter II

1 The version of Vitruvius' work which has come down to us appeared in 16–15 B.C. Parts of it, or possibly a condensed version had appeared before 27 B.C., to judge mainly by the fact that the name Augustus is not used for Octavianus. Homo, p. 5.

2 Lugli on p. 48–49 has a short exposition of building methods.

3 Augustus used the word '*latericius*' in the same sense in his well-known statement, of which Suetonius relates: "*Urbem neque pro maiestate imperii ornatam et inundationibus incendiisque obnoxiam excoluit adeo, ut iure sit gloriatus marmoream se relinquere quam latericiam accepisset.*" Suet. Aug. 28.

4 Brunt calculates that the population of Rome at the end of the Republic was about 750,000; this estimate is based on data which have been preserved regarding the number of those entitled to receive State-distributed grain. Brunt, p. 382–3.

5 Salvioli, p. 54–.

6 Serious Tiber floods are mentioned for the years 54, 44, 27, 23, 22, 13 B.C., A.D. 5, 12, 15, see le Gall p. 29. Dio mentions great fires for the year 16, 14, 12, 7 B.C., A.D. 6. See Brunt p. 385 n.

7 Lugli p. 44. – Vitruvius discusses the use of wood, Book 2, Chapter 9. Strabon, who also wrote in the time of Augustus, stresses the importance of obtaining building wood and stone for the development of Rome, *Strabon* 5, 3, 7.

- 8 Lugli p. 531— and Homo p. 571.
- 9 Homo p. 571.
- 10 Such a connection is suggested by Boethius, *Eranos* 1941, p. 154.
- 11 *Vitr.* 2, 7, 1–3.
- 12 *Vitr.* 2, 7, 4. The poor opinion held by Vitruvius of the stone quarried near Rome is apparent from his advice to builders (2, 7, 5), which begins with the following sentence: "cum ergo propter propinquitatem necessitas cogat ex Rubris lapidicinis et Pallensibus et quae sunt urbi proximae copiis uti, si qui voluerit sine vitiis perficere, ita erit praeparandum."
- 13 For the use of brick in Ostia see Italo Gismondi in the work *Scavi di Ostia* I, p. 192–208 and Boethius, *Stadsbebyggelse*, especially p. 8, 25 and 38.
- 14 Rostovtzeff II, p. 568 n. 36.
- 15 *Vitr.* 2, 8, 18. See also Lugli, p. 593 and 661.
- 16 Roman brick stamps discovered in north Africa were last published in the *Corpus* in 1900, *CIL* VIII S 3, 22632; see also Picard p. 87- (esp. Note 100). Brick stamps encountered in north African excavations are almost all Roman. I have been unable to examine how common the use of brick was in north Africa. The following instance shows that at least in some cases Roman bricks were used systematically: *AE* 1967 No. 538: in excavations at a Roman *villa* in Tagiura, 29 km east of Tripoli, 65 stamped bricks were found, incl. 6 different stamps; all were Roman, and 5 can be dated midway in the decade of 150.
- 17 Grounds for estimates, see Picard p. 169–175, Kirsten–Buchholz–Köllmann p. 235–237, Duncan-Jones p. 259–276.
- 18 Herodian 7, 6, 1; see also Picard p. 170.
- 19 Picard p. 176.
- 20 Frank, *Survey* p. 237; Duncan-Jones p. 276, Note 7.
- 21 Kirsten–Buchholz–Köllmann, p. 236–238.
- 22 Picard, p. 176.
- 23 Lehmann–Hartleben *RE* III A p. 2071; Calza p. 60–63. The meaning of the word 'insula' in 4th century sources has been under dispute; Calza shows in his article that 'insula' = 'rented house'.
- 24 This is Loane's opinion, p. 79–83 (esp. Note 77).
- 25 Loane p. 83.
- 26 Bloch, *BL* p. 321 and 324; Bloch 1959.
- 27 The best means of studying the diffusion of brick stamps are still the provenance lists of *CIL* XV, 1. The diversity of brick stamp material in buildings is made clearly evident in Bloch's lists in *BL* and in *Scavi di Ostia* I.
- 28 Stamping of bricks was possibly connected with this transport and marketing system.

III Nomenclature and Social Status of Persons in Brick Stamps

In this chapter I shall examine the persons mentioned in brick stamps as a group and elucidate the social composition of this group as far as possible. The categories I shall use are: slaves, freedmen and freeborn. From the last-mentioned I further isolate the 'higher orders' of senators and knights. In this division, therefore, a person belongs to the social category indicated by his position under law; students of Roman social history have generally operated with these categories.

Data regarding the nomenclature of brick stamps are taken from Bloch's indexes I (*nomina virorum et mulierum*), II (*cognomina virorum et mulierum*) and III (*imperatores et domus eorum*). Included are all persons appearing in the stamps of *CIL* XV, 1 and the *Supplement* (except consuls mentioned in the consular dates). Because Bloch has not separated *domini* and *officinatores* in his indexes I have been unable to take adequate account of this important division.

1. *Domini*

Even a cursory examination shows that the *domini* appearing in brick stamps are, on the average, from very high levels of society. The persons we know both from brick stamps and from other sources belong to the group *domini*. They include all Emperors from Trajan to Caracalla, the Empresses Domitia Domitiani, Plotina, Sabina and both Faustinae, also other members of Imperial families: Matidia (mother-in-law of Hadrian), Arria Fadilla (mother of Antoninus Pius), Iulia Lupula (sister of Antoninus Pius), Domitia P.f. Lucilla (mother of Marcus Aurelius) and Annia Faustina (sister of Marcus Aurelius). 54 further identified senators and 7 knights are included. *Domini* total 150 if Emperors are omitted.¹

Second century senators are known chiefly from inscriptions on monuments erected in honour of officials. For this reason women of the senatorial order are less known than men. To judge by their names, the women mentioned in brick stamps may include otherwise unknown members of the senatorial order. Examples are Plotia Isaurica, Flavia Seia Isaurica, Aelia Severa, Iulia Albana, Antonia

Manliola, Memmia L.f. Macrina, Valeria Polla. These all appear in stamps as *domini*.

Another special feature of *domini* as a group is, in fact, the large number of women. 100 women are mentioned in brick stamps, including 43 *domini* and 20 *officinatores*; the remainder are found in stamps where one person only appears and this person cannot be classified as *dominus* nor as *offinator*. Among the group of *officinatores*, 355 persons in all, there is only one certain member of the higher orders: the *offinator* of stamp CIL 526 announces himself as *eq(ues)R(omanus)*. This indicates a clear social difference between *domini* and *officinatores*.

2. Total Number of Persons. Free and Slaves

For the most part the names of persons in brick stamps are those of free Roman citizens; that is to say, most contain a *nomen gentilicium*. The *tria nomina* type with *praenomen* + *nomen* + *cognomen*, and the *duo nomina* type with *nomen* + *cognomen* are about equally common; on the other hand the *praenomen* + *nomen* type is rare, which is consistent with the fact that the stamps are generally later than Augustus. The *tribus* is missing almost entirely.² Filiation is hardly encountered among the names of freeborn men. In the first century stamps it appears quite commonly in the names of freedmen ('libertination') and women, but in the second only in the names of a few women *domini* and freedmen of the Emperor.³ If the forms of names occurring in brick stamps are compared with the official forms, the lack of filiation in brick stamps is the clearest difference. In second century epitaphs it is still fairly common.⁴ This omission, we may be sure, is due mainly to shortage of space, but the unofficial nature of brick stamps may also have been responsible.

1325 persons are mentioned by name in brick stamps. This number is made up of all cases which Bloch considers to be personal names; owing to the widespread use of abbreviations not all cases are certain. There are 1076 names which include the *nomen gentilicium*, and 249 unaccompanied *cognomina*. The absence of *gentilicium* is not incontrovertible evidence that the person is a slave. In the following cases this can be proved by comparison of stamps: *Proculus* (stamp S. 32) = *Pettius Proculus* (CIL 90, 95); *Ingenua* (CIL 205) = *Sabinia Ingenua* (CIL 203); *Fortunatus* (CIL 297) = *T. Travius Fortunatus* (CIL 297); *Fyrmus* (S. 175) = *P. Servilius Firmus* of *Fyrmus* (CIL 232-3, S. 178 etc); *Magnio* (CIL 943-4) = *Caetennius Magnio* (CIL 942, 1203, S. 568); *Rufinus* (CIL 2174) = *Domitius Rufinus* (CIL 2173, 2204). These persons are *officinatores* in brick stamps. Of well-known senators and knights appearing as *domini* the *cognomen* is more commonly used alone.

Since the use of *gentilicium* was so common, however, its omission from the name of a free person was obviously exceptional. In late stamps it is more likely than in early stamps that the *cognomen* used alone stands for a free person.

19 % of all names are unaccompanied *cognomina*, so that somewhat less than 19 % of the persons concerned are slaves.

The total number of persons mentioned gives reason for reflection on the representativeness of brick stamps. The number of persons who worked in Roman brick production over nearly 200 years must have been many times greater than 1325, the number of persons mentioned in stamps. In what manner do the persons appearing in stamps represent those who worked in Roman brick production? I have expressed the opinion earlier that almost all stamps which have been in use are known to us. If this is correct, the small number of persons cannot be explained by the assertion that only a part of the stamps are known.

Far from all bricks are stamped. Lugli estimates that in the late first century some 10 % of bricks were stamped, and in the time of Hadrian, when stamping was at its most common, 20–50 %.⁵ Lugli does not say on what calculations his figures are based; they are evidently a general impression formed by him during decades of archaeological work. The rarity of stamped bricks is generally explained by assuming that each producer stamped only a proportion of his bricks. If this is correct, we can first infer that most producers stamped their bricks; from this and from the small number of persons appearing in stamps it may further be concluded that each person mentioned in stamps represents a large number of persons engaged in production and therefore a large production unit. – A second possibility is that only a part of producers practised stamping, but stamped all their bricks. If this is true, then stamps represent only a proportion of the production units, and we do not know how large; in that case we can conclude nothing as to the size of production units from the total number of persons.

I regard it as highly probable that brick stamping was connected with the following fact: the transport and storage of bricks in Rome and other centres of building activity was not in the charge of producers or users but of organizations quite separate from them. It can be assumed that stamps were used to indicate the brick consignments of each producer during transport and storage. (This was not necessarily the only purpose of stamping.) If this hypothesis is correct, brick stamping was a general practice among producers, especially those who manufactured bricks for urban centres.

3. Freeborn and Freedmen

Because the filiation is missing, free persons cannot be divided into freeborn and freedmen in the same way as all persons were divided into free and slaves. The division can only be based on *cognomina*.

When a slave was freed he received the *praenomen* and *nomen* of his former master as a token of his new status; his old slave name he retained as a *cognomen*.⁶ If we assume – and many scholars start with this assumption – that names of slaves

in general differed from the *cognomina* of the freeborn, then it may be concluded that the free persons whose *cognomen* is a slave name are former slaves. Regarding Latin *cognomina* it has not been possible to make a division into free and slave names.⁷ But a Greek *cognomen* in Italy and the western provinces is generally viewed as an indication of unfree origin in its bearer. Because the significance of Greek names too is still a great problem, I shall briefly explain the main points at issue.⁸

Examination of various groups of inscriptions has revealed the two following facts: 1) the proportion of Greek *cognomina* in Latin areas is very large, in central and southern Italy more than half the persons appearing in the material have Greek *cognomina*; 2) parents gave their children a Latin name distinctly more often than a Greek one, regardless of whether they themselves had a Latin or a Greek name.⁹ How are these observations to be reconciled? How was the proportion of Greek names able to remain large? The answer given to this question is that persons with Greek *cognomina* were not the descendants of free citizens in Latin-speaking districts.

Frank, from whose studies this discussion started, believed that a Greek name expresses first and foremost an Eastern origin. Because persons arriving in Italy from the east were generally slaves in his view, he considered that a Greek name also signified an unfree origin.¹⁰ Among later scholars Thylander has regarded a Greek name as especially revealing an Eastern origin.¹¹ He takes the view that the preference for Latin names simply reflects a normal linguistic development, while Greek-speaking arrivals were assimilated into the Latin-speaking native population. – Other scholars, such as Lily Ross Taylor and Heikki Solin, have considered a Greek name a sign of unfree origin in particular.¹² In their belief a slave in Rome and throughout Italy was more willingly given a Greek name regardless of his place of origin. Because a Greek name was a sign of unfree origin, free parents did not like to give their children Greek names.

The problem of Greek names cannot yet be considered solved, so that there is not cause to draw far-reaching conclusions from the relation between Greek and Latin *cognomina* occurring in the material. The following tabulation gives figures derived from the names appearing in brick stamps. If the root of a word is Greek but its ending is Latin, I have counted the word as Greek. Geographical and ethnic names I have counted as Latin if they refer to the western part of the Empire, and Greek if they refer to the eastern part. Only those names are included whose Latin, Greek or other linguistic character I have been able to determine. Because words often appear sharply abbreviated in stamps this has not always been possible.

Division of *cognomina* occurring in brick stamps
into Latin, Greek and other languages.

		Latin %	Greek %	Other %	Total %	Cases total
A	Names	49.1	47.8	3.1	100	690
B	Persons					
	– free	67.8	30.5	1.7	100	827
	– slaves	48.6	48.6	2.8	100	249
	– all persons	63.4	34.7	1.9	100	1076

As slaves I have counted all persons whose name is formed by an unaccompanied *cognomen*.

Attention is aroused in these figures by the large proportion of Latin *cognomina*: 63.4 % of all persons appearing in brick stamps bear a Latin *cognomen*. Kajanto has calculated the same proportion for a part of the epitaphs of the city of Rome, with a result of 41.5 %.¹³ Thylander's calculations from inscriptions in the ports of Latium give a result of 47 %.¹⁴ The proportion of Latin *cognomina* is distinctly larger in brick stamps than in other inscriptions which were compared.

According to Taylor, Solin etc. it might be concluded from these figures that persons mentioned in brick stamps included a larger proportion of freeborn than those persons whom the materials of Kajanto and Thylander represent. The presence of *domini* partly explains the large proportion of Latin *cognomina* in brick stamps, but not entirely, because when *domini* are removed from the calculations, Latin *cognomina* still account for 60.0 %.

Slaves appearing in brick stamps have Latin names as often as Greek. This is not compatible with the opinion that slaves were generally given Greek names. The explanation may be that among the persons mentioned by *cognomina* alone, whom I have counted here as slaves, there may in fact be many free persons. The material is so small, however, that it is not worth trying to draw further conclusions.

I shall now show the proportions of Latin *cognomina* to be found among the *cognomina* of the three person-categories in brick stamps. These categories are "domini", "officinatores" and "others", the last being "those who are neither domini nor officinatores". I shall elucidate later on pages 89–91 how these categories are composed.

person- categories	proportion of Latin <i>cognomina</i>	cases counted	persons total
<i>domini</i>	89.1 %	138	150
<i>officinatores</i>	46.3 %	335	355
others	66.0 %	603	820

The proportion of Latin *cognomina* varies distinctly in the different groups. For *officinatores* it is much the same as in the material of Kajanto and Thylander, while for *domini* it is about twice that figure.

We know that the *domini* of brick stamps usually belonged to the highest level of Roman society. The large proportion of Latin *cognomina* among *domini* is evidence in favour of the belief that Latin *cognomina* were generally used in the highest levels of society. The social difference between *domini* and *officinatores* also seems to be clearly reflected in the figures.

Persons belonging to the categories *domini* and *officinatores* appear almost exclusively in second century stamps, and these groups can therefore be compared. But members of the "others" group appear on the average in earlier stamps; this group accounts for almost all persons in first century stamps. This time difference may be reflected in the figures.

4. *CIL* VI, 1, 1815 and the gens *Calpetana* of Brick Stamps

In his comment on stamp *CIL* 517 Dressel refers to inscription *CIL* VI 1815 = *ILS* 1926; he thinks it possible that the persons mentioned in these inscriptions have a connection with each other. Bloch suggests the same possibility in the *index nominum* of *CIL* XV, 1 for *C. Calpetanus Livianus*. Because the gens *Calpetana*, on whom the inscription mentioned gives some data, is an *officinator* family of the greatest importance in Roman brick stamps, and because there is very little information of *officinatores* apart from that contained in brick stamps, I shall examine the said inscription from this point of view. The inscriptions to be examined will be found on page 28.

The following questions must be studied: 1) In inscriptions 1, 2 and 3 a person named *Calpetanus Livianus* is mentioned; how likely is it, that the person is the same in all cases? 2) What is the connection of this *Calpetanus* with other *Calpetani* mentioned in stamps? 3) What was the social status of *Calpetanus Livianus*?

Dressel linked inscriptions 1 and 6 together on the ground that in 1 a person appears whose name is *C. Calpetanus Glyptus*, and in 6 a person whose name is *Glypt(us) Calp(etanus or-etani)*. In inscription 1, however, *GLYPTVS* is merely a conjecture of Gruter which has not been accepted for the *CIL* VI text, as Dressel mentions. This connection is therefore a very weak one, and is not worth further consideration.

1) *CIL* VI, 1, 1815 = *ILS* 1926

<p>Q FABIVS AFRICANI L CYTISVS VIATOR QVAESTORIVS AB AERARIO SCR LIBR TRIBVNICIVS SCR LIBR QVAESTORIVS TRIVM DECVRIARVM 5 C CALPETANVS C L CRYPHIVS VIATOR PVLLARIVS PRIOR VIR CVLICINAE L NVMPIDIVS L L PHILOMELVS SCR LIBR Q III DECVRIARVM CYTISI FRATER PIVS ET FIDELIS 10 C PROCVLEIVS C L HERACLEO CVLICINAE PATER PROCVLEIA STIBAS CVLICINAE MATER</p>	<p>LIVIAE DIVAE AVG L CVLICINAE PLASIDIENA L F AGRESTINA CALPETANI LIVIANI PRIMI PIL</p>
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Textual criticism (see *CIL* VI, 4, 32266): Line 5: *Mazochius*: CLIPTIVS pro CRYPHIVS, *Gruter*'s conjecture: GLYPTVS. The original inscription was lost in the 16th century.

2) *CIL* X, 2, 8048, 3 = S. 475
pelvis, Pompeii

CRESCENS
C·CALPETANI
LIVIANI

3) *CIL* X, 2, 8048, 4 = S. 476
pelvis, Pompeii

VIATOR
c CALPETANI
LIVIANI

4) *CIL* 2422 *pelvis, amphora*
Rome

CRESCENTIS
C·CALP·FAVORIS

5) *CIL* 901 = S. 243 = S. 473
dolium, pelvis, brick, Rome

C CALPETAN
CRESCENTIS

6) *CIL* 517 EX·FIG Q·CASS CAECIL·SALAR
AGIT·GLYPT·CALP

Ex fig(linis) Q. Cass(ii) Caecill(iani), Salar(ense sc. opus). Agit Glypt(us) Calp(etanus vel -etani)

The gentilicium *Calpetanus* is an *anus*-ending type of late and rare occurrence.¹⁵ The first known holder of a name of this type is *C. Norbanus*, consul in 83 B.C. Other *anus*-ending gentilicia do not occur in senatorial lists until the Imperial Age.¹⁶ Listed in the *Onomasticon* of *Theaurus* are 32 *Calpetani*, 17 of them in Roman brick stamps. No other *praenomina* than *C.* occur for *Calpetani* in brick stamps.

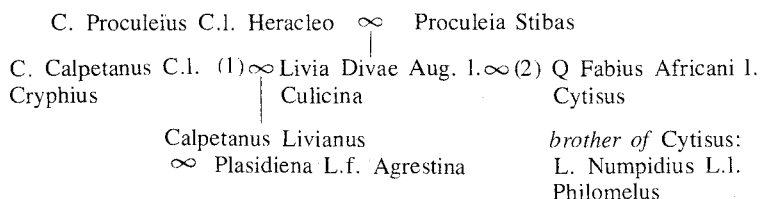
Known from the first century A. D. is a senatorial *gens Calpetana*, whose members use the *praenomen C.*; other *C. Calpetani* evidently descend from freedmen of this *gens Calpetana*. The known members of the senatorial family are the following:¹⁷

– *C. Calpetanus C.f. Statius Rufus, curator locorum publicorum iudicandorum* in A.D. 2, *praetor, curator riparum et alvei Tiberis* shortly after A.D. 16.

– *C. Calpetanus C.f. Rantius Sedatus Metronius*, evidently son of the above, *curator tabulariorum publicorum* in 46, *cos. suff.* about the year 50, *legatus Augusti pro praetore Dalmatiae* between the years 54 and 63.

– *C. Calpetanus C.f. Rantius Quirinalis Valerius P.f. Pomp(tina tribu) Festus*, evidently adopted son of the above, the only representative of this family known from literature.¹⁸ Related to Vitellius and his *legatus* in Africa in 69/70, went over to Vespasian and was *cos. suff.* in 71, *curator riparum et alvei Tiberis* in 73, *legatus* of Titus in Hispania in 79/80, died before 85/86. The senatorial family seems to have died out with the decease of its last known member.

Inscription 1 is obviously that of a family grave, although most of the characteristics of epitaphs are missing. The right-hand column is the original epitaph, the left-hand was added later. Relationships of the persons concerned are as follows:



The most accurate basis for dating is provided by the name of the central personage, *Livia Divae Aug(ustae) l(iberta) Culicina. Diva Augusta* is Livia, wife of Augustus. She was pronounced *diva* at the suggestion of Claudius in the year 42.¹⁹ That year is therefore *terminus post quem* for the inscription; in *CIL VI* it is dated to the reign of Tiberius. The name reveals, moreover, that *Culicina* was freed before A.D. 14, because in that year Livia transferred to the Iulii, and those freed by her thereafter received the name Iulius.²⁰

The parents of *Culicina* were obviously freed by C. Proculeius, friend and close associate of Augustus.²¹ Proculeius was about the age of Augustus; he committed suicide and willed his property to Augustus. From the names of persons we see that Proculeius himself had time to free the parents of *Culicina*, perhaps by the terms of his will; *Culicina* with the other property of Proculeius was transferred to Augustus and from him to Livia. *Culicina* was therefore born before Proculeius died, but we

do not know exactly when he died. From these data it may be deduced that *Culicina* was born a little before the birth of Christ. By the time the epitaph was composed *Calpetanus Livianus*, the son of *Culicina*, must have been a middle-aged man, 40 years at the least, to judge by the office he was holding or had held (see below). Thus the epitaph must be re-dated to the reign of Nero, perhaps its latter part.

The second husband of *Culicina*, *Q. Fabius Africanus l. Cytisus*, was freed by Africanus Fabius Maximus. Africanus Fabius Maximus²² was born in 44 B.C. and was *consul ordinarius* in 12 B.C.

The first husband of *Culicina*, *C. Calpetanus C.l. Cryphius*, was evidently freed, therefore, by the first known *Calpetanus* senator. This dating fits best with the previous datings.

The lifetime of *Livia Culicina* and thereby the birth time of her son *Calpetanus Livianus* can be deduced fairly accurately from the inscription. *Calpetanus Livianus* was born early in the reign of Tiberius, or perhaps in the last years of Augustus.

Stamps 2 and 3 were found at Pompeii, and were thus in use before the year 79.²³ This being so, the *Calpetanus Livianus* who appears in inscriptions 1, 2 and 3 can from the chronological viewpoint be the same person in all cases. The rarity of the name *Calpetanus* and the still greater rarity of the combination *Calpetanus-Livius* which is postulated by the name *Calpetanus Livianus* render it highly probable that these persons are identical.

Stamps 2, 4 and 5 may contain information on the nature of the connection between *C. Calpetanus Livianus* and the *C. Calpetani* of the *officinator* family which appears in brick stamps. If the *Crescens* appearing in these three stamps is the same person in all cases, then the following is known of him: he was the slave of *C. Calpetanus Livianus* before the year 79, then the slave of *C. Calp(etanus) Favor* and finally a free man. *Crescens* therefore transferred from *Livianus* to *Favor*; this suggests that *Favor* was the successor of *Livianus* in this field of work. Evidently *Favor* was the freedman or the son of *Livianus*; the latter possibility is suggested by the fact that *C. Calpetanus Favor* invariably appears in stamps as a free man, not once as a slave.²⁴

Stamps 4 and 5 are from the end of the first century,²⁵ and the last stamps of *C. Calpetanus Favor* are from the end of the reign of Trajan.²⁶ The work of *Favor* as *officinator* finished before the year 117 (when Trajan died). The proposed connection between *Livianus* and *Favor* is therefore possible chronologically. But the name *Crescens* is fairly common, and it is therefore by no means so likely that its three bearers are identical as in the previous case of *Calpetanus Livianus*.

The relation of *C. Calpetanus Livianus* to ceramic production was not necessarily close, although two of his slaves worked in this line. *C. Calpetanus Favor*, on the other hand, appears as *officinator* in several stamps of the second century; he was the central figure of the *Calpetanus* officinator family; after him *figlinae Marcianae* began to be named *figlinae Favorianae* in the second century.²⁷ Inscription 1 is interesting from the standpoint of the present study because it may illuminate the background of *C. Calpetanus Favor*.

From inscription 1 the social status of the persons therein mentioned becomes clear. The offices held by both husbands of *Livia Culicina*, her brother-in-law and her son are mentioned. The family belongs to the influential "freedmen aristocracy" of the reigns of Claudius and Nero. *Scr(iba) libr(arius) quaestorius trium decuriarum* was head of a department in the Senate treasury (*aerarium Saturni*). This was the highest *apparitor* office in State administration under the Senate. 40 holders of this office are known, 5 of them freedmen, the others freeborn; many were knights or received the rank of knight later.²⁸ The second husband of *Livia Culicina*, *Q. Fabius Cytisus* and his brother *L. Numpidius Philomelus* rose in their careers to the office of *scriba librarius quaestorius trium decuriarum*. – *Viator pullarius*, the office of *C. Calpetanus Cryphius*, who was *Culicina*'s first husband and the father of *Calpetanus Livianus*, was lower in rank than the *scriba* offices.

Calpetanus Livianus, of the second generation, adopted a military career in which he, as a freeborn Roman citizen and with an influential family behind him, enjoyed good possibilities for promotion. When the monument was erected he was *primus pilus* or *primi pili centurio*, the senior of 60 centurions in the legion and a member of the legion commander's council of war (or, more probably, had held this office and was now *primipilaris*).²⁹ This was an esteemed office, and especially well paid.³⁰ In the light of De Laet's researches it looks as though it was already an equestrian office.³¹ The office of *primus pilus* was reached after more than 20 years' service as a centurion; consequently, the holders of this office were elderly men.³²

5. A Note On the Reading of Stamps

The reading of brick stamps presents certain difficulties which the epigraphist does not normally encounter. These are due 1) to the form of the stamps and the placing of the text, and 2) to the ellipticity of the texts (syntactical stops and word endings are missing, as is also in most cases the word signifying the brick itself). The cases I present here will be referred to later.

As a rule stamps are not rectangular in form, but are plane figures bounded by circular peripheries, parts of such peripheries and straight lines. The text placed within these frameworks does not follow straight lines: at least part of it is in lines which are in circular or other curved form. Two difficulties arise from this: it is not always certain in what order words are intended to be read within a line, nor is it always certain in what order lines themselves should be read.

1) When a text is in a line forming a complete circle and syntactical stops are missing, it is uncertain at what point the stamp-maker intended reading to begin.

The following stamp, for instance, is circular in form, the text is in one line following the circle and the words are linked without gaps.

(i) EX F CASTRICIA C·SATRINI CELERIS

CIL 141

The text is understandable in the above order given in CIL, but an understandable text is also obtained in the order: C·SATRINI CELERIS EX F CASTRICIA; both orders are possible, and we do not know which the stamp-maker had in mind.

Appearing in the text is a *figlinae* mentioned by name, *figlinae Castricianae*, and a person mentioned by name, *C. Satrinus Celer*. For purposes of interpretation it would be important to know whether something is said in the stamp of the relation between *figlinae Castricianae* and *C. Satrinus Celer*; to be more precise, whether it is said that *C. Satrinus Celer* owns *figlinae Castricianae*? The answer may depend on which of the two possible orders of words is chosen. By adding to the text the word '*opus*' signifying the brick itself and a punctuation mark we obtain the following interpretations:

CIL order of words:

(a) (*opus*) *ex figlinis Castricianis C. Satrini Celeris*

(b) *ex figlinis Castricianis, (opus) C. Satrini Celeris*

Second order of words:

(c) (*opus*) *C. Satrini Celeris ex figlinis Castricianis*

According to interpretation (a) it is said in the text that *C. Satrinus Celer* owns *figlinae Castricianae*, but according to (b) and (c) it is not said that *C. Satrinus Celer* owns *figlinae Castricianae*.

Is it said in the stamp that *C. Satrinus Celer* owns *figlinae Castricianae*, or not? From the standpoint of conclusions the question is important. On the evidence of this stamp alone the problem may be deliberated as follows. If we examine only the order of words given by CIL, interpretation (a) gives an affirmative answer to the question, and (b) a negative one: the mathematical probability is, in fact, 1/2 for each alternative, and so the problem is not resolved. But if both possible orders of words are taken into account the alternative 'it is not said in the stamp that *C. Satrinus Celer* owns *figlinae Castricianae*' has two interpretations, (b) and (c), and a mathematical probability of 2/3 in its favour, while the alternative 'it is said in the stamp that *C. Satrinus Celer* owns *figlinae Castricianae*' has only one interpretation, (a), in its favour and a mathematical probability of 1/3. So the problem is resolved in favour of the negative alternative. It is a problem which proves to be highly significant for the interpretation of stamp texts. The negative alternative is supported not only by mathematical probability but by the fact that the positive alternative applies only if the CIL order of words is chosen, while the negative alternative applies regardless of which order is chosen. This is a strong argument when we interpret the whole class of stamp texts of this form, and not one stamp only.

Problems of this type need not usually be solved on the evidence of one stamp alone, since further illumination is obtained from other stamps. Thus the previous stamp can be compared with the following stamp of rectangular form:

(ii) C·SATRINI·CELERIS
EX·FIGLINIS·MARCIA

CIL 303 a

(opus) *C. Satrini Celeris ex figlinis Marcianis*

The order of words is now unambiguous, being the same as the second order for the previous stamp. To the question "is it said in the stamp that *C. Satrinus Celer* owns *figlinae Marcianae*?" there is only one answer: No. Comparison of the stamps therefore produces the same result as was arrived at on grounds of mathematical probability.

2) The stamp is in the form of a segment of a circle and part of the text is placed in lines following the arc of the circle, another part in straight lines in the direction of the chord. In this case it remains uncertain whether the lines following the arc of the circle should be read first and those in the chord direction next, or vice versa. The following stamp, for instance, is of this character:

(iii) STATI M ANTIOCHI
DE FIGLIN
VICCIAN

CIL 672 = S. 203

In this the top line follows the arc of the circle and the other two are straight. Of this stamp three variants are known which vary in the placing of lines and letters in relation to each other. The problem is similar to that in (i) above: are the lines to be read in the above order 1-2-3 or in the order 2-3-1? Both are possible and both produce an intelligible text. The problem of interpretation is the same as in (i), and a solution is obtained in the same manner.

3) The most common type of brick stamp is the so-called *orbiculus*-stamp. Its outline is formed by two circles, a big and a small. The smaller circle (*orbiculus*) is drawn inside the bigger in such a way that the circumferences either touch or intersect each other. The text is placed in lines following the circumference of the bigger circle.

In these stamps the lines are usually to be read in order from the outermost to the innermost, but this rule does not always apply. In reproductions of stamp texts for CIL Dressel, however, observes a consistent rule: the outermost line of a stamp is the topmost in a CIL text, and the innermost is the lowest.³³ For this reason lines in CIL are not always in the order in which the text composer intended them to be read. In the following stamp, for instance:

(iv) FAVSTINAE L VALLIVS PROCLVS F
EX·PRAEDIS

CIL 714

reading is clearly intended to begin from the second line or the innermost of the stamp: *ex praedis Faustinae, L. Vallius Proclus fecit*. By having the lines printed in this order Dressel shows readers in what order the lines occur in the stamp, not in what order they are to be read. – Thus for stamps with *orbiculus* it is not always certain from which point the composer intended his text to begin. The consequence is that in some cases the text can be read in more than one order. In this stamp, for instance,

(v) SOTERICI ET FAVORIS
D FVLVIORVM

CIL 1163

there are two different interpretations – both intelligible – depending on which line is read first:

- (a) *Soterici et Favoris duorum Fulviorum*
- (b) *duorum Fulviorum Soterici et Favoris*

With interpretation (a) the slaves *Sotericus* and *Favor* of two *Fulvii* are mentioned; with (b) two *Fulvii*, *Sotericus* and *Favor*, are mentioned. Because it is uncertain in which order the lines should be read, it also remains uncertain in which of the two ways the text should be interpreted.

Cases such as the following will prove to be significant later:

(vi) T·RAV·PAMP·EX·F·P·IS
CAEPION

CIL 65

The word CAEPION, alone in the second line, is the adjective *Caepionianus*, *a, um*. It is now to be asked whether this adjective is grammatically the adjectival attribute of a word occurring in the stamp. If the text is read in the above order, then the adjective CAEPION can be linked to the word '*figlinae*' and the text is as follows: (*opus*) *T. Rausi Pamphili, ex figlinis Plotiae Isauricae Caepionianis*. But if the lines are read in reverse order the text cannot, without doing violence to it, be interpreted as showing that a *figlinae* named *Caepionianae* is mentioned in the stamp. The interpretation in that case is: *Caepioniana* (*sc. tegula*) *T. Rausi Pamphili, ex figlinis Plotiae Isauricae*. Therefore the adjective CAEPION is either the name of *figlinae* or the 'name' of the brick, depending on the order of lines.

The changing of the order of lines in *orbiculus* stamps is a fairly consistent feature of development. Those *orbiculus* stamps may be taken as a starting point in which the lines do not follow the circumference of the circle but are curved only a little. In these stamps the lines are placed in the same manner as in stamps of rectangular form. Dressel marks these stamps in CIL with the words '*versibus falcatis*' and in the printed text keeps the order of lines the same as in the stamp:

the highest and innermost line in the stamp is the highest in CIL, and the lowest and outermost in the stamp is the lowest in CIL. – The next stage of development is represented by stamps in which the lines follow the circumference of the circle but reading must begin from the innermost line. Finally the order of lines is reversed and we arrive at the "normal" *orbiculus* stamp in which the text starts from the outermost line. The following stamps exemplify the transition from the first stage to the second:

- | | | |
|--------|---|---------|
| (vii) | IMP·CAE·TRO·AVG
EX·FIGLI·MARC·DOLI
C·CAL·FAVORIS | CIL 313 |
| (viii) | C·CALPETANI·FAVORIS
EX·FIGLI·MARC·DOLIA
IMP·CAE·TRA·AVG | CIL 314 |

Both stamps contain the same lines (the only differences are in abbreviations of words), but the lines are in reverse order. Stamp (vii) is "*versibus falcatis*", while in stamp (viii) the lines follow the circumference of the circle. In accordance with his principle Dressel has printed the text of stamp (vii) in CIL with the innermost line highest and the outermost line lowest, and the text of stamp (viii) with the outermost line highest and the innermost line lowest. The order in which the composer intended his text to be read is clearly that of stamp (vii): *imperator Caesar Tr(a)ianus Augustus, ex figlinis Marcianis, doliare (sc. opus) C. Calpetani FAVORIS*.

Notes to Chapter III

- 1 Data regarding *domini* are available in the *dominus* lists of Setälä. Setälä, Appendixes 1.1 and 1.2.
- 2 *Tribus* is mentioned in 3 or 4 cases; see *Indices* p. 95.
- 3 In early stamps an indication of master is encountered in the nomenclature of slaves, e.g. CIL 1269: *Eumenes Marci C. s(ervus)*.
- 4 Huttunen p. 137–142.
- 5 Lugli, p. 557.
- 6 For the system of names see e.g. Cagnat, p. 37–87 and Duff p. 52–53.
- 7 Kajanto 1965, p. 133–4.
- 8 For discussion on the significance of Greek *cognomina* see Thylander p. 143–167 and Solin p. 121–158.

- 9 This observation has been made from inscriptions in which parents and children are both mentioned. Such calculations are presented by Frank in "Race Mixture", p. 693; Thylander p. 123-5 and L.R. Taylor p. 126-7.
- 10 Frank, "Race Mixture", esp. p. 693-4.
- 11 Thylander p. 143.
- 12 Taylor p. 127; Solin presents his conclusions on pages 135-8 of his work.
- 13 Kajanto, *Onom. Studies* p. 57. Kajanto's material consists of grave inscriptions published in *CIL* VI:4, 2-3; 5680 persons are included.
- 14 Thylander p. 182. Thylander's material is composed of inscriptions in the ports of Latium (from Formiae to Centumcellae), 6100 persons.
- 15 Syme, *The Roman Revolution*, p. 93, 200.
- 16 Syme, *Historia* XI 1962, p. 146 (*Aefulanus, Funisulanus, Verulanus, Vipstanus*).
- 17 For data on the senatorial family, *Kleine Pauly* I p. 1018.
- 18 Tacitus, *Hist.* 2, 98 and 4, 49-50. Tacitus uses only the name *Valerius Festus*.
- 19 Suet. *Claud.* 11. Modern scholars have not doubted the accuracy of this information provided by Suetonius.
- 20 *RE* XIII, 919 (Lotte Ollendorf).
- 21 On C. Procleius see *RE* XXIII, 72-74 (R. Hanslik).
- 22 *PIR*² III, p. 102 No. 46
- 23 All *pelves* discovered at Pompeii were made in Rome, to judge by the stamps. Bloch, *Suppl.* p. 94.
- 24 Information on C. *Calpetanus Favor* will be found later, p. 128 and p. 141 No. 14.
- 25 In his comment on *CIL* 725 Dressel dates stamp 5 in the time of Hadrian. In both form and content, however, it suggests the first century. Dressel's dating derives from stamp *CIL* 900 from the year 137 in which a person named C. *Cal(petanus) Cre(scens)* is mentioned.
- 26 Stamp *CIL* 317 from the year 123 is non-existent; Bloch *BL* p. 335, n. 286.
- 27 The history of *officinatores* named C. *Calpetanus* is expounded later, p. 128-.
- 28 *RE* II A, 850 (Kornemann).
- 29 On *primus pilus* see the article of F. Lammert in *RE* XXII, 2, 1074-1076 and Dobson's work mentioned in the bibliography.
- 30 The pay of a *primus pilus* was four times that of a common centurion. Dobson, p. 396.
- 31 In *Ant. Class.* 9 (1940), p. 13-14.
- 32 Dobson, p. 411.
- 33 *CIL* XV p. 2. Dressel expounds his principles *CIL* XV p. 1-2.

IV Meaning of the Word '*figlinae*'

1. Introduction

The text components of brick stamps can be divided into three groups according to the information they contain: 1) names of persons; 2) words signifying place of manufacture and the brick itself; 3) other matters such as consular dates, wishes etc. In the present study the first two groups will be examined. Names of persons in brick texts represent individuals who took part in brick production, and the organizations formed by them; words signifying place of manufacture refer to the setting within which production took place. The preposition *ex* occurring in the text shows that the stamps reflect the situation prevailing in brick production and are not connected, for instance, with the use of bricks as building material. This is a sound presumption, though we cannot give a precise, uniform answer, applying to all stamps, to the question "What was the purpose of stamping?"

Words signifying place of manufacture are '*praedia*', '*figlinae*', '*fundus*', '*officina*', '*fornax*'.¹ '*Praedia*' and '*figlinae*' are distinctly more common than other words: '*praedia*' occurs in stamps 545 times and '*figlinae*' 448 times; '*officina*' occurs with certainty 57 times²; '*fundus*' and '*fornax*' are encountered in a few stamps only, the former in 5 and the latter in 4.

All others among these words are common in Latin and have a clear meaning, except for *figlinae*. *Figlinae* is strictly a word of Roman brick stamps: it occurs very rarely in literature or in other inscriptions, nor is it encountered in other ceramic stamps or in brick stamps in other areas than Rome. In Roman brick stamps, however, the word is common and seems to be linked more specifically to brick production than *officina* and *praedia*. *Figlinae* is the keyword of Roman brick stamps, and our notion of the organization of brick production depends on the idea we have formed of the meaning of this word.

The meaning of the word '*figlinae*' in brick stamps will be studied mainly by comparing its use with that of '*praedia*' and '*officina*'. The derivation and meaning of the words is as follows:³

officina (*opus* + *facio*): 'a place in which something is manufactured, workshop, manufactory'. '*Officina*' is the only Latin word which means 'workshop, manufactory' generally (German 'die Fabrik', Swedish 'fabrik'). The word '*fabrica*', from which many words linked with industrial production in present-day

languages are derived, is more limited in its Classical Latin meaning than '*officina*': it means merely one type of *officina*, namely 'the workshop of an artisan who works in hard materials'. In the great dictionary of Georges, for instance, the Latin equivalent for the German 'die Fabrik' is given as '"*officina*' (Werkstätte überhaupt), – '*fabrica*' (Werkstätte eines Fabers, d.i. Schmiedes, Zimmermanns u. dergl. Handwerkers), – '*textrina*', '*textrinum*' (Weberei)." Because the processing of raw materials has quite a different rating in modern industrial society than in antiquity (and, for that matter, before the 19th century), the use of any word connected with industrial production as an equivalent for the Latin '*officina*' easily gives rise to wrong associations.

praedium is derived from '*praes, dis*' = 'surety, bondsman'; '*praedium*' was security accepted by the State in agreements between State and private citizens affecting exploitation of public wealth. Already in Plautus '*praediolum*' occurs in the sense of 'small farm'. As a rule '*praedium*' signifies landed property, but it can also mean built property. In legal texts the terms '*praedia rustica*' and '*praedia urbana*' are used for these forms of real wealth.⁴ In speaking of a specific farm the main word is often omitted, e.g. *Tusculanum* (sc. *praedium*) *Ciceronis*, *suburbanum*, etc. In Roman brick stamps the word is generally shortened to P, PR, PRA, PRAE, PRAED; when written in full it is in the ablative plural except in one case, stamp CIL 417, where the form is ablative singular.

fig(u)linae (the form *figilinae* also occurs) is an adjective in plural form used as a substantive. The meaning of *fig*, the root, is found in the verb '*figo*', 'to mould or form (originally from clay, later in the widest significance)'. Also derived from the root *fig* is '*figulus*', 'a potter or clayworker'. Examples of adjectival use: *ars figulina*, *opus fig(u)linum*. In Roman brick stamps the word generally appears in abbreviated form; in cases where the ending is indicated, the form is the ablative plural *ex figlinis* except in stamp CIL 2200, where the nominative *figline* is used. Stamp CIL 2200 and some occurrences of the word outside brick stamps which will be examined later indicate that the head word from which '*figlinae*' separated to become a substantive was of feminine gender. It cannot be said with certainty what this word was: possibilities are '*fornax*', '*officina*' and '*fodina*'.⁵

2. Meaning of the Word '*figlinae*'

According to Dressel and Cozzo

Dressel and Cozzo have elucidated the meaning of '*figlinae*' in Roman brick stamps.

Dressel's method is to compare the occurrence of '*figlinae*' and '*officina*' in stamp texts. He notes that both words signify *officina*, a place where *opus doliare* was made; '*figlinae*' is more often encountered in stamps than '*officina*'. Then he continues:⁶

sed voces *figlinae* et *officina* ita usurpantur, ut inter utrumque verbum aliquid interesse certum sit. Nam ubi *ex figlinis* ponitur, sequitur aut *figlinarum* nomen peculiare aut nomen eius cuius *figlinae* sunt; post verba *ex officina* vero sequi solet nomen officinatoris. Vocabulo *figlinae* igitur designari videtur totum (*die Fabrik*), *officina* contra pars (*die Werkstatt*), quarum plures in singulis *figlinis* fuisse existimandum est.

According to Dressel *figlinae* is a production establishment, a brickworks; brick stamps also indicate a two-level establishment: *figlinae* is a production unit composed of several 'departments' or *officinae*.

Dressel's reasoning is not made fully clear by the passage quoted, but when account is taken of what he has said elsewhere of the persons of brick stamps, i.e. *dominus* ('is cuius *figlinae* sunt') and *officinator* (see below p. 93), the chain of reasoning can be given as follows: 'Because the word '*figlinae*' is connected with the name of *dominus*, and the word '*officina*' with the name of *officinator*, and because the stamps of each *dominus* generally contain several *officinatores*, each *figlinae* contains several *officinae*; for this reason *officina* is part of *figlinae*; because *officina* is *die Werkstatt* and *officina* is part of *figlinae*, *figlinae* is *die Fabrik*.'

Cozzo examines the meaning of '*figlinae*' as follows:⁷

Dopo il fondo, nelle iscrizioni doliari, venivano citate le *Figlinae*, ossia le cave di argilla dove si producevano i mattoni. (. . .) avendo essa [*figlinae*] la stessa radice di *figulus*, operaio dell'argilla, operaio vasaio, deve riferirsi più alla materia lavorata che all'impianto industriale necessario alla preparazione dei mattoni. È naturale che in un primo tempo, quando l'importanza del banco d'argilla prevaleva sulla modestia degli impianti, il luogo di fabbricazione delle tegole e dei mattoni fosse indicato prevalentemente dal sedimento argilloso che veniva sfruttato; dalla cava, cioè, da cui si estraeva la materia prima. (. . .) Le *Figlinae* rimasero così, fino all'epoca Severiana ad indicare in modo prevalente, sia, insieme, la cava di argilla e la fabbrica, sia la sola cava di argilla, oppure, infine, la cava di argilla ed il *praedium*, quando il proprietario dell'una si identificava con l'altro.

According to Cozzo the original and principal meaning of '*figlinae*' was 'clay-pit', though in course of time the word came to have further connotations. Cozzo's etymological reasoning for '*figlinae*' = 'claypit' is not convincing, for it can as easily be maintained that the word '*figlinae*' contains the same root as '*figo*', whose meaning is connected more with the manufacturing process than with the raw material used. But what he says of the technique of brick production and the part played in it by raw material and manufactured equipment is noteworthy.⁸

For the present study the meanings proposed for '*figlinae*' by Dressel and Cozzo provide a good starting point. The problem is: was *figlinae* a manufactory or a clay district? These meanings involve the following implications affecting

persons mentioned in the stamps and the organization of brick production. If *figlinae* is a manufactory, then persons mentioned in stamps of the same *figlinae* belong to the same production organization; it is then most natural to suppose that the *figlinae* owner (*dominus*) is the manager of the production establishment, the 'manufacturer', and that the *officinatores* mentioned in stamps of the same *figlinae* are foremen, persons of lower rank in the same organization. But if the meaning of '*figlinae*' is merely territorial, 'a clay district', there is no specific reason to suppose that a manufacturing organization is implied in the word '*figlinae*': it may be that there is no organizational connection between *officinatores* appearing in stamps of the same *figlinae*, and no connection either between the *figlinae* owner (*dominus*) and the *officinatores*. Thus our understanding of the organization of brick production depends on our notion of the meaning of '*figlinae*'. The problem is as follows: does the word '*figlinae*' refer simply to a locality (meaning: 'clay district'), or does it also imply a manufactory and production organization (meaning: 'brickworks')?

It must first be noted that Dressel's reasoning is not beyond reproach. The data he gives on stamp texts and on the use of the words '*figlinae*' and '*officina*' are correct, as is also the premise formed from these data, that 'one *figlinae* may contain several *officinae*'. But it does not follow from this that '*officina* is part of *figlinae*': *officina* may be contained in *figlinae* without being part of it. Therefore, although Dressel's second premise '*officina* = 'die Werkstatt' is also correct, the conclusion '*figlinae* = 'die Fabrik' is not necessarily so. '*figlinae*' = 'city' would also suit Dressel's premises, and so would Cozzo's '*figlinae*' = 'clay district'.

Although Dressel clearly propounds his notion of the meaning of the word '*figlinae*', he builds up no precise picture of the organization of brick production from it. Dressel's method was that of a philologist, collector of material and publisher: he explained his material, but drew no far-reaching conclusions on its basis. With Bloch the situation is different. He no longer investigates the word '*figlinae*' but accepts Dressel's meaning and draws the conclusions suggested by it.⁹ To him *figlinae* are factories whose owners (*domini*) are manufacturers, while the *officinatores* are foremen in their service. The same view of the organization of brick production appears in Frank's general works on Roman economic history.¹⁰ In the *History* which came out before Bloch's studies, Frank uses in connection with the *figlinae* and their owners such words and phrases as 'factory', 'firm', 'enterprise', 'tended toward factory and monopolistic methods', 'certain brick firms at Rome grew to immense proportions'. In the *Survey* the same picture is given, with Bloch's results as an addition.

The 'modern' picture by Bloch and Frank of the organization of Roman brick production is based on the meaning '*figlinae*' = 'manufactory'. In the following pages the applicability of this meaning to passages where '*figlinae*' occurs is examined. Brick stamps form the chief material, but a beginning is made by considering some occurrences of the word apart from brick stamps.

3. Examples of Use of the Word 'figlinae' Apart from Roman Brick Stamps

In the following passages the word 'figlinae' occurs in a sufficiently full context for examination of the meaning to be possible. Apart from the inscription of Veleia the passages are mentioned in the *Thesaurus*, where other occurrences of the word are also listed. The problem formulated above – to what extent the word 'figlinae' means a manufactory and to what extent a locality, a place for digging clay – is not solved by these passages: the purpose is merely to throw light on the problem.

The texts differ widely in period: *Lex Ursonensis* is from 44 B.C., Varro's *De re rustica* from about 35 B.C., the inscription of Veleia about A.D. 110 and the writings of Paulus and Ulpian from the early 3rd century A.D.

Lex Ursonensis 76:¹¹ figlinas teglarias maiores tegularum CCC tegulariumq(ue) in oppido colon(ia) Iul(ia) ne quis habeto. qui habuerit it aedificium isque locus publicus colon(iae) Iul(iae) esto. (...)

In this passage 'figlinae teglariae' signifies a building in the urban area ('in oppido colonia Iulia'). This is clear, at least, if it is assumed that 'id aedificium' in the second sentence refers both to 'figlinae teglariae' and 'tegularium'. If, on the other hand, it is considered that 'id aedificium' means 'tegularium' alone, then the use of the words 'maiores tegularum CCC' to express the size of 'figlinae teglariae' shows that a building is spoken of.

Mingazzini has amply explained this passage in an article¹² and reported on the discussion aroused by it. For the words 'maiores tegularum CCC' two interpretations have been offered: 1) three hundred roof tiles are the capacity of a 'figlinae teglariae' oven, or the usual production capacity of a manufactory in some unspecified period of time; 2) 'tegula' is the unit of measurement for the size of building, three hundred tegulae expressed the floor area (or some other standard) of a 'figlinae teglariae'. The former is the traditional interpretation proposed by Mommsen. Mingazzini supports the latter interpretation on the grounds that in the *Lex Tarentina*¹³ the size of a normal urban house is expressed in the same way. Further support for Mingazzini's view is found in passages where the property tax levied on Roman citizens in 43 B.C. is discussed.¹⁴ The basis for calculation of this tax in urban houses was the number of tegulae (in Cassius Dio the word is *keramis*). These passages show that tegula – precisely specified in a manner unknown to us – was the unit of measurement for the size of a building.¹⁵ This is also the best explanation, in my view, for the *Lex Ursonensis* passage.

For the purposes of this study it is immaterial in which way 'maiores tegularum CCC' is explained, for in both interpretations 'figlinae teglariae' means building, brick oven and other manufactured production installations.

The word '*figlinae*' occurs twice in the inscription of Veleia:¹⁶

obligatio 14: P. Albius Secundus (. . .) professus praed(ia) rustica (. . .) et obligare [debet] fundum Iulianum cum figlinis et coloniis VIII pagi Iunonio et Domitio (. . .)

obligatio 47: C. Coelius Verus professus est saltus Avegam Veccium Debelos cum figlinis, saltus Velvias Leucomelium qui sunt in Veleiate pag(is) Albense et Velleio (. . .)

The properties listed in the inscription are areas of land in rural districts. At the beginning of most bonds (e.g. the 14th) the legal term *praedia rustica*, meaning landed property, is used of the wealth to be mortgaged; the term *praedia urbana*, meaning built property (See Ulpian's definition, note 4, p. 84), does not occur in the inscription, and urban properties are not mentioned. In the same way as '*figlinae*', the following words occur as appendages to *fundi* or *saltus* mentioned by name (in the text they are connected to '*fundus*' and '*saltus*' by the preposition *cum*): '*cum silvis*' (passim), '*cum casis*' (passim), '*cum meride*' (passim),¹⁷ '*cum meridibus*' (passim), '*cum silvis sagatis et loco agri Nasulliani*' (obl. 22), '*cum casis et silvis et meridib(us) et debelis*' (ibid.)¹⁸, '*cum iure Appennini*' (obl. 28), '*cum vadis*' (obl. 44), '*cum alluvionibus iunctis praedis*' (obl. 44). These 'appendages' to *fundi* and *saltus* are mentioned separately for the undoubted reason that their yield was not a direct or normal income derived from agriculture and stock raising. *Figlinae* are mentioned as parts of great landed properties extending over the area of two *pagi* and situated far from population centres on the central slopes of the Apennines.¹⁹

All these facts indicate that '*figlinae*' in the inscription of Veleia does not signify buildings and other manufactured production establishments. We may suppose that these *figlinae* were clay deposits favourably located for transport along the Trebia and Nure, and used for the manufacture of ceramic objects. One can imagine a landowner deriving income from charges paid to him for the right of using clay. Perhaps used in these *figlinae* were some of the brick stamps which in *CIL* are entitled '*Tegulae agrorum Placentini, Veleiatis, Parmensis*'.²⁰

In the following extracts the word '*figlinae*' appears in contexts where the economic employment of irreplaceable natural resources is in question.

At the beginning of Varro's *De re rustica* there is a long passage (1, 2) in which Varro and his interlocutors ponder the question: What belongs to *agri cultura* and what does not? The following is an extract.

Varro, *Rust.* 1, 2, 22-23: Anne ego, inquam, sequar Sasernarum patris et filii libros ac magis putem pertinere [ad agri culturam] figilinas quem ad modum exerceri oporteat, quam argenti fodinas aut alia metalla, quae sine dubio in aliquo agro fiunt? sed ut neque lapidicinae neque harenariae ad agri culturam pertinent, sic figilinae. neque ideo non in quo agro idoneae possunt esse non exercendae, atque ex iis capiendi fructus: ut etiam, si ager secundum viam et opportunus viatoribus locus, aedificandae tabernae devorsoriae, quae tamen, quamvis sint fructuosae, nihilo magis sunt agri culturae partes.

"*Figulinas exercere*" here means exploitation of the riches of the soil. *Figlinae* is a mine belonging to the same category as other mines (*alia metalla*). Very closely related to *figlinae* are quarries (*lapidicinae*) and sand pits (*harenariae*). In the first sentence the word '*fodinae*' may be actually added: "*figilinas (sc. fodinas) (. . .) quam argenti fodinas et alia metalla*". It also appears from the second sentence that the question of whether "*figilinas exercere*" is possible in a certain locality depends on the nature of the soil, because the words "*in quo agro idoneae (sc. figilinae) possunt esse*" can be interpreted in no other way. It is emphasized throughout the extract that the activity called by Varro "*figilinas exercere*" depends on natural condition which man cannot change. Best suited to this passage is the meaning proposed by Cozzo: '*figlinae*' does not mean buildings and other manufactured productive establishments, but a clay deposit which can be employed for the making of ceramic objects.

Varro's text indicates the division of the riches of the soil between metallic and non-metallic; the word '*figlinae*' is linked with the latter together with the words '*lapidicinae*' and '*harenariae*'. Stone (*lapis*), clay (*creta*), gravel/sand (*harena*) and limestone (*calx*) were non-metallic extracted substances with considerable economic importance. They often occur together in texts when there is discussion of economic exploitation of the soil, for instance in legal texts dealing with *locatio-conductio*, *usus fructus* and servitudes when the right to use land is defined for holders of the above rights.

In the following passages there is discussion of the rights of the holder of *usus fructus* (*fructuarius*) and of the three extracted substances stone, clay and gravel/sand:

Ulpian Dig. 7, 1, 9, 2 sed si lapidicinas habeat et lapidem caedere velit, vel cretifodinas habeat vel harenas.

Ulpian Dig. 7, 1, 13, 5 inde est quaesitum, an lapidicinas vel cretifodinas vel harenifodinas ipse instituere possit.

If we compare these²¹ with the extract from Varro, we note similarities and divergences. In all extracts there is examination of the three substances stone, clay and gravel/sand, and in all there is the question of defining different methods in economic exploitation of the land. Varro draws a distinction between "*agri cultura*" and other methods of land exploitation, while Ulpian defines the rights of *fructuarius* in relation to the rights of the owner (*dominus*) of the same land. But the word used in connection with the utilization of clay is not the same in Varro and Ulpian, Varro using '*figlinae*' and Ulpian '*cretifodinae*'. What difference of meaning is there between the two words?

In the following extract the situation is the same as in the former, except that the right of land utilization now examined is that of a servitude holder on burdened land; the question at issue is the types of servitude which can be created. Appearing in the passage are the extracted substances stone, clay, gravel/sand and limestone.

Dig. 8, 3, 5-6:

5 *Ulpian* (. . .) sed ipse [Neratius] dicit, ut maxime calcis coquendae et cretae eximendae servitus constitui possit, non ultra posse, quam quatenus ad eum ipsum fundum opus sit:

6 *Paulus* veluti si figlinae haberet, in quibus ea vasa fierent, quibus fructus eius fundi exportarentur (sicut in quibusdam fit, ut amphoris vinum evehatur aut ut dolia fiant), vel tegulae vel alia* ad villam aedificandam. sed si, ut vasa venirent, figlinae exercerentur, usus fructus erit. item longe recedit ab usu fructu ius calcis coquendae et lapidis eximendi et harenae fodiendae aedificandi eius gratia quod in fundo est (. . .)

*) alia is an addition by Mommsen.

In defining the right of utilization possessed by a servitude holder Paulus quotes the purpose for which extracted substances may be used. On a servitude basis material may be taken only if it is used for needs arising from the normal operation of *fundus dominans*; if, on the other hand, material or goods made from it are intended for sale, servitude is insufficient: the beneficiary must possess *usus fructus*.

In the Paulus extract and the earlier quoted Varro extract there are, in addition to the occurrence of '*figlinae*', two common features: stone, clay and gravel/sand are spoken of (also limestone in Paulus), and clay is set apart from the rest for separate examination. Why is clay given this special status? Because clay was far more important and variously used in agricultural economy than the other substances, being the chief raw material of ceramic objects which were used for a great variety of purposes. Paulus mentions the purpose specifically and gives a list of ceramic objects; and from Varro it is easily discerned that the *Sasernae* included *figlinae* within *agri cultura* because clay artefacts had such variety of use in farm economy, but excluded *lapidicinae* and *harenariae* because the use of stone and sand was more limited.

We arrive at the following distinction of meanings: '*cretifodinae*' is associated merely with the extraction of clay, referring to its economic utilization from the 'industrial extraction' side; '*figlinae*' covers not only this but also the fabrication of ceramic objects from clay, and refers to the 'processing side' too of the economic utilization of clay. An etymological connection with the verbs '*fodio*' and '*tingo*' thus seems to be reflected in the meanings of '*cretifodinae*' and '*figlinae*'.

The use of the words '*cretifodinae*',²² '*figlinae*' and '*officina*' can also be explained in terms of the general conditions prevailing in the ceramic and, specifically, the brick industry. In brick production the following factors are influential: 1) clay is by far the most important raw material; 2) the processing grade is low; 3) transport is a very expensive item compared with other production costs. These factors are responsible for the siting of brickworks in relation to population centres (market areas) on the one hand, and raw material sources on the other.²³

It is a characteristic feature of the brick industry that primary production (clay digging) and processing (brick-making from clay) are performed as an integrated procedure without disruption by transport. Only finished bricks are conveyed to the

market area, because clay is more expensive to transport than bricks.²⁴ Owing to the dominance of clay among production commodities and also owing to transport costs, therefore, brickworks are located in clay districts.²⁵

Working conditions for the manufacture of finer ceramic are different. Clay is of less central importance, mainly because the processing grade is higher: the finer the ceramic, the less clay is required for production of a certain value. On the other hand, more production requisites are needed. It is more natural in this case that primary production and processing should differ in locality. The clay-digging site, *cretifodinae*, and the processing establishment, *officina*, are in different places. Clay is more suitable for transport than easily breakable finished ceramics. Greater quality demands are made on clay, and it can be brought from afar and from many places. The best location for a processing establishment is a population centre where customers live and production requisites and equipment are most easily obtainable.

The following explanation may now be proposed for the words occurring in the texts: *cretifodinae* is the clay-digging site, *officina* the manufactory; *figlinae* is the clay-digging site and manufactory together in cases where primary production and processing form an integrated procedure. This would explain the fact, for instance, that the word '*figlinae*' occurs only in brick stamps, while '*officina*' occurs also in the stamps of finer ceramic objects.²⁶

4. The Word '*figlinae*' in the Text of Roman Brick Stamps

Introduction

In this chapter I examine the meaning of '*figlinae*' in Roman brick stamps. More precisely, the problem is: does the word '*figlinae*' refer to the organization of production and to an administrative unit (meaning 'brickworks'), or merely to a territorial unit (meaning 'clay district')?

The study method is historical and comparative: that is, the occurrence of the word '*figlinae*' in stamp texts is compared with that of other words, and account is also taken of time as a variable. For purposes of comparison texts are analyzed in their components, in relation to content on the one hand and form on the other.

It transpires that the content of texts is made up of three components, i.e. three matters are announced (omitting consular dates and wishes).

They are:

- The first person, to whom I later give the name *offinator*,
- the place of brick manufacture (name of *figlinae*),
- the second person, to whom I later give the name *dominus*.

The words with which these three matters are announced are divided into four groups:

- Nouns signifying place of brick manufacture (in one or another manner): '*praedia*', '*figlinae*', '*officina*' etc. Dressel's remark on the relation between the words '*figlinae*' and '*officina*' (see p. 39 above) holds good, i.e. in one *figlinae* there may be several *officinae*, but in one *officina* there cannot be several *figlinae*. If note is taken of this result as it stands, the chief matter remaining for comparison is the use of the words '*figlinae*' and '*praedia*'.
- Words signifying the brick itself: '*opus*', '*opus doliare*', '*opus figlinum*', '*tegula*' etc. The text of the stamp is often so composed that the word signifying the brick itself is missing, but account has been taken of it in the grammatical structure. In that case the absent word must be understood.
- Proper names in adjectival form which can be linked grammatically to the words of either previous group. Such adjectives are *Marcianus, a, um*, *Caepionianus, a, um*, *Domitianus, a, um*, *Oceanus, a, um* etc. They number about 80 all told.²⁷ An adjective occurs in 580 stamps, or nearly one third of the total.
- Names of persons, important since they enable the conditions of *figlinae* ownership and possession to be examined.

The occurrence of the components of content of the text is not consistent in stamps. Any component may be absent, and any component may alone form the whole of a text. Component occurrence is only partly correlated with time. As noted earlier, the inconsistent occurrence of components makes it impossible to suggest a consistent purpose for the stamping of bricks; in other words, the question "What was the purpose of stamping?" can receive no answer which takes account of all components and is applicable to all stamps. For this reason conclusions drawn from stamps must be treated with reserve.

In addition to components of content and form, time appears as a variable. To take account of time is possible, because stamps can be dated with great reliability. I used Dressel's datings (with Bloch's additions) because they are based for the most part on other stamp features than the occurrence of the mentioned components, and thus form a variable which is independent of the other variables examined. The aim is to avoid errors of reasoning arising from multicollinearity.²⁸

The main point is that Dressel in his dating of stamps took no account of the occurrence of the words '*figlinae*' and '*praedia*', which in my examination turns out to be significant.

Division into periods has been roughly performed: only clear time differences are taken into account, so that certain features of the development of the text become visible. The main division is between stamps of the first and stamps of the second century; in the latter group two sub-groups can be further distinguished: early second century and late second century stamps.

Early second century stamps make up the main type, the category of 'typical' brick stamps. Their texts contain most commonly all the components of content, and consular dates are found only in them. These informative stamps have always interested students most, and conclusions drawn from brick stamps are based to a great extent on them.

Stamps of the First Century

I first examine the most simple type, which is common to all ceramic stamps.

(1a) STATI·MARCI
STATORIS

S. 337

(1b) ST·MARCIVS
RABBAEVS·FEC· CIL 311

In these texts there is one component only, the name of a person. The grammatical structure of both texts is such, however, that completion is needed: in (1a) the person's name in the genitive needs a head word; in (1b) the predicative transitive verb needs an object. This missing part, which the compiler of the text intended the reader to supply, is obviously the very article on which the text is written. If the brick itself is marked with the word '*opus*', the completed texts in general form are: (1a) **opus illius** and (1b) **ille opus fecit**.

Who is the person mentioned in the stamp? or: what is his position in the production process? When we are dealing with some other ceramic object than a brick, the answer seems clear: the stamp bears the name of the person who has given the object its form, who has made it. This answer does not apply if the object is a brick. One cannot then speak of giving form in the same sense as when speaking of finer ceramic: the form is important, but in a different manner. Bricks must be as similar as possible, they take their form mechanically in accordance with certain standards fixed in advance. In other ceramic form is individual: it does not arise mechanically, but is imparted to an object by its maker. Bricks represent mass production among ceramic objects, composing a category of their own. With other ceramics, the finer the object, the greater its individuality of design.

A similar distinction must be made between stamps. An "ordinary" ceramic stamp is in greater or less degree a signature, while a brick stamp is in greater or less degree a trade-mark. Bricks are made collectively: at no working stage does an individual of such supremacy appear as the designer of a finer ceramic, who would deserve his name on the stamp more than others. The person mentioned in a brick stamp is the director of the production process, his name represents all those who took part in that process, from the clay diggers to the firers. This distinction explains, partly at least, why Roman brick stamps, having at first been similar to other ceramic stamps, evolved with time into a group of their own.

Differentiation becomes graphically visible in certain stamp groups of the first century. In early Roman brick stamps the same names of persons commonly appear as in the stamps of other rough ceramic objects (*sarcophagi, dolia, amphorae, pelves* etc); the same stamps are even found in objects of both categories. For instance, members of the three families *St. Marci*, *C. Satrinii* and *C. Calpetani* who worked on *figlinae Marcianae* in the first century are known to us both from the stamps of bricks and those of other ceramics. The following stamp is from a *dolium*:

(2)

C·SATRIN·COMMVNI
AVCTVS·FEC

S 79

C. Satrini Communis, Auctus fecit

Two names are mentioned in the stamp, *C. Satrinus Communis* and *Auctus*, who is obviously the slave of *Communis*. With some constraint the text can also be interpreted as meaning that only *Auctus*, the slave of *C. Satrinus Communis*, is mentioned. This interpretation is arrived at by removing the comma from the text written in full. Thus in the *dolium* stamp the name of *C. Satrinus Communis* is accompanied (or replaced) by that of his slave. In brick stamps, on the other hand, *C. Satrinus Communis* appears alone.

The same situation is encountered with *C. Satrinus Celer*: four (or six, depending on interpretation of texts) slaves of *C. Satrinus Celer* are known from *pelvis* stamps found at Pompeii (S. 543–548), but he appears alone without slaves in all his brick stamps (CIL 141, 303–305, 388). Further cases of the kind are found in early stamps.²⁹

The difference between brick stamps and other ceramic stamps in these cases may be explained by the fact that *C. Satrinus Communis* and *C. Satrinus Celer* made bricks themselves and left other objects to be made by slaves. But a better explanation is obtained from the difference between "trade mark" and "signature". A *dolium* and a *pelvis* were marked with the name of the maker, i.e. designer, while a brick was marked with the name of the director of the production process:

his name in the stamp represents all those taking part collectively in the work of production.

The following stamps show how the place of brick manufacture is expressed in the first century stamps:

(3) C·SATRINI·COMMVN
DE·FIGLINIS
MARCIANIS CIL 306 c = S. 77

(4) MARCIANA
C SATRINI COMMVNIS S. 573

Place of manufacture is expressed by the adjective *Marcianus*, *a*, *um*, which is linked either to the word '*figlinae*' or directly to the brick itself (stamp (4) is completed to read: (*tegula*) *Marciana*). If the adjective is indicated by the letter **M**, the texts in general form are:

(3) **opus illius, de figlinis M**

(4) **opus M illius**

Both texts are evidently the same in content.

In examples (3) and (4) expression of the place of brick manufacture is linked to type (1a) (page 47). Both expressions of the place can also be linked to type (1b). Name of person and expression of place thus can appear in four combinations which are all the same in content.

The place of manufacture is thus expressed only in brick stamps; no similar expression appears in other ceramic stamps. Why is this? What was intended to be expressed? To these questions too an answer may be sought among the difference between production conditions in the brick industry and other ceramic industry – besides the fact, of course, that the surface of a brick or tile provides room for a more abundant text than that of a finer ceramic object.

In brick-making, because the processing grade is low, the quality of the finished product depends largely on that of the raw material used, namely clay; production is confined, on the other hand, to clay occurring in one place. With other ceramics the situation is different: quality depends more on factors other than the clay used as raw material, and production is not confined to clay occurring in one place. Perhaps *C. Satrinus Communis* wished to make known in his stamps that his bricks were made of *figlinae Marcianae* clay: the name of the *figlinae* was a kind of quality mark.

To the expression **ex** (or **de**) **figlinis M** in Roman brick stamps an analogy can be found in building stone production. Vitruvius in Book 2 Chapter 7 deals with rock species in the Roman region and their suitability for building. He uses the word '*lapidicinae*' for an occurrence of rock, and indicates quality by stating from what *lapidicinae* stone originates. In the following extract, for instance, '*lapidicinae*' directly signifies 'quality of stone': '*lapidicinae* (. . .) *Rubrae, Pallenses, Fidenates, Albanae sunt molles*'.³⁰ The next extract is an exact parallel to the expression of brick stamps:

Vitr. 2, 7, 3 lapidicinae (. . .) quae dicuntur Anicianae (. . .) quarum officinae maxime sunt circum lacum Volsiniensem

Lapidicinae Anicianae is a region where stone of a certain quality occurs.³¹ *Officina* is a place where stone is quarried and cut to sizes suitable for transport; in *lapidicinae Anicianae* there are several *officinae*, as in one *figlinae* there are several *officinae*. The specification of locality "*circum lacum Volsiniensem*" shows that *lapidicinae Anicianae* is an extensive area.

Brick-making is part of the ceramic industry where raw material and production methods are concerned, but it is part of the building material industry, like building stone production, where the use of its products is concerned. It may be assumed that when brick was first used as construction material in the Roman area and a brick industry came to life the terminology previously employed in this field was adapted to the new material. The word '*figlinae*' came to correspond to '*lapidicinae*'. As stated, this was possible because the processing grade of brick was only little higher than that of building stone. Just as building stone quality could be expressed by reference to the place of occurrence, e.g. "*de lapidicinis Anicianis*" or "*lapis Anicianus*", so brick quality could be expressed by the locality of occurrence of a certain kind of clay, e.g. "*de figlinis Marcianis*" or "*tegula Marciana*".

It may be supposed that brick producers thought on these lines when they included the name of the *figlinae* in the stamp text. The notion that clay qualities in the various *figlinae* differed so much as to be distinguished in the finished bricks may be partly imaginary, but not entirely so. Clay used for roof tiles has to meet higher quality demands than that used for wall bricks.³² Clay must be easily moulded if it is to make good roof tiles, thus fatter clay is required. Fat clay can be made leaner by admixture of sand or other material, but lean clay cannot be made fatter. Thus the quality of the clay employed was of greater importance for finished products in early times, when wall bricks were not yet in use and roof tiles were the only building components made in *figlinae*. It may be assumed that in these early times the reputation of certain good clay regions had become established, they were the *figlinae* mentioned by name; and in the later wall brick period the mention of a *figlinae* by name had already become traditional. Such mention by name was not used as a guarantee of

quality or a trade-mark in the modern sense, as is seen from the rather inconsistent use of *figlinae* names in stamps. *C. Satrinus Communis* and *C. Satrinus Celer* did not mark the name of *figlinae Marcianae* on all their brick stamps, for instance, nor did other persons with several stamps act in that way.³³

With regard to the meaning of the word '*figlinae*' my reasoning leads to the conclusion that Cozzo is correct: *figlinae* is a clay district. It is obviously difficult to make the distinction between 'brickworks' and 'clay district' merely by comparing brick stamps. The form of speculation introduced above is more likely to produce new hypotheses than dependable results. Brick stamps, however, enable us to examine the problem of the meaning of '*figlinae*' from a further standpoint. If *figlinae* is a manufactory it is also an administrative whole; if *figlinae* is merely a clay district it does not necessarily compose an administrative unit. I will therefore seek to discover how the possession relations of the *figlinae* are reflected in brick stamps of the first century.

At *figlinae Marcianae* early in the first century members of three families were at work.³⁴ *Statius Marcius Rabbaeus* (CIL 310, 311; S. 81, 616), *C. Satrinus Communis* (CIL 306-309; S. 77-79, 573, 574) and *C. Calpetanus Auctus* (CIL 302; S. 72, 73) make known in their stamps that their bricks are from *figlinae Marcianae*. Bricks of all three have been found on the ships of Nemi, which makes it reasonably certain that they were producing bricks contemporaneously, about A.D. 40.³⁵

To Bloch, who accepts the meaning proposed by Dressel ('*figlinae*' = 'brickworks'), there are difficulties in explaining these stamps. How can three persons have owned the same manufactory at the same time? Bloch's answer is that *figlinae Marcianae* was owned at that time by a community resembling a co-operative association.³⁶ This explanation is complicated, and legal exposition would be needed to substantiate it. It might be asked, for instance, whether the names of all society members should not appear in all stamps, or whether stamps should not announce in some way that the bricks are produced by a society. Examples of the *societas* are found in Roman brick stamps. But these problems need not be elucidated, for Bloch's question proves to be wrongly posed.

From the specimen stamps (3) and (4) (p. 49) it is easily established that there is no question of the ownership of *figlinae Marcianae* in them. In stamp (3) the order of words shows that the name of *C. Satrinus Communis* is not the genitive attribute of the word '*figlinae*', and in stamp (4) the word '*figlinae*' does not appear. In the stamps it is therefore not stated that *C. Satrinus Communis* owns *figlinae Marcianae*, but that he "owns" the brick.

The order of words does not indicate the meaning of the text so

unambiguously in all stamps as in (3). In the following stamp the text components are in the opposite order:

(5) DE FIGLINIS MARCIANIS
ST·MARCI·RABBAEI

CIL 310

The text can be interpreted in two ways, either:

- (a) *de figlinis Marcianis St. Marci Rabbaei*, or
- (b) *de figlinis Marcianis, (opus) St. Marci Rabbaei*

According to (a) *St. Marcius Rabbaeus* would be the owner of *figlinae Marcianae*; according to (b) he would be merely the "owner" of the brick. The reason for this uncertainty is that the maker of the stamp has used no syntactical stops. Dressel in *CIL* chooses interpretation (b), and his choice must be regarded as correct, because (b) fits not only the unambiguous texts (3) but also the ambiguous (5), whereas (a) fits only the ambiguous. Also in favour of (b) is the fact that the order of words in (3) is more common in stamps than that occurring in (5). In this special case there is yet another support for Dressel's choice: for specimen stamp (5) there exists a variant, S. 616 (very fragmentary, it is true), with the same order of words as in the specimen stamp (3). If we want an interpretation that suits both variants we must choose (b).

Thus in the stamps there is no question of the ownership of *figlinae Marcianae*. Bloch's problem has arisen because in his view the word '*figlinae*' means 'brickworks'. The thought process is that if the stamps mention the name of a manufactory and the name of a person, then the person is the owner of the manufactory. Because this conclusion is eminently reasonable, the observation that the owner of *figlinae* is not mentioned must be considered proof that the word '*figlinae*' does not mean 'brickworks'. In second century stamps the owner of *figlinae* is mentioned, and it is obvious that Dressel arrived at the meaning '*figlinae*' = 'brickworks' precisely on this evidence: the stamps of the second century make up the great majority of stamps, and these stamps have always received the most attention. The historical method has the advantage, however, that it enables conclusions to be drawn also from the order in which text components have been included in the stamps.

If the meaning of '*figlinae*' is 'clay district', then first century *figlinae Marcianae* stamps present no problem. In the *figlinae Marcianae* district there were several administratively independent *officinae*, the names of whose "directors" are mentioned in the stamps. The name of *figlinae Marcianae* is present only as a quality mark in the manner previously explained. To mention the name of the owner of *figlinae Marcianae*, i.e. of the land, is therefore unnecessary.

The features which distinguish first century stamps from second century stamps are:

- ## Second Century Stamps

(6)

CIL 312

53

The stamps so far examined, (1) – (6), are all from *figlinae Marcianae*, and therefore belong to a historically homogeneous group. On their basis, accordingly, conclusions can be drawn regarding the development in *figlinae Marcianae*: stamp (6) is some 70 years later than (3) and (4). Which person of the binominal stamp continues the traditions of the persons of the one-name stamps? Obviously *officinator*, because *C. Calpetanus FAVOR* belongs to a family whose members already worked in *figlinae Marcianae* in the early first century.³⁷ The Emperor Trajan, for his part, has no connection with *figlinae Marcianae* stamps of the first century. This shows that mention of the name of *dominus* is a new feature. The position of the name of *dominus* in the stamp (6) shows that the Emperor Trajan is mentioned as the owner of *figlinae Marcianae*. The difference is, therefore, that in stamps of the first century the owner of *figlinae* is not mentioned, but in second century stamps he is. From the appearance of the name of *dominus* in stamps it cannot be concluded that the ownership of *figlinae Marcianae* changed at that time. It may have done; but there is also nothing to disprove that Trajan himself or earlier Emperors owned *figlinae Marcianae* as early as the first century; for unknown reasons it was not until the early second century that it became customary to mention the name of the owner of *figlinae* in stamps. It is certain that someone already owned *figlinae Marcianae* in the first century.

I shall now examine stamp texts of the early second century with regard to the meaning of '*figlinae*'. The following stamp indicates how the name of *dominus* was linked to the type represented by the stamp (4). In this case no examples of *figlinae Marcianae* stamps are found.

(7)

CAEP·L·GELLI·PRVDENTIS

EX·F·PLO·ISAV

CIL 55

Caepioniana (sc. tegula) L. Gelli Prudentis, ex figlinis Plotiae Isauricae

The general form of the text is: **opus M illius, ex figlinis huius**. Before the comma the text is the very same as the text of the first century stamp (4), as an addition, after the comma, the owner of *figlinae* (*dominus*) is declared. The content is composed of the same three matters as in the stamp (6): the names of *officinator*, *figlinae* and *dominus*. But the form of expression is different: the adjective expressing the name of *figlinae* is linked in stamp (6) to the word '*figlinae*', but in stamp (7) to the brick itself.

In all earlier stamps the word '*figlinae*' is defined by the adjective expressing the name of *figlinae*, but in stamp (7) it appears without an adjective. This shows that the word '*figlinae*' has acquired a new function.

The word '*figlinae*' is not needed in stamp (7), as it was not needed in (4), to announce the name of *figlinae*, but it is needed for another function: to announce the name of the owner of *figlinae* (*dominus*).

In the following stamp the word '*figlinae*' occurs "plainly" in this new function.

(8)

C·CALPETANI HERMETIS
OPVS DOLIARE·EX·FIG
CAESARIS·N

CIL 320 = S. 84

C. Calpetani Hermetis opus doliare, ex figlinis Caesaris nostri

In general form: **opus illius, ex figlinis huius**

The words before the comma are the same as in the first century stamp (1a), and after the comma comes what is new in second century stamps: the name of the owner of *figlinae* (*dominus*). The name of *figlinae* is missing from stamps (1a) and (8). If we compare (8) with (6) and with some other stamps,³⁸ we may conclude that (8) too has been in use in *figlinae Marcianae*, but this is not said in the text.

Dressel, Bloch and other commentators on Roman brick stamps draw no distinction between the two uses of the word '*figlinae*'. They treat the expressions **ex figlinis M** and **ex figlinis huius** as equivalent methods of stating the place of manufacture of the brick or its origin; in other words they consider that a *figlinae* can be equally well specified by mentioning the name of its owner and by mentioning the name of *figlinae* itself. The development of brick stamp texts becomes more comprehensible, however, as I have shown earlier, if different meanings are given to the expressions: **ex figlinis M** (e.g. *ex figlinis Marcianis*) expresses the place of brick manufacture (and is, initially at least, a form of quality mark), **ex figlinis huius** (e.g. *ex figlinis Caesaris nostri*) expresses the owner of *figlinae* (*dominus*); the only purpose of the latter is to express ownership.

The difference between the two ways of using the word '*figlinae*' becomes still clearer if we compare the use of '*figlinae*' with that of '*praedia*'. The word '*praedia*' appears in brick stamp texts at the beginning of the second century. This was noted by Mirja Lahtinen in her study of brick stamp terminology. Frequency of occurrence of the words '*figlinae*' and '*praedia*' at various periods is shown in the following table.

Frequency of occurrence of words '*figlinae*' and '*praedia*'. Figures as percentages of all stamps of the period. (Source: Lahtinen, Table 4.)

Period	-99	100 -122	123	124 -138	139 -180	181 -220
Stamps in which word ' <i>figlinae</i> ' occurs	10.0	22.5	34.4	30.8	38.6	66.2
Stamps in which word ' <i>praedia</i> ' occurs	0	13.1	26.3	47.3	66.2	81.8

The Table shows that the word '*praedia*' does not appear in stamps until the early second century, while the word '*figlinae*' appears in the first already. Lahtinen has used the datings of Dressel, whose dating criteria were to a very large extent independent of the occurrence of '*figlinae*' and '*praedia*'. Results are therefore reliable in this regard.

The following stamps illustrate how the word '*praedia*' is used in the early second century.

(9) CAEPIONIANA·MAR·LVCIFER PRAED
PLOTIAE ISAVRICAЕ CIL 59a

Caepioniana (sc. tegula) Marci Luciferi, (ex) praedis Plotiae Isauricae

The text in its general form reads **opus M illius, ex praedis huius**, i.e. the same as (7) except that '*figlinae*' is replaced by '*praedia*'. (In addition the stamps are from the same *figlinae*, *figlinae Caepionianae*, and the same *dominus* appears in them.)

The preceding text contains all components of content: *offinator* (*Marcius Lucifer*), name of *figlinae* (*Caepionianae*) and *dominus* (*Plotia Isaurica*). From the following the name of *figlinae* is missing.

(10) EX PRAEDIS CAES N·OPVS
DOL·TETELLI·DON CIL 713

ex praedis Caesaris nostri, opus doliare Tetelli Donacis

If the components are placed in the same order as in earlier stamps, the general form reads **opus illius, ex praedis huius**, which is the same as stamp (8), except that the word '*figlinae*' is replaced by '*praedia*'.

A comparison of stamps shows that the expressions **ex figlinis huius** and **ex praedis huius** can be used interchangeably to convey the same matter: I shall demonstrate later that this holds good for brick stamps in general. As reported earlier, the name of *dominus* appears in bricks at the same period

of the early second century as the word '*praedia*'. This confirms the notion introduced previously, that *dominus* is mentioned in stamps as the owner of the land, because **ex praedis huius** cannot mean other than '(the brick originates) from the land of such and such a person'.

With regard to the meaning of '*figlinae*', comparison leads to the conclusion that 'clay district' is more likely than 'brickworks', because if one person makes bricks in the clay district of another, he can express the fact equally well with the words 'on the land of so and so' and with 'in the clay district of so and so'; on the other hand the expressions 'on the land of so and so' and 'at the works of so and so' are further from each other.

The difference of meaning between **ex figlinis M** (e.g. *ex figlinis Marcianis*) and **ex praedis huius** (e.g. *ex praedis Caesaris nostri*) is especially evident in cases represented by stamp (10). *Figlinae Marcianae* – regardless of the meaning of '*figlinae*' – is a *figlinae* with precisely defined location, whereas '*praedia Caesaris nostri*' signifies the Emperor's landed property, an area covering tens of thousands of square kilometres around the Mediterranean. Therefore the expressions **ex figlinis M** and **ex praedis huius** cannot have the same function in the stamps.

It may be pointed out, of course, that stamp (10) is a special case. Is it not possible that the landowner's name contains also an indication of the locality if he is not an owner on the same scale as the Emperor? The answer is affirmative. But a very large proportion of the *domini* of brick stamps are members of senatorial and equestrian families, persons whose *praedia* were extensive, even if less so than those of the Emperor; parts of these *praedia*, moreover, might be located anywhere in the territory of the Empire, and in several places in the surroundings of Rome. In the second place, there are many cases where we know by name several *figlinae* of a certain *dominus*, e.g. the *figlinae* of *Seia Isaurica*: *Aristianae* (CIL 11-12), *Fabianae* (CIL 207-210), *Publilianae* (CIL 421), *Tonneianae* (CIL 651) and *Tur()* (CIL 674). If, now, the stamp tells us merely that a brick is '*de praedis Seiae Isauricae*', as, for instance, in stamp CIL 1423 (see stamps (22) on p. 60 below), we do not know from which *figlinae* of *Seia Isaurica* the brick originates, nor, apparently, did the person know for whom the text was stamped. The same is true of the expression '*de figlinis Seiaes Isauricae*', which occurs in stamp CIL 1425. The expression **ex figlinis M** (e.g. *ex figlinis Aristianis*) does not therefore contain the same information as **ex praedis huius** and **ex figlinis huius**.

Comparison of brick stamps for the early second century indicates that the words '*figlinae*' and '*praedia*' are used as follows:

- 1) '*figlinae*' and '*praedia*' are used as equivalents, without difference of meaning, when the owner of the *figlinae* (*dominus*) is conveyed;
- 2) '*praedia*' is not used in place of '*figlinae*' when the place of brick

manufacture (name of *figlinae*) is announced. — For indication of the *figlinae* owner (*dominus*) and the place of manufacture (name of *figlinae*) the following three combinations are therefore available:

- (a) **opus M ex praedis huius**
- (b) **opus M ex figlinis huius**
- (c) **opus ex figlinis M huius**

Reasons for the differences between these expressions are, on the one hand, that the words '*figlinae*' and '*praedia*' can be used interchangeably and, on the other, that the adjective **M** expressing place of manufacture (name of *figlinae*) is connected either with the brick itself or with the word '*figlinae*'. The grammatical difference between '*figlinae*' and '*praedia*' is that the adjective **M** expressing place of manufacture (name of *figlinae*) is linked as an adjectival attribute to '*figlinae*' but not to '*praedia*'.

I shall now demonstrate the truth of the foregoing in the light of fuller evidence. It cannot be statistically proved that the similar use of '*figlinae*' and '*praedia*' was a general practice, because it is impossible to define what is meant by "similarity" of two stamps. But it is possible to list an adequate number of examples. In the following pairs of stamps the words '*figlinae*' and '*praedia*' are used as equivalents; in the first stamp of each pair is the word '*figlinae*' and in the second the word '*praedia*'. The stamps of each pair are similar at least in the sense that each contains the same *figlinae* owner (*dominus*).³⁹

- | | | |
|------|--|----------|
| (11) | (a) EX FIGLINIS·DOM DOM | CIL 556 |
| | (b) EX·PR·D·D·
<i>ex praedis Domitiae Domitiani</i> | CIL 557 |
| (12) | (a) EX F L BELlici SOLLERTI
<i>ex figlinis L. Bellici Sollertis</i> | CIL 887a |
| | (b) DE·PRAEDIS·L·B·S
<i>de praedis L. Bellici Sollertis</i> | CIL 888 |

- (13) (a) SEVERO-ET-ARRIAN COS-EX- a. ?
FIGL DOM DOMIT CIL 552
Severo et Arriano consulibus, ex figlinis Domitiae Domitiani
- (b) PAET-ET-APR COS-EX-PR- a. 123
DOMITIAE DOMIT CIL 553
- (14) (a) EX F-CVSINI-MESSALINI
AP-ET-PAE-COS a. 123 CIL 957
ex figlinis Cusini Messalini; Aproniano et Paetino consulibus
- (b) EX PR CVSINI MESSALLIN CIL 958
- (15) (a) GLABRION ET TORQVATO COS EX a. 124
FIG CL CELSI CIL 395
*Glabrione et Torquato consulibus;
ex figlinis Claudii Celsi*
- (b) EX-P-CLAVDI-CELSI
AP-ET-PAE-COS a. 123 CIL 393
ex praedis Claudii Celsi; Aproniano et Paetino consulibus
- (16) (a) EX-F-CL MARCELLIN
AS II ET AQ COS a. 125 CIL 935
*ex figlinis Claudiae Marcellinae;
Asiatico II et Aquilino consulibus*
- (b) APR ET PAET COS a. 123
EX PR CL MARC CIL 934
*Aproniano et Paetino consulibus;
ex praedis Claudiae Marcellinae*
- (17) (a) TROP EX F-PL-AVG DOL CIL 701
Trophimi, ex figlinis Plotinae Augustae, doliare
- (b) L CALPVRNI-PHOEBI
EX PR PLO-AVG DOL CIL 703
(The text is completed from an exemplar found by us at Ostia)

- (18) (a) EX·FIG·DOM·LVC·OP·DOL
AELI·ALEXAD *sic* CIL 173
- (b) O DOL·EX·PR·D P·F LVC·P·A·ALEX
NIGRO ET·CAMER *a. 138*
COS CIL 172
opus doliare ex praedis Domitiae P. f. Lucillae, P. Aeli Alexandri; etc
- (19) (a) EX·FIGLINIS·DOMIT·DOMITIAN
C·GALVISI·MNESTER *sic* CIL 555
KAABEICEI
- (b) EX PR DOMIT DOM
T AVENI ATTICI (new stamp)
ex praedis Domitiae Domitiani, T. Aveni Attici
- (20) (a) EX FIGIL PLOTINAE AVG DOL
M OCI ANTIOCHI CIL 698
ex figlinis Plotinae Augustae, doliare M. Oci Antiochi
- (b) EX·PR·PLOTINAE·AVGVSTAE
DOL·P·OCI·ANTIO
CHI CIL 700
ex praedis Plotinae Augustae, doliare P. Oci Antiochi
- (21) (a) EX FIG ASINIAE QVADRATILLAE O D C NVN
NIDI FORTVNAT·LVCIO
QVADRATO COS *a. 142* CIL 861
*ex figlinis Asinae Quadratillae, opus doliare C. Nunnidi Fortunati;
Lucio Quadrato consule*
- (b) EX PR·ASINIAE QVADRATILL·OP DOL A·FLAV CIL 150
MAXIM GALLICA·ET VETER COS *a. 150*
*ex praedis Asinae Quadratillae, opus doliare A. Flavi Maximi;
Gallicano et Vetere consulibus*
- (22) (a) P·SERVILI·FIRMI OP·DE FGL *sic* CIL 1425
SEIAES·ISAVRICAE
P. Servili Firmi, opus de figlinis Seiae Isauricae
- (b) IVLI FORTVNATI DE PRAEDIS
SEIAE ISAVRICAE CIL 1423

- (23) (a) EX FIG DOM LVC O D DION DOM LV SE
SERVIANO III ET VARO COS a. 134 CIL 1030a
*ex figlinis Domitiae Lucillae, opus doliare Dionysi Domitiae
Lucillae servi; etc*
- (b) OP DOL EX PR DOMLVC DIONYS LVC
PAETIN ET APRO COS a. 123 CIL 1020
*opus doliare ex praedis Domitiae Lucillae, Dionysi Lucillae
(sc. servi); etc*
- (24) (a) T·RAV·PAMP·EX·F·P·IS
CAEPION CIL 65
*Caepioniana (sc. tegula) T. Rausi Pamphili, ex figlinis
Plotiae Isauricae*
- (b) EX PRAED·PLOTIAES ISAVRICA·CEPIONAL
T RAVSI PAMPHILI CIL 67a
*ex praedis Plotiae Isauricae, Cepionalis (sc. tegula)
T. Rausi Pamphili*
- (25) (a) EX F C·C C·C·CAEPIONANA·SEX·ALF·AM
PAETINO ET APRONIANO a. 123 CIL 99
COS
*ex figlinis C. Curiati Cosani C(), Caepion(i)ana (sc. tegula)
Sex. Alfi Amandi; etc*
- (b) EX PRAED C·C·COSAN CAEPIONIAN SEX ALFI
AMAND PAETIN ET APRONIANO a. 123 CIL 98
COS
- (26) (a) EX·FEGLINIS·ARRIAE·FAD·CAE sic S. 25
C·IVLI LVPIONIS
*ex figlinis Arriae Fadillae, Caepioniana (sc. tegula)
C. Iuli Lupionis*
- (b) EX PR ARRIAE Fadillae CAEP S. 26
C·IVLI LVpioNIS
*ex praedis Arriae Fadillae, Caepioniana (sc. tegula)
C. Iuli Lupionis*

- (27) (a) EX·FIG CAES SVBORT·Q·M·R
PONT·ET·APR a. 123 (?)
COS CIL 544

*ex figlinis Caesaris, Subortana Q. M() R(); P(ae)tino (?)
et Aproniano consulibus*

- (b) DE PR CAES SVBHOR·FL·HALOTI
APR·ET·PAET·COS a. 123 CIL 543

*de praedis Caesaris, Subhortana Flavi Haloti;
Aproniano et Paetino consulibus*

- (28) (a) EX FIG T S M O MACE NVN RESTVTI sic
SERVIANO III ET VARO a. 134
COS CIL 289

*ex figlinis T. Statili Maximi, opus Macedonianum Nunnidi Restituti;
Serviano iii et Varo consulibus*

- (b) EX·PR·STATILI MAXIMI OPVS MA
CEDON·FORTVNAT CIL 298

ex praedis Statili Maximi, opus Macedonianum Fortunati

These examples show that in the early second century the expressions **ex figlinis huius** and **ex praedis huius** in stamps were equivalent means of denoting the *figlinae* owner (*dominus*). From the table on page 56 it is seen that in early stamps the word '*figlinae*' is more common than '*praedia*', and that in course of time this position is reversed. The conclusion might be drawn that '*figlinae*' and '*praedia*' were not equivalents at the same time, but that '*figlinae*', the word in earlier use, was later replaced by '*praedia*'. This was not the case, however, as can be seen from specimen stamps with consular dates. In stamp pairs (15), (16) and (23) the word '*praedia*' occurs in the earlier stamp and '*figlinae*' in the later; in pair (21) '*figlinae*' is in the earlier stamp and '*praedia*' in the later; in pairs (25) and (27) the stamps are from the same year, '*figlinae*' occurring in one and '*praedia*' in the other. To take account of time differences, therefore, is not to alter the conclusion that it was immaterial whether the word '*figlinae*' or '*praedia*' was used to indicate the *figlinae* owner (*dominus*).

But in another matter, namely expression of the place of manufacture (name of *figlinae*), the words '*figlinae*' and '*praedia*' are not used in the same way, and are therefore not equivalents. The difference is seen in the list of expressions on page 58: (a) and (b) correspond to each other, in them the words '*figlinae*' and '*praedia*'

are equivalents. But for (c) there is no counterpart which might contain the word '*praedia*'; in the expression **ex figlinis M huius**, that is to say, the word '*figlinae*' cannot be replaced by the word '*praedia*'.

I shall expound the matter first by means of examples, and then support my assertion by more general arguments.

(29) EX FIGL MACEDO HADRIANI SEVERI
EX OFIC SYNTRO sic S. 572 = CIL 294

ex figlinis Macedonianis Hadriani Severi ex officina Syntrophii

In its more complete form, the name of the *dominus* mentioned in the stamp, as known in brick stamps and other inscriptions, is *T. Statilius Maximus Severus Hadrianus*.⁴⁰ The stamp declares all three matters: name of *officinator*, place of brick manufacture (name of *figlinae*) and name of *figlinae* owner (*dominus*). I analyse the text in order to bring to light the words used to express specific matters: in order to bring to light the words used to express specific matters:

- *officinator*: *ex officina Syntrophii*
- place of manufacture: *ex figlinis Macedonianis*
- *dominus*: *ex figlinis Hadriani Severi*

It will be noted that the word '*figlinae*' is used in two functions: 1) to express the place of brick manufacture; 2) to express the *figlinae* owner (*dominus*). The word '*figlinae*' is not repeated in the text, but the grammatical structure of the expression is such that to the word '*figlinae*' the name of *figlinae* is linked as an adjectival attribute and the name of the *figlinae* owner (*dominus*) as a genitive attribute.

In the following stamp the same matters emerge as in the previous, and the expressions are precisely the same in content in both stamps: the same *officinator*, the same place of manufacture and the same *dominus*. But the form of expression is different.

(30) EX·PR·HADRIANI MACE
OFIC·SYNTRO sic CIL 295

This text differs from the previous at two points (if inessential differences are disregarded): the word '*praedia*' occurs in place of '*figlinae*', and the names of *dominus* and *figlinae* have changed places. The words of this text can be linked to each other in more than one way, whereas the word order of the previous text allowed of only one interpretation. Dressel generally chooses the following interpretation:⁴¹

1) *ex praedis Hadriani Macedonianis, (ex) officina Syntrophii*

If the stamp maker thought of the words as interconnectable in this way, he used the word '*praedia*' in exactly the same way as the word '*figlinae*' in stamp (29): place of manufacture is expressed by the words *ex praedis Macedonianis* and *dominus* by *ex praedis Hadriani*.

A second possible interpretation is the following:

2) *ex praedis Hadriani, (opus) Macedonianum (ex) officina Syntrophii*

This is the interpretation I have previously supported, because if the stamp maker thought of the words as interconnected thus, he has used the word '*praedia*' in a different manner from the word '*figlinae*' in stamp (29). In stamp (30) matters are expressed in the following words:

- | | |
|-------------------------|--|
| – officinator: | (<i>ex</i>) <i>officina Syntrophii</i> |
| – place of manufacture: | (<i>opus</i>) <i>Macedonianum</i> |
| – dominus: | <i>ex praedis Hadriani</i> |

If the use of the word '*praedia*' here is compared with the use of '*figlinae*' in stamp (29), it will be observed that '*praedia*' is used only to express *dominus*, while '*figlinae*' is used for both *dominus* and place of manufacture (name of *figlinae*). As stated earlier, the use of the word '*praedia*' differs from that of '*figlinae*' in precisely this manner.

What evidence is there that the stamp maker imagined a combination of words for stamp (30) in the manner of 2) and not 1) – since both are syntactically possible? In this special case, when we are concerned with stamps of *figlinae Macedoniana*, light is cast on the problem by comparison of stamps. On page 62 both stamps of pair (28) are of *figlinae Macedoniana*, and in both the place of manufacture (name of *figlinae*) is expressed by the words *opus Macedonianum*, in one shortened to O MACE, in the other as OPVS MACEDON; a similar example is stamp CIL 293, which reads OP FIG MACED (= *opus figlinum Macedonianum*). In most stamps of *figlinae Macedoniana*⁴² the place of brick manufacture (name of *figlinae*) is expressed in the same manner as for stamp (29). That is to say, the adjective *Macedonianus*, *a*, *um* is linked directly to the word '*figlinae*', but in not a single *figlinae Macedoniana* stamp is the adjective linked directly to the word '*praedia*'. These facts suggest that the stamp (30) is intended to be read in the manner of 2) and not 1); in this case, therefore, as in many others, the word signifying brick itself must be understood.

A second, similar example is here given:

- (31) EX·F·CAEPION·PLOTIAE ISAVRICAЕ
FOR PECVLIARIS SER

CIL 64

ex figlinis Caepionianis Plotiae Isauricae,
(ex) fornace Peculiaris servi

- (32) EX·PR PLOT ISAVRICAЕ CEPIONA sic
EX·FVR·PECVLIARIS sic CIL 63

ex praedis Plotiae Isauricae, Caepioniana (sc. tegula),
ex fornace Peculiaris

Stamp (31) can be read only in the manner shown, because the adjective *Caepionianus*, *a*, *um* is linked directly to the word '*figlinae*', i.e. a word is marked in the text which is clearly the word qualified by the adjective. But in stamp (32) the words can be linked to each other in a further manner, and this is chosen by both Dressel and Bloch⁴³ namely:

ex praedis Plotiae Isauricae Caepionianis, ex fornace Peculiaris

The fact that the stamp maker intended stamp (32) to be read in the first manner presented by me and not in that chosen by Dressel and Bloch may also be noted in the *figlinae Caepionianae* case by comparison with other stamps of the same *figlinae*⁴⁴. In specimen stamp (9) on page 56 the adjective appears as first word of the text in the form CAEPIONIANA, and the only possible interpretation therefore is (*tegula*) *Caepioniana*. In other *figlinae Caepionianae* stamps too the adjective appears as first word of the text, so that the interpretation *tegula Caepioniana* (or generally **opus M**) must be chosen. Such stamps are, in addition to those mentioned, CIL 53 and 55, the specimen stamp (7) on page 54 above. See also my comment on the reading of stamp (vi), p. 34 above. In other respects too the place of manufacture (name of *figlinae*) is expressed in the same way as in *figlinae Macedonianae* stamps: the adjective is linked directly to the word '*figlinae*', but not to the word '*praedia*'.

The third example, which I shall now present, is one in which the place of brick manufacture (name of *figlinae*) is expressed in a manner so unambiguous that there is no room for different interpretations. The names of persons appearing in the stamps are in their complete form as follows *officinator*: *P. Servilius Firmus* (*Fyrmus*); *dominus*: *Q. Aburnius Caedicianus*.

- (33) EX·PR·AB·CAE·FYR
PAET·ET·APRON·COS a. 123 S. 175
ex praedis Aburni Caediciani, (opus) Fyrmi;
Paetino et Aproniano consulibus
- (34) EX·F·TEMP·ABVR CAED TEG SER FYRMI
PAETIN·ET APRONIANO a. 123 S. 172
COS
ex figlinis Tempesinis Aburni Caediciani, tegula Servili Fyrmi;
Paetino et Aproniano consulibus
- (35) TEG TEMP SER FIR EX P AB CE S. 177 = CIL 234
VERO·III·ET AMBIBVL COS a. 126
tegula Tempesina Servili Firmi, ex praedis Aburni Caediciani;
Vero III et Ambibulo consulibus

In stamp (33) only two matters are expressed, the names of *offinator* and *dominus*; the place of brick manufacture (name of *figlinae*) is not mentioned. The word signifying the brick itself must be understood, because the name of *offinator* needs a head word. — In stamps (34) and (33) all three matters are declared: name of *offinator*, place of manufacture (name of *figlinae*) and name of *dominus*, and these are the same in both stamps: the texts are therefore the same in content. In form of expression, however, the texts differ, and in exactly the same manner as the stamps in the two previous examples. But stamp (35) can now be interpreted in one way only. The expression is unambiguous because the word '*tegula*', meaning the brick itself, is marked on the stamps and need not be supplied. (Even without '*tegula*' stamp (35) would be unambiguous: its word order is such that the adjective *Tempesinus*, *a*, *um* cannot be linked to the word '*praedia*'.) If the order of components is made the same as in earlier examples, the following general forms are obtained for the texts:

- (33) **opus illius, ex praedis huius**
(34) **opus illius, ex figlinis M huius**
(35) **opus M illius, ex praedis huius**

By means of the specimen stamps two facts are noted regarding stamps of the early second century:

1) For the place of manufacture (name of *figlinae*) two alternative means of expression are used: the adjective (**M**) expressing name of *figlinae* is linked either to the word '*figlinae*' (**ex figlinis M**) or to the word signifying the brick itself (**opus M**); these means of expression are the

same as in first century stamps (see p. 49 above), in this respect those of the second century contain nothing new. The substantive meaning the brick itself is usually missing from the text, so that the detached adjective must be interpreted as substantivally employed, e.g. CAEP = *Caepioniana* = "brick made in *figlinae Caepionianae*"; MACE = *Macedonianum* = "brick made in *figlinae Macedonianae*" etc.

2) The word '*figlinae*' is used for both place of manufacture (name of *figlinae*) and name of *dominus*, but '*praedia*' is used only for name of *dominus*. '*figlinae*' is therefore used in three combinations: **ex figlinis M**, **ex figlinis huius** and **ex figlinis M huius**, while '*praedia*' is used in one combination only: **ex praedis huius**. Of these combinations only **ex figlinis M** occurs in first century stamps; thus in the stamps of the second century the name of *dominus* (**huius**) and the word '*praedia*' appear as new features.

The formal difference between the words '*figlinae*' and '*praedia*' proves to be that they are placed differently in stamp texts in relation to the adjective (**M**) expressing place of manufacture (name of *figlinae*). Because stamp texts are extremely elliptical, with words shortened, syntactical stops missing and the word signifying the brick itself generally omitted, the reader of stamps has less chance of verifying in what manner the composer intended words to be linked together than if he were concerned with a normal text. The only recourse is to examine the placing of words in relation to each other. Let us suppose that a substantive and a proper name linked to it as an adjectival attribute form such a close unit of words that only in exceptional cases is another word placed between them. The matter may then be examined statistically: adjectives (**M**) are attributes of the word '*figlinae*' if they are placed immediately next to (after) the word '*figlinae*'; they are attributes of the word '*praedia*' if placed immediately next to (after) the word '*praedia*'.

I shall now show the placing of '*figlinae*' and '*praedia*' in relation to the adjective (**M**) expressing place of manufacture (name of *figlinae*) in cross-tabulated form. In the Table appear all stamps containing the adjective, grouped on the one hand according to the occurrence of '*figlinae*' and '*praedia*', and on the other according to their position in relation to the adjective. A dot signifies that the case is logically impossible.

Position of the adjective expressing place of manufacture in relation to the words 'praedia' and 'figlinae'

Text type Position of the adjective		Occurring in stamp				Total
		'praed' but not 'figl'	'figl' but not 'praed'	both 'praed' and 'figl'	neither word	
adj. linked directly to word	'praedia'	10	.	1	.	11
	'figlinae'	.	146	127	.	273
adj. not linked directly to either word		86	49	0	161	296
Total of stamps containing the adjective						580

The Table shows very clearly that the adjective 'behaves' in different ways to the words 'figlinae' and 'praedia'. From the right-hand column it will be seen that in 273 stamps the adjective is linked directly to the word 'figlinae' and in 11 stamps directly to the word 'praedia'; this difference is significant, especially when it is noted that 'praedia' occurs more commonly in the stamps than 'figlinae'. From the same column it is seen that the most common case is one in which the adjective is not linked directly to 'figlinae' or 'praedia'. Examples of this are stamps (4), (7), (9), (32), (35) above. Especially communicative are the figures of the central column: if a stamp contains both 'figlinae' and 'praedia' the adjective 'chooses' 'figlinae' in all but one case. This is typical of late second century stamps, which I shall examine later.

Examination of specimen cases and statistics has now led to the result that the adjective (**M**) expressing place of manufacture is linked to the word 'figlinae' but not to the word 'praedia' (except for 11 special cases to be examined later). My interpretation of this result is that the adjectives are merely names of *figlinae*, i.e. the *praedia* have no names, but the *figlinae* have names. Even when an adjective occurs detached in the text, substantively employed, as 'the name of the brick' (e.g. (*opus*) *Macedonianum*, (*tegula*) *Tempesina* etc), its origin is the name of *figlinae* in the sense that the name of *figlinae* is transferred to the product made in that *figlinae*.

I shall now give an example of Dressel's interpretations; the case is one in which his error can be noted by comparison of stamps. The stamps are as follows:

ex praedis Faustinae, opus doliare a Calpetano Verna

*opus doliare ex praedis Augustorum duorum nostrorum,
figlinis Favorianis, (a) Calpetano Verna*

*ex praedis Faustinae, opus doliare a Calpetano Crescente
qu.r.tl.a.(?)*

*opus doliare ex praedis Augustorum duorum nostrorum,
figlinis Favorianis, a Calpetano Crescente*

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I shall now examine separately the 11 stamps in which the adjective is linked directly to the word '*praedia*'. The conclusion reached earlier, that the adjectives are merely the names of *figlinae*, does not hold good here. The stamps are:

- | | | |
|----------|---|--------|
| CIL 542 | D P·SVB·ORTA
IMP·CAE·NE·T·AVG
GER·DAC·Q·C
L·LAB·BARS | |
| CIL 530 | APR·ET·PAE COS·EX·PR·SABIN
EX·OF·CL·FRON
SAL | a. 123 |
| CIL 9 | OP DOL EX PR AIACIA ARVL EPAGATH
MAXIM ET AVIT COS | a. 144 |
| CIL 10 | EX·PR·AIACIANIS·OP·DOL
EX·OF·CAL·PRIMIT | |
| CIL 462b | EX PREDIS QVINTANESIB
AGATHYRSVS AVG LIB
F | sic |
| CIL 279 | OP FIG DOL EX PRAED LIC DOMINI N
L SEPTIMI SEVERI AVG | |
| CIL 142 | FVNDVM SILIANI SERVILI PROCE
SSI PRAEDIA CENTVRION | |
| CIL 541a | OPVS DOL EX PRED STATON COMM AVG
DOMIN N EX FIG MADISP | sic |
| CIL 14 | EX PRAEDIS ASTIVIANIS | |
| CIL 137 | OP·F·EX·PR·CANINIANI·SERG
SVLPICI·SERVANDI | |
| S. 148 | L·V·VAL EX PRAE SALARE. . .
PAETIN APRONIA
COS | a. 123 |

I briefly comment upon these stamps:

CIL 542: the beginning is completed as *de praedis sub Orta imperatoris* etc. To the word '*praedia*' a prepositional expression is actually linked. The words SVB·ORTA, which in this stamp are best interpreted as a prepositional expression, occur in other stamps more clearly in adjectival form, e.g. in stamps (27) (p. 62)

ex figlinis Subortanis or *Subortanum* (sc. *opus*).⁴⁸

CIL 530: Dressel completes the end of the first line as *ex praedis Sabinis*, but adds that SABIN may also signify a person's name (name of *dominus*), *Sabinus* or *Sabina*. *Domini* mentioned in brick stamps who would fit this particular stamp are *Larcia Sabina* (CIL 1235–1236), whom Dressel also mentions, *Sabina Sabinilla* (CIL 354) and the Empress Sabina (S. 144–145). Since the latest discoveries appear to show that the Empress Sabina actually appears as *dominus* of brick stamps,⁴⁹ it is probable that in CIL 530 SABIN is in fact an abbreviation of her name. The correct choice would be *ex praedis Sabinae*, and we should encounter a similar case to the '*praedia Favoriana*' explained earlier.

CIL 9 and 10: Dressel considers it possible⁵⁰ that the *praedia Aiaciana* mentioned in these stamps has received its name from *Vibius Aiacianus*, who appears as *dominus* in stamps CIL 1500, 1503 and 1504. It may be assumed that the adjective *Aiacianus* in these stamps replaces the name of a person in the genitive; '*praedia Aiaciana*' would be an expression of the same kind as '*bona Plautiana*'. Such use of an adjective may indicate that *Vibius Aiacianus* has died and that his landed property, '*praedia Aiaciana*', has been undivided at the time that stamps CIL 9 and 10 were made.⁵¹

CIL 462 and its variant CIL 463: The *praedia Quintanensia* mentioned in the stamp is known also from other sources.⁵² The adjective *Quintanensis* occurs in several stamps.⁵³ In none of them is it linked directly to the word '*figlinae*', and it is therefore merely the name of a *praedia*.

CIL 279: *Praedia Liciniana* or *Licinianum* (sc. *praedium*) is a similar case to *praedia Quintanensia*. The adjective occurs in 17 stamps, generally without a head word, in the following abbreviations: DE LICINI, DE LICIN, DE LIC, DL⁵⁴; only in CIL 279 does the adjective have a head word, which is '*praedia*'. Mentioned in CIL 139, 226, 408 and 630 is *port(us) Licini*, which is best explained as the name of a river harbour. Possibly the name of *praedia Liciniana* is derived from that of *portus Licini*.

CIL 142 and 541: *Praedia Centurion(ica?)* and *praedia Statoniensia* are similar cases to the two preceding. These adjectives occur only in these stamps.

CIL 14: The adjective *Astivianus*, *a*, *um* is linked in this stamp directly to the word '*praedia*'; in CIL 13 the same adjective is linked directly to the word '*figlinae*'. In the CIL XV list of text types Dressel presents this case as an example of the fact that the adjectives are linked both to the word '*figlinae*' and the word '*praedia*'.⁵⁵

CIL 137: In this stamp the adjective *Caninianus*, *a*, *um* is linked directly to the word '*praedia*', in 16 stamps it is linked directly to '*figlinae*' and in one it is linked to neither.⁵⁶ In the other stamp (CIL 136) of *offinator Serg. Sulpicius Servandus*, who appears in CIL 137, *praedia Caniniana* is replaced by *figlinae Caninianae*. In this case the anomalous stamp CIL 137 may be explained as a mistake of the stamp maker.

S. 148: The adjective *Salarensis*, *e*, which in this stamp is linked directly to the word '*praedia*', is in other stamps detached without a head word; in not a single stamp is it linked directly to the word '*figlinae*'.⁵⁷

In the late second century a new analytic text type becomes general which does not cause such problems of interpretation as the synthetic texts of the early second century. The analytic character may be seen from the following points, which can be compared with points 1) and 2) on pages 66–67 above.

1) The place of brick manufacture (name of *figlinae*) is expressed in one manner only, by linking the adjective expressing the place to the word '*figlinae*': **ex figlinis M**.

2) The word '*figlinae*' is used with only one function, namely to express the place of brick manufacture: **ex figlinis M**; to indicate *dominus* only the word '*praedia*' is used: **ex praedis huius**.

In each stamp, therefore, occurs both '*figlinae*' and '*praedia*'; the frequency of this text type is shown by the figures in the central column of the Table on page 68.

The following stamp is an example of an analytic text:

(36) EX PR FAVSTINAE AVG EX FIC CANINIA sic
 OP DOL BRITTIDI PRISCINI CIL 133
ex praedis Faustinae Augustae, ex figlinis Caninianis, opus doliare Brittidi Priscini

The text is unambiguous although syntactical stops and word endings are absent. The reason for the lack of ambiguity is that the words '*praedia*' and '*figlinae*' both occur, each in its own function, and in addition the words '*opus doliare*' signifying the brick itself are marked in the text. The three matters are expressed as follows:

– officinator:	opus illius
– place of manufacture:	ex figlinis M
– dominus:	ex praedis huius

The matters expressed are the same as in early second century texts (those, that is to say, in which all three matters are expressed), but the form of expression is different. The difference in use of the words '*praedia*' and '*figlinae*', whose detection in earlier synthetic texts made analysis of the texts necessary, is now clearly apparent. Similarly with the difference between stamps of the first and second centuries: from the first century stamp (3) (p. 49) the *dominus* portion (**ex praedis huius**) is missing, but other matters are expressed in both stamps in the same way.

The analytic expression **opus ex praedis huius, ex figlinis M** is evidently quite the same in content as the synthetic expressions **opus M ex praedis huius, opus M ex figlinis huius, opus ex figlinis M huius**; all contain two matters, place of manufacture (name of *figlinae*) and name of *dominus*, expressed in different ways.

It may be deduced from this that in stamp (36), for instance, *dominus* is the owner of both *praedia* and *figlinae* although his name is a genitive attribute of the word '*praedia*' only. It appears from the stamp, that is, that *figlinae Caniniana* belongs to the *praedia* of the Empress Faustina, or is located in them. This accords with what was previously noted with regard to the similar use of '*praedia*' and '*figlinae*' in early second century stamps. The two words are equivalents in the expression of *dominus* for the undoubted reason that *figlinae* was located in *praedia*, the owner of *figlinae* and *praedia* being the same.

If the words '*praedia*' and '*figlinae*' are used with the same meanings in analytic as in earlier synthetic stamp texts, then *praedia* and *figlinae* mentioned in the same stamp must have the same owner. That this is so is not as clearly visible in all stamps as in (36). In the following stamp, for instance (whose textual omissions and scriptural errors will be corrected).

(37) O DO EX FAVST AVG FIG RANINIANAS *sic*
 RVTILI SVCESSI *sic* CIL 134
opus doliare ex (praedis) Faustinae Augustae, figlinis Caninianis, Rutili Successi

the text differs from the preceding one only in the transfer of the words '*opus doliare*', signifying the brick itself, from before the name of *officinator* to the beginning of the text, but this is enough to make the stamp ambiguous. The problem is the same as with the first century stamp (5) (p. 52): should there be a comma before the name of *officinator* or not? If the comma is omitted, *Rutilius Successus* is the owner of *figlinae Caniniana*; if the comma is added, *Rutilius Successus* is merely the 'owner' of the brick. Comparison with the preceding and following stamps readily indicates that the composer of the text intended it to be arranged with a comma before the name of *officinator*, meaning that *Rutilius Successus* is not the owner of *figlinae Caniniana* but the 'owner' of the brick. The owner of *figlinae Caniniana* remains the Empress Faustina.

The following stamp is again unambiguous, although the words '*opus doliare*' signifying the brick itself are in a different position from the positions they occupy in the two previous texts:

(38) EX PR LVCIL VERI OP DO·EX·FIG
 CAN·VIBI PVDES S. 41
ex praedis Lucillae Veri, opus doliare ex figlinis Caninianis, Vibius Pudens (fecit)

This is unambiguous because the *cognomen* of *officinator* is written in full, so that the syntactical position of the name of *officinator* is seen from the case ending; the name of *officinator* is the subject of the sentence in the same way as in the first century stamp (1b) (p. 47). This text too cannot be interpreted as showing that

Vibius Pudens is the owner of *figlinae Caninianae*.

In some stamps the word '*figlinae*' seems to occur without an adjective expressing place of manufacture (name of *figlinae*). These stamps are more difficult to explain than the preceding ones. Here, for instance

- (39) EX·PRAE·MAGIAE·MARCELLAE
FIGVL·ORTENSI·PROCL CIL 1259

Dressel completes the second line as *figulinis Ortensi Procli*. If this is correct, then *praedia* and *figlinae* have different owners. In this case, too, the text can be completed in another way which preserves the consistency of the expressions.

The abbreviations F, FIG, FIGL, FIGVL etc in stamps do not indicate the word '*figlinae*' alone, but may also signify (when not preceded by the preposition *ex* or *de*) the words '*figlinum*' (= *opus figlinum*), '*figlinator*' or '*figulus*'.⁵⁸ In the following stamp, for instance

- (40) OPVS DOL EX PRAED AVGG NN FIGL
MARCIAN FIGL AEL FELIX CIL 324

the only possible completion on the second line is *figlinator Aelius Felix*. The word '*figlinae*' cannot be considered because of FIGL MARCIAN (= *figlinis Marcianis*) earlier in the text; '*figlinum* (*sc. opus*)' does not fit because the name of *officinator* is in the nominative.

In the following stamp again

- (41) OPVS DOL EX PRAED AVGG NN FIGL
MARCIAN FIGL A CAL MAXM CIL 325

the only possible completion on the second line is *figlinum* (*sc. opus*) *a Calventia Maximina*. The word '*figlinae*' cannot be accepted for the same reason as in the previous case, nor can '*figlinator*'/'*figlinatrix*' because the name of *officinator* appears in a prepositional construction used with a genitive function. The letter A, moreover, signifies the preposition and not the *praenomen Aulus* because the *officinator* is a woman (her name occurs unabbreviated in stamps CIL 214–216).

Correspondingly, stamp (39) can now be completed in such a form as not to contain the information that *praedia* and *figlinae* have different owners, e.g.: *ex praedis Magiae Marcellae, figulinum* (*sc. opus*) *Ortensi Procli*. There are four more similar cases in the stamps, CIL 416, 769, 1092 (= S. 282) and 1466.

Remaining in the material are four stamps which can only be interpreted in the sense that *praedia* and *figlinae* have different owners.⁵⁹

The following is one of them:

(42) OP·DOL·EX·P·DOM·LVC·EX
FIG·QVARTIONIS

CIL 1063

opus doliare ex praedis Domitiae Lucillae, ex figlinis Quartionis

The word '*figlinae*' cannot now be replaced with the words '*figlinator*' and '*figlinum*'. In the following stamps the same persons appear as in the preceding: *Domitia Lucilla* and *Quartio* (who is evidently the slave of *Domitia Lucilla*); but another picture is given of the proprietary relationships of *figlinae*.

(43) EX FIGLINIS LVCILLAES
QVARTIONIS

CIL 1064

ex figlinis (Domitiae) Lucillae, (opus) Quartionis

(44) QVARTIONI OPVS·FIG[
EX PR DOM·LV[

Steinby 1974, p. 101 no. 9.

Quartionis opus figlinum. . .
ex praedis Domitiae Lucillae. . .

In these stamps *Quartio* does not own a *figlinae*, but *Domitia Lucilla* owns both *figlinae* and *praedia*.

These stamps cannot be explained by ascribing the same meaning to '*figlinae*' in all cases. Stamps (43) and (44) form a similar pair to those listed on pages 58–62; in these the words '*figlinae*' and '*praedia*' are used as equivalents in a connection where it is immaterial which of the two is used. In stamp (42), on the other hand, the words '*figlinae*' and '*praedia*' are used to express different matters. Stamp (42), which does not fit the picture, could be explained as a maker's error, particularly as only one specimen of it is known, but this explanation would not fit the three other stamps of the same type. The only explanation left is that in these four stamps the word '*figlinae*' is used in the sense of '*officina*'. Although all these stamps are late it cannot be argued from them that '*figlinae*' gradually assumed the meaning of '*officina*', because in the latest stamps, after the 'empty period' of the third century, only the word '*officina*' appears, and '*figlinae*' has disappeared.

The subject-matter of brick stamp texts is so simple that the persons for whom the message was intended understood it from a very scanty text. Name of *officinator*, place of manufacture (name of *figlinae*) and name of *dominus* were clearly conveyed if proper nouns and the words '*figlinae*' and/or '*praedia*' were present; word order mattered little and inflectional endings not at all. The maker of stamps had no need to be careful with regard to his ancient readers, but the way he acted caused difficulties for later students.

5. A Case Study: the *figlinae Caepionianae*

The stamps of *figlinae Caepionianae* illuminate the meaning of the word '*figlinae*' in the same way as the stamps of *figlinae Marcianae*. For this reason I have chosen them as an illustration. They contain abundant data and provide more opportunities for deduction than is normal; they are not, in fact, a typical group of Roman brick stamps. – Dressel and Bloch place 78 stamps under the *figlinae Caepionianae* heading.⁶⁰ The earliest are from the late first century and the latest is from after the year 138.

Because the stamps are from the second century the name of the owner of *figlinae* (*dominus*) is also mentioned in them. Relations of possession are thus reflected in *figlinae Caepionianae* stamps more fully than in the first century stamps of *figlinae Marcianae* which were examined earlier.

The history of *figlinae Caepionianae* ownership is as follows:⁶¹ About the year 100 the *figlinae* had two owners, *Plotia Isaurica* and *C. Curiatius Cosanus*. Subsequently, but at the same time as the former, *Arria Fadilla*, mother of the later Emperor Antoninus Pius, appears as owner of *figlinae Caepionianae*. About the year 115 the share of *Plotia Isaurica* is transferred to *Arria Fadilla*; *Cosanus* retains his share until the year 123, after which his name disappears from the stamps and is replaced by *Ti. Tutinius Sentius Satrinus*. After the year 130 the only owners encountered in stamps are the son of *Arria Fadilla*, who used the names *Arrius Antoninus* and *Fulvus Antoninus* before he became Emperor, and her daughter *Arria Lupula*.

Figlinae Caepionianae therefore had at least two owners at once, sometimes three. In the year 123 at any rate there were three, because the names of the consuls of that year are mentioned in stamps of *Arria Fadilla*, *Curiatius Cosanus* and *Sentius Satrinus*.

How are complicated proprietary relationships to be explained? What did these persons own? If we start from the meaning '*figlinae*' = 'brickworks' we encounter great difficulties of explanation: either there were several manufactories of the same name or the same manufactory was owned by several persons at the same time. I shall examine only the latter alternative, because it alone gives opportunities for further deductions. We are faced with a question of collective ownership (*societas*), of which many examples are known from brick stamps (see p. 113 below). *Societas*, however, is a poor explanation in the *figlinae Caepionianae* case, because in each stamp only one owner is mentioned and not all contemporaneous owners, as might be expected.⁶² If, on the other hand, '*figlinae*' is 'manufactory', then *societas* is not only collective ownership but also collective enterprise. It is difficult to understand why persons of the senatorial order should have practised commercial activities in such forms (among the owners of *figlinae Caepionianae* *Arria Fadilla*, *Arrius Antoninus* and *Arria Lupula* at least were of this order, and probably others also).

Dressel observed the difficulties and therefore arrived at the explanation that the adjective *Caepionianus*, *a*, *um* refers not to *figlinae* but to *praedia*: the *figlinae* of the *domini* mentioned in stamps were located in *praedia Caepioniana*.⁶³ This explanation is poor because *figlinae Caepionianae* but not *praedia Caepioniana* is mentioned in the stamps. Dressel's explanation shows that he had in mind the meaning '*figlinae*' = 'brickworks', in other words he supposed that the word '*figlinae*' refers to the production organization, an administrative whole and not merely a territorial whole.

All difficulties vanish if we accept 'clay district' as the meaning of '*figlinae*'. There was only one *figlinae Caepionianae*, and each *dominus* had his own *praedia*. The boundaries of these *praedia* intersected at *figlinae Caepionianae*. Each *dominus* had a part of *figlinae Caepionianae* on his *praedia*. *Figlinae Caepionianae* contained several *officinae* in which bricks were made from the clay of *figlinae Caepionianae*. The *officinatores* of the stamps were "directors" of these *officinae*. In their stamps they mentioned not only their own names but also those of *figlinae Caepionianae* and the person on whose land they produced bricks. By this explanation *figlinae Caepionianae* is neither an administrative nor a production unit but merely a territorial entity.

Our mental picture of *figlinae Caepionianae* is clarified by additional epithets which occur in some stamps.⁶⁴ In CIL 106 (= S. 36) the words "*ab Euripo*" are joined to the name of *figlinae Caepionianae*; in CIL 107-110 and S. 37 "*ab Euripo*" occurs without that name. A similar addition linked to *figlinae Caepionianae*, in Dressel's view, is "*a Pila Alta*", which occurs in CIL 111. Other expressions which clearly indicate a place and are closely linked to *figlinae Caepionianae* are "*Caricet()*" (stamps CIL 101 and 102 (= S. 34)) and "*de Mulionis*" (stamps CIL 338-340). *Figlinae Caepionianae* was evidently an extensive area. It stretched in one direction to a canal (*euripus*) and in another to the area of a high column or embankment (*pila alta*). Sub-areas later became independent and were no longer regarded as parts of *figlinae Caepionianae*, but as *figlinae* in their own right. In the latest stamp (CIL 110) in use after the year 138 (Antoninus is already Emperor) the place of brick manufacture is merely "*figlinae ab Euripo*"; in CIL 338, a stamp of about the same time, the place of manufacture is "*figlinae Mulionis*". It may be imagined that clay digging and brick making gradually ceased in the central area of *figlinae Caepionianae*, but that activities continued in bordering areas.

Dressel and Bloch do not interpret the letter combinations CARICET and CARC[, which occur in the stamps, in the manner introduced earlier, but assume that the combinations contain the name of a person.

The stamps are as follows:

CIL 101 EX PRAED CVRIAT COSANI CARIC ET
 T RAVSI PAMPHIL

CIL 102 = S. 34 T·R·P·EX·FIG CARÇ[
 ·C·C·C[

The interpretations of Dressel and Bloch are:⁶⁵

CIL 101 *ex praedis Curiati Cosani, Caric(i?) et T. Rausi Pamphili*
CIL 102 *T. Rausi Pamphili, ex figlinis Car(i)c(i. . .) C. Curiati Cosani*

According to this interpretation a person named *Caricus* appears in the stamps, in CIL 101 as *offinator* with *T. Rausius Pamphilus*, and in CIL 102 as *dominus* evidently with *C. Curiatius Cosanus*. Such a situation is highly improbable, however, because the *offinatores* and *domini* of brick stamps form two non-overlapping categories, the same person not appearing in stamps as both *offinator* and *dominus* (see p. 92 below). Matters are made still more improbable by the fact that *Caricus* would in both cases be a partner of a *societas*.

It is therefore better to explain CARICET and CARÇ[as place names of the same nature as "ab Euripo", "a Pila Alta" and "de Mulionis". This interpretation is also supported by comparison of the stamps; the preceding specimens may be compared with the following:

CIL 67a EX PRAED·PLOTIAES ISAVRICA·CEPIONAL
 T RAVSI PAMPHILI

CIL 86 T·R·P EX FIG CAEPIONIA
 NIS·A·F

T. Rausi Pamphili, ex figlinis Caepionianis Arriae Fadillae

The stamps correspond to each other in pairs, on the one hand CIL 101 and CIL 67a, and on the other CIL 102 and CIL 86.⁶⁶ Among text components the name of *offinator*, *T. Rausius Pamphilus*, remains constant in all stamps; the other components are variables: *dominus*: *C. Curiatius Cosanus* – *Plotia Isaurica* – *Arria Fadilla*; name of place of manufacture: *Caricet*/*Carc* – *Cepional*/*Caepionianis*. The correspondence of place names is quite clear: the word CARICET corresponds to the word CEPIONAL and the word CARÇ[corresponds to the word CAEPIONIANIS. It is so clear, indeed, that the words CARICET and CARÇ[might be suspected as errors by the stamp maker.

I shall still examine stamps CIL 338–340, in which the place of manufacture is expressed by the words EX FIG MVLIONIS, DE MVL and D MVLIONIS. Dressel did not place these stamps among the stamps of *figlinae Caepionianae*, but the connection between them and the latter is extremely clear. In all three stamps at least one person is mentioned who appears also in *figlinae Caepionianae* stamps. The *dominus* of CIL 339 is *Plotia Isaurica*, the first known owner of *figlinae Caepionianae*. *Avienus Hality* (), mentioned in the same stamp as *officinator*, may also appear in the following *figlinae Caepionianae* stamp which has only recently been published complete:⁶⁷

EX PR SENTI SATRIANI CAE

A·A·H

The second line of CIL 339 containing the name of *officinator* reads as follows: AB AVIENO HALITY. If A.A.H is an abbreviation of the words *ab Avieno Hality*, which is not improbable, then both persons of CIL 339 appear also in *figlinae Caepionianae* stamps. – “*De Mulionis*” stamp CIL 340 contains one name: the person mentioned is *M. Bassus* (= *Statius Marcius Bassus*), who was *officinator* in *figlinae Caepionianae* in the time of both *Plotia Isaurica* and *Arria Fadilla* (see below p. 144 no. 33).

The most interesting and problematical person appearing in these stamps is *dominus* of CIL 338, *Iulia Lupula* (the name appears in the form IVLIAE LXPVLAE), whose connection with *figlinae Caepionianae* went unnoticed by Dressel and Bloch.

Iulius Capitolinus mentions at the beginning of his biography of Antoninus Pius⁶⁸ the following relations of the Emperor: mother, *Arria Fadilla*, step-father Iulius Lupus and step-sister *Iulia Fadilla*. *Arria Fadilla* had therefore, evidently after the death of the Emperor's father T. Aurelius Fulvus,⁶⁹ contracted a new marriage with Iulius Lupus.⁷⁰ Born of this marriage was a daughter for whom Capitolinus uses the name *Iulia Fadilla*. In a brick stamp published by Bloch in 1958⁷¹ this person appears with the name *Arria Lupula* as *dominus* of *figlinae Caepionianae*. If account is taken of the many connections between stamps of *figlinae Caepionianae* and “*de Mulionis*” noted earlier, *Iulia Lupula*, *dominus* of stamp CIL 338, may also be identified as this daughter of *Arria Fadilla* and step-sister of the Emperor.

A capricious use of name by the Emperor's sister strikes our attention: in each document she has a different name formed from various combinations of the names of her parents. Such vacillation is common, however, among senatorial families of the second century. The name occurring in stamp CIL 338 is composed merely from the names of the father of *Iulia Lupula* and gives no indication of the close relationship between *Iulia Lupula* and the Emperor Antoninus Pius.⁷²

The later history of the ownership of *figlinae Caepionianae* may now be particularized as follows: About the year 130 the whole of *figlinae Caepionianae*

belonged to the lands of *Arria Fadilla*. That part, among others, to which the words "*de Mulionis*" refer had been transferred to her from *Plotia Isaurica*, and that part to which the words "*ab Euripo*" refer was transferred from *Ti. Tutinius Sentius Satrinus*. The landed property of *Arria Fadilla* was divided on her death between her son and daughter. That part of *figlinae Caepionianae* to which "*de Mulionis*" belonged became the property of the daughter, *Iulia Lupula* (*Arria Lupula*, *Iulia Fadilla*), while the part containing "*ab Euripo*" became the property of the son, *Arrius Antoninus* (*Fulvus Antoninus*). Another possibility is that the "*ab Euripo*" part was transferred directly from *Ti. Tutinius Sentius Satrinus* to *Arrius Antoninus* after the death of *Arria Fadilla*. This is suggested by the words of CIL 1427 EX FIG QVAE FVE SEN SATR (= *ex figlinis quae fuerunt Senti Satrini*), the year being 134, and on the other hand by the fact that the dated stamps of *Arrius Antoninus* are from 134. It may be assumed that in early 134 *Sentius Satrinus* had been dead only a short time and that the land left by him was not yet divided; this situation would be reflected by stamp CIL 1427. Later the same year the property of *Sentius Satrinus* would have been divided and part of it transferred to *Arrius Antoninus*.⁷³

Location of figlinae Caepionianae

Roman brick stamps contain little information on the whereabouts of *figlinae* mentioned by name; it has been possible to locate only two or three with reasonable certainty. With reference to *figlinae Caepionianae*, Huotari, who to my knowledge has studied the location of *figlinae* most extensively, alludes only to an inscription of *Curiatius Cosanus* found in Ameria and makes no further suggestion.⁷⁴ I shall now present data which connect *figlinae Caepionianae* with the region of the present-day town of Orte, situated near the confluence of Tiber and Nera.

Among the *domini* of *figlinae Caepionianae* *C. Curiatius Cosanus* is known, apart from brick stamp references, only from three inscriptions all connected with the town of Ameria. His letter sent in the capacity of *curator municipii Caeretanorum* to the decurions of Caere⁷⁵ is dated in Ameria on 12th September 113. An altar has been found at Ameria whose inscription states that it was set up to Fortuna by decision of the decurions "*ob munificentiam Curiati Cosani*".⁷⁶ A third inscription⁷⁷ is fragmentary, with only the *cognomen* preserved, but in this too the same person is possibly mentioned. In inscriptions of Ameria there appear two other *C. Curiatii*, who may be freedmen of *Curiatius Cosanus*.⁷⁸ These data indicate that *C. Curiatius Cosanus* was a man of note in Ameria, which means that he owned a great deal of land in its territory. The date of the letter is compatible with what we know of the history of owners of *figlinae Caepionianae* (see p. 76 above). Marini already connected these three inscriptions with the *C. Curiatius Cosanus* mentioned in brick stamps.⁷⁹

The left bank of the Tiber near the present-day town of Orte belonged to the territory of Ameria at the period of the *figlinae Caepionianae* stamps,⁸⁰ the Tiber formed the boundary between the territories of Horta and Ameria.

In the territory of Ameria near the left bank of the Tiber has been found a monument to *Cassia Vener[ia]*, said in the inscription to have been raised by *Doris*, a *liberta* of the deceased.⁸¹ This *Doris* might be the same person as *offinator Cassia Doris*, who appears in brick stamps CIL 73–75. In CIL 73 and 74 the name of *figlinae Caepionianae* is mentioned, also *Arria Fadilla* as *dominus*; CIL 73 has the consular date of 124.

Among the *nomina* of *figlinae Caepionianae officinatores* appearing in the Ameria inscriptions of CIL XI are *Alfius*, *Avienus*, *Pettius* and *Travius*.⁸² Appearing as *offinatores* in brick stamps are *Sex. Alfius Amandus* (CIL 98, 99, 104, 111), *Avienus Halitus* () (see p. 79 above), *Pett(ius) Proculus* (CIL 90, 95; S. 31, 32) and *T. Travius Felix* (CIL 235, 338, 383). *Avienus Halitus* () and *T. Travius Felix* declare DE MVL and FIG MVLIONIS as the place of manufacture for their bricks, while the other stamps bear the name of *figlinae Caepionianae*.

A third connection between *figlinae Caepionianae* and the Orte area is provided by the *Statii Marcii* and *C. Satrinii*, *offinatores* of the "figlinae Marcianae group". As I shall recount later in the history of the *Statii Marcii* (p. 126–127 below), the last *offinatores* bearing that name are encountered in *figlinae Caepionianae* and *figlinae Subortanae*, *St. Marcius Lucifer* and *St. Marcius Bassus* in the former and *St. Marcius Fortunatus* in the latter. If it is assumed that the *Statii Marcii* did not move geographically far from each other, then *figlinae Caepionianae* was located near *figlinae Subortanae*. Some degree of proof that at least *St. Marcius Lucifer* and *St. Marcius Fortunatus* worked near each other in the early stage of their careers is offered by stamp CIL 62 for the former and stamp CIL 1275b for the latter; these are of an extremely rare type and closely resemble each other.

Figlinae Subortanae is a *figlinae* whose name expresses its geographical location. Occurring in the stamps is the word SVB·ORTA (CIL 542), SVBHOR (CIL 543), SVBVRTAN (CIL 546), SVBORTANI (CIL 545) etc., meaning "below Orta (Horta)",⁸³ and *figlinae Subortanae* therefore signifies "figlinae below Horta".⁸⁴ The ancient Horta (Orta) is present-day Orte.

A second connection between the *offinatores* of *figlinae Marcianae* and *figlinae Caepionianae* is supplied by the *Satrinii*. In stamp CIL 110 *Satrinus Fortunatus* is *offinator*; mentioned as place of manufacture is merely "figlinae ab Euripo" and *dominus* is the Emperor Antoninus Pius, which shows that the stamp is from the year 138 at the earliest. Can this *Satrinus* be linked in some manner to *C. Satrinus Communis* and *C. Satrinus Celer*, who were active in *figlinae Marcianae* during the first century (cf. p. 127 below)?

Marini has already drawn attention to the epitaph CIL XI 4519 found in the territory of Ameria and composed by *Satrinus Clemens* for his sons.⁸⁵ Marini thought it possible that this *Satrinus Clemens* was the same person as *C. Satrinus Clemens* of brick stamp CIL 384 = S. 96. In the stamp of *C. Satrinus Clemens* the

words EX FI OCE M (= *ex figlinis Oceanis minoribus* (or *maioribus*)) are used for the place of manufacture. Because in one stamp of *C. Satrinus Celer* (CIL 388), whose stamps CIL 303 and 304 mention the name of *figlinae Marcianae*, the place of manufacture is expressed with the words EX F OCIANI (= *ex figlinis Ocianis*), it may be assumed that *C. Satrinus Clemens* is associated with the *C. Satrinii* of *figlinae Marcianae*. In fact, *C. Satrinus Clemens* may be the same person as *Clemens*, the slave of *C. Satrinus Celer*, mentioned in stamp S. 547, subsequently manumitted. Thus the *Satrinii* form a connection between *figlinae Marcianae*, *figlinae Oceanae* and *figlinae Caepionianae*, and the territory of Ameria.

The same combination of *figlinae* arises through stamps of the *Statii Marcii*, members of the second family belonging to the *figlinae Marcianae* group. In *figlinae Marcianae* appear *Statius Marcius Rabbaeus* (CIL 310, 311; S. 81), in *figlinae Oceanae* *Statius Marcius Secundio* (CIL 357) and in *figlinae Caepionianae* the earlier mentioned *Statius Marcius Lucifer* and *Statius Marcius Bassus*. As evidence of connection between *figlinae Caepionianae* and *figlinae Oceanae* at a later period stand the stamps of *T. Travius Felix*: EX FIG MVLIONIS (= *ex figlinis Mulionis*) as place of manufacture in CIL 338 and FIG OCEAN MIN (= *ex figlinis Oceanis minoribus*) in CIL 383; *Travius Felix* is *offinator* in these stamps; the *domini* mentioned, *Iulia Lupula* and *Augg. nn.*, indicate the middle and later part of the second century.

With the aid of *offinator* families some sort of relative position is thus found for *figlinae Caepionianae* in relation to *figlinae Marcianae*, *figlinae Subortanae* and *figlinae Oceanae*. The name of *figlinae Subortanae* and the inscription of *Satrinus Clemens* point to the district of present-day Orte as an absolute location.

Figlinae Caepionianae stamps also contain many features which do not indicate the district of present-day Orte; no source discloses, for instance, that any *figlinae Caepionianae* owner other than *C. Curatius Cosanus* had owned land in the Ameria or Horta territory. But no facts speak against the Orte area as a location. The above argument is intended as a hypothesis which might possibly be tested by investigations on the ground or other methods. If the location of *figlinae Caepionianae* (or another *figlinae* of importance) could be established with certainty, the information would have great significance for the study of Roman urbanistics and economic geography.

6. Conclusions

Analysis of brick stamp texts and examination of specimen cases show that of the two possible meanings of the word '*figlinae*', namely 'brickworks' and 'clay district', the latter is correct. 'Clay district' is a meaning far better suited to the contexts in which the word '*figlinae*' is used in brick stamps. The reasons are briefly as follows:

1) The name of the *figlinae* owner (*dominus*) is found in stamps not earlier than the beginning of the second century. In stamps of an early period (the first century) the owner is not mentioned, but other persons active in the *figlinae* are referred to. – If *figlinae* were a manufactory, then the owner of *figlinae* would be, nominally at least, director of the production organization operating at the said manufactory, and it would then seem natural for his name – and no other person's – to appear in stamps as representative of all members of the production organization.

2) The word '*figlinae*' appears in stamps qualified by a proper adjective, in other words *figlinae* are mentioned by name; in early stamps the word '*figlinae*' appears only thus. – Mention of the name of *figlinae* in brick stamps can easily be explained as a mark of quality in some degree. *Figlinae* mentioned by name were areas whose clay was considered especially suitable for manufacture of high-quality bricks.

3) The word '*praedia*' appears in stamps at the same time as the name of the owner of *figlinae* (*dominus*). The words '*figlinae*' and '*praedia*' are used without difference of meaning when the owner of *figlinae* (*dominus*) is declared. Therefore, as an instance of the right of ownership *figlinae* = *praedia*, but as a specified locality *figlinae* ≠ *praedia*. – If the word '*figlinae*' meant 'manufactory', its possible replacement by the word '*praedia*' would be strange. But if the word '*figlinae*' has a territorial meaning only, then **ex figlinis huius** = **ex praedis huius** is fully understandable because these expressions are equivalent means of designating the owner of the land on which and from which the bricks were manufactured.

4) Proprietary relations of *figlinae*: On the evidence of brick stamps cases can be found in which a *figlinae* mentioned by name is owned simultaneously by more than one person, not collectively (as a *societas*) but with each individual owning his own part. Such cases are difficult to explain if *figlinae* is an administrative unit (manufactory), but easy to explain if *figlinae* is merely a territorial unit (clay district).

Notes to Chapter IV

1 Words occur in stamps in forms so abbreviated that it is not always certain what word is intended. Thus the letters F, FIG, FIGL, FIGVL etc. may be short forms not only of *fig(u)linae* but also of *fig(u)linum* (sc. *opus*), *figlinator* (occurs in full in stamp S. 311), *figulus* or even *fecit*; OF, OFIC may signify not only *officina* but also *opus figlinum*. The word intended must be deduced from the context.

2 In late stamps which belong to the years following the "blank period" of the 3rd century and which Dressel has placed in a separate section of *CIL* XV, '*officina*' is the only word mentioned here which appears, and it is in general use. These late stamps do not lie within the scope of the present study and do not figure in the calculations presented.

- 3 See Ernout-Meillet and Walde etymological dictionaries, Georges and Lewis & Short and *Thesaurus*, v.v. '*officina*', '*fabrica*', '*praedium*', '*figlinus*', '*figlinae*' and their equivalents in modern languages.
- 4 Definition of Ulpian: *Dig.* 50, 16, 198 '*Urbana praedia*' omnia aedificia accipimus, non solum ea quae sunt in oppidis, sed si forte stabula sunt vel alia meritoria in villis et in vicis, vel si praetoria voluptati tantum deservientia: quia urbanum praedium non locus facit, sed materia.
- 5 '*Fornaces figlinae*' occurs in Arnob. *nat.* 6, 14: "simulacra fornacibus incocta figlinis". '*Fodinae figlinae*' may perhaps be completed in accordance with a passage of Varro which will be examined later, p. 43. '*Officinae figlinae*' is supported by stamp S. 574, where the normal "*ex figlinis Marcianis*" is replaced by [ex] *officinis Marci*[anis].
- 6 *CIL* XV, p. 4. Dressel adds to the above quoted: "est tamen ubi *figlinae* et *officina* idem valeant." – This explanation of Dressel has been taken into *Thesaurus*, v. *fig(u)lina*, 708, 12–14.
- 7 Cozzo p. 252–253.
- 8 Cozzo's thesis in his book is that the period when building and the use of brick were at their most intensive began in Rome at the time of the Severi. Accordingly, he would move the dating of stamps as a whole about 100 years forward from the chronology of Dressel. Bloch has shown (*Bl.* p. 15–23), to my mind convincingly, that the datings of Cozzo rest on a faulty foundation, and that the chronology of Dressel is largely reliable. The passage mentioned above occurs in a section where Cozzo uses the meaning of words appearing on stamps to support his theory: '*figlinae*' refers to a primitive production method and belongs therefore to an early period, the 2nd century, when brick production was slight; '*fornax*' refers to a more developed method and belongs to the Severian epoch and the 3rd century, when production was abundant; '*officina*' "ci dà il concetto di una vera organizzazione industriale" and belongs to a later period when production establishments had been transferred to the State and productive activity was "the most rational".
The fact that Cozzo's theory is not based on the analysis of brick stamps is revealed in this passage particularly by what he says of the occurrence of '*fornax*' in stamps: "Da quel momento, il vecchio termine industriale *Figlinae*, non deve avere più risposto all'importanza dei nuovi impianti; vediamo, perciò, prevalere l'altra denominazione *Furnace* o *Fornace*, che ci indica la prevalenza del forno su tutte le altre parti della fabbrica, conseguenza certa di una specializzazione degli impianti e del personale."
Cozzo thus asserts that '*fornax*' is a word of similar general occurrence in Roman brick stamps to '*figlinae*' and '*officina*'. This is not the case, however. The word '*fornax*' occurs in only 4 stamps (*CIL* 58, 63, 64, 157; S. 24 = *CIL* 64 b), which with one exception are early stamps of *figlinae Caepionianae*, from about the year 100 by Dressel's chronology.
- 9 Bloch, *Bl.* p. 334–. In this Chapter Bloch presents his conclusions more widely; his notions are also revealed elsewhere, in *Bl.* and the *Supplement*.
- 10 Frank, *History*, p. 227–231, and *Survey*, p. 207–209.
- 11 Bruns p. 122–139 = *CIL* II S 5493 = *ILS* 6087 = *FIRA* p. 177–199.
- 12 *Bull. com.* LXXVI (1956) p. 77–95, especially 79–.

13 *Lex Tarentina* 28 (Bruns p. 120–122, *FIRA* p. 166–169): It was a qualification for municipal office that the candidate should own in the city "*aedificium quod non minus MD tegularum tectum sit*".

14 Cic. *ad Caes. iun.* fr. 5 and Cass. Dio 46, 31, 3.

15 These *tegulae* were not necessarily, of course, the same or of the same size as actual roof tiles, as Mingazzini assumes.

16 *CIL* XI 1147.

17 *Thesaurus*: '*meris, dis*' = '*pars fundi alii iuncta*'.

18 *Thesaurus* does not explain the meaning of "*cum debelis*". It is treated merely as a proper noun in the *Onomasticon*; it occurs three times (*obl.* 17, 22 and 47); elsewhere it is a proper noun, but here clearly a common noun.

19 See Pachtère's map, between p. 30 and 31 in his book.

20 *CIL* XI 6673, 1–25; 6674, 1–56.

21 Both extracts belong to passages in which further diggings are mentioned, and the word '*metalla*' occurs in both passages. In similar surroundings '*cretifodina*' occurs in Ulp. *Dig.* 24, 3, 7, 13–14 and the following extracts from which gravel/sand is missing: Ulp. *Dig.* 27, 9, 3, 6; Gai. *Dig.* 39, 4, 13 pr; Paulus *Dig.* 50, 16, 77. Also Ulp. *Dig.* 4, 3, 34 "*cum mihi permisisses saxum ex fundo tuo eicere vel cretam vel harenam fodere*".

22 The word '*cretifodinae*' means not only clay-pit but also chalk-pit, just as the root word '*creta*' means both clay and chalk (*Thesaurus*, *creta* p. 1186, 7– and 27–). The fact that clay is the subject of discussion in the extracts quoted in this chapter is deduced from the presentation of *creta* as a substance of general occurrence in the soil, like *lapis* and *harena*.

23 See, for instance, Bruno, p. 40–43.

24 Finished bricks are lighter than the clay used as their raw material. Bruno mentions the following figures: In the 1920s in Germany an average of 1250 kg clay was used for 1000 kg bricks, and in central Sweden 1400 kg clay for 1000 kg wall bricks. Bruno, p. 37–38.

25 Supply of fuel may have been a factor affecting the location of brick-works. According to Bruno the share of fuel in the total production costs was some 20–30 % in Sweden before introduction of the ring-oven (Bruno p. 47). In Roman region the effect may have been that the brick-works were located to a greater distance from Rome, farther up the Tiber valley. – But on the location of the brick-works in relation to the clay digging site this factor has no effect.

26 E.g., of Gallic ceramic stamps, *CIL* XIII, 10 001–, *Thesaurus* states (v. *fig(i)linus* p. 708, 16): "*In vasculis Gallicis nusquam legitur figlinae, semper officina.*" – The same applies to Hispanic ceramic stamps, *CIL* II, 4970, and others too.

27 They are listed in *CIL* XV table of contents. *Suppl.* p. 125–127.

28 Datings by Dressel and Bloch have later been adjusted for several stamps, notably by Steinby, but Dressel's chronology has not been altered in essentials. Steinby in her datings has taken note of the variables whose occurrence I am examining, and therefore her datings are not independent of my variables.

29 Bloch draws attention to this difference in his comments on S. 548 b and S. 550 a.

30 *Vitr.* 2, 7, 1.

31 Pliny too mentions *lapidicinae Anicianae*, HN 36, 168: "*Anicianis lapicidinis circa lacum Volsiniensem*".

32 Bruno p. 34-35. Good clay for wall bricks must be 25 % finegrained (dimension of grain not more than 0.001 mm); for roof tiles the corresponding proportion is at least 30 %.

33 This would further suggest that the *figlinae* name is mentioned more often in roof tile than in wall brick stamps. To my knowledge no study has been made from this point of view.

34 *Q. Valerius Cato* (S. 82) and *L. Mescinius Flaccus* (CIL 2469 = 1787, 2470) also mention in their stamps the name of *figlinae Marcianae*, and their stamps may be as old as those mentioned in the following. It is impossible, however, to fix their period of activity exactly.

35 Bloch *BL* p. 219-222. Regarding the ships, their chronology and the bricks found in them, see the article by G. Gatti in the book by Ucelli.

36 Bloch *BL* p. 220 and 334-335.

37 The history of the *C. Calpetani* is explained later, p. 128-.

38 *C. Calpetanus Hermes* was a former slave of *C. Calpetanus Favor*, as shown by stamps CIL 904 and S. 244; in his stamp CIL 318 *C. Calpetanus Hermes* mentions the name of *figlinae Marcianae*.

39 Corresponding pairs are CIL 124 & 125; 498 & 592; 525 & 524; 1043 & 1042; 1302 & 1301; 1378 & 1377; CIL 511 & S. 145; S. 147 & CIL 516; S. 120 & CIL 478; S. 155 & CIL 545; S. 28 & CIL 74; CIL 286 & S. 70 = CIL 291; S. 215 & S. 216.

40 See Bloch, *Indices* p. 47.

41 *CIL* XV p. 87. In this special case Dressel's interpretation is less clear, because he had two variants of stamp CIL 295, neither of which he had seen himself. This interpretation is a combination of the variant texts.

42 The *figlinae Macedonianae* stamps are CIL 281-300 and S. 62-71.

43 Dressel's completions CIL p. 24-25 and Bloch's comment on stamp S. 36.

44 *Figlinae Caepionianae* stamps are CIL 52-111 and S. 23-39.

45 *CIL* XV p. 6, *sub.* X.

46 E.g. Dressel's comments on CIL 644 and 1773.

- 47 See Dressel's comment on CIL 221.
- 48 For the meaning of 'sub Orta' and 'Subortanus' see p. 81.
- 49 See Bloch's comments on S. 144 and 145, and Coste p. 94 and 95 (with photograph). Bloch has a fragmentary exemplar of stamp S. 145 whose second line he completes as: a. gabIN AVGVST sal (= *A. Gabini Augustalis, Salarese*). Coste has a better fragment, in which the beginning and end of the second line are preserved: S-BIN AV-VST (= *Sabinae Augustae*). – Thus the Empress Sabina really occurs as *dominus* in brick stamps, as Coste asserts. As stamps of Sabina we must now reckon also CIL 510, 511 and S. 144.
- 50 CIL XV p. 15.
- 51 Cf. CIL 1427, in which appears EX FIG QVAEFVESEN SATR (= *ex figlinis quae fuerunt Senti Satrini*).
- 52 It was located on Via Labicana "ad Quintanas"; CIL XIV p. 275.
- 53 See CIL 437–470.
- 54 See CIL 258–279.
- 55 CIL XV p. 6 sub X.
- 56 See CIL 116–140; S. 41–43.
- 57 See CIL 478–530; S. 120–152.
- 58 The word 'figlinator' appears written in full only in stamp S. 311; it is "an addition to the *Thesaurus*", as Bloch observes in his comment. For the occurrence of these words see Bloch, *Indices* p. 96.
- 59 CIL 299, 731ab, 757 and 1063.
- 60 The *figlinae Caepionianae* stamps are CIL 52–111; S. 23–39, 569.
- 61 CIL XV p. 25–26, Bloch *BL* p. 47–48 and *Suppl.* p. 13. I report the ownership entirely in accordance with Bloch.
- 62 The names of both *socii* of the *societas* of *Domitius* brothers, the *societas* best known in stamps, appear in all their stamps. Only the name of *Tullus*, who outlived his brother, appears alone.
- 63 CIL XV p. 25.
- 64 Such additional epithets occur also in the stamps of some other *figlinae*: in *figlinae Domitianae* "maiores" and "minores", "novae" and "veteres", see CIL XV p. 48; in *figlinae Oceanae* "maiores" and "minores", see CIL XV p. 105.
- 65 CIL XV p. 25 no. 101 and Bloch's comment on S. 34.
- 66 Stamps CIL 102 and 86 are also linked together by a rare composition which is common to both. Dressel states in his comment ad CIL 102: "Forma ac species huius sigilli eadem est quae sigilli n. 86."

- 67 Steinby 1974, p. 97, no. 1; previously this stamp was known as a fragment, CIL 2001: a third specimen was found by us at Ostia.
- 68 *SHA Pius* 1, 1–6.
- 69 T. Aurelius Fulvus was consul in the year 89, which is therefore the *terminus post quem* for the birth of Iulia Fadilla (Syme, *Tacitus* p. 793).
- 70 P. Iulius Lupus, *cos. suff.* 98? (Syme, *Tacitus* p. 794).
- 71 Bloch 1958, p. 409. Bloch assembled the stamp from fragments found in three separate places.
- 72 Leiva Petersen (*PIR*² IV 2, p. 319 no. 676) thinks it more likely that *Iulia Lupula* is the granddaughter of *Arria Fadilla* and Iulius Lupus. This is to complicate the prosopography unnecessarily, however. Stamp CIL 338 belongs to the time of Antoninus, and it must be presumed that the Emperor's younger sister was living.
- 73 Pliny mentions (*Ep.* 4, 27, 5), to be sure not quite without ambiguity, that Sentius Augurinus, an otherwise unknown poet, was related to Arrius Antoninus (father of *Arria Fadilla*). The transfer, as reflected in the stamps, of the property of Sentius Satrinus to Arrius Antoninus (son of *Arria Fadilla*) also suggests a relationship between *gens* Sentia and *gens* Arria.
- 74 Huotari p. 79–80.
- 75 CIL XI 3614 = ILS 5918a.
- 76 CIL XI 4347 (cf. CIL XI 2:2 p. 1322).
- 77 CIL XI 4397.
- 78 CIL XI 4391, 7843.
- 79 Marini, p. 138 *ad* no. 334.
- 80 CIL XI p. 639: in the time of Cicero part of the Tiber bank belonged to the Ameria territory (*Rosc. Amer.* 7, 20): according to Pliny (*Ep.* 8, 20, 3) Lacus Vadimonis west of the Tiber was part of the Ameria territory.
- 81 CIL XI 3061 (cf. CIL XI 2:2, p. 1322).
- 82 CIL XI 4361, 4416, 4431, 4432 (*Alfius*); 4383, 4384, 4495 (*Avienus*); 4348 (*Pettius*); 4530, 4531, 4402 (*T. Travius*).
- 83 *Suborta* as a place name is comparable with names of stations appearing in Itineraria: *Succosa* (= *sub Cosa*, "below Cosa" on the Via Aurelia) and *Sub Lanuvio* ("below Lanuvium" on the Via Appia).
- 84 Marini gave this interpretation as a possibility, but thought it more likely that SVBHOR, SVB ORTA etc. refer to '*hortus*' and that this *figlinae* was situated below a garden or park famous at the time. See Marini, no. 24. Dressel borrows this interpretation of Marini, CIL p. 156.
- 85 Marini, no. 1265; Dressel borrows Marini's comment for CIL 384.

V Organization of Brick Production.

Persons Mentioned in Brick Stamps in Their Relation to the Brick Industry

1. *Dominus* and *officinator*

Earlier I have used the titles '*dominus*' and '*officinator*' for persons mentioned in brick stamps. These titles are established in the literature dealing with brick stamps, and are used by Dressel and Bloch among others. I use these titles in a more exact sense than the two above-named. My definition is as follows:

- *Dominus* is the person whose name is used in a brick stamp text as a genitive attribute of the word '*praedia*' or '*figlinae*'; i.e. the person declared in the stamp to be the owner of *praedia* or *figlinae*;
- *officinator* is the other person mentioned in the stamp.

With the aid of this definition it can be said of each individual in each stamp whether he is *dominus*, *officinator* or neither; the groups of "*domini*" and "*officinatores*" can be formed merely from data appearing in the texts of stamps – nothing else is required.

In binominal stamps the groups of "*domini*" and "*officinatores*" emerge naturally. In their respect it is quite evident that *dominus* and *officinator* had a different position in the production process and production organization. For this reason I have been able in the analysis of texts to use the titles '*dominus*' and '*officinator*' in conjunction with binominal stamps without danger of confusion. In the following text, for instance:

(45) EX-FIG M-HERENNI POLLIONIS DOL
L-SESSI-SVCCCESSI

CIL 1180

ex figlinis M. Herenni Pollionis, doliare L. Sessi Successi

M. Herennius Pollio is *dominus* and *L. Sessius Successus* is *officinator*. The origin of the title '*dominus*' is clearly visible: in the stamp text it is said that *M. Herennius Pollio* is the owner of *figlinae* (*dominus figlinarum*). As shown earlier, the word '*figlinae*' in such a connection can be replaced with '*praedia*' without a change in the content of the text. *Dominus* is therefore "*dominus figlinarum*" or "*dominus praediorum*". – The title of *officinator* owes its origin to the occurrence of the word '*officinator*' in some stamps, and to the use of the name of the *officinator* as genitive attribute of the word '*officina*' in others.¹

One-name stamps are more problematical. By means of my definition *domini* can be distinguished in them, but not *officinatores*, because *officinator* is defined in relation to *dominus*. *L. Bellicius Sollers* and *Claudia Marcellina*, for instance, whose names occur in one-name stamps (12) p. 58 and (16) p. 59, are *domini* in those stamps because they are announced as owners of *figlinae* or *praedia*. The texts can only be interpreted so that the names of persons are genitive attributes of the words '*figlinae*' and '*praedia*'.

The "*domini*" and "*officinatores*" groups are composed of persons whose names occur in stamps at least once in the position of *dominus* or *officinator*. *Dominus* and *officinator* are defined as "role names", components of the text of each stamp. A person belonging to the "*domini*" group may also appear in stamps in a position where he is not *dominus* according to my definition. *L. Bellicius Sollers*, for instance, who appears as *dominus* in stamps presented earlier, is found in the following stamp:

- (46) L VELICI SOLLER S. 241
L. (B)el(l)ici Sollertis (or: *L. Bellicius Sollers*)

but not as *dominus* (or *officinator*).

Similarly, a person belonging to the "*officinatores*" group may appear in a position where he is not *officinator* by my definition. In the following stamps, for instance:

- (47) L SESSI-SVCCESSI DOLIARE
 DE FIGLINIS PVBL sic CIL 420 = S. 107
 LIANIS
- (48) SEIAES ISAVRICAES
 EX FIGLINIS PVBLILIAN CIL 421
 DOLIAR

the texts are formed from the same components, but the name of the person is different. In each stamp appears the word '*figlinae*' and the word '*doliare*' meaning the brick itself, and in each stamp the name of *figlinae* is the same (*figlinae Publilianae*). Neither of the persons mentioned in the stamps (*L. Sessius Successus* and *Seia Isaurica*) is *dominus*, for neither is stated to be the owner of *figlinae Publilianae*. The second stamp, by reversing the order of its lines, could be put in such a form that *Seia Isaurica* might be interpreted as the owner of *figlinae*, but even in that case such an interpretation would not be the only one possible (cf. following specimen stamp). On the evidence of these stamps neither person can be placed in the "*domini*" and "*officinatores*" groups.

But the classification can be made if other stamps are considered. Comparison shows that *L. Sessius Successus* belongs to the "*officinatores*" and *Seia Isaurica* to

the "domini" group. In the stamp (45) serving as an example above p. 89. *L. Sessius Successus* appears in the position of *offinator*, while *Seia Isaurica* appears as *dominus* in many stamps, such as those taken as examples above, (22) p. 60. So the name of a person belonging to the group "domini" can occur in a stamp in which it is not in the position of *dominus*, and the name of a person belonging to the group "offinatore" can occur in a stamp in which it is not in the position of *offinator*.

The division must be carried out thus, because also appearing in the stamps are persons who do not occur in a single stamp as *dominus* or *offinator*. In the following, for instance,

(49) ·EX·FIG·DOM·
L·VALERI·SEVERI

CIL 151

ex figlinis Domitianis, (opus) L. Valeri Severi

the word FIG is adequately defined by the adjectival attribute DOM; it needs no person's name as an attribute. Thus the name of a person can be interpreted as a genitive attribute of either the word FIG or the omitted word signifying the brick itself. — *L. Valerius Severus*, therefore, may be interpreted as the owner of *figlinae Domitianae*, but equally well as "owner" of the brick alone; the latter interpretation is obtained by adding a comma before the name of *L. Valerius Severus*. It is the more likely interpretation in this case because the text composer may well have intended the lines to be read in reverse order, in which case the latter interpretation is the only possible (cf. p. 32 above).

L. Valerius Severus does not appear in a single stamp as *dominus* or *offinator*, and cannot therefore be placed in the "domini" or the "offinatore" group. From individuals like *L. Valerius Severus* a third person-group is composed, namely "those who belong to neither the "domini" nor the "offinatore" group".

My definition is of a character which enables *dominus* to be found directly from the text, but *offinator* only in relation to *dominus*. From the standpoint of my investigation this is favourable, because the organization of brick production is reflected first and foremost by the relation between the two persons *dominus* and *offinator*. Because the "production" status of *dominus* (owner of *praedia* or *figlinae*) is quite clear when the meaning of the words '*praedia*' and '*figlinae*' is once elucidated, the chief remaining problem is to determine the status of *offinator* in relation to *dominus*.

The "domini" and "offinatore" groups formed in the manner expounded are mutually exclusive. In the stamps no persons appear who belong to both groups.² This shows that the definition and the groups formed by its aid are not artificial, but that the "domini" and "offinatore" groups had corresponding groups clearly distinguished from each other in the reality which the brick stamps reflect. The mutual exclusiveness of the groups leads also to a conclusion bearing on reality: the

There are 650 stamps in which both *dominus* and *offinator* appear, and 160 in which only *dominus* appears. (Stamps number 1815 in all). The "*domini*" group, exclusive of imperial persons, contains 149 persons,³ and the "*offinatores*" group 355. (The total number of persons referred to in stamps, when consuls mentioned in dates are omitted, is 1325.)

(50) TROPHIMI·AGATHOBVLI
DOMITI·TVLLI CIL 1003 a
Trophimi Agathobuli Domiti Tulli (sc. servi vicarii)

Only in one stamp is the three-rank system visible:

This stamp recalls what we know of the organization of mines.⁵ The owner of *figlinae* is the Emperor, the work of production is led by a contractor (*conductor*) acting on his own account, and every *officina* has a man in charge (*officinator*). But this is the only case among Roman brick stamps, and it is possible that this stamp does not actually belong to them.⁶

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2. The Groups *domini* and *officinatores* of Dressel and Bloch

Dressel and Bloch use the words '*dominus*' and '*officinator*' in a looser sense than I. Dressel composed these categories of persons in order to explain the stamps he had assembled for *CIL* XV. For him '*dominus*' and '*officinator*' ('*conductor*', '*exercitor*' and '*figulus*' are titles he also uses of other persons than *domini* mentioned in stamps) indicate the positions held by persons in reality, in brick production and in society as a whole. Dressel composed his categories in this manner for the natural reason that his problems were philological: his task was to explain individual stamps by means of the actual situation reflected by the stamps.

Dressel does not state explicitly how he composed his categories of persons, but it is easy to observe that his starting point also was binominal stamps, from which two person-categories emerge naturally. In accord with his task to explanation he then attempts to place all persons mentioned in the stamps in these groups. The following extract illustrates Dressel's grouping principles:

Nomen secundo casu positum, ex quo solum constant plurimi tituli antiquiores et bonae aetatis, utrum domini officinae vel praediorum sit, an eius qui officinae praeerat (officinatoris, exercitoris) vel eam conduxerat, saepenumero incertum est. Nominis enim indole quamquam dominus a figulo discerni plerumque potest, conductores tamen vel officinatores sive exercitores a dominis distinguere vix possunt, quos omnes tam ingenuos quam libertinos esse potuisse constat.⁸

Dressel's first criterion for division is formal, based merely on data from stamp texts; it is identical with the definition I presented earlier. His second criterion is "social", and he has recourse to it when the formal criterion gives no result. Numerous members of the "*domini*" group composed by means of the formal criterion belong to the highest levels of society. On this ground Dressel places in the "*domini*" group all persons mentioned in the stamps for whom he perceives some indication of high social rank. Similarly, the "*officinatores*" group contains persons for whom Dressel perceives no such indication. Bloch uses the titles '*dominus*' and '*officinator*' in much the same way as Dressel. The "*domini*" and "*officinatores*" groups of Bloch and Dressel are therefore larger than my corresponding groups. The differences are seen in two cases.

The first case consists of one-name stamps whose person cannot on formal grounds be placed in the "*domini*" group or, consequently, in the "*officinatores*" group. In these cases too Dressel and Bloch endeavour to place the person in one group or the other. In the following stamps, for instance

(52) TI·IVLI·OPTATI
DE·FIG·OCIANIS

CIL 387

Ti. Iuli Optati, de figlinis Ocianis

(53) C SATRINI CELERIS EX·F OCIANI

CIL 388

C. Satrini Celeris, ex figlinis Ocianis

Dressel and Bloch may designate *Ti. Iulius Optatus* as *dominus* and *C. Satrinus Celer* as *offinator*.⁹ Classification of persons in "domini" and "offinatores" groups clearly does not take place on the evidence of stamp texts, for in both stamps the content is the same except for the names of persons. (Stamp (53) is circular and its text forms a closed ring. Thus the words can also be read in this order: EX·F OCIANI C SATRINI CELERIS. In CIL the text is in this form. Both orders of words are equally possible, and the text is interpretable in the manner shown regardless of which is chosen; see stamp (i) on p. 32 above.) In this case and others similar the classification of Dressel and Bloch is based on data obtained from other sources than the stamps. *Ti. Iulius Optatus* is known from elsewhere, he was *praefectus classis Misenensis* and belonged therefore to the highest levels of society.¹⁰ *C. Satrinus Celer*, on the other hand, is known only from brick stamps.

For Dressel the formal criterion always takes precedence over the social. He has recourse to the latter only when a person mentioned in a stamp cannot be placed in either the "domini" or the "offinatores" group by means of the formal criterion.¹¹ Bloch is less concerned with the formal side. The question of whether the person mentioned is known or unknown interests him more than the position in which the name of that person appears in the stamp text. A rough example is the following stamp, in whose interpretation the "social" criterion is superior to the formal:

(54) DOL EX FIG ANTEROTIS CAES ·N SER
PAETINO ET APRONIAN
COS

a. 123
CIL 810a

doliare ex figlinis Anterotis Caesaris nostri servi, etc.

The Emperor's slave *Anteros* is *dominus* according to the formal criterion, because he is mentioned unambiguously in the text as the owner of *figlinae*. Bloch, however, classes him as "figulo" and "offinatore",¹² clearly because he knows *Anteros* to have been a slave. In this case the "social" criterion is particularly difficult to apply because it must be decided whether an Imperial slave belonged to the upper or lower levels of society.

A second case in which Dressel and Bloch use the titles 'dominus' and 'offinator' differently from myself may be seen in the following stamps:

- (55) T GREI IANVARI EX FIG CANIN
DVORV·DOMIT
V·Q·F

CIL 117 a

*T. Grei Ianuari, ex figlinis Caninianis duorum Domitiorum;
valeat qui fecit*

- (56) AMOENI D D LVCANI ET TVLLI
EX FIGLINIS CAN
INIAN

CIL 116

*Amoeni duorum Domitiorum Lucani et Tulli (sc. servi),
ex figlinis Caninianis*

In stamp (55) *dominus* and *officinator* can be distinguished with the formal criterion: the Domitius brothers (*duo Domiti*) are *dominus* and *T. Greius Ianuarius* is *officinator*. In stamp (56), on the other hand, the division cannot be made with the formal criterion, because the Domitius brothers are stated to be owners not of *figlinae* but of a slave. In such a case also Dressel and Bloch may class persons as *dominus* and *officinator*; the Domitius brothers in this case too are *dominus* and their slave *Amoenus* is *officinator*. Thus "*dominus servi*" is placed in the same category as "*dominus figlinarum*", and *dominus-servus* pairs join the *dominus-officinator* pairs composed by means of the formal criterion.

The following stamp shows that *dominus-servus* pairs cannot be placed directly alongside *dominus-officinator* pairs:

- (57) MERCVRI TI CL QVINQVAT
EX·PR·LVCILL·VERI

CIL 1077a

*Mercuri Ti. Claudii Quinquatralis (sc. servi), ex praedis
Lucillae Veri*

Here "*dominus servi*" is *Ti. Claudius Quinquatralis* and "*dominus praediorum*" is *Lucilla Veri* (= *Domitia Lucilla*), i.e. different persons appear in these positions. By the formal criterion *dominus* is *Lucilla Veri* and *officinator* is *Mercurius* (or *Mercurialis*), a slave of *Ti. Claudius Quinquatralis*.

If *dominus-servus* pairs are counted as *dominus-officinator* pairs, then the set of *dominus-officinator* pairs turns skew. A set composed in this way cannot be used, for instance, as a means of drawing conclusions from the relationship in law of persons between *dominus* and *officinator*, because the set is so composed that all *dominus-servus* relationships are included, but only part of those between *patronus* and *libertus*, and *liber* and *liber*.

Dressel used person-categories merely to explain stamps, bringing out all possible data to clarify the situation represented by each stamp. His categories are

well suited to such a task. In the situation indicated by stamp (56), for instance – so one may deduce from stamp (55) and some others – it is highly probable that the Domitius brothers were owners of *figlinae Caninianae*, although the stamp contains no mention of this. It is similarly possible in the situation shown by stamp (52), though less likely than in the previous case, that *Ti. Iulius Optatus* was owner of *figlinae Ocianae*. These circumstances must be displayed when individual stamps and the situations reflected by them are subjects of explanation.

Person-categories arising in this way are inapplicable, however, in studies where we are faced with the reverse of Dressel's problem: when, that is, we draw conclusions from stamps regarding the reality that the stamps reflect. The weakness of the "*domini*" and "*officinares*" categories of Dressel and Bloch then proves to be that in their composition two types of information totally different in value have been confused: these are data contained in the text of stamps, and data in our possession on the brick industry at the time concerned and on society in general. We know the brick stamps, but we do not know with anything like completeness the social status of persons mentioned in them. In the case of many a person so mentioned we know that he was high in the social scale, but in the case of the majority we do not know whether they were high or low. We have no means to decide whether, for instance, in the situation reflected by stamp (53) *C. Satrinus Celer* was owner of *figlinae Ocianae* or not. Confusion between stamps and the reality they reflect leads, on the other hand, to a vicious circle. We cannot examine the social composition of the "*domini*" and "*officinares*" groups if we have used the social status of the persons concerned as a criterion for composing these groups.

3. Problems

Analysis of the text of brick stamps has now led to some degree of understanding of the relation between persons mentioned in the stamps and brick production. *Dominus* is mentioned as owner of land, which is the meaning of **ex figlinis huius** and also **ex praedis huius**. *Officinator* is closer to the actual making of bricks.

What was the relation between *dominus* and *officinator*? Frank and Bloch, who start from the notion that *figlinae* is an administrative unit, arrive at the explanation that *dominus* and *officinator* belonged to the same organization, the latter being subordinate to the former. In other words, *dominus* was the manufactory owner and brick producer, while *officinares* were foremen paid (or owned) by him.¹³ Bloch's view appears in expressions such as: "Arria Fadilla ha iniziato la sua attività industriale ancora sotto Traiano etc."; ¹⁴ "one of the (...) officinares of Arria Fadilla had also previously belonged to Plotia's staff"; ¹⁵ "Q. Aburnius Celer who was later in the service of Statilius Maximus"; ¹⁶ "L. Lurius Myrinus (...) now joins Zosimus as a workman for L. Iulius Rufus, proprietor of figlinae Tonneianae and Vicianae"; ¹⁷ "the appearance of three of Aburnius' former officinares in the service of his more successful competitors". ¹⁸

Dressel is cautious in the conclusions he draws. Because he considers that *figlinae* is manufactory, *dominus* to him too is 'manufactory leader' or 'manufacturer', though he does not use such titles in his comments. But he is unsure of the relation between *dominus* and *offinator*, and in some cases regards *offinator* more as an independent tenant than as a foreman in the service of *dominus*. In accordance with this he uses various titles for *offinator* – 'conductor', 'offinator', 'exercitor', 'figulus' – depending on his conception of this status.¹⁹ The word 'conductio' or 'conductor', which points to a tenancy relation, occurs in some stamps.²⁰

Gummerus has a notion similar to Dressel's of the nature of the organization reflected by brick stamps. In his view *offinatores* were often independent enterprisers, and among them were at least as many tenants (Pächter) as foremen (Werkführer). The reasoning of Gummerus is based not on the meanings of the words '*figlinae*', '*praedia*' and '*officina*', but on observations concerning persons mentioned in the stamps. Facts indicating the independence of *offinatores* in his opinion are the abundance of Latin *cognomina* and uncommon *gentilicia* in brick stamps, and the circumstance that some *offinatores* are women.²¹

Neither of the 'organization models' presented conflicts with the fact that *dominus* is mentioned in stamps as a landowner, because the owner of the land may also possess the manufactory located on it. On the other hand the 'model' of Gummerus accords poorly with the meaning '*figlinae*' = 'brickworks'. In this regard the conclusion reached – that the word '*figlinae*' in brick stamps has territorial meaning only – supports the opinion of Gummerus on the organization of brick production.

In the explanation of stamps the characteristics of brick production expounded earlier must be kept in mind.²² An industry producing brick as a building material is dependent on the large population centres which serve as its marketing area. The brick manufactories, however, are not located in cities but in rural districts within suitable transport distance. Because of the twofold nature of the industry – it is primary production and processing at the same time – a brick manufactory is bound firmly to the land. It needs an extensive area from which to obtain clay, and production apparatus also requires space. But was the producer compelled to own the land on which and from which he manufactured bricks? This brings us to the important problem of how land productivity was exploited. Did an owner make direct use of his land's productivity through the aid of persons he paid (or owned), or did he lease the land for use by another?

It is a recognized fact that land near Rome (and throughout Italy) came into the possession of leading Roman families at an early stage. It is in no way surprising, therefore, that *domini* mentioned in brick stamps belonged to the highest level of Roman society. The clay deposits which enabled brick production to be established in the Roman area were part of the landed property of senatorial families. A problem of the greatest interest is the manner in which production was arranged in these circumstances in order to meet the demand which sprang up and quickly increased in the first century.

Textual analysis of brick stamps has shown that in first century stamps the landowner is usually unmentioned, only the manufacturer being referred to. The expression "brick manufacturer" is not to be understood in a concrete sense. The person mentioned in the stamp has directed the production process: he has not taken physical part in brick manufacture – not, at least, in all cases.²³ A person mentioned alone in stamps may or may not be the landowner: this is an open question, because land ownership is not referred to in these stamps. When the relation of brick production to land ownership is examined, suitable source material is provided by second century stamps in which the landowner (*dominus*) and the person more closely associated with brick manufacture (*officinator*) are both mentioned. The purpose of the present chapter is to elucidate this problem, whose existence was realized by Gummerus: was *dominus* or *officinator* the producer of bricks, that is the enterpriser in this field of industry?

The picture sketched by Frank of the development followed by the organization of brick production (see p. 13 above) is based merely on observations concerning the names of persons of the stamps. Like Bloch, he pays no attention to the development of stamps, nor does he attempt to solve the problems raised by it. To what extent is the development of stamps an independent phenomenon? To what extent does it reflect the development of the organization of brick production? Mention of the landowner's name in a stamp did not become customary until the early second century. Can it be directly concluded from this feature of the development of the text that a change occurred in the organization of brick production in the early second century? Hardly. The land certainly had an owner in the first century already. The appearance of the name of the landowner in stamps and the organization of brick production may be phenomena independent of each other.

According to Frank the Roman brick industry in the first century was in the hands of small enterprisers, but in the second century the small enterprisers were replaced by large ones. This is based on the correct observation that in second century stamps several well-known and financially powerful persons are mentioned, but in the first century only persons unknown from other sources are mentioned. When the evolution of the content of stamps is taken into account the matter may be explained in another way. First century stamps mention only the manufacturer, while those of the second century mention both the manufacturer and the landowner. The well-known persons of second century stamps are precisely these landowners. In this respect first and second century stamps are not comparable with each other.

The second century concentration of property which can be noted in stamps and which Frank regards as a concentration of the brick industry under Imperial leadership may also be seen as a development in the circumstances of land ownership. Just as it is known that during the Republic land had already passed into the keeping of leading Roman families (or landowning families had risen to the leadership of the Roman state), so it is also known that landed property during the early Empire had a strong tendency to concentrate. The birth rate was low in the

highest class of society, and for this reason property was not often divided. On the other hand families easily died out, and their property was transferred to other families related by marriage. The marriage policy of families advanced the concentration of property.²⁴

The position of the Imperial 'family' was favourable in this system. It did not die out: an Emperor always inherited the property of his predecessor, and thus the property was not dispersed. In the first century the growth of Imperial landed property was favoured by a state of tension between Emperor and Senate which caused confiscations. In the second century the system governing the order of succession worked in the same direction. From Nerva to Marcus Aurelius and Lucius Verus each new Emperor brought a new family to the throne and combined its property with that of the Emperor.²⁵

The evolution of the body of *domini* in brick stamps certainly reflects that of land ownership in the Roman area. For *domini* the stamps are a source of the greatest value for the study of details in this evolution, which is as much political as economic.²⁶ But does this also describe how the organization of the brick industry evolved? Did the landowning nobility allow the transfer of parts of their lands outside the authority of themselves and their families? Was brick production tied to the ownership of land, or had enterprisers the opportunity to acquire some other entitlement to the use of land suitable for their purposes?

The problem which confronts us, therefore, is the relation of *dominus* and *officinator* to brick production. Which was the producer and the enterpriser in this field? As a start it may be assumed that *dominus* was the enterpriser unless facts emerge which indicate that *officinator* played that part. Thus the task is to search for features in brick stamps which provide grounds for concluding that *officinatores* were enterprisers and as such independent of *domini*. The question above may be answered on the strength of how many such features are found.

The investigation is divided in two parts. I first examine the relation in Roman Law of persons between *dominus* and *officinator* and compare the general picture which emerges with what is known of the significance of relations in law of persons in the society of the early Empire. In this part the set under examination consists of *dominus-officinator* pairs, and binominal stamps are the only acceptable material. I then examine the 'officinatores' group from the standpoint presented above.

First of all, however, I survey one group which contains both one-name and binominal stamps from both the first and second centuries, namely the stamps of *gens Domitia*. I survey this group in order to discover how the evolution of text content affected the type of persons to be mentioned in the stamps. Another reason is that in general expositions which include references to brick stamps, the stamps of *gens Domitia* have been taken as representing the whole material of Roman brick stamps. For a long period the studies of *gens Domitia* stamps by Descemet and Dressel were the only coherent works dealing with brick stamps. In particular the work of Dressel, published by the author in condensed form in *CIL XV 1*,²⁷ has been a source of information on this subject.

4. Persons in the Stamps of gens Domitia

Occupying a central position in Roman brick stamps is the gens *Domitia*, whose members and their years of death are as follows:²⁸ *Cn. Domitius Afer* 59, *Cn. Domitius Lucanus*²⁹ 93/94, *Cn. Domitius Tullus* 108, *Domitia Cn. f. Lucilla* 123 and *Domitia P.f. Lucilla* 155. For these persons I use the general name *Domitii* in the following.³⁰

Dressel in *CIL* XV treats the stamps of the *Domitii* as one whole. Most of them are collected in the section "*Lateres gentis Domitiae*",³¹ while the rest are connected with *figlinae* owned by the *Domitii* and mentioned by name.³² Stamps of the *Domitii* appear in other ceramic objects than bricks, moreover.³³ In *CIL* XV there are at least 250 stamps of the *Domitii*, by far the greatest number for a specific family.

Also appearing in the stamps of *Domitii* are other persons, either alone or in company with *Domitii*. These other persons are divisible in six groups according to their relationship in law of persons with the *Domitii*: 1) Slaves of *Domitii*; 2) *vicarii* of slaves of *Domitii*; 3) freedmen of *Domitii* (name *Cn. Domitius* + *cognomen*); 4) slaves of freedmen of *Domitii*; 5) free persons independent of the *Domitii* in law of persons; 6) slaves of persons in 5).

In the following tabulation I show the numbers of "other persons" in stamps containing the name of some *Domitius*. The numbers are calculated from Dressel's lists in *CIL* XV p. 268-273. The first column contains the numbers of "other persons" mentioned in stamps of *Afer*, *Lucanus* & *Tullus* and *Tullus*; these data therefore originate from stamps which have been in use until A. D. 108. In the second column are corresponding data on stamps of *Domitiae Lucillae* in use during the period 109-155. The third column has information on stamps of *Domitia P.f. Lucilla*, period 123-155. (Persons belonging to Group 4) do not appear in these stamps.)

	-108	109-155	123-155
1) Slaves of <i>Domitii</i> ³⁴	26	23	17
2) <i>Vicarii</i> of slaves of <i>Domitii</i>	2	0	0
3) <i>Cn. Domitii</i>	3	5	3
5) Other free persons	1	28	27
6) Slaves of other free persons	0	6	2

The figures reveal one difference between first and second century stamps which has been reported earlier. It will be noted that slaves of *Domitii* (Group 1) are encountered steadily in all periods. Free persons, on the other hand, especially those independent in law (of persons) from the *Domitii* (Group 5), appear very little in first century stamps, but a great deal in second century stamps. How is this to be explained?

If conclusions are drawn without regard for the independent development of stamp content, the result is as follows: The *Domitii* worked their clay deposits at first with the help of their slaves alone. In the second century they left the working more and more frequently to free persons independent in law of themselves. – The fault in this explanation is that note has not been taken of the development of stamp content. On the lands of the *Domitii* during the first century many persons who were independent of the *Domiti* in law of persons may have worked, but because it was not yet customary for the landowner to be mentioned in stamps the names of *Domitii* do not appear in the stamps of these persons. The following stamp, for instance

(58) T·GREI·IANVARI
VALEAT·QVI F

CIL 120

T. Grei Ianuari, valeat qui fecit

does not inform us whether *T. Greius Ianuarius* worked the clay deposit on Domitian lands. But in two other stamps of *T. Greius Ianuarius*, CIL 117 and 118, of which the former is the specimen stamp (55) above on page 95, *dominus* is also mentioned, namely *duo Domiti* or the Domitius brothers *Lucanus* and *Tullus*. On the evidence of these stamps we can, in Dressel's manner, place all stamps of *T. Greius Ianuarius* among those of the *Domitii*. It may well be that in the first century many free persons worked on the lands of the *Domitii* who used only stamps of (58) type. – The following stamp is an example of a different kind:³⁵

(59) O·L·MVNATI·FAVSTI D
CRESCENTI

CIL 962a

opus doliare Crescentis L. Munati Fausti (sc. servi)

From this text we do not know, as we did not know from the previous stamp, whether *Crescens* the slave of *L. Munatius Faustus* produced bricks on the lands of the *Domitii* or elsewhere. The previous stamp was placed by Dressel with the stamps of *gens Domitia*, but this one was not. Comparison strongly suggests, however, that this stamp also was used on Domitian lands. The same *Crescens* appears later, manumitted, with the name *L. Munatius Crescens* as *offinator* in stamps CIL 124, 127 and 128, the last of which is dated by the names of the consuls for the year 126; in all these stamps *Domitia Lucilla* appears as *dominus*. In addition two slaves of *L. Munatius Crescens* appear as *offinatores* in stamps CIL 121 (year 123) and CIL 123, and in these stamps too *Domitia Lucilla* is *dominus*. There are reasons for supposing, therefore, that specimen stamp (59) was used on Domitian lands; not a single known fact contradicts this supposition.³⁶ The stamp

evidently would contain the name of some *Domitius* if a) *Crescens* had been a slave of some *Domitius*, or b) *Crescens* had signified the landowner's name (*dominus*) for this stamp of his, as he did so signify for his later stamps.

The appearance in stamps of *gens Domitia* of slaves of the *Domitii* and persons independent of the *Domitii* in law of persons can now be explained as follows: In first century stamps the landowner (*dominus*) is not mentioned, only the brick manufacturer is referred to. This being so, the names of *Domitii* appeared only on the stamps of their own slaves, as parts of the names of those slaves, in the manner exemplified by stamps (50) and (56) above on pages 92 and 95. In the second century it became a general custom to mention the name of the landowner (*dominus*) also on a stamp, and then the names of *Domitii* came to be included also in the stamps of free persons producing bricks on lands owned by the *Domitii*. The fault in the reasoning introduced earlier lies therefore in failure to take note of development in the textual content of the stamps on the one hand, and in counting *dominus-servus* pairs as *dominus-officinator* pairs on the other (cf. p. 95 above).

In addition to *Domitii* 21 persons appear in the stamps whose name is *Cn. Domitius* + *cognomen*. Some of these are known on the evidence of stamps to be freedmen of the *Domitii*, and some to have been liberated by such freedmen: there are good grounds for linking them all with the *Domitii*. Dressel in *CIL* XV has placed the stamps of these *Cn. Domitii* among those of *gens Domitia*.

From the preceding table it will be seen that 5 *Cn. Domitii* appear as *officinatores* in stamps where some *Domitius* is *dominus*: the other 16 appear thus in one-name stamps only. If it is true that the name of *dominus* came to the stamps late, at about the beginning of the second century, then a clear majority of these *Cn. Domitii* should be persons of early occurrence, primarily freedmen of the male *Domitii*, and the five *Cn. Domitii* appearing in binominal stamps should be the latest. Such is in fact the state of affairs. Dressel shows ³⁷ that most of the *Cn. Domitii* appearing in one-name stamps are *liberti* of the *Domitius* brothers, two are still earlier, *liberti* of *Domitius Afer*, and only one is *libertus* of the elder *Domitia Lucilla*; the fact that all have the praenomen *Cn.* can be taken as an indication that not one of them is *libertus* of *Domitia P.f. Lucilla*; no slave of *Domitia P.f. Lucilla* appears as *libertus* in stamps. Those *Cn. Domitii* who appear in binominal stamps are the latest, although none of them extended his activity later than the decade of 120.

5. Relationship of *dominus* and *officinator* in the Roman Law of Persons

Slaves

It became apparent earlier that somewhat less than 19 per cent of persons appearing in brick stamps are slaves (see p. 24 above). The majority of slaves appear in one-name stamps, i.e. mainly in those of the first century. A considerable group is formed by stamps of the following type from the year 123:

(60) APRON ET PAE COS *a. 123*
ALCIDIS CIL 786

According to Bloch these stamps were used in the *praedia Quintanensia* owned by *M. Annius Verus*;³⁸ 40 slaves are known from these. The abundance of stamps of this type in the year 123, among other things, has given reason to suspect that stamping in that year had some special purpose which did not exist in other years.

In cases where both *dominus* and *officiator* are mentioned in a stamp and *officiator* is a slave, the relationship in law of persons of *dominus* and *officiator* may be of two kinds: 1) *officiator* is the slave of *dominus*; 2) *officiator* is the slave of some other person than *dominus*. There are examples of both cases in second century stamps. The following

(61) EX PR FAVSTINAE AVG FIGL TERENT
OPVS DOL MAI FAVSTN *sic*
AVG CIL 620
ex praedis Faustinae Augustae, figlinis Terentianis,
opus doliare Mai Faustinae Augustae (sc. servi)

is an example of the former case. It is stated specifically in the stamp that *offinator* (*Maius*) is the slave of *dominus* (Empress Faustina the Younger). An example of the latter case is stamp (57) on page 95 above, where *offinator* (*Mercurius*) is the slave of another person (*Ti. Claudius Quinquatralis*) than *dominus* (*Domitia Lucilla*).

If we take into account only those stamps in which it is specifically stated whose slave *offinator* is, then the cases where *offinator* is the slave of another person than *dominus* are more common (they are listed later, on page 104). In most cases, however, it is not stated whose slave *offinator* is; it is then most natural to assume that *offinator* is the slave of *dominus* mentioned in the same stamp. For the following calculations this assumption has been made.

a) *Officinator is Slave of dominus Mentioned in Same Stamp*

A total of 355 *officinatores* appear in stamps. 39 or 11.0 % of these are slaves of *dominus* mentioned in the same stamp. This figure – as said before – includes all *officinatores* for whom a *cognomen* alone is used in a stamp, and of whom it is not stated that they are slaves of another person than *dominus*. Because the persons mentioned by *cognomen* alone obviously include free persons also, (see p. 23 above), the figure arrived at is a maximum. Thus of the *officinatores* of brick stamps not more than 11.0 % are slaves of the *dominus* mentioned in the same stamp.

The largest groups of slave-*officinatores* are the following: 10 slaves of the *Domitiae Lucillae*,³⁹ 5 slaves of *Vismatius Successus* (CIL 1518–1526; S. 397–402), 4 slaves of *Iulia Albana* (CIL 1214–1216; S. 322, all from the year 123), and 3 slaves of *Q. Servilius Pudens* (CIL 1434–1440; S. 379). In stamps of all these *domini* free persons, independent of the *dominus* in law of persons, also appear as *officinatores*.

The clearest example of a great landowner of the senatorial order possibly acting himself as producer and enterpriser in the brick industry is to be found in the stamps of *Q. Servilius Pudens* already mentioned. The stamps show that three of his slaves in succession were in charge of brick production for *Pudens* in the years 128–139. The stamps of *Hedys* are for the years 128–131 and 133,⁴⁰ those of *Arabus* and *Abascantus* for 139.⁴¹ In the stamps of *Hedys* and *Abascantus* the fact that *officinator* is in the service of *dominus* is indicated by the words *sub cura*, *cur(ante)*, *ex opere* or *per*. These stamps for the slaves of *Q. Servilius Pudens* are the only ones in which such expressions are encountered.⁴²

b) *Officinator is the Slave of Some Other Person Than dominus*

In the following cases it is specifically mentioned in the stamp that *officinator* is the slave of some other person than *dominus* mentioned in the same stamp.⁴³

<i>officinator</i>	<i>dominus</i>	
Eutyc() P. A.() A()	Arrius Antoninus	CIL 93
Chresimus L. Munati Crescentis	D(omitia) L(ucilla)	CIL 121 (cf. CIL 122)
August(alis) L. Munati Crescentis	D(omitia) L(ucilla)	CIL 123
Primus Q. Sulp(ici) Aphy()	Cass() (= L. et P. Cassi)	CIL 284
Euhod(us) C. C() Primig(eni)	Annius Lib(o)	CIL 514
Glypt(us) Calp(etani?)	Q. Cass(ius) Caecil(ianus)	CIL 517
August(alis) Publ(ici) Cresc(entis)	Aug(ustus) n(oster)	CIL 686
Aprilis Aquiliae Sozomen(ae)	Caes(ar) n(oster)	CIL 709
Epagathus Claud(i) Quinquatr(alis)	Dom(itia) Luc(illa)	CIL 1073 (cf. CIL 1074)
Mercuri(us) Ti. Claud(i) Quinquat(ralis)	Lucilla Veri	CIL 1077
Iustin(us) trium [] ior(m)	I]saurica ⁴⁴	S. 378

In these 11 cases a connection in law of persons is absent between *dominus* and *officinator*, and present between *officinator* and a third person.

Two *officinatores* in the list deserve special attention. The *officinator* of stamp CIL 709 *Aprilis Aquiliae Sozomenae* appears later as a free man named *C. Aquilius Aprilis* in 5 stamps (CIL 358–362); in one of these the name of *figlinae Oceanae* is mentioned. In all stamps of *Aprilis* there appears *Caes(ar) n(oster)* (= Hadrian) as *dominus*, and his three dated stamps are from the years 123–125. – *Mercurius Ti. Claudii Quinquatralis* may be the same as *officinator* in stamps CIL 716 and 756, whose name appears only in the forms *Mercuri(us)* and *Merc(urius) s(ervus)* without an owner's name. *Dominus* in stamp CIL 716 is *Aurelius Caes(ar)* and in CIL 756 *Aug(ustus)*. If *Mercurius* is the same person in all stamps, then it is quite possible that *officinator* in stamps CIL 716 and 756 is a slave not of *dominus* mentioned in the same stamp, and that this state of affairs is not declared in the stamp.

Officinator is libertus of dominus

A second possible link connecting *dominus* and *officinator* is that between former master (*patronus*) and freedman (*libertus*). If *officinator* has the same *gentilicium* (and *praenomen*) as *dominus* in the same stamp, it is highly probable that *officinator* is the *libertus* of *dominus*. This criterion is based on what we know of the Roman name system: a slave, when manumitted, took the *praenomen* and *gentilicium* of his former master.⁴⁵ – Because the positions of *dominus* and *officinator* did not belong to the same career and a clear social distinction is noticeable between them we may exclude the possibility that a common name implies blood relationship (cf. p. 23 and 92 above).

Cases occur in brick stamps which show that this criterion is not certain. In stamps of *Domitia Lucilla* (see list p. 107) there appear three *officinatores* named *Cn. Domitius* of whom we definitely know that they were not *liberti* of *Domitia Lucilla* or her parents or ancestors. *Cn. Domitius Carpus* and *Cn. Domitius Trophimus* were *liberti* of *Cn. Domitius Agathobulus*, who was *libertus* of *Domitia Lucilla* the elder,⁴⁶ and *Cn. Domitius Adiectus* was *libertus* of *Cn. Domitius Trophimus*.⁴⁷ *Cn. Domitius Arignotus* too was manumitted not by either *Domitia Lucilla* but evidently by the *Domitius* brothers. This may be deduced from the fact that *Arignotus* appears already as free in *pelvis* stamp S. 501 found at Pompeii. Nor was *Cn. Domitius Asiaticus* freed by *dominus* of the same stamp, for if he had been freed by *Domitia P.f. Lucilla* his *praenomen* would obviously have been *P.*

Because the status of *patronus* was hereditary⁴⁸ but that of *libertus* was not,⁴⁹ we can count *Arignotus* and *Asiaticus* as *liberti* of *Domitia P.f. Lucilla*, the *dominus* mentioned in their stamps; but in the three other cases the most that can be said is that there is a connection between *dominus* and *officinator*.

It is highly probable, on the other hand, that *Servilius Gelos*, *officinator* in stamp

CIL 50 (*Ti. Servilius Gelos* in CIL 51) was the freedman of *Plotia Isaurica*, *dominus* in the same stamp,⁵⁰ although there is no *nomen gentilicium* in common. *Isauricus* had long been a *cognomen* of *gens Servilia*, and it is therefore possible that *Servilius* was among the *gentilicia* of *Plotia Isaurica* also, though in brick stamps she appears only with the names *Isaurica* and *Plotia Isaurica*. Known from one inscription⁵¹ is a *libertus* of *Plotia Isaurica* named *Servilius Sigerus*. The multiplicity of names among senators and knights of the second century, in fact, makes it difficult to discover all *patronus-libertus* pairs by study of names alone.

I have looked up all *dominus-officinator* pairs of which we can show in the manner described (and with the reservations mentioned) that *officinator* is the *libertus* of *dominus*. It will suit our purpose to divide the cases in two groups: 1) *dominus* is the Emperor or Empress; 2) *dominus* is some other persons.

1) Because Emperors are generally referred to in stamps merely as *Caes(ar)* *n(oster)*, *Aug(ustus)* *n(oster)* or *d(ominus)* *n(oster)*, it is by no means always possible to say with certainty which Emperor is intended. Identification is still more difficult if an abbreviation such as *Augg. nn.* is used, because this may signify not only two Emperors, but also an Emperor and an Empress. For this reason I have included in the following list all *officinatores* who have the *nomen gentilicium* of an Imperial family and who appear in stamps whose *dominus* is *Augustus*, *Augusta* or *Caesar*. Because all stamps are from the second century I have not taken into account *officinatores* whose *nomen gentilicium* is *Flavius* or the name of a still earlier Imperial family.⁵²

<i>officinator</i>	<i>dominus</i>	
P. Aelius Alexander*)	Caes(ar)	CIL 717
L. Aeli ii Secund(us) et April(is)	Aug(ustus) n(oster)	CIL 626
C. Aelius Asclep(iades)	II Aug(usti)	CIL 385
	Faustina Aug.	CIL 398
P. Aelius Demetrius	Augg. nn.	CIL 217
Aelius Euphemus	August. n.	CIL 537
Aelius Felix	Augg. nn.	CIL 324
	Aug. n.	CIL 624
L. Aelius Phidelis*) (<i>sic</i>)	Aug. n.	CIL 625
	Augg. nn.	CIL 628
L. Aelius Sabinianus	Aug. n.	CIL 753
L. Aelius Victor	Aug.	CIL 627
	Augg. nn.	CIL 629
Cocceia A. lib. Primigeni(a)	Caes. n.	CIL 745 = S. 587
Sex, Pompeius Heli()	Faus(tina) Aug.	CIL 400
	Aug.	CIL 757-8

Vib(ius?) Ver(na?)	Aug. n.	CIL 222
M. Ulpius Anicetianus*)	Caes. n.	CIL 472-3
	Aurelius Caes. et	CIL 719
	Faustina Aug.	

*) *P. Aelius Alexander*, *L. Aelius Phidelis* and *M. Ulpius Anicetianus* also appear as *officinatores* in stamps of other than Imperial *domini*. See *officinator* list, nos. 1, 4 and 63.

Names can be removed from the list which clearly do not belong to Imperial freedmen: *C. Aelius Asclepiades*, because the *praenomen* *C.* does not appear among Emperors named *Aelius*; *Cocceia A. lib. Primigenia*, because the *praenomen* of Nerva was *M.*;⁵³ *Sex. Pompeius Heli*(), because the *praenomen* of Plotina's freedmen was *L.*;⁵³ *P. Aelius Demetrius* and *Vibius Verna*, because they appear in stamps so late that they are unlikely to be freedmen of Hadrian and Sabina. There thus remain 8 *officinatores* who are possibly Imperial freedmen and who mention in their stamps some Imperial person as *dominus*.

2) The cases where *dominus* and *officinator* have the same *nomen gentilicium* and *dominus* is not an Imperial person are:

<i>officinator</i>	<i>dominus</i>	
Ab(urnius) G()	Abur(nius) Cae(dicianus)	CIL 608=S. 170
Annius December	Annius Libo	CIL 512, 513
M. Annius Zos(imus)	M. Ann(ius) Ver(us)	CIL 245-6
M. Ann(ius) Hermes	Ann(ius) Ver(us)	CIL 799
M. Cornelius Thalam(us)	Cornelius At(t)icus	S. 419
Cn. Dom(itius) Adiec(tus)	Dom(itia) Luc(illa)	CIL 1021
Cn. Domitius Arigno(tus)	D(omitia) P.(f) L(ucilla)	CIL 1024
Cn. Domitius Asiaticus	Dom(itia) P.f. Luc(illa)	CIL 1032
Cn. Domitius Carpus	Domitia Lucill(a)	CIL 267-8, 277; S. 59-60
Cn. Domitius Trophimus	Dom(itia) Luc(illa)	CIL 269
T. Flavius Phoebus	Flav(ius) Posido(nius)	CIL 677, 678, cf. CIL 679
Fulvius Primitivus*	C. Ful(vius) Plaut(ianus)	CIL 184
L. M(emmius) Astrag(alus)	M(emmia) Macri(na)	CIL 1300
C. Statius Comolvis	C. Statius Capito	CIL 2200, cf. CIL 2197
L. Tut(ilius) Ianuar(ius)	L. T(utilius) L(upercus) P(ontianus)	CIL 2158, cf. S. 410
Vismatius Feli(x)*	Vism(atius) Successus	cf. S. 401

*) *Fulvius Primitivus* and *Vismatius Felix* appear as *officinatores* also in stamps of other *domini*. See *officinator* list, nos. 24 and 61.

The list contains 16 *dominus-officator* pairs. Comparison of stamps for 7 of these enables us to note more precisely what connection existed between *dominus* and *officator*. As stated earlier, the relation between five *Cn. Domitii* and *Domitia Lucilla* was not a direct *libertus-patronus* relation, but was indirect in various ways. Again, we know on the evidence of other stamps that *M. Annius Zosimus* and *Vismatius Felix* were freedmen of the *domini* mentioned in their stamps.⁵⁵ On the remaining 9 pairs the other stamps give no further information.

How many *officinatores* were the *libertus* of *dominus* mentioned in the same stamp? The lists contain 29 *officinatores* in all. 5 of the *officinatores* of Imperial stamps can be removed as not pertinent, also 3 with *Cn. Domitius* names; *Ti. Servilius Gelos* can be added from outside the lists. The result is 22 *officinatores*, which is 6.2 % of all *officinatores* and 7.2 % of free *officinatores*.

Conclusions

The results of my calculations can be summed up as follows:

- typically the *officinatores* were free persons and independent in law (of persons) of the *domini* of their stamps; 283 or 79.7 % of all *officinatores* satisfy these requirements;
- 61 *officinatores* at the most, or 17.2 % of all *officinatores*, were dependent in law of persons on the *domini* mentioned in their stamps.

Have these figures some relevance to the organization of brick production? Can we draw conclusions from them regarding the position in production organization of *dominus* and *officator*? – It is generally presumed that slaves were in their masters' service, i.e. that a master and his slaves formed a unit in economic life. In many scholars' opinion the same applies largely to a *patronus* and his *liberti*.⁵⁶

Therefore, if the *officinatores* had been slaves or freedmen of the *domini* of their stamps, then we could infer that the *domini* and *officinatores* belonged to the same organization and the *officinatores* were subordinates of the *domini*. But my calculations show that the *officinatores* were generally independent in law of persons of the *domini* of their stamps. Can we from this inversely conclude that the *officinatores* and *domini* did not belong to the same organizations?

In my opinion reasoning on these lines is not admissible. We do not know sufficiently the role of patronage in the commercial and industrial life of the early Empire and the part played in it by relations in law of persons.⁵⁷ From literary sources and inscriptions we are acquainted with some large households of first century aristocrats in which slaves and freedmen produced what was needed within the household. From Petronius we may deduce that the ideal among the wealthy was economic autarchy, the *dominus/patronus* exploiting his resources through his slaves and freedmen. From Classical law texts we know provisions which may have made it advantageous for the *patronus* to make use in his commercial and industrial activities of the services of his own freedmen rather than the services of

other persons. But this is knowledge of too vague and general a nature to be of use in interpreting the concrete situations reflected in brick stamps.

But the results are not without interest for the significance of relations in law of persons in industrial and commercial life. From brick stamps we know a concrete case. They reflect a clear-cut situation in industrial activity, and we are able to estimate fairly reliably their representativeness as source material. So we know from brick stamps that in the second century the mostly aristocratic landowners on whose lands bricks were produced for the builders of Rome obtained their revenue from this industry usually through persons independent of the said landowners in law of persons. This is a valuable piece of information, particularly so if the revenues were as considerable as Frank believes when asserting that 'the profits made by a few large brick yards (. . .) provided the fortune upon which the Antonine family rose to prosperity and power'.⁵⁸

On the other hand, we know from brick stamps that the 'producers proper', i.e. *officinatores* or persons in whose *officinae* the bricks were produced, were usually independent, in law of persons, of the landowners on whose lands the *officinae* were situated.

Duff in his standard study of freedmen in the early Empire opts for the view that aristocrats mostly used their own slaves and freedmen in their undertakings. As a concrete case he presents Roman brick stamps. He writes:

In industries where the factory system prevailed, capitalists made their freedmen overseers, while the rank and file of the workmen were slaves. In this connexion we cannot have better evidence than the rough inscriptions on bricks. Many a brick bore not only the name of the maker, but also that of the foreman under whose direction it was made.⁵⁹

From the context we see that Duff refers by the words 'capitalists' and 'maker' to the *domini* of the stamps, and by the words 'overseers' and 'foreman' to the *officinatores*. But according to my calculations Duff's information is not correct: *officinatores* are very rarely freedmen of *domini* of the same stamps. Thus the example is not illustrative of the case he is propounding.

From the context we see where Duff's error originates. His source of information on brick stamps is the study of the stamps of *gens Domitia* which Dressel published in abridged form in *CIL* XV, 1.⁶⁰ It is true that there are numerous slaves and freedmen in the stamps of *gens Domitia*, but this group is not typical of Roman brick stamps; besides, Duff underestimates the part played by those who were independent, in law of persons, of the *Domitii* in these stamps. But the main cause of Duff's error is his failure to take into consideration the development of the content of the stamp text. (See above p. 101.)

If Duff is right in his opinion that 'in industries where the factory system prevailed, capitalists made their freedmen overseers', then the conclusion to be drawn from the result of my calculations is that the *officinatores* of brick stamps were independent enterprisers and not foremen paid by the *domini*.

6. *Officinatores*

What type of persons were the *officinatores* of brick stamps? In many cases the name of an *offinator* is a genitive attribute of the word '*officina*' in the same way as the name of a *dominus* is a genitive attribute of the words '*praedia*' and '*figlinae*'. Were *officinatores* then "owners of *officinae*" and, if so, what does this mean in modern terms? Or does, for instance, the expression "*ex officina Valeriae Nices*" (CIL 693-4) merely mean that the brick was manufactured in an *officina* where *Valeria Nice* was foreman?

Thus far my study has disclosed nothing to indicate that *domini* and *officinatores* belonged to the same production organization with *dominus* as director and the *officinatores* his subordinates. The meaning of the word '*figlinae*' does not suggest this, nor do the relations in law of persons which have been noted between *domini* and *officinatores*.

With regard to *domini* we need not believe only what is stated in stamps, because the names of *domini* accord well with names occurring in the prosopography of the senatorial and equestrian orders at the same period; we may take it as certain that the *domini* of brick stamps actually were landowners. Comparison of the groups *domini* and *officinatores* has shown that the latter, considered as a whole, did not belong to the same social levels as the former. This only means, however, that *officinatores* did not belong to the highest level of society; plenty of scope still remains. Did they belong to the "middle" or "lower" class? This is a difficult question when we bear in mind that scholars are in disagreement as to whether Roman society of this period included a "middle class" at all. All we can do is to search for characteristics among members of the *officinatores* group which reveal something of their status. We know at least that they were concerned in brick production for construction of the urban centre of the Empire.

In one-name stamps, which are on the average early, the official position of the person is sometimes mentioned. Mentioned in stamp CIL 1136 (cf. CIL 1137, S. 290) is *L. Faenius Rufus pr(aefectus) pr(aetorio)*; we know through Tacitus that this person was *praefectus praetorio* in the year 62 (*Ann.* 14, 51). Mentioned in CIL 1380 (cf. CIL 1381) is *C. Pontius Crescens trib(unus) coh(ortis) I pr(aetoriae)*. In CIL 1507 *C. Vibius Eclectus scr(iba) lib(rarius)* is mentioned. These are offices of good standing, and the persons concerned may be accepted as part of a high social level. What was their position in brick production?

As noted earlier among persons appearing in binominal stamps, *dominus* is a "new" person and *offinator* continues the traditions of the persons of one-name stamps. If this is so, then the *officinatores* of binominal stamps may also include

persons similar to the important individuals mentioned. Similar references are indeed to be found in binominal stamps, but still more rarely than in one-name stamps.

In stamp CIL 705, which is from the year 124 and contains as *dominus* *Caes(ar) n(oster)*, the *officinator* is *Q. S() Scafa pr(ocurator) Aug(usti)*.⁶¹ In CIL 527 the *officinator* is *Iulius Theodotus eq(ues) R(omanus)*; the stamp is from the end of the second century. In CIL 1047, where *dominus* is *Domitia Lucilla*, *officinator* is *Earinus*, of whom it is said in stamp CIL 1049 that he is *Earinus Lucillae Veri act(or)*. The two first-mentioned *officinatores* belonged to very high ranks of society; *Earinus* was in a high position in the inner hierarchy of one of the most powerful houses in the Empire.

So we know that the *officinatores* included at least one knight. At an earlier stage I attempted to link one *officinator*, *C. Calpetanus Favor*, with persons known from other sources which give some indication of their social status; the link remained quite hypothetical. I shall now give a second example. – Was *Ti. Claudius Secundinus*, who appears in brick stamps as *officinator*, the same person as *Ti. Claudius Secundinus L. Statius Macedo*, whose successful equestrian career is known from inscriptions?⁶²

The stamps of *Ti. Claudius Secundinus*⁶³ contain no consular dates, but they are easily dated in accordance with *domini* appearing in three stamps: the name form *Lucilla Veri*⁶⁴ indicates the period 145–155, *Caesar noster* indicates 156–161 (M. Aurelius after the death of his mother *Domitia Lucilla*, whose property he inherited, and before his accession), and *Faustina Augusta* perhaps indicates the period subsequent to 161. The term of *Ti. Claudius Secundinus* as *officinator* can thus be placed in the decade of 150 and the time following (possibly also the time slightly preceding). This is quite compatible with the career of the equestrian official bearing the same name. According to Pflaum *Ti. Claudius Secundinus L. Statius Macedo* became *praefectus annonae* at the earliest in 147; his term of office therefore fell into the decade of 150, and he must then have lived in Rome. How long he remained *praefectus annonae* is unknown, but this office was evidently the height of his career.

From the chronological standpoint, therefore, the persons could be the same, but there is nothing to show positively that they are identical. If *Ti. Claudius Secundinus* appeared in brick stamps as *dominus*, then his identification with a well-known knight would seem natural; the *domini* of brick stamps generally belong to the highest rank of society, and this is a fact which might be taken as a positive indication that *Ti. Claudius Secundinus*, appearing as *dominus*, was identical with the knight of the same name who is known from other sources. But we do not have the same clear picture of the social composition of the *officinatores* group: it may include persons from anywhere in the social scale from the lowest to the knights.

Women as officinatores

In connection with *domini* there has already been some discussion of women appearing in brick stamps. The following list gives all women *officinares* mentioned in stamps.

<i>officator</i>	<i>dominus</i>	
Aemilia Romana	Aug(ustus) n(oster)	CIL 174
	Aug(usti duo) n(ostri)	CIL 181
Appia Pyramis	Q. Asinius Marcellus	CIL 854 (S. 191)
Aufidia Restituta	T. S(tatilius) M(aximus)Sever(us)	CIL 1455
Augustina	Aug(usti duo) n(ostri)	CIL 182
Caecilia Amanda	Aug(ustus) n(oster)	CIL 192-194
	Aug(usti duo) n(ostri)	CIL 195, 196
Calventia Maximin(a)	Aug(ustus) n(oster)	CIL 214
	Aug(usti duo) n(ostri)	CIL 215-6, 325
Cassia Doris	Arria Fadil(la)	CIL 73-4, (75)
Cocceia A.lib. Primigeni(a)	Caes(ar) n(oster)	CIL 745=S. 587
Iulia Menile	Q. Pomponius Mussa	CIL 1375
Iu[lia Sa]turnina	Aug[]	CIL 365
Nunnidia Sperat(a)	L. Aelius	S. 215
Procill(ia) Gemella	Memmia L.f. Macrina	CIL 1302
Procilia Phila	Mamm()	CIL 301
	Iulia Albana	CIL 1217
Publicia Quintin(a)	d(ominus) n(oster)	CIL 761
Sabinia Ingenua*	Aug(ustus) n(oster)	CIL 203
	Aug(usti duo) n(ostri)	CIL 205
Statia Primilla (Primula)	Dom(itia) Luc(illa)	CIL 139, 140, 630
Titia Rufina	dom. nn. Augg.	CIL 774
Valeria Nice	Plotina Aug(usta)	CIL 692-694
Vibia Procill(a)	Terentius Iulianus	CIL 1468
Vibia Procla * *	Flavius Aper	CIL 1147

*) In stamp CIL 205 the *societas* of *Font(eius) Proculus et Ingenua* appears as *officator*; probably this *Ingenua* is the same person as *Sabinia Ingenua* as Dressel supposes in his comment.

**) The *officator* of stamp CIL 1147 is a *societas*: *Tontius Felix et Vibia Procla*.

Gummerus took the presence of women *officinares* as evidence that the *officinares* included persons who were not foremen subordinate to *dominus*, but independent tenants. There is good reason to agree with this. It is difficult to understand why women should have been foremen, but easy to understand that they may have acted as independent enterprisers, a position in which they took no physical part in brick manufacture.

But if we regard the *domini* of the stamps as landowners and the *officinares* as largely independent enterprisers, then the occurrence of women in the stamps, taken as a whole, fits well into the picture. There appear 43 women as *domini* in the stamps, or nearly 30 % of all *domini* are women. This proportion is not surprisingly high, for in the society of that time, especially on its highest level, it was common for women to be owners of wealth (as heiresses, for instance). Nor is it surprising that only about 6 % of the *officinares* are women, for undoubtedly the opportunities of women to take part in economic activities as active enterprisers were much inferior to those of men.

Societas in Brick Stamps

Interesting in many respects are those brick stamps in which more than one person is mentioned either as *dominus* or *offinator*. There are a considerable number of such stamps: the present study is concerned mainly with those in which there are several *officinares*.

Roman law knows a form of juridical person.⁶⁵ Collective bodies existed with their own property and with an identity other than the sum of their members, bodies which remained the same although their members changed; but their field of action was limited, they were religious congregations, professional clubs, burial associations and so on. In the commercial field these collective forms were not recognized: economic life was ruled by individualism. Responsibility was always an individual matter.

Collaboration could certainly be practised, but only if each partner answered for his own share.⁶⁶ Two or more individuals might agree on their collective ownership of, for instance, an inheritance, or on plans to work together for an economic

objective. Such an agreement and the association formed by it were known as *societas*, and those who made the agreement as *socii*. *Societas* had no economic significance comparable with that of the modern business company. This is further illustrated by the fact that *societas* was one of the contracts which could be made without formal procedure of any kind.⁶⁷ The property of *societas* was merely the sum of the shares of *socii*, each *socius* controlling his own share as he wished. Also, *societas* itself was merely the sum of its members. Each *socius* was free to resign and remove his share at any time, and if one *socius* resigned the whole *societas* broke up. *Societas* could not be a party to agreements: it was necessary for one *socius* to put his name to an agreement and be responsible for it.

Cases of more than one *dominus* in brick stamps are easily explained in terms of *societas*. A *societas* of *domini* evidently implied collective ownership without a particular joint enterprise. Almost all *societates* of *domini* seem to have originated in *socii* together receiving an inheritance and forming a *societas* in order to preserve it whole.⁶⁸ As proof of this, in all cases except one the *socii* were either brothers or otherwise related.

The *societas* of the *Domitius* brothers *Lucanus* and *Tullus* is well known also from literary sources.⁶⁹ It was formed exactly as mentioned above, when *Cn. Domitius Afer*, father of the brothers, died. This was a case of *societas omnium bonorum*, which means that the agreement covered all property of the *socii*, both what was in their possession when the agreement was made, and what might come into their possession later.⁷⁰ In this respect brick stamps fully confirm the data given by Pliny: the name of *Lucanus*, who died before his brother, occurs only in combination with the name of his brother *Tullus*.

Among the *societates* of *domini* those have a special interest which illustrate the inheritance and control of the property of the Imperial family. The stamps indicate that the later Emperor, Marcus Aurelius, and his wife *Faustina* administered part of their property as a *societas* between the years 146 (when *Faustina* became *Augusta*) and 161 (when Marcus Aurelius became *Augustus*). This was not *societas omnium bonorum*, because both *socii* are also encountered alone in the stamps.⁷¹ Because Marcus Aurelius and *Faustina* were cousins it may be assumed that they had inherited the joint property from their grandparents *M. Annius Verus* and *Rupilia Faustina*,⁷² who both appear in brick stamps as *domini*. What happened to this *societas* after Marcus Aurelius became Emperor in the year 161? If it continued, then part of the stamps with the abbreviation *Augg nn* are of Marcus Aurelius and *Faustina* (in Index III Bloch does not place one of them under the names of Marcus Aurelius and *Faustina*). It is also possible that the combined property was divided or united with the Emperor's patrimony. Both Marcus Aurelius and *Faustina* appear alone as *domini* also after the year 161.

In 161 it happened for the first time that power was divided between two *Augusti* of the same rank. Brick stamps show that both Emperors, Marcus Aurelius and *Lucius Verus*, still controlled their private property separately, but held jointly the property they inherited from the previous Emperor *Antoninus Pius*.⁷³

More interesting than *societates* of *domini* from the standpoint of this study are *societates* of *officinatores*. The following list includes all cases where more than one *officinator* is mentioned in a stamp and *dominus* is also mentioned. The stamp-numbers refer to *CIL* XV (bare number) and to *Suppl.* (number preceded by S.).

<i>officinator</i>	<i>dominus</i>	<i>stamp</i>
Cl(audius) Q(uin)q(uatralis) et L(ivius) Mart(ialis)	Dom(itia) Luc(illa)	1079
Hermetianus et Urbicus	Augusti	367
	Aug(ustus) n(oster)	370
Tontius Felix et Vibia Procla	Flavius Aper	1147
Font(eius) Proclus et Ingenua	Aug(usti duo) n(ostri)	205
Nunn(idii?) Rest(itutus) et Leon()	Statilius Severus	S. 69=286
Op(pius) Procul(us) et Op(pius) Iust(us)	Caes(ar) n(oster)	363
Iusta et Rufinus	Ti. Iulius Iulianus	2174
L. Aeli II Secund(us) et April(is)	Aug(ustus) n(oster)	626
T. Am() Cip(), d(uo) R(ufellii?) P() et Fel()	Arr(ia) Fad(illa)	88,89
Q. Sin() Am(), Q. A[...]P()	Ar(ria) F(adilla)	S. 33
M.[] Jucul() Euc() et Volu()		
Pr[o]cul(us)	L. Aurelius Commodus	739

A good explanation of the appearance of two or more *officinatores* in the same stamp is that the *officinatores* had formed a *societas* to produce bricks together. On the other hand it would be difficult to explain why two foremen were appointed for one working crew. Stamps CIL 1147 and CIL 205, whose *officinatores* are evidently married couples, can hardly be explained by the assertion that the *officinatores* were subordinate to *dominus* in a production organization, for instance paid foremen.

Societates formed by *officinatores* seem to have been unions of a temporary nature. On the evidence of stamps only the *societas* of *Hermetianus* and *Urbicus* can be shown to have functioned for more than one year (CIL 367, 370); it operated through the change of rule in either the year 161 or 169. – In several cases one or more members of a *societas* are also encountered alone as *officinator*: *Ti. Claudius Quinquatralis* (CIL 1069–1079), *Livius Martialis* (CIL 1080), *Sabinia Ingenua* (CIL 203), *C. Nunnidius Restitutus* (CIL 289, 1158, 1278), *Rufellius Felix* (S. 29) and (*Domitius*) *Rufinus* (CIL 2174).

Officinatores Who Appear in Stamps
of More Than One dominus

There are a considerable number of *officinatores* in whose stamps more than one *dominus* appears. I have collected data on these *officinatores* in a list on pages 139-, the references below are to numbers in this list.

If the same *offinator* appears in several stamps with different *domini*, we know of the *offinator* that either 1) his *officina* was situated on land whose owner changed, or 2) he manufactured bricks first on the land of one *dominus*, and then moved to the land of another, or 3) he manufactured bricks simultaneously in different places on the lands of different *domini*. In order to clarify the relation between *dominus* and *offinator* it would be important to know which of the three alternatives applies in each case. If it is 1) nothing can be said of the relation, but if it is either 2) or 3) we may take it as a sign that *offinator* was independent of *dominus*.

Alternative 1) applies at least to cases in which it is known, or there is reason to suspect that land was transferred from one *dominus* to another by inheritance. This is so when *domini* are members of the Imperial house; other such cases are *Domitia Lucilla* – *M. Aurelius* (& *Faustina*) (nos. 1, 20, 32, 36, 63), *Seia Isaurica* – *Flavius Aper* (no. 8), *Q. Asinius Marcellus* – *Asinia Quadratilla* (no. 39), *Arria Fadilla* – *Arrius Antoninus* (no. 45) and perhaps others. – Analogously it may be suspected that a greater transfer of landed property, by will, for instance, took place in cases where more than one *officinatores* have the same *domini*. Such cases are: *Plotia Isaurica* – *Arria Fadilla* (nos. 25, 33, 35 and 52), *Iulius Stephanus* – *Domitia Lucilla* (nos. 1, 21 and 44), *Seia Isaurica* – *Statilius Maximus* (nos. 37 and 55). – On the evidence of the list a great variety of hypotheses can be formed regarding the transfer of property.

The appearance of the name of *C. Fulvius Plautianus* in the list was explained earlier (see note 26). I shall examine one further case separately, since it illuminates a phase of second century political history. The stamps of *A. Aristius Thallus* (no. 9) show that he produced bricks in the years 123–134 on the land of *Plaetorius Nepos*, and in 138 on the land of the later Emperor *L. Verus* (*L. Ceionius Commodus Caesaris filius*). If it is assumed that *Thallus* throughout the period produced bricks in the same place, it is then clear that ownership of the land was transferred sometime between 134 and 138 from *Plaetorius Nepos* to the future Emperor.

Plaetorius Nepos is a person known from other sources.⁷⁴ He was consul in the year 119 with Hadrian; for most of Hadrian's reign he was one of the Emperor's closest associates. In the last years of Hadrian he lost favour, however, being mentioned in *Vita Hadriani* as one of the notables whom Hadrian "*quasi futuros imperatores detestatus est*". References in *Vita Hadriani* suggest, in fact, that

Plaetorius Nepos in the end fell victim to the Emperor's suspicions.⁷⁵ Carcopino, showing great powers of invention, has reconstructed the course of these events. According to him the aim of the "*futuri imperatores*" was to prevent the appointment of L. Ceionius Commodus (L. Aelius Caesar) as successor. Hadrian could carry his adoption scheme into effect only after the death of the Empress Sabina (this is the essential point in Carcopino's theory). We know that Sabina died "dans le second semestre 136" and that the adoption of L. Aelius Caesar took place in December 136; consequently the revolt of the "*futuri imperatores*" must have occurred between these dates.⁷⁶

The stamps of *A. Aristius Thallus* are quite compatible with the above data. The course of events was as follows: *Plaetorius* was condemned and his property confiscated. At least part of the confiscated property was transferred by Hadrian to L. Aelius Caesar (father of L. Ceionius Commodus, *dominus* of stamp CIL 732), whom he adopted and thus appointed his successor. L. Aelius Caesar died on 1. 1. 138. This early death explains the fact that his name does not appear in stamps, though the name of his 7-year-old son appears. The property of *Plaetorius Nepos* was transferred to L. Aelius Caesar only in the year 137, because if the transfer had been made the previous year the name of L. Aelius Caesar would have been in time to appear in the stamps of 137. A second possibility is that the stamp series of *A. Aristius Thallus* contains gaps; the stamp for the year 138 in any case bears the name of the son and heir of L. Aelius Caesar.

The course of events illustrated in the brick stamps can be understood only on the assumption that the *domini* of the stamps were great landowners. The lands transferred to L. Aelius Caesar may have been very large, and for those concerned this was certainly the important fact, far more so than the location on this land of one brickworks.⁷⁷ Land ownership had great political importance; it may be assumed that Hadrian wished to strengthen the status of the man he had chosen as his successor. This example is similar to the case of *C. Fulvius Plautianus*, which was expounded earlier. To explain the change of *domini* one need not look for changes in the brick industry, as there may be quite other features in the background.

But these changes of *dominus* took place without the influence of the *officinator*, he played a merely passive part in the events reflected in these stamps. Does the list contain cases in which *officinator* was active and responsible for the change of *dominus*? Among *officinatores* who produced bricks simultaneously on the lands of more than one *dominus* are almost certainly *Sex. Alfius Amandus* (no. 7), *C. Nunnidius Restitutus* (no. 40) and *P. P() B()* (no. 43), for their stamps record several *domini* in the same year. *Officinatores* who very probably produced bricks in more than one place, either simultaneously or at different times, are: *T. Rausius Pamphilus* (no. 52), in whose stamps appear three *domini* of *figlinae Caepionianae* and one instance of an adjective suggesting a second place (*Salarese*); *Caetennius Magnio* (no. 12); *P. Servilius Firmus* (no. 55), in whose stamps appear three

domini; and *M. Ulpius Anicetianus* (no. 63) with four *domini*. Further probable examples are nos. 14, 15, 34, 38, 42, 44, 48, 57, 60 and 61.

These cases may be regarded as proving that *officinatores* were not so tied to one *dominus* that they were unable to move to the lands of another or produce bricks simultaneously on the lands of several *domini*.

Continuity of the Functions of officinatores: For How Long Did They Operate?

Listed in this chapter are the *officinatores* of brick stamps who are known to have produced bricks for at least twelve years. Twelve years are the interval between the consular dates which appear most often in stamps, the years 123 and 134.

Persons who were *officinatores* in stamps for the year 134 and who also have a stamp for 123 but none for the years outside those limits are nine in number: *M. Lurius Valens* (CIL 336, 335), *A. Gabinius Successus* (CIL 490–4, 488–9), *Pomp(onius?) Vitalis* (CIL 453, 455), *Dionysius Domitiae Lucillae* (CIL 1020, 1030), *Tertius Domitiae Lucillae* (CIL 1041, 1043), *Graphicus ser(vus)* (or *Servius Graphicus*) (CIL 851 = S. 237, CIL 852), *C. Nunnidius Restitutus* (see *offinator* list, no. 40), *Pettius Proculus* (no. 45) and *A. Pontius Clodianus* (no. 49).⁷⁸

Zosimus, slave of *M. Annius Verus*, appears in stamp CIL 806, which has the consular date for the year 123; the same man appears as a free *offinator* named *M. Annius Zosimus* in stamps CIL 245–6, which are from the year 135; he therefore operated for at least 13 years. Other *officinatores* who are shown by the consular dates to have operated for over 12 years appear in stamps with more than one *dominus*. Data on them will be found in the *offinator* list below. *P. Aelius Alexander* (no. 1), *A. Aristius Thallus* (no. 9) and *P. Servilius Firmus* (no. 55) produced bricks for at least 16 years, 123–138; *C. Nunnidius Fortunatus* (no. 39) operated for at least 20 years, 123–142; *M. Ulpius Anicetianus* (no. 63) for at least 21 years, 134–154.

Officinatores who were at work even longer will be found among those whose names occur in stamps with more than one *dominus*.⁷⁹ In these cases the minimum length of the period can be estimated from data in stamps referring to *domini*.

M. Ulpius Anicetianus (no. 63), who was mentioned earlier, produced bricks for longer than the consular dates of his stamps show, because his stamp CIL 719 belongs to the period after the death of *Domitia Lucilla* (155 or later) (as *dominus* appears the *societas* of *Aurelius Caesar* and *Faustina Augusta*, heirs of *Domitia Lucilla*). – For *Sex. Publicius Consors* (no. 51) the time boundaries are the years 161 and 180, leaving a period of at least 20 years, because the *domini* of his stamps can be arranged in order as follows: *Aurelius Caesar et Faustina Augusta* (before 161, when *M. Aurelius* became *Augustus*), *Faustina Augusta* (until 176, when *Faustina* died), *duo Augusti* (177–180 *M. Aurelius* and *Commodus*), *Augustus*

noster (from 180 Commodus). – *Calpetanus Crescens* (no. 13) was at work at least 27 years from 151 till 177, if the *domini* of his stamps, *Faustina Augusta* and the two Augusti are placed in the same order as in the stamps of *Sex, Publicius Consors*.⁸⁰ – *L. Lanius Festus* (no. 31) produced bricks for at least 27 years: stamp CIL 399 was in use before the death of the Empress Faustina (176), and in CIL 240 *C. Fulvius Plautianus* is mentioned as consul *bis*, which points to the years 203–205.

Two persons appearing as *officinatores* in binominal stamps are encountered in *pelvis* stamps found in Pompeii, which shows that their activities started before the year 79. They are *Cn. Domitius Arignotus* (S. 283–4, CIL 1094; 1024) and *St. Marcius Lucifer* (no. 35 in the *officinator* list). In the binominal stamp CIL 1024 of *Cn. Domitius Arignotus*, *dominus* is D P L (= *Domitia P.f. Lucilla*), which in Dressel's normal chronology points to a time not before the year 123, but he dates this stamp of *Arignotus* to 108 or immediately afterward.⁸¹ – *St. Marcius Lucifer* appears in the Pompeian *pelvis* stamps both as slave and free, and *Plotia Isaurica* and *Arria Fadilla* appear as *domini* in his brick stamps; on the evidence of *Arria Fadilla* Dressel dates his last stamps to 123–127. The career of *Lucifer* is so long that it is difficult to imagine him a paid foreman; at the time when his last stamps were in use he must have been extremely old.

Continuity of the Functions of officinatores: officinator gentes

If *officinator* has been freed by *dominus* mentioned in the same stamp, it is possible, as noted earlier, that the incentive for the *officinator's* work is to be found in the *dominus*: such cases may be regarded as evidence that *domini* represented continuity in brick production. If, on the other hand, *officinator* has been freed by another *officinator* mentioned in other stamps it is similarly possible that the incentive has come from another *officinator*; in this case *officinatores* might be seen as representatives of continuity.

For this chapter I have gathered data on 11 *officinator-gentes* appearing in brick stamps. In these cases the *gentilicium* is so uncommon that the persons concerned are probably connected; in each case, moreover, there are connecting factors other than the name.⁸²

I assumed at an earlier stage that the same *gentilicium* for *dominus* and *officinator* points to a *patronus-libertus* relation. The clear social disparity observed between the *domini* and *officinatores*, and the fact that the positions of *dominus* and *officinator* did not belong to the same career are sufficient grounds for this assumption. But if two *officinatores* have the same *gentilicium* (and *praenomen*), the possibility of blood relationship must also be considered. Blood relationship, however, cannot be verified from data appearing in stamps because filiation is missing from the names.

Rustii

L. Rustius Lygdamus appears in three stamps, CIL 1418, 1419 and S. 541 (*dolium*). Both his brick stamps are from the year 123, in CIL 1419 he is alone, in CIL 1418 *Se(ia) Is(aurica)* is *dominus*; in neither stamp is the name of *figlinae* mentioned. *Rustius Felix* (without *praenomen*) appears in only one stamp, CIL 422; in this stamp the name of *figlinae Pubiliana* is mentioned, and *Flavius Aper* is *dominus*. – Because *Flavius Aper* often appears as successor to *Seia Isaurica* as *dominus* (e.g. in *figlinae Publiliana*),⁸³ the two *Rustii* can be linked together. *Rustius Felix* continued the work of *L. Rustius Lygdamus* as *officinator*.

Fadii

*L. Fadius Pass()*⁸⁴ appears as *officinator* in three stamps, in all of which *Seia Isaurica* is *dominus*, but they are all from different *figlinae*: CIL 12 from *figlinae Aristiana*, CIL 207 from *figlinae Fabiana* and CIL 674 from *figlinae Tur()* (evidently = *Tonneiana*); stamps CIL 207 and 674 are from the year 134. – *Fad(ius) Euhelp(istus)* (without *praenomen*) appears in two stamps, CIL 209–210, in both of which *Flavius Aper*, the successor of *Seia Isaurica* is *dominus*. Stamp CIL 209 contains the name of *figlinae Fabiana* and also the consular date 157. – Between the two *Fadii* arises the same connection as between the two *Rustii* above; the consular dates additionally show that the *Fadii* belong to different generations.

In the case of the *Rustii* and the *Fadii* we observe that a person of earlier occurrence in stamps signifies the *praenomen*, but a later person does not.

C. Cominii

C. Cominius Proculus (no. 21 in the *officinator* list) is mentioned in three stamps. *Dominus* in CIL 1210 is *Iulius Step(hanus)* and in CIL 1051 *Dom(itia) Lucil(la)*; in CIL 1211 only *Felix Caric(us)*, a slave of *C. Cominius Proculus*, is mentioned; stamp CIL 1210 is from the year 127. – In stamp CIL 754 a–b of *C. Cominius Sabinianus dominus* is *Aug(ustus) n(oster)*, in Dressel's opinion M. Aurelius or Antoninus Pius (or Faustina). – In this case the connection between *officinatores* is weaker than in previous cases; the uniting factor apart from names is the circumstance that M. Aurelius was heir to *Domitia Lucilla* and her successor as *dominus* of brick stamps.

Q. Oppii

The *Q. Oppii* who appear in brick stamps can be divided into three groups: 1) those who appear alone: *Natalis* and *Priscus*; 2) those who appear both alone and with *dominus*: *Iustus* and *Verecundus*; 3) those who appear only with *dominus*: *Proculus*

and *Stabilis*. Also to be added is *Q. Oppius Terminalis*,⁸⁵ who appears in a sarcophagus stamp. The name of *Stabilis* appears without *praenomen*, with the others the *praenomen* is *Q.*

The time boundaries are stamp CIL 2476, where the *Domitius* brothers are mentioned and which is therefore from the year 94 at the latest (*Cn. Domitius Lucanus* died then), and CIL 706, which has a consular date of 134. The factors uniting the *Q. Oppii* besides their common name are the names of members of the *gens Domitia* occurring in their stamps.

The earliest of these persons are *Q. Oppius Terminalis*, in whose only stamp the name of the *Domitius* brothers appears, and the *Oppii* appearing in stamps alone, *Q. Oppius Priscus* (CIL 1347) and *Q. Oppius Natalis* (CIL 1345, 1346 a-d)⁸⁶; their stamps belong to a time when the name of the landowner was not yet declared in a stamp, i.e. to the first or early second century.

Q. Oppius Verecundus and *Q. Oppius Iustus* (no. 42 in the *officinator* list) are slightly later than the above, or it may be better to say that their work extended to a later period. Both appear in some of the stamps alone without *dominus*, *Verecundus* in CIL 1348 a-c and S. 351, and *Iustus* in CIL 1342 and 1344, of which the former bears the consular date of 123. Both *Verecundus* and *Iustus* have a stamp for the year 123, in which *dominus* is *Domitia Lucilla* and the place of manufacture is marked D L or DE LIC (= *de Liciniano* or *Licinianis*); these stamps are CIL 272 and 273. In addition *Iustus* has stamp CIL 1046 for the year 129 with *Domitia P.f. Lucilla* as *dominus*, but the place of manufacture is not mentioned.

The third and evidently latest group of the *Oppii* is composed of *Q. Oppius Proculus* and *Oppius Stabilis*, in whose stamps CIL 364 and 706 *Caesar* (apparently Hadrian) is *dominus*. The stamp of *Stabilis* has the date of 134.

Through stamp CIL 363 a connection arises between *Q. Oppius Iustus*, who worked on the land of *Domitia Lucilla*, and *Q. Oppius Proculus*, who worked on the land of *Caesar*. In this stamp a *societas* formed by *Oppius Iustus* and *Oppius Proculus* appears as *officinator*, and *Caesar* as *dominus*. Since the name of *figlinae Oceanae* is mentioned in the stamp it is possible that CIL 364 of *Proculus* and CIL 706 of *Stabilis* are also from *figlinae Oceanae*.

Also appearing in stamps are two slaves of *Q. Oppius Iustus*, namely *Restitutus* in *pelvis* stamp CIL 2486 and *Fortunatus* in brick stamp CIL 1343, which is from the year 126.

The stamps of the *Q. Oppii* fit well into the picture I have given of the development of the content of brick stamps. Persons can be arranged in the time scale according to whether they appear in stamps alone or with *dominus*. The name of the landowner (*dominus*) does not occur in stamps until the decade of 120. It is highly probable that the stamps of the *Q. Oppii* in which *dominus* is unmentioned, i.e. all stamps of *Natalis* and *Priscus* and some of *Iustus* and *Verecundus*, were also used on the lands of the *Domitii* (in style the stamps are similar). The name of the *Domitii* is missing from these stamps only because it was not yet customary to mention the name of the landowner (cf. p. 102 above).

L. Lurii

As a group the *L. Lurii* resemble the *Q. Oppii*: they too appear both in first century one-name and in second century binominal stamps. The *L. Lurii* can be linked together mainly on the strength of their common name: in their late stamps common *domini* do not occur in the same manner as *Domitia Lucilla* and *Caesar* appear in the stamps of the *Q. Oppii*.

The following *L. Lurii* appear only alone in stamps: *Aprio* CIL 1247, *Blandus* CIL 1248, S. 511 (*pelvis Pompeiana*), *Martialis* CIL 1249–1251, *Proculus* CIL 1253, *Verecundus* CIL 2459 (*dolium*), *Verus* CIL 1962 and additionally the slaves of *Proculus*, *December* CIL 1254 and *Crescens* CIL 2458 (*pelvis*).

Three *L. Lurii* appear in one-name and also in binominal stamps, namely *Crescens*, who is evidently the same person as the earlier mentioned *Crescens*, slave of *L. Lurius Proculus*, CIL 280, S. 61; *Myrinus* CIL 1252, S. 200–1; *Primitivus* CIL 208 = S. 50, S. 512 (*dolium*). All three have one stamp in which *dominus* and place of manufacture are mentioned: in CIL 280 of *Crescens Caes(ar)n(oster)* and *figlinae Lusianae*; in S. 200 of *Myrinus Iulius Ru(fus)* and *figlinae Vicianae*; in CIL 208 = S. 50 of *Primitivus Seia Isaurica* and *figlinae Fabianae*.

Absolute time references for the work of the *L. Lurii* are obtained from stamp S. 511 of *Lurius Blandus*, which was encountered at Pompeii and was therefore in use before the year 79, and from stamp S. 61 of *L. Lurius Crescens*, which has the consular date of 123. The work of the *L. Lurii* appears to have extended little later than the decade of 120, the latest probably being stamp CIL 208 = S. 50 of *L. Lurius Primitivus*. On the other hand some *L. Lurii* may have been at work long before the year 79, as the forms of the stamps of *L. Lurius Martialis* and *L. Lurius Blandus* suggest.

Between the *L. Lurii* and the *Statii Marcii* (to be examined later) a connection of some sort seems to have existed. Pointing to it are CIL 1248 *a* and 1962 of the *L. Lurii Blandus* and *Verus*, and CIL 1275 *b* and 62 of the *Statii Marcii Fortunatus* and *Lucifer*, which are very similar to each other but clearly different from other stamps. Also, *L. Lurius Myrinus* and *Statius Marcius Antiochus* mention the name of *figlinae Vicianae* in their stamps.

Aristii

A. Aristius Thallus (no. 9 in the *offinator* list) and the *Aristii Success(us)* (CIL 735) and *Aug(ustalis?)* (CIL 733–4), who both appear without *praenomina*, belong clearly to at least two generations. All stamps of *A. Aristius Thallus* contain a consular date, the years being 123, 134 and 138. In stamp CIL 733 of *Aristius Augustalis* there is a consular date, the year 148, and in the only stamp of *Aristius Successus* the year is 150. These three *Aristii* are connected not only by a common

name but by the appearance in their stamps as *dominus* of the later Emperor L. Verus.

The career of *A. Aristius Thallus* was examined earlier (see p. 116). *Aristius Augustalis* may well have been his immediate successor as regards the chronology. In CIL 734, an undated stamp of *Augustalis*, the name of the future Emperor is in the form *L. Ael(ius) Caes(ar or -aris) Com(modi) f(ilius)*, which can be interpreted as pointing to the year 138 or at least not much later.⁸⁷ So the following years would be arrived at as working periods for the *Aristii*: *Thallus* 123–138, *Augustalis* 138–148 and *Successus* 150–.

Also encountered in the stamps are *A. Aristius Menander* (CIL 829–831, S. 230) and his two slaves *Primus* (CIL 832) and *Tertius* (CIL 833), whose stamps lack the name of *dominus* and whose possible link with *A. Aristius Thallus* thus cannot be proved. Consular dates for the years 123, 124 and 128 appear in the stamps.

*C. Nunnidii*⁸⁸

The four *officinatores* bearing the name of *Nunnidius* in brick stamps belong to at least two generations, *C. Nunnidius Fortunatus* (no. 39 in the *officinator* list) and *C. Nunnidius Restitutus* (no. 40 in the *officinator* list) to the earlier and *Nunnidia Sperata* (S. 215) and *C. Nunnidius Felix* (CIL 737–8; S. 216) to the later. The stamps CIL 846–8 and S. 236 of *Fortunatus* are from the year 123 and *Q. Asinius Marcellus* is *dominus* in them. Stamps CIL 860–1 are from the years 141 and 142, and *Asinia Quadratilla* is *dominus*. In his only undated stamp, CIL 862, *Fortunatus* is alone without *dominus*. – In the stamps CIL 286 = S. 69 and CIL 289 of *Restitutus* the name of *figlinae Macedonianae* is mentioned and in both *T. Statilius Maximus* is *dominus*; the former is from the year 123 and the latter from 134. In CIL 1158, also from 123, *Flavia Procula* is *dominus*; in the only undated stamp, CIL 1278, *Q. Marcius Hermogenes* is *dominus*. In stamp CIL 286 = S. 69 the *societas* of *Nunn(idii) Rest(itutus) et Leon()* appears as *officinator*. – In all stamps of the second generation *Nunnidii*, *Sperata* and *Felix*, the Emperor L. Verus is *dominus*, in the early stamps still as a private person. The only stamp of *Nunnidia Sperata* is from the year 153. Stamps CIL 738 and S. 216 of *Felix* are from the period before 161, when L. Verus became Augustus; in CIL 737 L. Verus is already Augustus.

C. Nunnidius Fortunatus is one of the rare *officinatores* about whom information has survived in other sources than brick stamps. In the cemetery of Isola Sacra at Ostia a monument of *C. Nunnidius Fortunatus* has been found.⁸⁹ He had it erected "sibi, liberis, libertis libertabusque, posterisque eorum". In the words of Thylander "la tombe pourrait dater de l'époque de Trajan ou de celle d'Hadrien"; if the person concerned is the same as in the brick stamps then this dating is somewhat early (although *Fortunatus* erected the monument in his lifetime), for *C. Nunnidius Fortunatus* still produced bricks at least in the year 142. If the persons of the brick stamps and the monument are one and the same – there is no other uniting

factor than the name – then it seems obvious that this *officinator* lived in Portus or Ostia. Where was his *officina* located? We do not know.

*Vismatii*⁹⁰

Vismatius Successus is encountered in stamps both as *officinator* and as *dominus*. Only in his new stamp (see p. 131, n. 2) is the place of brick manufacture mentioned: it is *figlinae Tempesinae*. Bloch dates his other stamps (CIL 1518–1525; S. 397–402) on grounds of building-historical comparison to a period of a few years near 120.⁹¹ In the stamps of *Successus* five free *officinatores* appear: *Clodius Victor*, *Lusenus Celer*, *Lusenus Ampliatus*, *Veturius Severus* and *Vismatius Felix*, the last-mentioned undoubtedly a freedman of *Successus*; five slaves also appear: *Maius*, *Primus*, *Tiridas*, *Crescens* and *Fortunatus*, the last two of whom are encountered later free. Of these *officinatores* *Vismatius Felix* (no. 61 in the *officinator* list) and the former slaves *Vismatius Crescens* and *Vismatius Fortunatus* (no. 62 in the *officinator* list) appear later in stamps in which *Successus* is not *dominus*. Stamp CIL 31 of *Vismatius Felix* is from *figlinae Brutianae*, *dominus* is *Rutilius Lupus* and this stamp too is from about the year 120. *Vismatius Crescens* appears alone in stamp CIL 407, where the name of *figlinae Ponticulanae* is mentioned. Dressel has dated this stamp by its form to the time of M. Aurelius or Commodus; if the person concerned for the whole period is the same *Crescens*, the dating of Dressel does not appear believable. Also known from *dolium* stamp CIL 2497 is *Tertius*, a slave of *Vismatius Crescens*. *Fortunatus*, another slave of *Vismatius Successus*, is encountered as a free man in stamp CIL 607 of the year 123; the other stamps of *Vismatius Fortunatus*, S. 180–181, are from 125 and 126. In all these stamps *Q. Aburnius Caedicianus* is *dominus*, and in CIL 607 and S. 181 the name of *figlinae Tempesinae* is mentioned, which also appeared in one stamp of *Vismatius Successus*, the *patronus* of *Fortunatus*.

In addition to these three freedmen of *Vismatius Successus* three *Sex. Vismatii* are known from the stamps (they used the *praenomen* whereas the former *Vismatii* did not); their relation to *Vismatius Successus* does not become clear from the stamps. In stamp CIL 644 of *Sex. Vismatius Neritus* the name of *figlinae Tonneianae* is mentioned and *dominus* is *Quintilla Saeniani* (who appears in other stamps with the name *Pedania Quintilla*). Dressel considers it possible that *Sex. Vismatius Neritus* is also concealed behind the letters S V N, which appear in CIL 42, a stamp of *figlinae Brutianae*; if this is so, then through *figlinae Brutianae* arises a connection between *Vismatius Felix* and *Sex. Vismatius Neritus*. – In stamps CIL 640 = S. 192 and CIL 1517 of *Sex. Vismatius Himerus* there is no mention of *dominus*, but in the former the name of *figlinae Tonneianae* is mentioned. – The stamps of *Neritus* and *Himerus* belong to the early second century. *Sex. Vismatius Restitutus* clearly belongs to a later period. *Faus(tina) Aug(usta) n(ostra)* is *dominus* of his stamp CIL 730; the stamp is therefore from the period between 146 and 176.

Lanii

Eight *officinatores* with the name *Lanius* appear in brick stamps, four with the *praenomen* *L.*, the other four without *praenomen*. The *Lanii* are a late *offinator* line whose stamps include some of the latest which can be dated.

The earliest is *Lanius Vin(dex?)*, whose only stamp, CIL 1441, can be dated to the decade of 130 or thereabouts on the evidence of *Q. S(ervilius) P(udens)*, who is mentioned in it as *dominus*. A central figure among the *Lanii* is *L. Lanius Festus* (no. 31 in the *offinator* list), whose name occurs in five stamps. In CIL 239 he appears alone, in other stamps the name of *dominus* is also mentioned. Appearing as *domini* are *Faus(tina) Aug(usta)*, *Commodus Aug(ustus) n(oster)*, *C. Ful(vius) Plaut(ianus)* and *Augg. nn.*; from these names we see that the work of *Festus* began not later than the year 176 and ended not earlier than 203. – *L. Lanius Crescens* can also be dated; in his only stamp, CIL 623, *Comm(odus) Aug(ustus)* is *dominus*, showing that the stamp belongs to the time when Commodus was Augustus, namely 177–192. – The other *Lanii*, *L. Lanius Substitutus* (CIL 767–8), *L. Lanius Felicissimus* (CIL 755), *Lanius Fortunatus* (CIL 159), *Lanius Pisentinus* (CIL 166) and *Lanius Rufinus* (CIL 602) mention only *Aug. n.*, *Augg. nn.* etc. as *dominus*, that is to say one or two Emperors without individual name; thus their stamps can be dated no more than summarily at the end of the second or beginning of the third century. – The *Lanii*, like others, appear to have belonged to at least two generations.

The Group of figlinae Marcianae

In Roman brick and other ceramic stamps there appear 21 *Statii Marcii*, 5 *C. Satrinii*, 15 *C. Calpetani* and several slaves of persons with these names. These persons are linked together by the name of *figlinae Marcianae*, which occurs in many of their stamps. The stamps of persons belonging to the *figlinae Marcianae* group form, with those of *gens Domitia*, a body of stamps in which long-term continuity of operation can be observed. The name of *figlinae Marcianae* appears in Roman brick stamps from the first half of the first century to the beginning of the third, and again after the blank period of the third century in the form *off(icina) Marciana*. Persons with the name *C. Calpetanus* occur in stamps in an almost unbroken series from the early first to the beginning of the third century.

The development of content in brick stamp texts is illustrated in the stamps of the *St. Marcii* and *C. Calpetani* in the same way, as in those of the *L. Lurii* and *Q. Oppii*. They appear in second century binominal stamps as *officinatores*. This

accords with the conclusion reached by analysis of stamp texts, that among the persons of binominal stamps *officinator* represents the traditions of the persons of earlier one-name stamps and *dominus* is the new person in binominal stamps.

For the dating of early stamps of the *figlinae Marcianae* group – which lack name of *dominus* and consular dates as internal criteria – two reference points are available: stamps occur in bricks of the ships of Nemi and in ceramic objects discovered at Pompeii (*pelves* and *dolia*). For the Pompeian stamps the year 79 is merely *terminus ante quem*, but there is good reason to suppose that the bricks of the ships of Nemi were produced only a short time before the ships themselves were built, namely a little before the year A.D. 40.⁹²

Stamps of the following members of the *figlinae Marcianae* group were on bricks of the ships of Nemi: *St. Marcius Optatus* (CIL 1282), *St. Marcius Rabbaeus* (S. 81, 616), *St. Marcius Stator* (S. 337), *St. Marcius* (without *cognomen*) (CIL 1966 = S. 618), *Atimetus*, slave of *St. Marcius Neo* (CIL 1280 = S. 336), *C. Satrinus Communis* (CIL 306–8) and *C. Calpetanus Auctus* (S. 72 b).⁹³

In the Pompeian stamps occur six *St. Marcii* and three of their slaves, two *C. Satrinii* and six of their slaves, also two slaves of *C. Calpetanus Livianus* (S. 515–529, 543–550, 475–6).

Only one person appears both in the ships of Nemi and in Pompeii, namely *C. Satrinus Communis*; his stamp CIL 308 is encountered in two Nemi bricks and one Pompeian *dolium*.

St. Marcii

In early stamps, including those of the ships of Nemi and Pompeii, it is the *St. Marcii* who occur most often. This may indicate that the *St. Marcii* were the first of these lines to function in *figlinae Marcianae*, which in turn makes it probable that the name of *figlinae Marcianae* derives from the name of the *St. Marcii*. The name of *figlinae Marcianae* seems to have established itself by the decade of A.D. 30, as it appears in four stamps of the ships of Nemi. Perhaps the earliest reference to the *St. Marcii* is a *dolium* stamp, CIL 2466, found on the bed of the Tiber, with the text ST MARCIVS ST F = *Statius Marcius Stati filius* (Dressel supports the completion: *St. Marcius Stator fecit*). Filiation and absence of *cognomen* point to an early period, perhaps to Republican times. Other early evidence is provided by *dolium* stamp CIL 2467 with the text ST MARCI TRIFERNA F. The *cognomen* is undoubtedly a somewhat altered form of the ethnicon *Tifernas* = 'native of Tifernum', and may – since the name in question is an early one – indicate the original home district of its bearer.⁹⁴

Seven *St. Marcii* are known among Pompeian *pelves*, namely *Fuscus*, *Tognaeus*, *Primigenius*, *Florens*, *Lucifer*, *Restitutus* and *Celer*, also slaves of the two last-mentioned named *Lucifer*, *Albanus* and *Quietus*; *Lucifer*, then, appears as both slave and free (S. 515–529). Appearing in *dolium* and other ceramic stamps discovered at Rome are *St. Marcii Triferna*, *Demetrius*, *Optatus* and *Secundio*

(CIL 2460–7), and in first century brick stamps *St. Marcii Suavillus*, *Demetrius*, *Fortunatus*, *Acanthus*, *Stator*, *Optatus*, *Rabbaeus*, *Antiochus* and *Secundio*, also *Atimetus*, slave of *Neo*, and *Hilario*, *Demetrius* and *Philippus*, slaves of *Helenus* (CIL 310–1, 1271–1285, 357, 672 = S. 203, S. 155–7); *Demetrius*, then, appears as both slave and free.

Among the *St. Marcii* only *Rabbaeus* mentions in his stamps the name of *figlinae Marcianae*. Later in the first century the *St. Marcii* appear to have moved away from *figlinae Marcianae*. In stamp CIL 357 of *St. Marcius Secundio* the name of *figlinae Ocianae* occurs, and in CIL 672 = S. 203 of *St. Marcius Antiochus* the name of *figlinae Vicianae*.

Only three *St. Marcii* seem to have extended their activities into the second century, the "historical" period of brick stamps. *St. Marcius Lucifer* (no. 35 in the *officinator* list), who already appeared in Pompeian *pelvis* stamps both as slave and free, is encountered in the early decades of the second century as *officinator* in *figlinae Caepionianae*. *Domini* in his stamps are *Plotia Isaurica* and *Arria Fadilla*. *St. Marcius Bassus* (no. 33 in the *officinator* list) also acted as *officinator* at *figlinae Caepionianae* in the time of both *Plotia Isaurica* and *Arria Fadilla*. In his stamps the consular date of 123 occurs. The third *St. Marcius* of the second century is *St. Marcius Fortunatus*. In one of his four stamps, S. 155, the name of *figlinae Subortanae* is mentioned, with *Caes(ar)*, either Trajan or Hadrian, as *dominus*.

C. Satrinii

The *C. Satrinii* are easily placed in order of time. *C. Satrinus Communis* is the earliest (CIL 306–309; S. 77–79, 549, 590, 573, 574). Some of his stamps were in the ships of Nemi and also at Pompeii. Possibly the son of *Communis*, and in any case later than he, is *C. Satrinus Celer* (CIL 303–305, 141, 388). Four or six – the number is a matter of interpretation – slaves of *C. Satrinus Celer* appear at Pompeii in *pelvis* stamps (S. 543–548). The name of *figlinae Marcianae* is most commonly mentioned in the stamps of *C. Satrinus Communis* and *C. Satrinus Celer*.

The *C. Satrinii* too appear to have moved away from *figlinae Marcianae* later. In *Celer*'s stamp CIL 141, the specimen stamp (i) on page 32 above, the name of *figlinae Castricianae* appears, and in his second stamp CIL 388 (specimen stamp (53) on page 94 above) the name of *figlinae Ocianae*. *Clemens*, a slave of *Celer* appearing in one Pompeian *pelvis* stamp (S. 547), is encountered later freed with the name of *C. Satrinus Clemens*. In his stamp CIL 384 = S. 96 is also the name of *figlinae Oceanae*.

Among binominal stamps of the second century only *Satrinus Fortunatus* (without *praenomen*) appears, his only stamp CIL 110 is from *figlinae ab Euripo* with the Emperor Antoninus Pius as *dominus*. – *C. Satrinus Priscinus*, whose possible connection with the other *C. Satrinii* cannot be proved, appears as *dominus* in stamp S. 372 and alone in CIL 1412.

C. Calpetani

I have already examined the background of the central member of the *Calpetanus* line, *C. Calpetanus Favor*, and his relation to *C. Calpetanus Livianus*, whose two slaves appear in Pompeian *pelvis* stamps (see p. 30 above). The earliest *C. Calpetanus* is *Auctus* (CIL 302, S. 72–3), whose bricks were found in the ships of Nemi. In his stamp CIL 302 the name of *figlinae Marcianae* is mentioned. The relation of *Auctus* to *C. Calpetanus Livianus* and *C. Calpetanus Favor* remains obscure. The activities of *C. Calpetanus Favor* (no. 14 in the *officinator* list) can be placed at the end of the first century and the beginning of the second. The Emperor Trajan is *dominus* in his stamps CIL 312–4, but Hadrian, the following Emperor, does not appear; the conclusion from this is that the work of *Favor* ended before the death of Trajan in the year 117.⁹⁵ In the stamps of *Favor* CIL 312–5 the name of *figlinae Marcianae* appears. Seven slaves of *Favor* are known from stamps: *Venustus* (S. 474), *Imasmus* (CIL 2423), *Crescens* (CIL 2422), *Facundus* (CIL 903 = Steinby 1974 p. 88), *Hermes* (CIL 904), *Mnester* (CIL 905) and *Secund(us)* (an unpublished stamp discovered by us at Ostia). Of these *Crescens*, *Hermes* and *Mnester* are later encountered free.

C. Calpetanus Favor seems to have been a man of distinction in his trade, for later his name came to be attached to the *figlinae* where he had been *officinator* (*figlinae Favorianae*; see below).

To the end of the first century and the beginning of the second belong the following *C. Calpetani*, whose relation to *C. Calpetanus Favor* remains obscure: *Ianuarius* (CIL 2424), *Achoristus* (CIL 899), *Fortunatus* (CIL 906), *Musophilus* (CIL 907) and *Restitutus* (CIL 908); these persons appear in stamps alone, and in their stamps the name of *figlinae* is not mentioned.

C. Calpetanus Hermes continued the activities of his *patronus* *C. Calpetanus Favor*. In his stamps CIL 318–320 *Caes(ar) n(oster)*, evidently Hadrian, is *dominus*; in CIL 318 the name of *figlinae Marcianae* is mentioned, and CIL 319 has the consular date of the year 123. *Hermes* appears to have been followed by *C. Calpetanus Mnester*, a second freedman of *Favor*. In both his stamps CIL 707 and 708 *Caes(ar) n(oster)* is *dominus*, still evidently Hadrian, and CIL 707 has the date of 138. In the stamps of *C. Calpetanus Mnester* the name of *figlinae* is unmentioned.

The history of the *liberti* of *C. Calpetanus Favor* ends with *Mnester*, but the series of *C. Calpetani* continues. The next is *Pannychus* (no. 15 in the *officinator* list) who appears in stamps only as a free man. *Domini* in his stamps are *Caes(ar) n(oster)* and *Cosin(ia) Gra(tilla)*. Stamp CIL 960 bears the consular date of the

year 147;⁹⁶ the *Caesar* of CIL 746 may be Hadrian or Antoninus Pius, or M. Aurelius before the year 161. In the stamps of *Pannychus* no name of *figlinae* appears.

Pannychus appears to have been followed by *Calpetanus Crescens* (no. 13 in the *officinator* list), clearly a different person from the *Crescens* about whom I have spoken earlier, who was first the slave of C. *Calpetanus Livianus* and C. *Calpetanus Favor*, and then a free man. The C. *Cal(petanus) Cre(scens)* appearing in stamp CIL 900, which has the consular date of 137 but no *dominus*, may be still another person than the two mentioned; in that case there would be three *Calpetani Crescentes*. Stamp CIL 1144 of *Calpetanus Crescens* is from the year 151 and mentions *Flavius Aper* as *dominus*; in the other stamps the Empress Faustina (the Younger) and *Augg. nn. are domini*. Dressel considers that the *duo Augusti* signify Severus and Caracalla, but it is more natural to assume that we are concerned with the period of joint rule, 177–180, by M. Aurelius and Commodus: stamp CIL 218 was taken into use immediately after the death of the Empress Faustina in 176. The gaps are thus filled in the series of stamps. In CIL 218 *figlinae Favorianae* is declared as the place of brick manufacture; the name of the same *figlinae* appears also in stamps of subsequent *Calpetani*, but the name of *figlinae Marcianae* no longer appears. *Figlinae Favorianae* undoubtedly signifies the same place as *figlinae Marcianae*, which still appears in the stamps of other *officinatores* than *Calpetani*. The adjective *Favorianus, a, um* is evidently formed from the *cognomen* of C. *Calpetanus Favor*, central personage of the C. *Calpetani*.

The last *Calpetani* are *Verna* (no. 16 in the *officinator* list) and *Fortunatus*. The stamps of *Verna* compose a perfect parallel to the two last stamps of *Crescens* (see p. 69 above). In the only stamp of *Fortunatus*, CIL 219, *Augg. nn. is dominus*, which indicates some period of joint rule at the end of the second or beginning of the third century. Perhaps one or other of the last-mentioned still appears in S. 52, a fragmentary stamp datable to the early years of the third century, in which only the first part of the name of *officinator*, C CAL, has survived. In this stamp C. *Fulvius Plautianus* is *dominus* (years 203–205), and the name of *figlinae Favorianae* is mentioned.

7. Conclusion

Which of the two persons of brick stamps, *dominus* or *offinator*, was the brick producer or enterpriser in the brick industry? – As a result of my investigation I would transfer this role from *dominus* to *offinator*.

Dominus is mentioned in the stamp texts as owner of the land on which and of which the bricks were made; nothing else is implied in the expressions **ex figlinis huius** and **ex praedis huius**. The name of the landowner was included in the stamp text only in the beginning of the second century. There is no reason to conclude from this feature of development of the stamp text content that a change took place at that time in the organization of brick production.

Examination of the relations in law of persons of *dominus* and *offinator* revealed nothing to indicate that these persons were members of the same production organizations. More than 80 per cent of the *offinatores* were independent in law on persons of the *domini* mentioned in their stamps.

The above argument on *domini* leads to the conclusion that there is no need to view the *offinatores* as subordinates of the *domini* in a production organization. On the other hand several such cases can be found in which it is far easier to explain the *offinator* as an independent enterpriser than as a foreman subordinate to the *dominus*.

By assigning to *dominus* the role of landowner and to *offinator* the role of brick producer I do not exclude the possibility of cases in which both roles were united in one person. There are stamps in which *dominus* is mentioned but *offinator* is not. In such a case it is most natural to think that the landowner was the brick producer as well. And in cases of one-name stamps in which *dominus* is not mentioned it is by no means impossible that the person mentioned, besides being brick producer, was also owner of the land on which he produced bricks. The components of the text content do not occur consistently in the stamps, this must be borne in mind when conclusions are drawn from brick stamps (cf. p. 46).

The obvious question to be asked next is: What kind of right had the *offinator* to the land owned by the *dominus*? – I have only touched on this problem in my study. The word '*conductor*' or '*conductio*' occurs in stamps (see p. 97), so it is possible that the contract was *locatio-conductio*, the *dominus* being *locator* and the *offinator* being *conductor*. As a possible juridical form *usus fructus* also may be considered. *Usus fructus* is mentioned in the passage of Paulus Dig. 8, 3, 6 (quoted on page 44) describing a situation resembling that reflected in brick stamps.

Notes to Chapter V

- 1 The word 'officinator' occurs in stamps CIL 1697 and CIL XIV S 1, 5308, 27.
- 2 A clear exception is provided by *Vismatius Successus*, who in the following recently published stamp appears as *officinator*

F·T·CALPVRNIAE·SECVNDAE

O·D·VISMATI·SVCCCESS Steinby 1974, p. 98 no. 4

figlinae Tempesinae Calpurniae Secundae, opus doliare Vismati Successi

In the previously known stamps CIL 1518–1526, S. 397–402 *Vismatius Successus* appears as *dominus*. Steinby in her comment draws attention to the uniqueness of the case. – Other possible cases are *M. Aemilius Proculus*, *dominus* in stamp CIL 780, who may be the same as *M. At() Pro()*, *officinator* in stamps CIL 1056 and 1057; *Flav(ius) Prob()*, *dominus* in stamp CIL 1055, who may be the same as *F() Prob()*, *officinator* in stamp CIL 1054; *Iulia Saturnina*, *dominus* in stamps CIL 1218–1220, S. 323, may be the same as *Iu[lia sa]turnina*, *officinator* in stamp CIL 365. In these cases it is highly probable, however, that we are concerned with two persons of the same name.

- 3 Setälä p. 152.
- 4 See e.g. quotations p. 93 and p. 132 n. 19 below.
- 5 See e.g. Hirschfeld p. 159–162.
- 6 There are three specimens of this stamp, all of unknown provenance. – Shtaerman mentions this stamp as an example of three-stage renting. Shtaerman, p. 80–81, "dreistufige Pacht".
- 7 CIL 415–419, 430–432, 879; S. 105. Shtaerman also examines these stamps separately; she considers that three-stage renting is involved, and thinks it possible that only the right to sell bricks was leased to the *negotiator*. Shtaerman p. 82.
- 8 CIL XV, 1 p. 6–7.
- 9 Bloch classes *Ti. Iulius Optatus* as *dominus*, BL p. 222, 336: "proprietario delle figlinae Ociana". Dressel classes *C. Satrinus Celer* as *officinator* in his comment on CIL 141.
- 10 PIR² IV p. 241–242, no. 443.
- 11 This is seen from Dressel's comments in CIL; see e.g. CIL 462 and 1221.
- 12 *Anteros* is "figulo" BL p. 112 and "officinatore" BL p. 177.

13 See above p. 13; Bloch gives a connected report on his conclusions from brick stamps, *BL* p. 316–344.

14 Bloch, *BL* p. 328. Bloch uses for *dominus* the word 'industriale', e.g. *BL* p. 209 and 387.

15 Comment on S. 23;— 16 — on S. 170;— 17 — on S. 200;— 18 — on S. 187.

19 Dressel's conception appears from passages like the following: *CIL* XV p. 7: "Qui praedia possidebat, figlinas in eis positas aut suo nomine exercendas curabat per servum — ita enim videntur esse intellegendi tituli in quibus nomina servi eiusque domini coniuncta exhibentur (. . .) —, aut conductori (vel conductrici) locabat uni vel pluribus (. . .). Lateres huc pertinentes praeter domini nomen (*ex praedis* vel *figlinis illius*) exhibent nomina aut servi figuli vel officinatoris sive exercitoris aut conductoris — nam hic quoque saepe incertum, quis eorum nominetur — ita expressa etc." — *CIL* XV p. 7 n. 2: "Ubi nomina liberti eiusque domini coniuncta occurrunt (. . .), dubitari potest, utrum libertus domini sumptu officinam exercuerit, an a domino eam conduxerit."

20 In stamps *CIL* 390, 545, 643, 761, 761, 1477 (and perhaps 542).

21 Gummerus, 1498.

22 See above p. 44–45.

23 Examples of those who certainly took no physical part are the officers mentioned on page 110. A similar case is the *scr(iba) lib(rarius)* in stamp *CIL* 1507.

24 Veyne describes pertinently the importance attached to accumulation of landed property by the highest circles of Roman society: Veyne, p. 236–237. He quotes, for instance, the following extract from Pliny: "pulchritudo iungendi (. . .); non minus utile quam voluptuosum". Pliny, *Ep.* 3, 19, 2.

25 It is generally understood that in the time of Nerva and Trajan privately owned land increased in ratio to Imperial land in the Roman area and in Italy. Land confiscated in the time of Domitian was restored to private ownership. Cassius Dio mentions (68,2) that Nerva sold fiscal land to private persons, and Pliny relates the same of Trajan (*Paneg.* 50, 5–7). We also know (Pliny, *Ep.* 6, 19) that Trajan encouraged and even ordered new senators to invest their money in Italian land. Again, Trajan is the first Emperor to appear in brick stamps as *dominus*. These data best fit together if we assume that mention of the landowner's name (*dominus*) in a stamp became customary in the early second century, i.e. that proprietary relations remained as before, but an addition was made to the text.

26 I give here an extreme example of how conclusions drawn from brick stamps change when *domini* are regarded as owners of land, not manufactories. — *C. Fulvius Plautianus* is mentioned as *dominus* in 15 stamps. In all others except S. 311 the following titles are attached to his name: *pr(aefectus) pr(aetorio)*, *c(larissimus) v(ir)*, *co(n)s(ul) ii*. The stamps are therefore from the time between the years 203 (*Plautianus* was consul for the second time) and 205 (he was murdered as an aspirant for power on January 22nd). The stamps show that in almost every case the preceding owner of *figlinae* owned by *Plautianus* was the Emperor. — Bloch, who regards *domini* as brick

manufacturers, explains the abrupt appearance of *Plautianus* as *dominus* in place of the Emperor by asserting that Septimius Severus appointed his energetic chief of staff to reorganize the collapsing brick industry (Bloch, *BL* p. 300). If *domini* are regarded as landowners the conclusions may be different. Transfer of Imperial property near Rome to *Plautianus* may be interpreted as a sign that *Plautianus* was in the process of assuming power, exactly as historians of the age relate. In 203, the year of *Plautianus*' second consulship, the death occurred of the Emperor's brother P. Septimius Geta, who had vigorously defended the interests of the dynasty, and in the preceding year *Plautianus* had achieved the marriage of his daughter to Caracalla, the Emperor's son and heir. We may assume that the transfer of landed property had some connection with these events. For *Plautianus* see *PIR*² III p. 218–221, no. 554.

27 *CIL* XV p. 265–275.

28 According to Dressel. See genealogical table and accompanying text, *CIL* XV p. 267. In this study the year of *Cn. Domitius Tullus*' death is an important borderline; this year is deduced from Pliny's letter 8, 18, whose theme is the death and will of *Tullus*. Sherwin-White says in his comment on this letter: "There are no close indications of time." The year 108 is Mommsen's dating, which later scholars have considered slightly late (see Bloch, *BL* p. 46); Bloch opts for 106/7 on the evidence of brick stamp discoveries. – The year of *Afer*'s death is mentioned by Tacitus (*Ann.* 14, 19); the death of *Lucanus* is the theme of Martial's Epigram 9, 51, the dating being based on that of Martial's ninth book; the years of death of the *Domitiae Lucillae* are estimated by Dressel from brick stamps.

29 The name of *Cn. Domitius Lucanus* appears in stamps only in conjunction with that of his brother *Cn. Domitius Tullus*.

30 The son of *Domitia P.f. Lucilla*, the Emperor Marcus Aurelius, and the latter's son, the Emperor Commodus, also appear as *domini* in stamps. No note need be taken of their stamps in this connection.

31 *CIL* 979–1120; S. 265–288, 590.

32 *Figlinae Caniniana* (*CIL* 116–132, 139, 140; S. 41, 42), *figl. Domitiana* *minores* (*CIL* 171–173), *figl. Fulviana* (*CIL* 223, 224), *figl. Liciniana* (*CIL* 258–277; S. 59, 60) and *figl. Terentiana* (*CIL* 616–619, 630).

33 *CIL* 2417, 2433–2435; 2482–2485, 2496, 2516, 2517; S. 481–503.

34 I have counted as slaves of *Domitii* those whose masters are mentioned in a stamp as one of the *Domitii*, and those whose masters are not mentioned.

35 This is an instance of the *orbiculus* stamp whose lines are intended to be read in order from the inside outward; i.e. reading of the printed text must start from the bottom line. Cf. p. 34, Stamp (iv).

36 Bloch considers that *Crescens* transferred to the service of *Domitia Lucilla* on gaining his freedom: Bloch, *BL* p. 345: "(...) Crescente che alla fine del secolo si incontra ancora come servo di L. Munazio Fausto, per entrare, manomesso dal padrone, come L. Munazio Crescente nel 123 al servizio di Lucilla."

- 37 CIL XV p. 274-5.
- 38 Bloch, *BL* p. 333.
- 39 23 slaves of the *Domitiae Lucillae* are known from stamps, as shown by the tabulation on page 100. 13 of these appear in stamps where *dominus* is not mentioned.
- 40 CIL 1434-1439. 41 CIL 1440 and S. 379.
- 42 A comparable expression is found in CIL 363: *exfiglinis* (. . .) *quas cu(rant)* etc.
- 43 A suitable specimen stamp is (57) on page 95.
- 44 *Dominus* is either *Plotia Isaurica* or *Seia Isaurica*. Steinby suggests the former on the strength of features observed in the stamp which point to the early second century; Bloch suggests the latter. In my view the arguments of Steinby are convincing. (Steinby 1969, p. 442-443.)
- 45 See Duff, p. 52.
- 46 They appear as slaves and as freedmen, CIL 1107-8 and 263-4, 1008.
- 47 This is seen from the stamp Steinby 1974, p. 103 no. 12.
- 48 Gaius 1, 165; 3, 45-46; 3, 58, and Gaius *Dig.* 38, 1, 6.
- 49 See Duff, p. 50-51.
- 50 The name of *dominus* in the stamp is in the form ISAVR, which can mean both *Plotia Isaurica* and *Seia Isaurica*; Dressel opted for the latter, but Steinby has advanced good reasons in favour of the former. The name of *figlinae* in the stamp is in the form CAE, which can equally well mean *figlinae Caepionianae* of *Plotia Isaurica* and *figlinae Caelianae* of *Seia Isaurica*. (Steinby 1969, p. 339-40).
- 51 CIL VI 25544. Dressel expounds this case in CIL XV p. 25.
- 52 Names to be considered are: *Cocceius*, *Ulpus*, *Pompeius* (Plotina), *Aelius*, *Vibius* (Sabina), *Aurelius*, *Annius* (Faustina major), *Ceionius* and *Septimius*. For gentilicia of Imperial freedmen see Chantaine p. 61-65.
- 53 The full text S. 587 shows that the stamp reads *A. lib.*, not *Aug. lib.* Dressel, who knew the stamp as a fragment, thought the latter reading possible.
- 54 Syme, *Tacitus* p. 794.
- 55 *Zosinus Anni Veri (servus)* appears in stamp CIL 806. For *Vismatius Felix* the conclusion is more indirect. *Felix lib(ertus)* and *Succensus* (= *Vismatius Succensus*) appear together in stamp CIL 613 of *figlinae Tempesinae*, and *Vismatius Succensus* appears in stamps of *figlinae Tempesinae* CIL 612 and Steinby 1974 p. 98 no. 4, see also Steinby's comment.

56 This opinion is held, for instance, by Duff, p. 89: "After being freed, the slave would, more often than not, continue in the same situation as before manumission"; and by Veyne, p. 223: "Socialement parlant, l'affranchissement n'est rien. La distinction importante n'est pas celle des esclaves et des affranchis: c'est celle qui oppose, d'une part, les esclaves et la majorité des affranchis, qui restaient auprès de leur maître, et, d'autre part, une minorité d'affranchis qu'un ensemble de conjonctures rendaient juridiquement et économiquement indépendants de leur patron"; and Gagé, p. 141. – The main arguments for this opinion are enumerated in these passages.

57 It must be borne in mind that almost all *dominus-officinator* pairs of brick stamps belong to the second century. In Veyne's opinion the *patronus-libertus* relation had by then lost some of its significance in patronage. The changing position of Imperial freedmen in the Imperial administration is well known, but, as Veyne points out, otherwise we lack information on this change from the second century. See Veyne, p. 227.

58 Frank, *Survey*, p. 208. The uniqueness of the Roman brick industry in this respect is stressed by Frank in the concluding sentence of the paragraph on brickmaking in the *Survey*, p. 209: "This is practically the only instance in a thousand years of Roman history in which wealth derived from industrial success contributed to political distinction."

59 Duff, p. 92.

60 Frank gives a similar account in his *History*, p. 231: "This fact again explains a peculiar business practice in the association of the owner and slave managers of such factories, for brick stamps usually indicate the names of both the owner and the superintendent of the yard, the latter invariably a slave or freedman." Here the word "owner" refers to the *domini* and the word "superintendent" to the *officinatores* of the brick stamps. Frank's illustrative examples are from the stamps of *gens Domitia*, as are those of Duff. – In this passage Frank puts the situation reflected by brick stamps in a wider setting. He continues: "The landlord at this time seldom leased his lands; he rather cultivated them himself, placing a trusted slave or freedman in charge of his property, a position of considerable responsibility and dignity. It is apparent that the superintendent of the brickyards who was permitted to stamp his name upon the brick with that of his master corresponds in every way to the *villicus* of the estate." Now in this case too Frank's facts are contested by other scholars. Analysis of Pliny's letters, a good authority on land tenure of this time, shows that the estates of Pliny were cultivated by free tenants (*coloni*), and the word '*villicus*' does not occur in the letters. (See René Martin in *Revue des études anciennes*, LXIX (1967) p. 81–85.) – Frank dropped this passage from the paragraph on brickmaking in the *Survey*, p. 207–209.

61 Dressel interprets the abbreviation thus, as does Bloch, *Indices* p. 94.

62 Pflaum, *Carrières* I no. 109 p. 262–4; *PIR*² II no. 1015.

- 63 No. 20 in the *officinator* list.
- 64 For *Domitia Lucilla* in her late stamps the name *Lucilla Veri* is used. The consular dates in the stamps where this appellation occurs are for the years 145–155. Cf. *CIL* XV p. 273.
- 65 Berger, v. *collegia* p. 395.
- 66 For *societas* see Berger, p. 708 and Schulz, p. 549–553.
- 67 Berger, v. *consensus*, p. 408.
- 68 *Societates* of *domini* other than those mentioned in the text: *Aristii Strabo et Celer* (*CIL* 834), *L. et P. Cassii* (*CIL* 283, 284; S. 66), *Iunius Rufus et R() Cap()* (*CIL* 683, S. 206), *Paccii* (S. 353 = *CIL* 2049), *Petronii Mamertinus et Septimianus* (S. 411 = *CIL* 2159), *Vitrasius Pollio et Fundania Faustina* (*CIL* 520) and *Ummidius Quadratus et Annia Faustina* (*CIL* 731).
- 69 Pliny, *Ep.* 8, 18. The subject matter of this letter is the death of *Cn. Domitius Tullus*, his will, and the property of *Tullus* and his brother *Lucanus*.
- 70 *Ibid.* cap. 7.
- 71 It should be mentioned that *Faustina* appears far more often in stamps than *M. Aurelius* (see *Indices* p. 78, 79). Because *M. Aurelius* was the son and principal heir of *Domitia Lucilla* this is somewhat extraordinary. It is possible that *M. Aurelius* transferred part of his property to *Faustina* before he became Emperor.
- 72 Personal data on both, and on other persons mentioned in this chapter, will be found in, for instance, the *Oxford Classical Dictionary*.
- 73 *Indices* p. 78, 79. The stamps of *M. Aurelius*, *L. Verus* and *Faustina* show that precision was observed in the expression of *dominus*: the private property of Emperors and the Imperial patrimony were separated from each other.
- 74 *RE* XX. 2545–8 (Betz). The name in other sources than brick stamps is usually *Platorius*; for the phonetic structure of the name in literary texts see Bloch *BL* p. 181.
- 75 *S H A*, *Hadr.* 23, 2–6.
- 76 *Carcopino* p. 181, 190.
- 77 *L. Verus* appears often as *dominus* (in 11 stamps), both as Augustus and before his accession. But no earlier *Ceionii* are encountered in the stamps, nor any other of his earlier relatives, in so far as these are known. It is therefore possible that other lands in the vicinity of Rome were also transferred to *L. Aelius Caesar* in the manner described here. The same transfer is perhaps reflected in the stamps of two *officinatores* bearing the name of *M. Valerius: Priscus* (no. 58) and *Iulianus* (*CIL* 740). *Plaetorius Nepos* is *dominus* in the stamp of the former (year 134) and *L. Aurel(ius) Caes(ar)* in that of the latter. Cf. also stamps of the *C. Nunnidii* p. 123.

78 *A. Pontius Clodianus* belongs to this group if the consuls *Iulianus* and *Castus* were in office *circ. a. 134* as Bloch hesitatingly suggests in *Indices* p. 87.

79 See list p. 139-. The information on well-known persons introduced in the following is found, for instance, in the *Oxford Classical Dictionary*.

80 Two or three persons named *Calpetanus Crescens* appear in stamps. The career of this *Calpetanus Crescens* would be considerably prolonged if *C. Cal(petanus) Cre(scens)* (CIL 900) in a stamp of the year 137 were counted as the same person.

81 CIL XV p. 273, [p. 44-45].

82 I have verified the rarity of the name by examining the indexes of CIL. Among the names appearing in this chapter the name combination *Statius Marcius* and the gentilicium *Vismatius* occur only in Roman brick stamps; half the occurrences of the gentilicia *Calpetanus*, *Satrinus*, *Nunnidius* and *Lanius* are in Roman brick stamps, and the other gentilicia present are also rare.

83 See CIL XV p. 15 and 66; and no. 8 in the *officinator* list.

84 Depicted in his stamps is a bird, according to Dressel "*columba*", according to Steinby "*passer*"; in Steinby's view "*passer*" indicates a *cognomen*, which would therefore be *Pass(er)*; Steinby 1969, p. 442-3.

85 Stamp CIL 2476, whose peculiar text is as follows:
Q. OPPI TERMINALIS / DOMITIORVM F.

86 CIL 1345 = CIL 1346 c; see Steinby 1974, p. 93.

87 On the evidence of the filiation. The arrangements made by Hadrian to ensure an orderly transfer of power included his own adoption of Arrius Antoninus, who in turn adopted Marcus Aurelius and L. Ceionius Commodus, son of L. Aelius Caesar, the former heir to the throne who had died a little earlier. The adoptions occurred on 25. 2. 138 (see Carcopino 1958 p. 180), and Hadrian died on 10. 7. the same year. The appellation *L. Aelius Caes(ar or -aris) Commodi filius* seems to indicate the time between these dates, or at least the time preceding Hadrian's death, because after it *Caesaris filius* became *Augusti filius*; the filiation *Aug(usti) Pii filius* appears in the name of the future Emperor in CIL 735, which is from 150. The appellation *L. Ceio(nius) Com(modus) C(aesaris) filius*, which appears in CIL 732 from the year 138 belongs to the time preceding the adoption.

88 The name also appears in the forms *Ninidius* and *Nyn(nidius)*.

89 Thylander, *Inscriptions du Port d'Ostie*, A 74.

90 The name also appears in the forms *Vimatius* and *Bism(atius)*.

91 Bloch *BL* p. 113-114.

93 The ships were built in the reign of Caligula and sank soon after his death, see Ucelli p. 292-5.

93 There were 142 stamped bricks in all; of these 19 were of the *St. Marcii*, 17 of the *C. Satrinii* and 16 of the *C. Calpetani*.

94 The additional *r* in the name *Triferna* may be explained by the assimilative effect of the second *r* in the word. The case resembles that of '(lapis) *Tiburtinus*' – 'travertino' and '*thesaurus*' – 'trésor'.

95 Stamp CIL 317, with the consular date of 123 and *C. Calpetanus Favor* as *offinator*, is non-existent; Bloch explains his grounds for this in *BL* p. 335, n. 286.

96 Dressel published the text of stamp CIL 960 in the following form:

L ANNIO LARGO C PRAST PACAT COS EX OF C CALP FA
OP F EX PR COSIN GRA/ / / PANNYCHI

Only one exemplar of the stamp is known. Although both Marini and Dressel have seen this exemplar, I suggest a correction in the reading, because in the above form the text is not understandable. My corrected form is as follows:

L ANNIO LARGO C PRAST PACAT COS EX OF C CALPETA
PANNYCHI OP F EX PR COSIN GRA/ / /

Changes in the CIL text are as follows: 1) At end of line 1 F changed to E, and this E (or final A) connected as ligature with T; a stamp need not be greatly worn for such an error to arise. 2) Line 2 begins at a different point from that adopted by Dressel; such a change is admissible because the stamp is circular and the lines form a closed ring, cf. above p. 32 stamp (i). – With these slight corrections we obtain a normal binominal stamp text with *dominus* (*Cosinia Gratilla*) and *offinator* (*C. Calpetanus Pannychus*), whereas the text of Marini and Dressel displays three persons, the name of *offinator* breaking into two: *C. Calp(etanus)Fa()* and *Pannychus*.

List of *officinatores* Appearing in Stamps of More than One *dominus*

This list contains all those *officinatores* who appear in stamps together with more than one *dominus*. I have counted as different *domini* an *Augustus*, *Augusta* or *Caesar* mentioned by individual name, and such a person without individual name (see e.g. nos. 18 and 56); also *Caes. n.* (= *Caesar noster*), *Aug. n.* (= *Augustus noster*), *Augg. nn.* (= *duo Augusti nostri*) and so on are counted as different *domini* (see e.g. nos. 3–6, 26, 38).

Under the name of the *officator* the following data are recorded: the number of the stamp in *CIL* XV, 1 (bare number) or *Supplement* (number preceded by an S.), name of the *dominus*, the year of the consular date, and the name of *figlinae*. – Last are enumerated the stamps containing only the name of the *officator*.

1	<i>P. Aelius Alexander</i>		
	1208	Iulius Stephanus	a. 123
	172	D(omitia) P.f. Luc(illa)	a. 138
	171	Domitia Lucilla	– Domit.minorib.
	173	Dom(itia) Luc(illa)	–
	717	Caes(ar)	–
	S. 54		

In stamp *CIL* 1208 the *cognomen* only of the *officator* ALEXAND appears (the stamp is complete). The identification is based on the fact that the same *domini* appear in the stamps of *Peducaeus Lupulus* (no. 44) and *C. Cominius Proculus* (no. 21). Dressel and Bloch do not identify the *Alexand(er)* of stamp *CIL* 1208 with *P. Aelius Alexander*. – The letters *P.A.A.* in stamp *CIL* 93 may also refer to *P. Aelius Alexander*: Dressel (comment on *CIL* 93) and Bloch (*Indices* p. 15) deem this probable.

2	<i>C. Aelius Asclepi(ades)</i>		
	385	II Aug(usti)	– Ocean. m.
	398	Faustina Aug(usta)	– Ponticl.
3	<i>Aelius Felix</i>		
	324	Augg. nn. (= duo Augusti nostri)	– Marcian.
	624	Aug(ustus) n(oster)	– Terentia.
4	<i>L. Aelius Phidelis</i> (<i>cognomen</i> thus written in all stamps)		
	625	Aug(ustus) n(oster)	– Terent.
	628	Augg. nn.	– Terent.
	S. 190 (=1947)	C. Ful(vius) Plaut(ianus)	– Ter

- 5 *L. Aelius Victor*
- 629 Augg. nn. — Terentian.
627(fr.) Aug(ustus)
- 6 *Aemilia Romana*
- 174 Aug(ustus) n(oster) — Dom. min.
181 Augg. nn. — Domit. min.
- 7 *Sex. Alfius Amand(us)*
- 98 C. C(uriatius) Cosan(us) a. 123
99 C. C(uriatius) C(osanus) a. 123 Caepionana
104 Ti. Sentius Satrin(us) a. 123 Cepion.
111 C. C(uriatius) C(osanus) — ab pila alta
- 8 *L. Allius Rufus*
- 652 Sei(a) Isau(rica) — Tonn.
653 Flavius Aper — Tonneianis
- 9 *A. Aristius Thallus*
- 1363 Plactor(ius) Nepot(s) a. 123
1364 Pl(aetorius) Nep(os) a. 123
1365 Pl(aetorius) Nep(os) a. 134
732 L. Ceio(nius) Com(modus) C(aesaris) a. 138
f(ilius)
- 10 *Avienus Halys (?)*
- 339 Plotia Isaurica — de Mul.
2001 Sentius Satrianus — Caе.
= Steinby 1974 p. 97 no. 1
- In stamp CIL 339 the name of the *officinator*, in ablative case, is AVIENO HALITY. In the other stamp the name of the *officinator* is represented by the initials A. H. only; see p. 79 above.
- 11 *Caecilia Amanda*
- 193 Aug(ustus) n(oster) — Vet.
194 Aug(ustus) n(oster) — Vet./ de Lic
195 Augg. nn. — Vet.
196 Augg. nn. — Vet./ de Lic.
192 dom. n. Aug. — Vet.

12	<i>Caet(ennius?) Magnio</i> (in 943, 944 cognomen only)	
	942 Coe(lius) Phi(letus)	a. 134
	943 M. Coelius Philetus	—
S. 586	Coelius Fortunatus	— Antull.
1203	C. Iulius Apollinaris	—
944		

13 *C. Calpetan(us) Crescens*

	1144 Flavius Aper	a. 151
	725 Faust(ina)	—
	218 Augg. nn.	— Favor
S. 52 (fr.)	C. Ful(vius) Pla[ut(ianus)]	— Faor.

In the fragmentary stamp S. 52 the beginning C·CAL[of the *officinator*'s name is visible, so the *officinator* can be also some other *C. Calpetanus* or some *C. Calvius*. — There are two or three *C. Calpetani Crescentes* in the stamps: the others are: 1) *C. Calpetan(us) Crescens* (CIL 901 = S. 243) = *Crescen[s] C. Calpeta[ni] Liviani* (S. 475) = *Crescen[s] C. Calp(etani) Fav[o]ris* (CIL 2422) (see p. 28 above); and 2) *C. Cal(petanus) Cre(scens)* (CIL 900) whose stamp is from the year 137 and lacks *dominus*, the relevant text of this stamp reads: *ex of(ficina) L. Mal(li?) Thr() (et) C. Cal(petani) Cre(scentis)*. See my comment on no. 18 below.

14 *C. Calpetanus Favor*

314	imp(erator) Cae(sar) Tra(ianus) Aug(ustus)	— Marc.
312	imp(erator) Caes(ar) Ner(va) Tra(ianus)	
	Aug(ustus)	— Marcianis
313	imp(erator) Caes(ar) Tro(ianus) Aug(ustus)	— Marc.
316	Amf. Rus. (?)	—
315		

15 *C. Calpetanus Pannychus*

960	Cosin(ia) Gra[tilla]	a. 147
746	Caes(ar) n(oster)	—

16 *Calpetanus Verna*

220	Augg. nn.	— Faorian.
221	Fau(stina)	—

17 *Calventia Maximin(a) (Maxima)*

214	Aug(ustus) n(oster)	— Faor.
215	Augg. nn.	— Faor.
216	dom(inorum) Augg. nn.	— Faorian.
325	Augg. nn.	— Marcian.

Calvius Crescens (in 201 *Calxius Crescens*)

175	Aug(ustus) n(oster)	—	Dom. minor.
201	imp. M. Aurelius Antoninus	—	No(v)is
726	Faus(tina) Aug(usta) n(ostra)	—	
727	Faus(tina) Aug(usta)	—	

In stamp CIL 727 the *officinator*'s name is CAL CRESCENTIS (genitive), which can also mean *Calpetanus Crescens* (see no. 13 above).

Claudius Fortunatus

S. 209	Matidia Aug(ustae) f(ilia)	—
S. 210	Matidia Aug(ustae) f(ilia)	—
2203	Stertia Bassula	—

Ti. Claudius Secundinus

1082	Lucilla Veri	—
718	Caes(ar) n(oster)	—
728	Faustina Aug(usta)	—
1081, 1083, 1084, S. 590, 2428	(fr)	

C. Cominius Proculus

1210	Iulius Step(hanus)	a. 127
1051	Domit(ia) Lucil(la)	—
1211		

Domitius Rufinus

2204	Stertia Bassul(a)	—
2173	Ti. Iulius Iulianus	—
2174	Ti. Iulius Iulianus	—

In stamp CIL 2174 the *societas* of *Iusta et Rufinus* appears as *officinator*; this *Rufinus* is evidently the same person as *Domitius Rufinus*.

T. Flavius Corinthus

858	Asinius A.f. Marcell(us)	—
710	Caes(ar) n(oster)	—
765	d(ominus) n(oster) imp(erator)	—

The *officinator* has a *praenomen* only in CIL 710. Bloch considers (*Indices* p. 31) that *T. Flavius Corinthus* of CIL 710 is not the same person as *Fl(avius) Corinthus* of the other stamps.

Fulvius Primitivus

183	Augg. nn.	—	Domit. min.
184	C. Ful(vius) Plaut(ianus)	—	

25

L. Gellius Prudens

55	Plo(tia) Isau(rica)	—	Caep.
56	EX·P·S	—	Cepional.
58	Plotia Isaurica	—	Caepioniana
82	Arr(ia) Fadill(a)	—	Caep.
57			

26

Hermetianus et Urbicus

367	Augustor(um)	—	Oceanis.
370	Aug(ustus) n(oster)	—	Oce.

27

C. Iulius Fortunatus

1432	Seia Isaurica	—	
711	Caes(ar) n(oster)	—	
712			

The *offinator's praenomen* is lacking in CIL 1423.

28

C. Iulius Priscus

211	Faustina Aug(usta) n(ostra)	—	Faun.
1351	Q. P. F.	—	

The *offinator's praenomen* is lacking in CIL 211.

29

L. Lab(erius) Bars()

542	imp(erator) Cae(sar) Ne(rva) T(raianus)		
	Aug(ustus) Ger(manicus) Dac(icus)	—	sub Orta
S. 154	Cae(sar)	—	

30

L. Lanius Felicissimus

755	dom(inus) Aug(ustus) n(oster)	—	
185	C. Ful(vius) Plaut(ianus)	—	

In stamp CIL 185 the bare *cognomen* FELICISS is used for *offinator*.

31

L. Lanius Festus

399	Faus(tina) Aug(usta)	—	Pont.
238	Augg. nn.	—	Genianas
402	Commodus Aug(ustus) n(oster)	—	
240	C. Ful(vius) Plaut(ianus)	—	Genian.
239			

In stamp CIL 240 the *offinator's* name is L LA FE, which can refer to *L. Lanius Felicissimus* (no. 30) as well. The identification with *L. Lanius Festus* is based on the *signum* "leo dextrorsum currens", which appears in CIL 238 and CIL 240.

32

Maius ser(vus)

618	Lucill(a) Veri	a. 154	
622=S.189	Aurelius Caes(ar) et Faustina Aug(usta)	—	
620	Faustina Aug(usta)	—	Terent.
621	Faust(ina) Aug(usta)	—	Terentian.

33

Staius Marcius Bassus

S. 23=60	Plotia Isaurica	—	
81	Arria Fadilla	—	
340		—	Mulionis
79, 80		a. 123	

34

Marcus Fyrmus

545	Caesar	—	Subortani
1478	Titia Quart(illa)	a. 123	

35

Staius Marcius Lucifer

59	Plotia Isaurica	—	Caepioniana
83	Arria Fadilla	—	Caepion
61, 62, 2462-3, S. 519, S. 520, S. 525 (<i>Lucifer St. Marc(i) Restitutti sc. servus</i>)			

36

Mercurius Ti. Cl(audi) Quinquat(ralis sc. servus)
 (1077, 1078), *Mercurius* (716), *Merc(urius) stervus* (756)

1078	Lucilla Veri	—	
1077	Lucill(a) Veri	—	
716	Aurelius Caes(ar)	—	
756	Aug(ustus/usta)	—	

Bloch does not count this *Mercurius* as the same person in all cases (*Indices* p. 66).

37

Myrinus

1420	Seia Isauric(a)	a. 124	
288	Statil(ius) Max(imus)	a. 134 Macedon.	
40	Stat(ilius) Maxim(us) Severus Hadrian(us)	a. 127 Brut.	
41	T. Statil(ius) Max(imus) Sev(erus) Had(rianus)	—	

38

L. Numerius Iustus

47	C. Ful(vius) Plaut(ianus)	—	Bucconia
176	Aug(ustus) n(oster)	—	Domitianas minores
177	M. Aurelius Antonin(us)	—	
1124	Domitius Ianuarius	—	

The *officator's praenomen* occurs only in CIL 47.

39

C. Nunnidius Fortunatus

846	Q. Asinius Marcel(lus)	a. 123
847	Q. Asinius Marcellus	a. 123
S. 236	Q. Asinius Marc(ellus)	a. 123
848	Q. A(sinius) Mar(cellus)	a. 123
849	Q. A(sinius) M(arcellus)	a. 134
860	Asin(ia) Quad(ratilla)	a. 141
861	Asinia Quadratilla	a. 142
862		

40

C. Nunnidius Restitutus

1158	Flavia Procula	a. 123
289	T. S(tatilius) M(aximus)	a. 134 Mace.
1278	Q. Marcius Hermoge(nes)	—
286=S. 69	Statilius Severus	a. 123 Maced.

In stamp CIL 286 = S. 69 the *societas* of *Nunn(idii) Rest(itutus) et Leon* appears as *officator*.

41

P. Ocius Antiochus

700	Plotina Augusta	—
698	Plotina Aug(usta)	—
S.187=2036	Aburnius Caedicianus	—

In CIL 698 the *officator's praenomen* is *M*.

42

Q. Oppius Iustus

272	Dom(itia) L(ucilla)	a. 123 Lic.
1046	Domit(ia) P.f. Lucil(la)	a. 129
363	Caes(ar) n(oster)	— Ocean.
1342-4, 2486		

In stamp CIL 363 the *societas* of *Op(pius) Iust(us) et Op(pius) Procul(us)* appears as *officator*.

- 43 *P. P() B()*
- | | | |
|-----------|--|---------------|
| 478-9 | M. Annius Verus | a. 123 Salar. |
| 486=S.124 | Cor(nelia) Mall(iola) | a. 123 Sal. |
| 498 | L. Turr(anus) Gal(lus) (et) T(rebicia)
T(ertulla) | a. 123 Sal. |
| 500-1 | G(allus?) T(urranius?) (et) T(rebicia)
T(ertulla) | a. 123 Salar. |

- 44 *Peduc(aeus) Lupul(us)*
- | | | |
|--------|----------------------|-------------------------|
| 244 | Iul(ius) Step(hanus) | Severo et Arrian. cos G |
| S. 119 | Caes(ar) n(oster) | - Rhod. |
| 471 | Caes(ar) n(oster) | a. 133 Rhodin. |
| 1052 | Dom(itia) Luc(illa) | - |

In stamp CIL 244 the *officinator*'s name is PAED LVP.

- 45 *Pett(ius) Proculus*
- | | | |
|--------------|-------------------|--------------|
| S. 32 | Arr(ia) Fad(illa) | a. 123 Cep. |
| 90=S. 30 - 1 | Arr(ia) Fad(illa) | a. 123 |
| 95 | Antoninus | a. 134 Caep. |

- 46 *Pomp. Felix*
- | | | |
|------|------------------------|--------|
| 1301 | Mem(mia) Macrina | a. 134 |
| 1058 | Dom(itia) Luc(illa) | a. 136 |
| 1059 | Domitia P.f. Lucill(a) | a. 137 |

- 47 *Sex. Pompeius Heli()*
- | | | |
|-----|-------------------------------------|----------------|
| 400 | Faus(tina) Aus. (=Augusta) n(ostra) | - Ponticulanis |
| 757 | Aug(ustus) nos(ter) | - |
| 758 | Aug(ustus) | - |

The *officinator*'s *cognomen* is lacking in stamp CIL 400.

- 48 *Q. Pomponius Ianuar(ius)*
- | | | |
|------------|------------------------------------|--------|
| 808 | Annius Verus | - |
| 465=S. 577 | Agat(hyrsus) Aug(ustae) l(ibertus) | a. 123 |
| S. 578 | Agat(hyrsus) Aug(ustae) l(ibertus) | a. 123 |

49

A. Pontius Clodian(us)

1023	Domiti(a) Lucil(la)	a. 123
1039	D(omitia) P.f. L(ucilla)	a. 123
S. 276	D(omitia) P.f. L(ucilla)	a. 127
S. 146	M. An(nius) Lib(o)	Iuliano et Casto cos.

Bloch places the pair of consuls *Julianus* and *Castus* tentatively *circ. a. 134* (*Indices p. 87*).

50

Proclia Phila

301	Mamm()	a. 124
1217	Iulia Albana	—

51

Sex. Publicius Consors

45	Aurel(ius) Cae(sar) et Faustin(a)	—
S. 102	Fausti(na) Aug(usta)	— Pontices
186	Faustin(a) Aug(usta)	— Domit. m.
44	Augg. nn.	— Bucconian.
46	Aug(ustus) n(oster)	—
S. 44=154		

52

T. Rausius Pamphilus

67	Plotia Isaurica	— Caepional.
65	P(lotia) Is(aurica)	— Caepion.
66	P(lotia) Is(aurica)	—
S. 28	Arria Fadilla	— Caepion.
84	Ar(ria) Fad(illa)	— Caep.
85	Ar(ria) Fa(dilla)	— Caepioniani
86	A(rria) F(adilla)	— Caepionianis
101	Curiat(ius) Cosanus	— Caricet.
I02=S. 34	C. C(uriatius) C[osanus]	— Carc[
524	Trebicia Tertulla	— Salarese
68		

In stamp S. 32 the name of the *officinator* contains the *cognomen* PROCLVS only.

new	Annius Verus	—
456	Rup(ilia) Faust(ina)	— Quint.
S. 576, 457	Rupilia Faust[ina]	—
458		a. 125
460=S. 117		— Q.
459		

The *officinator*'s name is represented by the initials D·R·D only in all stamps but the new one found by us at Ostia.

The reading of the new stamp is not certain: the name seems to be DRVALI DORFTI or DRVTLI DORFTI (genitive sing.), which can be emended to D RVTILI DORETI. The *gentilicium* *Druteius*, attested in Tuder (*CIL* XI, 4687), is another possibility. The *cognomen* *Doretus* would be explained as the Greek *doretos*, verbal adjective of *doreo*.

— The identity of D.R.D. and the person of the new stamp was suggested by Steinby (see Steinby 1969, p. 392–3).

134	Faust(ina) Aug(usta)	— Raninianis*
135=S. 43	imp(erator) Com(m)o(dus) Aug(ustus)	— Can.

* figl. Raniniana = figl. Caniniana

232	Aburnius Caedicianus	— Furianis
233	A(burnius) C(aedicianus)	— F.
605=S. 178	Abur(nius) Caedicianus	— T.
604=S. 171	Aburnius Caedicianus	a. 123 Tempesini.
S. 172	Abur(nius) Caed(icianus)	a. 123 Temp.
614=S. 176A	Ab(urnius) Caed(icianus)	a. 123 Temp.
S. 175	Ab(urnius) Cae(dicianus)	a. 123
234=S. 177	Ab(urnius) Ce(dicianus)	a. 126 Temp.
1425	Seia Isaurica	—
1456	Stati(lius) Maxim(us)	a. 138
606, S. 174		a. 123 Tempesinis

In stamp S. 175 the *officinator*'s name is made up of the *cognomen* FYRMVS only.

225	Aurel(ius) Caes(ar) n(oster)	— Ful.
741	M. Aurel(ius) Antoninus Comm(odus)	—

57 *T. Travius Felix*

235	Valeria Poll(a)	—	Furi.
338	Iulia Lxpula (=Lupula)	—	Mulionis
383	Augg. nn.	—	Ocean. min.

Bloch considers (*Indices* p. 48) the *Travius Felix* of stamp CIL 383 a different person from that of the other stamps.

58 *M. Valerius Priscus*

703	Plotina Aug(usta)	—	
1366	Pl(aetorius) Nep(os)	a.	134
1367			

59 *Vibius Pudens*

S. 182 - 3	Q. A(burnius) C(aedicianus)	a.	127 Tempesina
S. 41=2071	Lucil(la) Veri	—	Can.

60 *Vibia Procill(a) or Procla*

1468	Terentius Iulianus	—	
1147	Flavius Aper	—	

In stamp CIL 1147 the *societas* of *Tontius Felix et Vibia Procla* appears as *offinator*.

61 *Vismatius Feli(x)*

S. 401=1525	Vis[m(atius) s]uccessus	—	
31	Rut(ilius) Lup(us)	—	Brutiana
613=S. 582			Temp.

The text of stamp CIL 613 a is: TEMP·SVCC·FELIX·LIB F. In this enigmatic text we can discern the names of (*Vismatius*) *Succ(cessus)* and his *libertus* (*Vismatius*) *Felix*. This interpretation is given by Steinby in her comment to a new stamp published by her, Steinby 1974, p. 98, no. 4; see above p. 132, note 2.

62 *Vism(atius) Fortun(atus)*

1521	Vism(atius) Su[cc(essus)]	—	
607	Q. Ab(urnius) Caed(icianus)	a.	123 Temp.
S. 180	Ab(urnius) C(aedicianus)	a.	125
S. 181	Aburn(ius) Caeb. (=Caedicianus)	a.	126 Temp.
S. 179			

In stamp CIL 1521 the *offinator* is *Fortunatus* without *gentilicium*; this is evidently *Vismatius Fortunatus* before manumission.

1263	L. Man() Theocritus	a. 134
1088	Dom(itia) Luc(illa)	—
1089	Lucill(a) Veri	—
1086	Lucil(la) Ver(i)	a. 154
719	Aurelius Caes(ar) et Faustina Aug(usta)	—
472	Caes(ar) n(oster)	— Rod.
473	Caes(ar) n(oster)	—
1533.	S. 332 (=2009)	

The *prænomen* *M.* of the *officinator* appears only in the stamp CIL 472. — Bloch thinks that the *officinator* mentioned in stamps CIL 472–3 is not the same as that mentioned in the other stamps (*Indices* p. 51). The person may, however, be the same in all cases: this opinion is supported by the analogy of the stamps of *Peducaeus Lupulus* (no. 44.) in which the same *domini Domitia Lucilla* and *Caesar* appear, also the name of *figlinae Rhodinianae*. In such a case there is reason to suspect that there was some connection between the two *officinatores*, e.g. that their *officinae* were near each other on land that changed owners.

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AE = *L'année épigraphique*. Paris 1888–.

Bruns = *Fontes iuris Romani antiqui*, I: *Leges et negotia*. ed. C. G. Bruns, Th. Mommsen and O. Gradenwitz. 7th ed. Leipzig 1909.

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FIRA = *Fontes iuris Romani antejustiniani, pars prima: Leges*. Iterum edidit Salvatore Riccobono. Firenze 1968.

ILS = *Inscriptiones Latinae selectae I–III*. Ed. H. Dessau, Berlin 1892–1916. (reprinted 1962)

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ORGANIZATION
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IN THE FIRST AND SECOND CENTURIES A.D.

An Interpretation of Roman Brick Stamps

BY
TAPIO HELEN

Indices

HELSINKI 1975

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Tapio Helen

Organization of Roman Brick Production in the First and
Second Centuries A.D.

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+) In a complete copy of the stamp 745 = S.587, published by Bloch in Scavi di Ostia I p. 226, the text is as follows:
EX FIG CAES N AB COCCEIA AVG / LIB PRIMIGENI.