A study of roman gold coins found its Britain and their implications

Isaac, Philip James

A STUDY OF ROMAN GOLD COINS FOUND IN BRITAIN AND THEIR IMPLICATIONS.

A THESIS SUBMITTED FOR THE DEGREE OF MASTER OF ARTS IN THE UNIVERSITY OF DURHAM.

PHILIP JAMES ISAAC

OCTOBER 1971.

An Abstract of an MA. Thesis entitled:-

A STUDY OF ROMAN GOLD COINS FOUND IN BRITAIN AND THEIR IMPLICATIONS.

My research has centred around two objects, namely a study of the longevity of aurei and a consideration of the economy, political and social life of Roman Britain in so far as this can be deduced from the evidence of gold coin distribution. The results have been concrete enough in the first category to justify the claim that aurei circulated for many years as a rule. Results in the second and more diverse section of my thesis have necessarily led to more tenuous and debatable conclusions and opinions.

It has been possible to collect statistics on the distribution of Roman gold coins in Britain from which I have deduced a series of theories regarding the economic, political and social spheres of Roman Britain at various stages in the province's history. Hoards and site-finds have been studied in isolation and together in order to gain all possible information. Geographical distribution seems fairly even over the whole country with a moderate bias towards bulk-volume in the south-east. North-south differentials exist at all periods and appear to fluctuate with military movements and economic growth and decline, both of which are of prime importance in studying this distribution pattern.

I have also considered gold coins from Ireland and gold pieces used for jewellery. These two topics form brief appendices to the main theme of the thesis and serve to illustrate something of its width. A final appendix discusses the use of numismatic evidence by Sir George Macdonald and evaluates some of his methods.

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ACKNOWLEDGEMENTS.

I wish to thank the following people for help and encouragement during my research:-

Professor Eric Birley.

Mr. R.A.G. Carson.

Mr. Richard Rees.

Mr. Norman Shiel.

Mr. John Casey.

PART ONE.

THE LONGEVITY OF AUREI.

During the first three centuries of the Roman occupation of Britain the composition of hoards combining aurei and denarii generally observed one basic rule. The latest gold issues antedated the latest silver, except in the case of the remarkable Sully hoard, to which more attention must later be given. To consider further the implications of the statement outlined above, one needs adequately recorded examples. A significant point emerges at the outset when one looks for suitable hoards with which to demonstrate and study the hypothesis. Of a total of nine such combined hoards eight are from Northern Britain and one from the Midlands.

The fact that none have been found representing this period in Scotland need not surprise us as aurei seem to have been scarce there, similarly the absence of gold - silver hoards from Wales and the south-west of Britain is predictable in view of the small number of aurei found there, particularly so in Wales, a fact which makes the Sully hoard even more fascinating. This is the only mixed hoard in Britain of its period where the latest, and indeed all the gold postdates the silver. There does, however, tend to be some doubt in my mind about the total absence of gold-silver hoards of first to third century date from south-east Britain. As will be seen fourth and fifth century hoards of like composition do occur there; from considerations of the economic development of the region under Roman administration one can conceive the possibility of several gold-silver hoards being concealed there during the first three centuries of the Occupation.

Having discussed the distribution of the hoards in question, I will go on to consider their contents and the data to be gained

from them. In choosing to study the hoards in chronological order, I am not making an arbitrary decision. This will allow us to trace a pattern through the series of hoards and it will show how generations of hoarders successively followed, or were obliged to follow, similar traits when forming mixed hoards of aurei and denarii. In each case the relative dating of the hoards is governed by that of the latest emperor represented by denarii.

The first group of coins for consideration was found at Brean Down in Somerset. It is a possibility that the coins do not in fact form a hoard. In order to preserve my chronology I must begin with these pieces. First, I will quote from the source where I gained my sparse information:-

"Some coins found under the turf include gold pieces of Augustus, Nero and the Elder Drusus."[1]

Though we are not explicitly told so, the coins may in fact form a hoard of gold and other metals. If so, we are still at a loss in the absence of details concerning the dates of any denarii present. In fact, but for the need to present a full survey of the available evidence, one could only justify reference to these coins by remarking on the rarity of gold of the Elder Drusus; it is not recorded elsewhere in Britain as far as I can ascertain.

Moving on to the Shap, Westmorland, hoard, we again find that the details necessary for the present purpose are not recorded. This serves to illustrate a problem which will recur. The hoard is stated to have contained nineteen aurei and five hundred and eighty denarii. Although given a terminus ante-quem as being Pre-Trajanic, and a terminus post-quem as being formed of imperial coins the hoard's only other details seem to be that the pieces were mainly those of Vespasian and Domitian. Thus the vital information regarding the relative dates of the aurei and denarii in

the hoard is not recorded. We are thus reduced to speculation and can reach no definite conclusion.

The Thorngrafton hoard allows more scope for theory and deduction. In this case full details are available and can be summarised here. The hoard, in a bronze arm-purse, contained three aurei, one each of Claudius, Nero and Vespasian, together with sixty denarii ranging from those of the late Republic to four "mint fresh" pieces of Hadrian. In view of the condition of these latest coins, it can readily be accepted that the hoard provides a glimpse of the normal Hadrianic currency. This has more than one interesting implication, for instance it reinforces the statement that Republican denarii circulated at least until Hadrian's reign.

But for the present purpose it is enough to consider the significance of the hoard with regard to the relative dating and age of aurei and denarii present together in hoards. The difference in time between the latest aureus (Vespasian) and the latest denarius (Hadrian) is considerable. It would be as well to establish as far as possible whether this hoard is likely to be typical of the Hadrianic period in respect of its aurei. In other words, can any reason be found to counter the theory that the three aurei were current when the purse was lost. At first sight it may seem that common sense denies any possibility of the non-viability of the aurei, why should they be kept in a purse with current denarii if not useable in the normal way? Sentiment may provide the answer and the coins may be those three gold pieces given to the soldier when he enlisted. Some support for this theory could possibly be derived from the fact that each of the three aurei was individually wrapped in leather. It can of course be objected that the presence of <u>three</u> aurei may be merely fortuitous and the wrapping was perhaps merely a precaution taken by the owner. Even if we imagine the extreme case of a

soldier retaining the aurei from the time of his enlistment and then losing them during his last year of service we can only push back the date of the aurei's circulation by some twenty-five years.

Thus, making the obvious assumption that the new recruit would receive his gold in current coin, aurei of Claudius, Nero and Vespasian were still viable coinage under Trajan, Nerva or Domitian. However, should the aurei be representative of the soldier's present capital it may be argued that these pieces were current at the time of loss. Thus the circulation life of Claudian, Neronian and Vespasianic aurei would be extended into Hadrian's reign. Obviously if the latter hypothesis is correct we have definite proof that early in the second century the aurei in circulation tended to be of considerable age.

The evidence thus gained gives encouragement for the theory that aurei, during the first century, generally circulated for long periods before any particular issue vanished through recall or more likely by hoarding. On the basis of the Thorngrafton hoard, it seems that this is also true of the currency down to the Hadrianic period. Although too much stress should not be laid on this one hoard, it is enough to show that Craster was wrong in his opinion that gold coins had a short circulation life. In 1908 he wrote:-

"Roman gold coins did not long continue in circulation."[2]

In fairness, it must be added that this statement is taken from Craster's report on the 1908 Corbridge hoard of solidi and may refer to that denomination rather than to Roman gold coins as a whole.

More recently, Miss Anne Robertson has stated categorically that Roman gold coins had a long circulation life.[3] The Thorngrafton hoard with its aurei clearly much earlier than its denarii amply supports the case for the longevity of aurei. A note of

warning must be added in view of the fact that only three aurei were present on which to base any hypothesis, even so their uniformly early date is noteworthy. The absence of gold pieces later than Vespasian introduces the problem of deciding why this should be so in the case of a deposit of sufficient status to contain sixty denarii. An obvious answer lies in the fact that one aureus was equivalent to twenty-five denarii and thus the sixty silver coins could only be exchanged for two gold pieces. Such a transaction would only leave the owner ten denarii in silver; as the latter was the denomination of everyday commerce he may well have preferred most of his capital to be in denarii.

Regardless of the reason for there only being three aurei in the hoard we have no explanation for the absence of Post-Vespasianic gold unless, (a) sentiment preserved earlier, now obsolete coins, (b) such old coins were still valid, or (c) later issues of aurei were as yet rare in Britain. Hypotheses (a) and (b) have already been discussed, (c) must now be considered. Unfortunately the most obvious method of checking this theory cannot be employed, The total absence of other gold-silver hoards of Hadrianic date in Britain renders impossible any hope of comparing their aurei and denarii with those from Thorngrafton in search of significant results.

In the absence of directly comparable material, it is still possible to argue that the shipment of currency depended upon the authority of the provincial Procurator. He would have to indent for new supplies as necessary. Obviously no Procurator would be likely, nor one imagines would he be allowed, to request further shipments of aurei if current stocks were sufficient for present requirements. It has long been argued that gold coins were largely required for military salaries. It could well transpire that for

such purposes sufficient or near sufficient amounts of aurei were present, having circulated in Britain since an earlier point during the Roman period, but as will be seen later I must argue against this theory. Nonetheless, I will develop it here and set out what is not in fact a totally contradictory position.

It is likely that large consignments of aurei will have been sent to Britain in 43 and the immediately following years in order to support the attempt to subdue and administer the land of the Britons. Thus a situation might arise where no major addition to the gold supply seemed necessary for years at a time. It would be unwise to base this theory solely on the evidence of the Thorngrafton hoard, but secondary evidence is available.

The hoard of one hundred and sixty aurei found at Corbridge in 1911 contained ten aurei of Nero, fifteen of Vespasian and altogether forty-eight of the period from Nero to Domitian. Clearly, all these aurei were valid as currency and they lend weight to the theory that aurei had a long period of circulation. Further support comes from three other hoards which combine aurei and denarii. A group of coins found near Carlisle, and presumed to be a hoard, contained one aureus and one denarius, both of Nero;also present were issues ranging from Galba to Aelius and the younger Faustina, the latter group being of unspecified metal. Here again, the Neronian aureus may be considered legal tender. The terminus post quem provided by the single coin of Faustina extends the circulation life of Neronian aurei beyond the Hadrianic period. The South Shields hoard was only partially recorded and although two to three hundred denarii are known to have been included, no details of their portraits, types or legends were preserved. It is thus impossible to study the relationship between the hoard's latest issues of gold and of silver. The important fact here is that the hoard also contains twelve aurei

ranging from Nero to Antoninus Pius. This confirms the evidence of the presumed hoard from the Carlisle area mentioned above.

Finally, there is the Rudchester hoard wherein denarii of Mark Antony and the period from Nero to Marcus Aurelius are in association with aurei extending from Neronian issues to those of Aurelius. Altogether this last hoard had fifteen aurei, four were Neronian and six Flavian. In other words, two thirds of the gold coins in this gold-silver hoard from the latter half of the second century had circulated for almost a century. Furthermore, the latest aureus in the hoard is one of 148 A.D. while the latest denarius was issued in 168 A.D. The combined total of this information must surely be enough to make a strong case for the argument that aurei continued in circulation longer than denarii.

This has been shown by the hoards so far discussed and is a deduction from the fact that gold-silver hoards are in all but the Sully hoard marked by the characteristic that the latest aurei are of an earlier date than the latest silver. In order to dispose for the moment of the enigmatic hoard from Sully, Glamorganshire, I will use it here to demonstrate my theory. The Sully denarii open with one of Marcus Aurelius and represent several rulers thereafter down to Postumus of whom some twenty pieces are present. The latest denarius is rather later, being a single issue of Carausius. The seven aurei in the hoard do not antedate the silver, but are representative of Diocletian and Maximian. This is the only cache that I have reference to where the gold postdates the silver in a mixed hoard of aurei and denarii found in Britain. I will reserve a fuller discussion of this hoard for the second part of my thesis and now move on to show the importance of the longevity of aurei with regard to my research and their distribution in Britain.

Commenting on the coins found in the Antonine fort at Duntocher, Dr. Anne Robertson observed:-

"any, or all, of these coins might have been lost during the Antonine period."[4]

The coin-list comprised issues ranging from Vespasian to the elder Faustina. Vespasian was represented by an aureus, this fact and Miss Robertson's remark underline Sir George Macdonald's remarks on the ambivalence of coin evidence on Scottish sites having both Flavian and Antonine occupation.[5] It must be borne in mind that all the aurei found in Scotland and issued between the reigns of Vespasian and Marcus Aurelius may in fact be currency lost under the Antonines and not evidence for Flavian occupation, Flavian military movements or Flavian prosperity.

This raises a vital point in the study of aurei from Scotland issued in the period up to the death of Aurelius. Crawford was happy to consider that an aureus of Titus and a coin of Domitian constituted significant dating-evidence at Dalginross. He argued that,

"The first two coins together perhaps with the marching-camp, speak of occupation in the first century."[6]

His "first two coins", those already mentioned, could in the light of the known longevity of aurei and Flavian silver indicate Antonine rather than first century occupation or activity.

This serves as an example to the more formidable hypothesis proposed by Sir George Macdonald. In 1918 he contrasted the total of aurei then known to have been found in Scotland with those of the Corbridge hoard. Macdonald concluded that most of the aurei from Scotland were lost there during the Agricolan and immediately Post-Agricolan period, rather than during the years of the Antonine phase. This is an important conclusion and it is necessary to restate

briefly the reasoning Macdonald employed in order to reach it.

His argument was that if the Scottish aurei represent casual losses from the thirty or forty years immediately after the construction of the Antonine Wall, they should include a considerably larger proportion of Hadrianic and later issues. The figures that Macdonald produced showed that Flavian and Pre-Flavian aurei constituted over seventy per cent of the total, Trajanic gold less than eighteen per cent and pieces of Hadrian and later emperors only some twelve per cent. These percentages form the basis for his hypothesis. The additional fact that Nero opens both the Scottish and the Corbridge lists of aurei and is represented by twelve pieces north of the Tweed, but by only ten at Corbridge was held by Macdonald to give further support to his claim.

The dilemma thus created is a fascinating one, as it seems reasonable to apply to Dalginross, and to Scotland as a whole, Dr. Robertson's comment, already quoted, on the Vespasianic aureus from Duntocher. This would involve the hypothesis that all the aurei from Roman Scotland issued up to the death of Aurelius could have been lost during the Antonine rather than the Agricolan occupation. As this is a total reversal of Macdonald's theory it is important to make clear the reasons for adopting my position.

Basically I disagree with Macdonald's interpretation of the evidence and more particularly with the way he introduced a hypothesis and then declared it to be the only possible solution. In other words, I agree with the use he made of percentages, but consider that in estimating their evidence he ignored the consequences of adopting an alternative theory which he had already rejected. As my research has shown and as I have demonstrated already in this thesis, aurei of the Pre-Hadrianic period continued to circulate in northern Britain during the Antonine era. Macdonald thought

that the paucity of aurei later than Trajanic indicated that more Scottish pieces were lost in the Agricolan period than in the Antonine. I argue, however, that no such certainty is possible. In Scottish legal terminology I contend that a verdict of Not Proven must be returned on the question of when many of these aurei were lost. The longevity of aurei must mean that the certainty which Macdonald attempted to bring to bear on the problem rests on false premises and must, therefore, be rejected. The fact that Hadrian and later emperors are represented by so small a proportion of the total volume of aurei is, however, important. I would suggest that this is to be explained by general causes such as the fact that supplies of aurei of earlier emperors were found to be adequate for much of the period up to the death of Aurelius. In other words, I consider that Macdonald's attempt to relate this situation to a specific dating for the bulk of these aurei is unwise due to its rather uncompromising nature.

It has been seen that aurei of Nero circulated with denarii of Aurelius and that Claudian gold was apparently current coinage in Hadrian's reign. From this one can conjecture that considerable amounts of Pre-Flavian, Flavian, and more obviously Trajanic and Hadrianic aurei were circulating in Scotland during the Antonine period.

An important point in connection with this argument was raised in the 1970 "Numismatic Chronicle". The perennial discussion regarding Trajan's treatment of the currency has again been revived, this time by drawing on evidence from Jewish Legal Writings. Sperber in this article quotes West on the Trajanic recall of Pre-Neronian denarii and those of Nero issued prior to his currency reforms in 63. Further Sperber cites West's statement that,

"The inference from twenty-seven hoards is that gold struck before the reform of Nero was likewise called in."[7]

Similarly Sperber quotes Mattingly as follows:-

"It seems clear that in 107 the Pre-Neronian coinage of gold and silver, so far it survived Nero was definitely withdrawn - probably demonetized by an edict or at least treated as invalid."[8]

Thus runs the traditional case, but Sperber has examined references in the Talmud and reached the conclusion that,

"Talmudic sources suggest that Trajan did not demonetize by edict the pre-Neronian coinage that he gathered in, and that though it became ever scarcer during the course of the second century, the government was always willing to accept it as legal tender. It apparently continued to have this status until some time about 250-60, when it was officially demonetized."[9]

If Sperber is correct in his conclusion, it has importance with regard to Pre-Neronian aurei found in Britain. One is inclined at least to disagree with the traditional view of West, Mattingly and others, if not, however, fully accepting the new evidence offered by Sperber. Unfortunately, the only Pre-Neronian aureus found in Britain in a hoard clearly later than 107, the date of the Trajanic demonetization is the Claudian piece from Thorngrafton. Although this is clearly in a Hadrianic deposit, it is very meagre evidence on which to base any theory. It does at least give some support to Sperber's thesis as regards aurei circulating in Britain. Obviously it would be wrong to suggest that all the Pre-Trajanic aurei found in this province belong to a period as late as the mid third century. Indeed some were firmly stratified in levels much earlier than this and others can be assigned to previous periods on grounds of probability. It does, however, serve to underline the fact that where coins occur as casual

losses and details of stratification and wear are minimal or non-existent, great care must be taken in dating accurately structures or objects in association from available numismatic evidence.

In summarising the findings of this first part of my thesis, I will do two things. First, I will restate briefly the main points that have emerged and then I will indicate the relevance of these with regard to the chronological survey which follows. We have seen that during the period between about 43 A.D. and 160 A.D. aurei tend to have a longer circulation-life than denarii. This has been demonstrated by reference to various hoards combining coins of the two metals; in each case this has clearly been the position. The only later hoard in which aurei occur with denarii is the one from Sully, Glamorgan. This hoard is exceptional in that all the aurei are later than the denarii, instead of observing the more usual relationship.

Having established that aurei possessed considerable longevity of circulation it has been my concern to apply this fact to the distribution of these coins in Britain. Thus the more diffuse matter arises of the effect this longevity will have on attempts at dating aurei when they occur as casual finds without adequate details of stratification and condition. This problem recurs many times and can only be met with a solution based on probability. While not infallible, such measures do allow progress to be made whereas excessive caution may prevent any conclusions from being drawn. Somewhere between these two extremes, unwise generalisation and extreme simplification and rigid conservatism lies a formula whose careful application will allow us to reach some tenable theories which are sufficiently flexible to allow correction in the light of new evidence and reinterpretation, and yet secure enough against criticisms of fact and, to some extent, of opinion. It is the purpose of the second

part of my thesis to set out these theories and the evidence on which they are based.

PART TWO.

CHAPTER ONE.

INTRODUCTION.

The study of the distribution of Roman gold coins in Britain leads to a number of conclusions regarding the economic, political and social status of Britain as a province of the Roman empire. In order to evaluate the evidence available, I will examine the hoards and casual losses in terms of several periods. These correspond to various important changes in the history of the Roman empire and it has, therefore, seemed logical to divide my research into sections by using the dates of these crucial events. Though my work has concerned only the Roman gold coins found in Britain, it is important to realise that this country was only a province of a great empire and that even here the repercussions of events in Rome, and in the empire at large, could be felt. The distinctive periods are the following:- (a) from the Conquest in 43 to the death of Trajan; (b) from Hadrian to Severus; (c) from the Severi to the death of Constantius I: (d) from Constantine I to the middle of the fifth century.

Period (a) includes the formulative period in which the pattern of the Roman occupation of Britain was established and ends with the death of Trajan. The latter date is the point at which Rome once again heeded the words of Augustus and began to consider that her territory should not be further expanded. The contrast between the foreign policies of Trajan and Hadrian is sharp and decisive. Not only did Hadrian avoid an aggressive policy of conquest, he even abandoned some of Trajan's annexations. This is not the place to elaborate on the subject, but these remarks show the fundamental change wrought by Hadrian. In Britain the period was one of the expansion, temporarily, of Roman rule, and eventually saw

the development of a sturdy Romano-British economy, boosted by the presence of the Roman military market.

Period (b) witnessed consolidation in Britain and elsewhere by Hadrian and the Antonines in terms of economics and politics. The travels and administrative ability of Hadrian and the sound government of Antoninus Pius and Marcus Aurelius allowed Britain to continue as an increasingly Romanised society with a bustling economy and a measure of political stability. It must be admitted that these remarks are generalisations and do not all apply throughout the province at any given time. However, they are basically relevant until the period of the risings in Northern Britain in the "fifties" and "sixties" of the Second century.

Period (b) ended briskly with the firm rule of Severus; after his death Northern Britain had peace for almost a century. None the less, the years between his demise and that of Constantius I in 307 saw a series of economic and political upheavals in the Roman empire. Suffice it to say that both, for example, in the influx of vast amounts of debased currency and in the support for, or toleration of, Carausius and Allectus, made an impact on Britain. This is the period I have called (c) one which, it will be seen, is perhaps the most difficult to analyse and assess.

In Period (d) Constantine I reformed the gold currency by introducing the solidus and its fractions. The period was marred politically by a series of rebellions, campaigns and intrigues both in the East and in the West. The accession of Valentinian I marks the last phase of effective Roman rule in Britain. By the middle of the fifth century, few Roman gold coins were reaching Britain; after 455 few coins of any metal from Roman mints were to arrive here. The last years of formal occupation culminating in the rescript of 410 are marked, as are the immediately following years, by a group

of gold and gold-plus-silver hoards. Thereafter only a trickle of solidi seem to reach Britain. None the less the research embodied in this thesis requires a consideration of this small amount of material marking the end of Roman gold circulation in Britain.

Having established a chronological sequence for my survey, I will now consider the social status of those people likely to have been in possession of gold coins. It is an established fact that in military zones, aurei are initially present as salaries for senior army personnel. Sutherland makes the point succinctly when he remarks,

"Gold and silver coins, ... had long been manipulated in the interests of the great imperatores..... Under the Principate the issue of gold and silver was still related closely to the payment of the armed forces:..... The Supply of aurei and denarii, however important to the economy of the empire at large, must first be assured to the soldiers by whom that economy and thus the position of the princeps himself was upheld."[1]

However, this does not explain the provenance of all the Roman gold coins found in Britain. For example, the south having once been conquered later developed as a prosperous civil zone. The military presence continued there, but civilian development was able to progress more rapidly and thoroughly than it could in the north. This is no surprise, because, in the words of Sir Ian Richmond, occupied zones like Northern Britain were treated as "buffers to absorb the shock of war and to prevent its surges from flooding into the areas of the full Roman peace."[2] The primary value of such frontier areas was thus calculated in terms governed by strategy "and any degree of Romanisation achieved was a by-product of the occupation rather than its purpose."[3]

Even so, whether in the booths of the vici or among the

colonnades of the towns, traders will have been busy and commercial transactions will have taken place between Romans and Britons. Certainly the bulk of the Roman coins thus entering native hands would be of silver and bronze, but a certain amount of gold would also circulate in this area of the Romano-British economy. This fact serves to remind us that although we may tentatively assign general causes to the casual losses and hoards recorded in this thesis, we are not always able to accurately relate coins to owners. The element of uncertainty must remain and should enjoin constant caution, not only here but throughout the field of the distribution and implications about to be studied.

At this point a technical comment may not be out of place as it has some relevance to my research and its results. A director of the Corinium Museum made a statement capable of general application when he observed,

"I fear that many gold pieces and a vast quantity of silver ones have found their way to the melting-pot, and that a large number of valuable coins found in Cirencester have left the town, and so their relation to the place has been forgotten."[4]

Not all the Roman coins found are reported to the proper authorities, and in the case of gold the temptation to avoid this may seem excessive. Add to this the consideration that data and theories based on distribution patterns are restricted by any inadequacy in the compilation of evidence and one reaches a position where some information may be withheld illicitly and some perhaps overlooked.

Having thus acknowledged some of the possible limitations, I will indicate the form in which this part of my thesis will be presented. I shall discuss the economic, political and social situation in Britain as illuminated by Roman gold coins. Working

from a basis of established principles in the interpretation of numismatic evidence, I will draw what seem the most reasonable conclusions open to me. It will sometimes appear that no concrete solution seems available for a given specific point. In such cases I will state the position clearly, note the possible alternatives and leave the matter open to further research and debate. Though the research forming the basis for this thesis will allow the formulation of various theories, it must be remembered that the evidence presented is incomplete and in some cases gleaned only from inadequate records which can no longer be checked as the coins have been lost or dispersed. There is a need for caution in the use to which the statistics and other information are put, but it will be reasonable to advance certain theories which, if open to dispute in matters of detail, may even so be regarded as basically sound. I will now open my discussion. The results of the survey will become apparent as the thesis proceeds; they will allow me to deduce a reasoned account of the economic, political and social position of Britain as a Roman province.

PART TWO.

CHAPTER TWO.

FROM CLAUDIUS TO TRAJAN.

The period from the Claudian invasion to the death of Trajan witnessed a steady rise in the volume of aurei circulating in Britain. A survey of Sutherland's comments on this subject forms an interesting introduction to this phase of the British economy. Of the Pre-Claudian and Claudian periods he says, "Roman aurei can have circulated only very rarely."[1] This is as one would expect in so far as regards the Pre-Claudian gold as its opportunities to reach Britain before 43 would be relatively limited. Thereafter, although it could reach Britain perhaps less such gold was by now left in circulation. We must also reflect that despite Strabo's much quoted passage on the export-import trade of the Britons, it is clear that the majority would more aptly fit the traditional idea of aggressive tribesmen rather than appear as enterprising merchants. Add to this the fact that aurei seem to have circulated more freely in areas where the Roman army was present and, by using negative evidence, one realises that the rarity of Pre-Claudian aurei in Britain is not surprising.

It is unfortunate that our knowledge of the circulation life of Pre-Claudian aurei in Britain is limited to comparative studies based on the evidence from Northern Britain. However, as I have shown, one can safely postulate considerable longevity for Claudian and later first century aurei. Similarly, a case can be made for the continued circulation of Augustan aurei down at least until the time of Claudius and apparently as late as the reign of Domitian. I have already referred to Sperber's theory that Pre-Trajanic aurei were legal tender until about 250-60; thus far are we allowed to go in terms of British evidence. This raises again the question

of Neronian and Trajanic currency reforms which both surely had the effect of raising the intrinsic value of Pre-Neronian aurei and presumably lead to the withdrawal of many such coins by hoarders and those eager to melt down the aurei for the gold they contained.

It is more difficult to accept Sutherland's statement in so far as it concerns Claudian aurei, here the position seems to be rather different. While it is certainly true that such coins are limited in their distribution, I have no record of any found north of the Humber-Mersey line bar a solitary piece in the Thorngrafton hoard; there are even so a moderate number of Claudian aurei in the south. It would be as well to qualify my claim by saying that although only some fifteen site-finds and one hoard are involved, this is a considerable total in terms of the relatively small numbers of Roman gold coins found in Britain. Thus, while accepting Sutherland's point, indeed such few coins as there are bear it out admirably, I must enter a caveat that one must not expect too much in terms of quantity of aurei and on the other hand one must not be too disparaging on grounds of inadequate evidence.

I now propose to examine in detail the Pre-Claudian and Claudian aurei found in Britain. The distribution of aurei in this period reflects the military movements of the initial Claudian Conquest and its gradual work of power consolidation. In making this and the following sub-divisions of my four major periods, I am aware that an artificial picture may be created. It would clearly be wrong to say that the presence of Pre-claudian or Claudian aurei automatically means that their find-site was occupied or even merely traversed by someone in the period between, let us say, 40 B.C. and A.D. 54. As has been seen, first century aurei have a considerable longevity, however it is surely reasonable to assume in the difficult case of casual losses that these coins will probably have circulated

for several years prior to their loss. This must usually be an arbitrary decision in most cases, as it is rare for evidence with regard to the degree of wear to appear in records of aurei that occur in Britain. Here it may perhaps be politic to note something of a paradox. It has long been an established theory that aurei tended not to circulate very much in transactions involving the transfer literally from hand to hand of large sums of money. This partially accounts for the fact that among the most frequent comments one reads on the degree of wear on aurei is something to the effect that on discovery they were in almost pristine condition, as if they had just left the mint. Their appearance, and its apparent freshness, may either be due to minimal circulation over a long period or less likely to loss soon after these aurei had entered Britain and begun to circulate.

Conversely, examples of worn aurei occur, as for instance in the Bredgar hoard whose earliest coin, one of Julius Caesar, was considerably worn while the others were less so in chronologically varying degrees. The point that I want to make here is that from its presence in a hoard dating from the Claudian period, it was possible to establish the longevity and probable age of the coins in the hoard, notably the earliest issues. If for instance, the Caesarean aureus had been found in isolation it might well not have been so easy to assign it to any given date after that of its issue. Evidence of wear, if given, would help but one returns none the less to the basic problem, namely how to assess the likely circulation-life of a given aureus. In the absence of either all, or all but inadequate evidence of wear and stratigraphy, one falls back on the dangerous aid of probability. Obviously it is more likely that (x) will be correct than (y) in a situation where (x) seems more reasonable than (y). But coins can present situations

where (y), however improbable, is likely to be the right answer.

If one applies this concept of probability to Pre-Claudian and Claudian aurei in Britain, one gains some assistance from their geographical distribution and from the negative value of later north British hoards. In view of the fact that both the hoards, or all three if a group formed of an aureus of Marcus Antoninus and some Republican denarii from Alderton, Northamptonshire, is in fact a hoard and almost all of the site-finds of aurei of this period come from southern Britain, one is given something of a clue to the most likely deposition-date of most, if not all, of these coins. It can be argued that no firm terminus post quem has been established for the presence of Pre-Claudian and Claudian aurei in Britain unless Sperber's thesis is accepted. Further, it may be urged that not all such coins need be associated with the invasion of A.D.43. The south of Britain is the area in contact with the Continent for trade in the Pre-Claudian period. Against this, it can be said that the Bredgar hoard provides a sample of the format of Claudian gold currency as it circulated in Britain in A.D.43. If we accept this hoard as a relatively typical cross-section of the gold, we can at least argue that the aurei of Augustus and Tiberius still circulated in A.D.43, the likely deposition-date of this hoard which closed with Claudian issues of 41-2. Thus, although certainty cannot be achieved it is likely that all the hoards and most of the casually lost aurei will have arrived with the invading army or in the possession of traders following or even accompanying the troops. The Alderton 'hoard' is of course a possible exception to this rule and may represent the wealth of a Briton trading with the Continent during the Pre-Claudian period.

Having thus established a tentative terminus post quem, it remains to be observed that the terminus ante quem cannot always

be demonstrated as being earlier than mid third century A.D. Thus the probability-assessment reappears and we are left to conclude that Pre-Claudian and Claudian aurei are likely to have largely left circulation by the time of, for argument's sake, the death of Trajan. This would allow what is probably an over generous circulation-life for these coins and prevent us from assigning any significance that is drawn from their distribution to an unnecessarily restricted period.

The geographical distribution of Pre-Claudian and Claudian aurei in Britain conforms to what might be thought an obvious pattern. Only one aureus, regarded as possibly an issue of Augustus has been found to represent this era in Scotland. Similarly, a solitary Augustan aureus constitutes the apparent total of Pre-Claudian gold found in Northern Britain as site-finds. It is a recurring danger in a survey of this nature that too much stress will be laid on statistical evidence which can only be based on very small totals of coins. Thus it is with due caution that I state that some eighty-seven per cent of the Pre-Claudian and Claudian aurei recorded in Britain as casual losses were found in southern Britain. This sounds meaningful until one realises that only some sixteen coins are involved. But regardless of the totals, it is reasonable to consider the proportions and to draw some conclusions from them. Before doing so, a brief reiteration of the hoard evidence is necessary. There are apparently only two hoards in Britain that close with aurei of Claudius. One was found at Bredgar in south-eastern Britain and the other in the south-west at Llanelen. Thus with both hoards in southern Britain the negative evidence provided by the absence of such caches from the north is strongly emphasised.

The implications of the distribution thus demonstrated are straightforward in their broad outline, but need careful consideration

in matters of detail. The most obvious factor at this early period is that aurei are far more likely to be possessed by soldiers than by civilians. Trade will as yet have been on a limited scale in comparison with the later economic development made possible by the actions of Rome. Furthermore, it will not have been possible for a great degree of Romanisation to have taken place by this time and here I am applying this in terms of numismatics. It has been shown that the Britons adopted Roman bronze denominations and used them in conjunction with their own gold and silver coins, when they had these, for some time after the Claudian invasion. This gives further support to my contention as unlike the natives the army would use aurei as their gold denomination. It is thus most likely a military distribution pattern that appears here, but once again we must remember that these aurei could have a sufficiently long circulation life to allow their loss by civilians at a later time when trade had become more extensive. The two hoards are certainly more likely to have been of military rather than civilian origin. One of them certainly bears heavy historical overtones. The Bredgar hoard was found in the Sittingbourne area and thus near the Medway. Furthermore the latest coins were issues of A.D.41-2, significant dates when one attempts to establish a connection between the hoard and the Claudian invasion of A.D.43.

Several scholars have discussed this hoard with the concensus of opinion being in favour of a military origin. Carson in his definitive account says, "As hoards concealed in Britain before, and also immediately after, the invasion are normally made up of native coins with an admixture of Roman pieces, the purely Roman composition of this find and the presence of fresh coins of Claudius points to very recent importation and to Roman rather than British ownership. If the find represented some part of official funds,

the hoard would have consisted only of coins of recent mintage, but the range of the coins and varying states of wear show that this is a currency hoard, belonging to an individual Roman. -------- The thirty four aurei of the find could well represent the personal savings of someone of the rank of centurion upwards in the legions which invaded Britain in 43.

"If the conjecture that the hoard is connected with the invasion of A.D.43 is correct, the place of finding is of some interest for the early stages of the Roman campaign and for the varying views on the site of the battle of the Medway."[2]

This theory is accepted and supported by Frere who contributes a less likely candidate as a possible owner for the hoard:-

"This sum is too small to represent a subsidy to some native prince, but it is too large to be the savings of an ordinary legionary soldier:-------- Such a large sum (three month's pay of a centurion) was probably the property of an officer, concealed before some skirmish, and it reinforces the view that the army passed north of the Downs by the route laid out as Watling Street. Thus we can picture the battle taking place near Rochester."[3]

If a native prince can safely be excluded from the possibilities surely so too can a native trader. This leads me to disagree with Jessup's view that the hoard may have belonged to such a man, although that author does suggest an army officer as an alternative owner.[4] This rather lengthy discussion of the Bredgar hoard serves to demonstrate the way in which the distribution of Roman gold coins in Britain can reveal evidence bearing on the economy, social life and political history of the province.

Although very few details are available with regard to the Llanelen hoard, composed solely of Claudian aurei, it supports the evidence of the Bredgar discovery. It too is likely to have been

concealed by a Roman soldier during the campaigning which occurred in Wales from 47 onwards; thus the aurei could be a marker for any of the Claudian or even Neronian campaigns taking place there. Again the likelihood of the hoard belonging to a civilian is slight and I conclude that as at Bredgar some military misadventure may well have prevented the hoard's recovery. In the absence of any details of the individual coins forming the cache, even their number is unknown, it has not been possible to establish the date of the hoard even in relative terms such as would have been made feasible by calculations based on the date, and if possible the condition, of the latest aureus present. If such evidence were to be available it might have been seen in meaningful association with the hoard's geographical location in Silurian territory. In fact it might have been possible to suggest a connection between the hoard and the campaign's of 51-2, 57-8 or perhaps even those of 74-8, in each case the relevant campaigns being those against the Silures. In the absence of sufficient evidence, these thoughts must remain speculative, but they reinforce the case for military rather than civil ownership of the Llanelen hoard.

The period from Nero to Trajan contrasts with the Pre-Claudian and Claudian phases in many ways. In terms of the aurei circulating in Britain, there is some justification for suggesting an increase in their volume during these years. Sutherland may be cited in defence of this theory or as an adverse critic of it, depending upon the interpretation of his actual words,

"The scarcity of the official coins was still such that, for the most part they occupied a place strictly independent of the conditions of ordinary currency."[5]

His comments on the dearth of official coins refer to the aurei of the years from Nero to Trajan. It seems to me that in

general terms it may be claimed that some increase in the volume of aurei circulating at this time should be expected in view of the political and economic situation then prevailing. Within the period the aurei of three reigns are particularly well represented by British discoveries. The reigns are those of Nero, Vespasian and Trajan; it is significant that all these emperors prosecuted a vigorous military policy in Britain. It has already been argued that the army was largely responsible for the distribution of aurei and this period gives considerable support for the theory.

Much depends on the age of the various casually lost coins, but it is permissible to draw general conclusions from the facts that in mildly rounded-up figures fifty aurei of Nero, twenty-five of Vespasian and twenty of Trajan have been found thus in Britain. The geographical distribution involved is particularly informative when viewed in conjunction with the military history of the period. Southern Britain has yielded eleven aurei of Nero as casual losses; this is interesting in view of the fact that about three times that number have been recorded as casual losses in northern Britain. If one is to connect the latter series with the Flavian expansion culminating in the Brigantian war of Cerialis and the consecutive campaigns in Scotland concluded by the victory at Mons Graupius, as is surely the obvious explanation, it is necessary to establish that Neronian aurei circulated at least as late as the Flavian period. As this has already been demonstrated, we are able to proceed to our conclusions. The most basic of these is that although such an attribution can be applied to at least some of the casually lost aurei of these reigns, and for that matter to the gold of all the reigns and periods between Nero and Trajan in so far as they are represented in Britain, when dealing with coins from northern

Britain the same cannot be said so firmly in the case of aurei issued in that period found in modern Scotland. In this latter group, the peak-frequencies of the national total, under Nero, Vespasian and Trajan, are repeated. Aurei of Nero predominate with those of Vespasian and Trajan forming sizeable proportions of the total.

I will now discuss the economic implications of the distribution of Roman gold coins of this period in Scotland. It was stated by R.G. Collingwood that in the military area of northern Britain it was the army who were largely responsible for the distribution and circulation of aurei.[6] Certainly there is relatively little likelihood of anyone other than a well paid officer being in possession of any great number of gold coins in the Scotland of Agricola and his immediate successors. Therefore, we should pay particular attention to the nature of the sites where aurei of the period have been found. The application of such a scrutiny reveals that eight Roman sites produced such coins as opposed to only two native sites. This comparison involves only ten sites while a further group may be demonstrated which are devoid of either Roman or native occupation. Thus a supplementary problem is raised, namely the reason for the loss of gold coins in such areas. Again from the previous discussion, we may assume that most of the losses will be those of soldiers, though here the assumption must be regarded with caution.

Whoever lost these coins only provided evidence of transitory presence and the circulation in those areas of aurei of the Pre-Hadrianic period. In no case has a great number of such coins been found on a site not known to be occupied either by Romans or natives; in the absence of such evidence one can only suppose that these isolated aurei may represent troop movements and on a lesser scale

the journeyings of itinerant traders. The campaigns of Agricola and the subsequent occupation of southern Scotland up to Trajan's reign would ensure the circulation of aurei in this area as troops would have to be paid and for this gold would be provided in the case of officers. It may be thought more difficult to prove that any gold coins of the period will have been lost by natives. As I have already noted only two have been found on native sites.

In defence of the idea of native traders operating here at the time, one can cite the work done in showing the distribution of Roman objects on non-Roman sites during the first and second centuries. Trade had been established and indeed Roman coins of the Pre-Hadrianic period appeared on native sites and on sites not known to be occupied by Romans or natives. A similar disparity is shown between the amounts involved, for example seventeen Republican coins on Roman sites, other than on the Antonine Wall, one such coin on a native site, ten of Nero in the former category (including two aurei), one on a native site. Similarly, coins of Vespasian, eighty-nine in all, and sixty-four of Domitian, have been found on Roman sites exclusive of those on the Antonine Wall, but only seven or eight and six respectively on native sites. To complete this selection of comparative figures, there is the case of Trajan with eighty-one coins on sites of the first category and only six on those of native occupation. There is then some justification for the theory that some of these early aurei probably belonged to civilians. We thus reach the conclusion that the early phase of the Roman occupation of Scotland was overwhelmingly military and gave small scope to even enterprising traders. But just as the combs found on military sites show how the women of the brochs and duns pursued their timeless trade, so too the evidence of Roman goods on non-Roman sites and the presence of Roman coins in such

places implies some limited measure of commerce between Romans and natives during the Pre-Hadrianic era.

Allowing full weight to the facts already stated regarding the longevity of aurei, and in particular the bearing this has on the gold coins found in Scotland, I am inclined to think that the Broomholm hoard falls into place more plausibly as of Agricolan rather than Antonine date. Sutherland had little doubt about either the period or the nature of the hoard,

"Roman Scotland supplies, ..., what is probably direct numismatic evidence of Agricola's Caledonian enterprise,..... since there is little reason to suppose that the natives of Caledonia would so soon value a gold currency after being wholly unused to any coined currency at all, we may assume that it is a military deposit."[7]

The argument advanced here does much to support the case for an Agricolan provenance; however, in order to ensure a thorough examination of the hoard it is as well to consider any available evidence for an alternative, Antonine, date. From the numismatic viewpoint there would be no difficulty in accepting the proposition in so far as regards circulation life. The idea of Neronian and Flavian aurei current in Scotland under Pius would be perfectly acceptable and is paralleled by the presence of similar coins in the Corbridge hoard of the early hundred-and-sixties. On the other hand, the fact that the Broomholm hoard included no coins later than those of Domitian may be held to argue against an Urbican date. One might defend the position by citing the Thorngrafton hoard wherein aurei of Claudius, Nero and Vespasian occurred with denarii terminating in fresh Hadrianic pieces. But on grounds of military history it is more difficult to support an Urbican date. The forward policy of Pius had surely insufficient bearing on Broom-

holm to make the probability of a soldier burying aurei there before an action (on the analogy of the Bredgar hoard) a very strong one. The activity of the one-fourties was centred further north. However, if, as seems reasonable, we abandon the idea of an Urbican date for the hoard we are not bound to accept Sutherland's theory that the hoard is "direct numismatic evidence of Agricola's Caledonian enterprise." Rather than seeing this as a hoard lost during the initial stages of campaigning by which Scotland was partially subdued, it is possible to regard it as a relic of the immediately Post- Agricolan period. An Agricolan fort was established at Broomholm and it is possible that the hoard belonged to an occupant and was lost at a point between the occupation of the area and the withdrawal which took place under Trajan.

Having studied the northern evidence, attention must now be given to aurei of the period from Nero to Trajan found in southern Britain. Only four such coins occur as casual losses in the Midlands; they comprise one each of Nero, Vespasian, Titus and Trajan. This may seem strange, but one must remember that the subdivision of one part of Britain into a geographical unit named the Midlands is a subjective act. It can only imply an area-distinction that was not germane to any Roman policy or practice in the period now under study. As far as Rome was concerned, the area now known as the Midlands constituted part of Britannia and was territory within the Roman part of this island. Thus the area was regarded in general terms as having no individual identity. It does, however, seem reasonable to consider the aurei from the Midlands apart from those in southern Britain in view of the fact that their geographical position may surely be held to give information not fully applicable to aurei in, for example, the west country or East Anglia and vice versa.

Two hoards found in the Midlands that contain aurei of the present period display an interesting degree of parallelism between themselves and with the local casual losses. In each case, aurei of Domitian close the series though little can be deduced from this fact in itself. The main deduction seems to be that under Nero and up to the time of Trajan, little of import occurred in the Midlands by way of military activity or civil development. The evidence of history supports this very tentative conclusion in so far as we may conclude that the major campaigns of the period took place in northern Britain and the greatest attempts at Romanisation were at work in southern Britain.

Turning to that part of the province, it is a different distribution that calls for discussion. Here in the south a period of consolidation by the army rather than a great deal of active campaigning was the order of the day. Boudicca's rebellion, though a gruesome reverse and costly, one repressed soon allowed a return to settled garrison duty in southern Britain. Certainly one of the results of this rising was the strengthening of the military grip on the south, but at the same time the ravaged colonia at Colchester and Londinium were revived and contributed once more to the civil development of the province. Increasingly during and after this period the history of the south became one of lessening military stringency and subsequently one of civil and commercial growth. One index of the extent of this change is the distribution of aurei in the south during the period. Although only eleven are concerned, it is significant that few of them have been found on specifically military sites. The majority have occurred at various points where the element of chance has had more to do with their loss than has the presence of either a garrison or a passing patrol. Some at least will probably have been in the

possession of traders and even non-commercial civilians who would by now be somewhat more accustomed to transactions involving aurei. Just as in the case of the Midlands so it is true of the south in this period that too few aurei have been found to allow any major conclusions to be drawn. Negative evidence needs to be very strong in order to have authority, it could be argued that such a position exists here. The sum total of aurei of the period in southern Britain is eleven, all recorded as site finds. This small total taken in conjunction with the absence of hoards either solely of gold or of gold plus silver can be taken as an indication that aurei were as yet rare in the south. Evidence of an increase in the volume of aurei congruent with the geographical position of various reigns of Britain can be deduced from the distribution pattern so far demonstrated. Although only four casual losses can be attributed to the Midlands, there are also the two tiny hoards which hint that enough aurei were circulating in the area to allow the formation of minimal hoards. In the north of Britain, as has been seen, circulation of aurei is more voluminous and the link with the army in this distribution is more than coincidental.

Having summarised the salient features of the foregoing discussion, it remains to consider the aurei of the Neronian to Trajanic period that have been found in Wales. There is a rather surprisingly small total of nine site finds and one hoard, of five aurei. In view of the series of campaigns in Wales, lasting until A.D.78 one might reasonably expect considerably more aurei to have been lost, or, more likely, to have been hoarded. If indeed there is any doubt about the ownership of gold coins lost in Wales at this time, rather than hoarded, logically most if not all of them would belong to soldiers; there can hardly be any doubt about the hoard's owner.

For once it is possible to be specific not only about him, but also about the period in which the man secreted his coins. But even this rare and encouraging case is to some extent marred by the usual problems. We know that Caerleon's turf and timber fort was built in about A.D.75 and rebuilt in stone during the decade from 100 to 110. During the life of the turf and timber fort, a hoard of five aurei, ranging from Vespasian to Titus and Domitian were buried

"in the lowest Roman layer beneath the black occupation soil of the stone barracks."[8]

It is also known that the original fort was built for use as a base by II Augusta during the final campaigns against the Silures. The numismatic dating evidence gives a bracket of 55 to 74 for the issue of the coins, those of Titus and Domitian having been issued under Vespasian. This in itself serves only to demonstrate to a small degree the nature of the aurei circulating in the period from about 75 to 110, but the hoard's prime importance may be held to lie in its historical rather than in its numismatic value. George Boon said that:-

"The hoard may represent about fifteen months net pay for a legionary, taking normal deductions for food, gear and compulsory savings, etc., from his yearly pay of three hundred denarii (= twelve aurei) into account."[9]

While this is certainly not open to doubt in terms of fact, the reasons for the hoard's secretion and loss are not given.

It would be more logical for anyone with five aurei apparently surplus to his current needs to deposit them in the saccellum under the charge of the standard bearer. Does the clandestine nature of the cache infer theft, mistrust of the cashier, conservatism or something completely different? Just as we are

unable to give a definite reply to this question, so too we are at a loss as to why the hoard was not recovered by its owner. These are speculations which would delight a historical novelist but must not be allowed free reign here. It only remains to restate the basic point that few aurei of this period are found in Wales. Thus the survey of Britain has been completed and the paramount status of the north in terms of aurei-distribution, aurei volume and military activity, together with their interaction, has been demonstrated.

PART TWO.

CHAPTER THREE

FROM HADRIAN TO SEVERUS.

The period from Hadrian to Severus was one in which Roman Britain underwent a series of policy changes. Hadrian, with his idea of limiting the empire, established his wall in north Britain, Pius authorised an advance into the north as far as the area ofthe Forth-Clyde line and built another wall, "this time of turf." In the reign of Aurelius a Brigantian revolt caused fierce warfare in the Pennines. Later the rule of Commodus was marked by the rising in which "a certain strategos" was killed and the frontier was penetrated. The arrival of the Severi to conduct campaigns against the Caledonii and Maeatae formed the logical conclusion and climax to this whole restless phase in the Roman occupation of Britain. In order to study the period in detail I have divided it at the death of Commodus. After this event the historical background is one of confusion until Severus has gained full control of the empire. What follows is a time of reconstruction and this is reinforced by the military action between 209 and 211. As there is some historical justification for this division, therefore, I will employ it without further comment.

Sutherland makes several remarks with regard to aurei of the years from Hadrian to Aurelius. His major point,clearly substantiated by the evidence, is that aurei are concentrated in the north at this time. "In Britain the circulation of gold was, ..., confined to the northern area, where it was mainly in demand for military and administrative purposes only."[1]

But when he also says that gold-silver hoards of this period "reflect the busy military organisation there undertaken by Hadrian" [2], one has to quibble and question the wisdom of one

of his examples: it seems to me unwise to designate as a hoard the group of coins found at Corbridge in 1911 in the following circumstances. Craster records that the coins in question, an aureus of Domitian and seven denarii ranging from Galba to Hadrian "were found loose on the floor of a house of the Antonine period."[3]

However, whether these coins formed a hoard or were merely associated by chance and accident of loss, Sutherland's second example, that of the Thorngrafton hoard certainly bears out his claim. Having been found on Barcombe hill, a location aptly described by Fenwick, "The hill on which this discovery took place, overlooks the site of the Roman state of Vindolanda,"[4] they provide evidence of military activity in the north. In this case it is probable that the purse was lost during quarrying operations. It would be rash to make firm statements about aurei distribution on the basis of literally only one or two hoards, but further material is to hand when one wants to consider the whole period from Hadrian to Aurelius. Here again the northern bias is clearly demonstrated, both in hoards and in casual losses. As Sutherland remarked,

"Gold,....., is multiplied, but only in the district which, from military and administrative reasons, was intimately connected with the Wall."[5]

In support of this statement, one can demonstrate the presence of five hoards of the period from northern Britain and none from any other part of the province. Similarly, nine of the fifteen individually lost aurei of this era come from northern sites. The total of the latter includes three of Antoninus Pius and one of Hadrian which were found in Scotland. In view of earlier conclusions stated in this thesis, the total may well need to be augmented by the addition of at least some if not all of the Flavian aurei found in Scotland.

It would be as well to state now the fact that aurei distribution in this period tells us little about conditions in any area of Britain other than the north. As the bulk of the coins are found there we are led to consider that most of the supplies originally circulated within that specific zone. Sutherland makes the point that while

"isolated aurei of the period are, of course, found generally and over a wide area of Britain, from our present knowledge of hoards discovered, we may say that gold was not sufficiently common to make hoarding worthwhile anywhere except in the north, near the Roman Wall."[6]

But this merely states the facts, it is permissible to deduce some conclusions from them.

Once again we have to rely to some extent on negative evidence. In view of the minimal total of aurei of this period found in all areas of Britain except the north, it is possible to propose two basic theories. Either this distribution demonstrates that the army was still the major factor in the circulation of aurei and that their concentration in the north meant what it always had in terms of currency drift; or it could be argued that some form of economic recession occurred, independent of the warfare in the north. In view of the fact that all the evidence suggests that no such recession occurred at this time, it is more reasonable to assume that the former hypothesis is that more likely to be correct. This in itself does not completely explain the apparent dearth of aurei in southern Britain, a scarcity carried to its zenith in Wales where very few gold pieces from the years between 117 and 180 are found.

In order to attempt a solution to the problem other than those already outlined, it is necessary to examine the distribution

of the aurei in terms of chronology and geography. This reveals that Hadrianic gold occurs in Scotland and the rest of Britain, excluding the Midlands. In each case only one coin is involved though an aureus of Sabina has been found in Northern Britain. Thus three such Hadrianic aurei come from the north and two from Southern Britain. Aurei of Antoninus Pius have a more limited distribution, being three in Scotland, one in Wales and none elsewhere. Supplementing these with British examples of Faustina the elder's aurei we can add a piece from the north and one from the Midlands. Finally, the most significant distribution of all is that of aurei of the joint emperors Aurelius and Verus. The only two Aurelian gold pieces occurring as site finds were found in Northern Britain, neither of them in modern Scotland, and the sole casual finding of an areus of Verus took place in the south. While it would be patently absurd to place much weight on the evidence of a mere three coins, it is amusing to note en passant that the ratio of 2:1 thus established between site-finds in Northern and Southern Britain provides a relatively accurate miniature of the distribution pattern of aurei in this period.

Having assembled the information regarding this distribution we can draw various conclusions from it. The first must be that the sample is too small to permit major theories, secondly, we may assume either that aurei of the period from Hadrian to Aurelius were in small supply in the south or that although many existed, few have been found since the Roman period. While the second possibility is feasible, it does seem more reasonable to accept the first. It has already been seen that Trajanic aurei occur in Britain with a steady frequency, again with the majority being found in the north. It does then seem likely that while aurei continued to enter Britain in the Hadrianic-Antonine era,

there may have been an official policy of transmitting the bulk of new supplies direct to the north. The economy of Southern Britain seems to have been serviced by the continued circulation of older aurei, probably with a small proportion of later issues of which the one aureus of Verus from Southern Britain is an example.

My survey has now reached a point at which a more detailed study of north British evidence can be undertaken. A final commentary on the rest of Britain at this time, may, however, be in order first. In the nature of the case Rome would ensure that the economy continued to function efficiently while at the same time the military activity in the north was amply financed. Thus we may not conclude from the presence of very few aurei in Southern Britain that any economic decline had begun. Rather we must constantly bear in mind the longevity of aurei. The other point in this connection is that earlier supplies of gold seem to have been largely sufficient for the needs of the economy in the south. This may in fact indicate that the system was maintaining or being maintained at a fairly steady level throughout the period. One reason for this might be the cost of maintaining maximum efficiency in the northern troops and their bases. This may have forced economy measures in the civil sector as far as public spending was concerned. These are speculations beyond the scope of the evidence and fascinating though they are, I must not take them too far lest I arrive at some untenable conclusions.

The evidence so far produced has demonstrated that Northern Britain became the predominant area for the distribution of aurei in the years from Hadrian to Aurelius. In order to give due weight to this fact I will now consider the hoards found at Corbridge, South Shields and Rudchester. An introduction is provided by

Sutherland in the course of his comments on the Corbridge hoard.

"It is interesting to observe the way in which gold entering Britain seems to have gravitated at once to the north: there are several die-identities, involving both dies, in this hoard, which (by their suggestion that consignments of gold were not very widely dispersed before reaching the north) may possibly indicate this process - 2 coins of Vespasian, 4 of Hadrian (from two different pairs of dies), and 2 of Pius - besides a considerable number of either obverse or reverse identities alone."[7]

This gives a useful opportunity for a discussion of the Corbridge hoard which is chronologically the first of the series now to be studied. As is the way with hoards, much has been written about the example found there in 1911.. Craster wrote the original report and concluded that the hoard began to be amassed in the Flavian period. This conclusion is one to which I will return after indicating the terminus post quem of the hoard. This was estimated by Craster as about 160-2 on the evidence provided by the presence of the latest coins. Since 1911 emphasis has again been laid on both the hoard and its date in attempts to link both with the northern uprisings which occurred at about this time. So far then the two basic theories have been introduced; I will now examine each in turn.

Craster explained his theory of a Flavian origin for the hoard in terms which I will summarise here. He considered it unlikely that a hoarder during Trajan's reign would own forty-eight aurei of that emperor besides forty-eight issued by Nero, his immediate successors and the earlier Flavians. Furthermore, he found it even more improbable that the aurei issued during the brief reigns of Galba, Otho and Vitellius survived to any great extent in the second century. Similarly, the concept of as many

as seven examples of the latter group occurring in a collection of one hundred and sixty coins, unless they began to be collected in the Flavian period, seemed totally improbable, to Craster. Having thus delivered judgement on the hoard he gave it as his opinion that,

"the hoard may, therefore, be taken to be the accumulated wealth of several generations which began to be laid by in the last quarter of the first century and was hidden about 160-162."[8]

The Craster theory may be challenged at several points. The most obvious opening remark is that attention must once again be given to the longevity of aurei. By accepting Sperber's findings that Trajan issued no edict demonetising aurei and allowing for the circulation of Pre-Trajanic aurei as legal tender throughout the second century one is able to envisage the circulation of forty-eight, and more, aurei of the period from Nero to Domitian in company with those of Trajan in about 160 A.D. I have already dissussed the effect of longevity on the examples of aurei from Scotland, here I conjecture that the circulation of Flavian aurei in the Antonine period occurred on a substantial scale. From this it is a logical and easy transition to postulate that Neronian and later aurei could be found with such pieces within the confines of a hoard first formed in about 160.

So far, I have done nothing to disprove Craster's theory, instead I have supplied an alternative solution to the problem. I consider this to be the more likely of the two because if the hoard represents a cross-section of currently viable coinage suddenly withdrawn from circulation it can be understood in terms of what is known about the traits of hoards and circulating aurei. These traits are discussed by R.G. Collingwood in the following passage,

"in a gold savings-hoard the coins are almost always in pretty good condition: while in a gold hoard representing pay,

and therefore drawn from current treasury stock, good gradation of wear is usual; as for example, in the Corbridge hoard."[9]

As an aside, it is interesting to contrast the Corbridge and Bredgar hoards in the light of this statement, the progressive stages of wear visible in the latter hoard have none the less not provoked a conclusion that the hoard is representative of pay. Probably, therefore, as is reasonable, the amount has been thought too small to represent such a pay-chest.

Returning to the present discussion, we find that Collingwood has taken the view that the Corbridge hoard represents pay and that its aurei come from "current treasury stock." Thus we have eminent advocates for both of the theories which I have outlined. An application of Collingwood's dictum will naturally tend to dismiss Craster's case for considering the Corbridge hoard a savings deposit. I have already said that I agree that this should be done as it seems more reasonable to suppose that the aurei forming the 1911 hoard represent Antonine currency rather than to imagine the successive generations of a capitalistic family steadily amassing a hoard of aurei, many of which, being worn, would be unlikely to appeal to hoarders with refined and expensive tastes.

We come now to the question of the reason for the hoard's burial and loss. Craster is certain of the cache's historical significance.

"It furnishes evidence of destruction overtaking Corstopitum in A.D.160-162."[10]

This opinion has more recently been supported by Frere who commuted the drastic word "destruction" to the more moderate phraseology of "some emergency". His statement that "the hoard must have been buried in some emergency at Corbridge in 160-162 and not recovered,"[11]

Serves to perpetuate Craster's melodramatic picture of Corbridge in flames and the whole northern frontier threatened and breached by rebellious northern tribesmen. It seems to me that this reading of the situation disregards various difficulties of interpretation. The Craster-Frere theory seems to require a measure of military action at Corbridge on a scale which would be, to say the least, surprising.

The idea that an emergency or even a disaster could arise of so great a magnitude that the garrison would not even have time to ensure the safe withdrawal of unit-funds seems to me unlikely. If it is argued that the hoard was buried for safety during a military action we may consider this nearer the truth. But what military man, if of officer-grade, would conceal regimental money in a copper jug? The nature of the receptacle urges us to consider an alternative solution to the problems posed here. It is not clear whether the site on which the hoard was found was the interior of a house or a courtyard area. In either case, neither location is such that it would readily recommend itself to a soldier entrusted with the concealment of army funds.

In view of the non-military nature of the vessel, the cunning shown in the hoard's secretion (extending to the stopping of the jug's mouth with two bronze coins rather than any of a more valuable metal, unless this was determined merely by the fact that only bronze pieces were of a suitable size for the work), the burial in a courtyard or under a house floor, both being indicative perhaps more of private than public areas of the fort, one is forced to conclude that the hoard may well be the result of a robbery from unit funds. This would explain the use of a jug and the burial in a relatively private area. The other, similar, possibility is that the hoard did in fact represent savings, being one of the exceptions that as

Collingwood admitted, contravened his general rule. If this were so we would have found the legitimately buried property of someone, or more likely some group of men, of considerable wealth.

Having examined the various possibilities regarding the hoard's ownership, we may progress to a discussion of its significance. As I have already said, Craster would like to associate the hoard with risings in the north, and Frere hints at a similar conclusion. It is, however, somewhat difficult to justify this interpretation of the situation in view of the available evidence. For the moment I will set aside all the alternative theories already stated, the acceptance of which would render any link with native risings in the north purely coincidental, and concentrate on the theory that the hoard was in fact buried during a military emergency at Corbridge.

It would be relatively easy to accept this fact if one had suitable proof in archaeological terms, and if the coin series had ended with issues of about 152-3 A.D., because at this period almost ten years before the terminus post quem of the Corbridge hoard, there was clearly military activity in response to a major rising in Northern Britain. Of the years 154 to 158 Frere remarked that indications of serious trouble are:-

"given by coins and inscriptions and confirmed by troop movements."[12]

Similarly, had the coin series been concluded rather later we could have associated this with the barbarian rising in 180 when Marcellus was sent to restore order in Northern Britain. But the Corbridge hoard lies stubbornly between the two known campaigning-sessions of the period. It seems that the only definite association to link it with military events is a reference in the scriptures Historia Augustae where it is recorded that, /S/o

"imminebat etiam Britannicum bellum ..... et adversos Britannos quidem Calpurnius Agricola missus est."[13]

The outcome of Calpurnius's arrival to suppress the threat of war was the construction of a series of forts in Northern Britain. It will be agreed that this does not seem a likely background against which to set the scene for a military emergency at Corbridge. It is, therefore, advisable to revise the traditional associations of this hoard and accept one of my alternative solutions. All of them will explain the concealment in an unofficial cache and container. None of them gives a convincing reason for the non-recovery of the hoard. If the coins were stolen, did the thief perish before spending his gains, did the legitimate owner die inestate and thus deprive his heirs of both fortune and details of its hiding-place? All such thoughts are intriguing but the major point at issue remains unsolved. The hoard can be dissociated from any rising in the north and from the idea of destruction at Corbridge or along the frontier in general.

The indefatigable Craster, having decided that the Corbridge hoard indicated enemy action, then went on to attribute similar causes to the burial of the Rudchester and South Shields hoards.

"The loss of a single hoard might be due to accidental causes; but when, as here, two or three large hoards of the same period are found in one district, it is safe to conclude that they point to a time of disturbance, ... six or eight years separate the Corbridge and Rudchester finds. The dangers that threatened in 160-162 had not passed away in 168-9."[14]

Again the attempt has been made to link the hoards to definite historical events. In the case of the Rudchester hoard, closing with a denarius of 168 military activity may well be indicated as the cause for burial. Marcus Aurelius may well have had to deal with a rising of some magnitude at the time in Northern Britain. However, this tells us little more about the exact significance of the hoard.

It would be possible by the mid second century for a wealthy civilian to have amassed capital to the value represented by the Rudchester hoard. Although it may be argued that the hoard is likely to have had a military origin, we should not omit a consideration of the traders and entrepreneurs in this period. Further, it must be remembered that though Northern Britain was almost constantly restive and more than once in open revolt between 117 and the Severan period it is not enough to say that this automatically guarantees the classification of the Rudchester cache as one laid away due to the menaces of current events. At all times even the most violent, cautious people will have hoarded currency; it may be that this was one such sum, hidden at this time for purely domestic reasons.

The South Shields hoard presents a rather different problem in that it was incompletely recorded, the date of the latest denarius is unknown. However, it is likely enough in view of the longevity of aurei that the hoard may represent a burial contemporary with that of the Rudchester cache or one soon after that. Craster wanted to consider the hoard as evidence for military action, but again I prefer to claim no certainty in the matter. My reasons are again those advanced in the discussion of the Rudchester hoard and I will not restate them here.

Having considered the hoards closing in coins of Aurelius I move on to discuss an interesting phenomenon. No aurei of the period from Commodus to Didius Julianus seem to have been found in Britain. In the case of all the rulers in this period, with the exception of Commodus, there is a reasonable historical explanation. Pertinax reigned for only about three months, Julianus for four, neither in fact allowing long for their aurei to reach Britain during their reigns. In view of this brevity and the general

confusion rife in the empire, it may be regarded as doubtful whether many aurei of these men and those of Niger and Albinus ever reached Britain in the form of official supplies of currency. One would expect a certain number to arrive at some point mixed with aurei of more orthodox emperors of longer rule. It may well be that the apparent absence of such pieces from Britain is due to a combination of their rarity and the accident of discovery. The aurei of Niger are even less likely to attain a sizeable volume in Britain as his coinage was all struck at Syrian Antioch and will rarely have travelled so far west during or after his three year reign. In each case, from Pertinax to Albinus, the brevity of rule and the consequent rarity of aurei can be accepted as a reasonably convincing answer to the absence of these coins from Britain.

The case of Commodus is different, his thirteen year reign is manifestly too long to allow any such explanation as that already advanced. Again we find an apparent absence of his aurei from Britain. Proceeding from general principles, it is possible to contrast this position with the volume of silver and bronze circulating in Britain under Commodus. Before quoting Sutherland for some relevant information it might be as well to point out that the following remarks concern the total amounts of currency circulating in the reign of Commodus and not only his own issues, Sutherland records a "sharp decline" in the volume of silver currency under Commodus, but gives no specific attention to the volume of bronze. However, he infers from the fact that no struck copies of bronze for the emperors from Commodus to Valerian I are known, and only one cast piece - a Commodan sestertius, that Britain had sufficient bronze coinage during the reign of Commodus.

The picture thus emerging of Commodan currency in Britain

is one which can be interpreted favourably with regard to our problem. Bronze supplies were adequate, silver was in relatively short supply. By visualising a currency-metal pyramid in ascending order of value, we can argue that in order to continue the logical sequence gold must be even more rare than silver. This is really little more than a stratagem designed to give some credence to an uncomfortable gap in our information, but it may have more than mere expediency to recommend it.

While I do not suggest that no Commodan aurei reached Britain, it does seem reasonable to think that only relatively small quantities actually did so. The most obvious counterpart to an apparent scarcity of Commodan gold would be an abundance of aurei issued by earlier emperors. An examination of site-find evidence extending as far back as Trajan suggests that only his aurei can have circulated in Britain in sufficient volume to allow considerable supplies to go on circulating under Commodus. If, on the other hand, we examine the Corbridge hoard we find not only Trajan but also Hadrian and Pius strongly represented. As always, I must stress the danger of judging from minute samples, but allowing for this we may suggest a possible answer. It may be that under Commodus and thereafter for an unknown length of time the bulk of Britain's gold currency was formed by issues of Trajan, Hadrian and Pius. All three had long reigns and the aurei of all of them are relatively well represented in Britain. This is flimsy evidence for such an important conclusion, but it again demonstrates a point that I made earlier. The fact that Britain seems to have continued to use existing, and presumably gradually declining, stocks of gold without receiving additions from the central treasury can be taken to imply either maintenance of an economic status quo or perhaps more likely, that a recession occurred now. Negative

evidence may lead to wrong conclusions here, but during the period of the Severi just such a decline befell and it may be that here we see its origins. If gold currency was in relatively small demand, we may argue that finance and commerce were depressed. If this is so, the effects would be felt in due course by the whole economy. At first, only the major industrialists and financiers would be affected, but eventually the 'slump' would reach all levels of society. I have said that my evidence is small for theories such as this, but none the less the above possibility is one to be borne in mind.

PART TWO.

CHAPTER FOUR.

THE SEVERI TO CONSTANTIUS I.

The period from the Severi to Constantius I is one marked by a series of major economic and political changes in Britain. To some extent these events are reflected in the volume and geographical distribution of aurei at this time. As well as the more spectacular aspects of the period - two breakaway regimes had to be brought down - there was a more insidious danger in economic matters. Inflation and recession, remarked upon in the previous chapter, now became grave problems during the third century. I will study the period under three major headings which will divide the century as follows:- (a) the Severan period; (b) the mid third century; (c) the British Empire and the Tetrarchy. It will be seen that full chronological coverage of the period is not thus achieved. However, by considering these four phases and alluding to the intervening years, I hope to produce a reasoned discussion of this confused and episodic century.

When Severus became undisputed emperor his imperium extended over a Britain ravaged by the inroads of embittered tribes from north of the Antonine Wall. The work of governors Lupus and Senecio and finally the presence of Severus and his sons were sufficient to concentrate the military activities of the period into the north as far as Britain was concerned. If we look back to the Hadrianic period which provides a historical parallel for such policies we find that numismatically they are reflected by the presence of gold-silver hoards and the direct passage of new gold supplies entering Britain up to the "front" in the north. In the case of the Severi a rather different picture emerges, silver shows the same trait now that gold had displayed under Hadrian,

new supplies travel mainly to the north. But besides a total absence of gold-silver hoards from the north, and from Britain as a whole, there are relatively few silver hoards.

The general picture is thus made rather more complex than was the case in reviewing the situation under Hadrian. An examination of the coins representing Severan gold must be handled with great caution as a mere four site-finds seem to have been recorded and there are no hoards with which to supplement the data thus made available. The volume of aurei and the complete absence of these pieces from contemporary hoards suggests a shortage of gold during the Severan period. This would accord with a general fall in the amount of currency circulating in Britain. Though not limited to this period, the decline began at the time of Severus. Laing says that the nadir of this decline was reached in about 235. He then goes on to make a far more important point, he contends that the decline, "coupled with the disappearance of hoards, points to the first half of the third century being a period of relative peace and poverty."[1]

An examination of this argument will allow a discussion of the period up to 350. As I intend to go on to that later I will reserve some of my comments for the moment. It is, however, necessary to make one or two points which have particular relevance to the Severan period. There is no disappearance of hoards at this stage, though as has been said, there are surprisingly few of them. A significant feature about these hoards is that many are composed of bronze rather than silver coins. The fact that bronze hoards are more common in the south than in the north is a logical consequence from the concentration of silver in the military area under Severus to service his northern campaigns. Even though hoards had not yet vanished there are some ominous

signs that the currency decline was underway. The small number of silver hoards and the virtual reduction of Southern Britain to a bronze currency basis found a natural concomitance in the, apparent, shortage of gold. I have thus used the evidence provided by silver and bronze to support my suggestion, that under Severus supplies of gold in Britain were strictly limited. If this reflects the fact that relatively small consignments were indented for by Severan governors we have a major reflection on the contemporary Romano-British economy. It has already been shown that post-Marcan aurei seem to be absent and I have suggested that this may mean that existing stocks of earlier gold were found sufficient. This is an economic explanation, but it was offered to cover a period the latter part of which - after the assassination of Commodus - was marked by growing political turmoil. It might be argued that Britain made her earlier aurei suffice because either none or only small amounts of more recent issues arrived due to the disruption of administrative machinery caused by the civil wars finally leading to the supremacy of Severus.

While this argument is far from totally satisfactory, it may indicate one factor in the problem caused by the absence of aurei from the period between Marcus and Severus. Even if this can be countenanced with regard to the phase just mentioned, one hesitates to apply similar reasoning to the Severan period. If I may be permitted an epigraphic metaphor, I will remark that Severan building inscriptions from Hadrian's Wall and its hinterland record reconstruction of various damaged structures per lineam valli. In just such the same way, one would imagine these efforts are reconstruction would be directed towards the British economy. Tiberius had once reproved a prefect of Egypt guilty of over-zealous tax-collection with the barbed words "boni pastoris esse tondere pecus, non deglubere."[2]

If Tiberius could thus curb the rapacity of Aemilius Rectus and at the same time act in Rome's interest, then surely it would not be beyond Severus to follow a similar policy. He became emperor at a time when economically and politically Britain was in need of restoration. The distribution and paucity of Severan aurei and the general decline in currency which now began suggest that economic aid was either small or non-existent. In terms of political rebuilding the Severi were more successful; after their campaigns and the Caracallan settlement the northern frontier of Britain remained peaceful for almost a century. The account given here tends to show the Severan period in Britain as one more concerned with political than with economic matters. The distribution of Severan aurei is dangerously tempting in that it is on too small a scale to be conclusive and yet the few coins that there are do support the theory that Severan concern was far more for the political than for the economic position of Britain. Northern England has produced an aureus of Julia Domna from Carrawburgh, while the Severan base on the Tay at Cramond revealed two aurei, one of Creta and one of Caracalla. The military nature of these sites needs no emphasis to support my point. A rather ironic point about the only Severan aureus from Southern Britain is that the reference made to the discovery records the coin as "a beautiful legionary aureus"[3] of Severus at Colchester. Thus, even in the south and on an urban site we have an echo of Severan militarism. In concluding this analysis of the period I will quote Collingwood's statement of the Rostovtzeff thesis with regard to the wider field of Severan domestic policy. "Where earlier emperors had fostered town life as the principal object of their care, Severus openly recognised the army as the basis of his power, and set on foot a movement by which the centre of

gravity of the empire's life was transferred from the town to the camp."[4]

This transfer of emphasis finds reflection in the British distribution of Severan aurei, but as I have previously said one must not draw too much from inadequate evidence.

I will now nove on to consider the mid third century. Throughout the empire the period was marked by political and economic chaos. The rapid rise and fall of a long series of emperors, usurpers and rebels was matched for pace only by the ever growing danger of inflation which finally wrecked the currency-system. Collingwood summarises the economic situation in the words,

"By the middle of the century the currency had collapsed owing to reckless inflation."[5]

This background must be considered in conjunction with the closing stages of the decline in the volume of currency already discussed which had a low-point in about 235. In this section of my thesis I will give a discussion of the period from approximately 235 to 270.

This will involve an examination of Britain at a time when the economic situation can hardly be said to improve. Rather it exchanges the austere and frugal lack of coinage which marks the opening of the period for the literal flood of base coin of the Crallic Empire period which brings this phase to a close. In both cases the economy of Britain was reduced to functioning on a currency in which bronze came to play an increasingly predominant part. The proportion of silver in the currency fell sharply and the intrinsic value of the antonininiani became negligible in terms of silver. In a currency where a growing proportion of the coin was of bronze and the silver finally became white-metal

washed aes there would seem to be little economic scope for a large-scale circulation of aurei. This deduction can be amply supported from distribution evidence as the number of gold pieces of the period that have been recorded seems to be very small. But before concluding that this must be the case it might be as well to consider the likely behaviour of any person fortunate enough to possess aurei at this time.

He might well find that the general decline in the value of bronze currency and the growing rarity of aurei made the preservation of his gold pieces seem vital. His argument might be that in such a situation only gold could provide a staple currency, bronze was debased and silver virtually a nominal concept. Therefore, with gold at a premium in more ways than one, the owner would surely try to preserve his coins for as long as possible or spend them carefully in order to achieve maximum value, despite rising inflation. If the owner adopted either position he would tend to save up his aurei for some time. If he was merely concerned to keep his gold in the form of savings he might form a hoard; should he be concerned to spend his coins wisely he might still form a hoard, but of a more temporary nature. In either case I posit a hoard, the problem arises that no hoards of aurei seem to have been found from the mid third century. If this is so or even if a relatively small number of such hoards did exist, we find that we must come back to our original conclusions. It seems that relatively few aurei entered,and circulated in, Britain during the mid third century.

There is one other possible counter to this theory. Although the purity of aurei was always of a tolerably high standard the difficulty of amassing large supplies and the practice of creating wealth in the form of bullion and ingots may have led to

the melting down of many gold coins during this period. I will show in due course it is likely that during the early sub-Roman period Britain was in an economic position where gold had no place in the currency structure. I may here advance the theory that the mid third century presents a similar picture. An inflation-wrecked economy almost totally based on worthless bronze can have had little place for fine gold. The relative value of the two metals in terms of denominations was such that it would tend to overrate gold at all times. The tremendous contrast between the base bronze and the fine gold must always have meant an increasing level of the exchange rate of aurei in terms of antoniniani.

Sutherland holds the opinion that the years from about 310 to 360 were "a half century of almost unrelieved bronze coinage."[6] Further, he maintains that "coins struck in gold and silver can only have circulated very rarely"[7] at this time. Thus it seems we have a basic economic reason for the scarcity of aurei in the mid third century. It is interesting to note that there seems to have been an attempt to produce a certain amount of cast imitation-aurei during the first half of the third century. These pieces are "base and somewhat rough"[8], but clearly attempt to copy contemporary aurei. This raises two points worthy of further discussion, on the one hand the efforts aimed at producing such copies may have had a criminal or an economic motive, on the other hand the very act of imitation is capable of at least two interpretations.

The criminal aspect of such behaviour leads one to assume that the forgers held the opinion that their pieces would readily be accepted in all commercial transactions. Does this mean that sheer unfamiliarity with genuine aurei on the part of many people would favour the forger? In other words, was he basing his attempt

to deceive on the grounds that his material would probably pass unchallenged on points of purity. To suggest such a hypothesis seems to lead us to two barely tenable conclusions, namely (a) that third century gorgers underestimated the traders, and perhaps troops, among whom their coins would circulate, and (b) that if genuine aurei were that rare how do we explain, (i) the gorgers' ready access to such supplies as did exist and (ii) the degree of rarity the deception would require aurei to possess in commercial circles in order to succeed. Only (ii) can be answered satisfactorily and I have already attempted to demonstrate as much.

Having thus argued against the idea that the base imitations of aurei were illegal gorgeries, one is drawn to the attractive hypothesis that these coins have a measure of pseudo-legitimacy. The period under discussion, the mid third century, is one in which the production of copies in base metal of silver coinage was both widespread and considerable. This process seems in the case of silver to have been based on economic rather than criminal grounds. It was a desire to maintain an adequate supply of acceptable coinage rather than a deliberate attempt at profitable deceit. If one attempts to extend this line of reasoning to apply the same economic justification to the casting of imitation aurei one meets seweral problems. The most basic and perhaps the most paradoxical lies in deciding why such a practice was followed.

It has already been stated that aurei will have been very rare in circulation during the early and middle years of the third century. The logical inference from this might seem to be that for this very reason there was a need to produce some form of token gold currency in order to maintain the upper stratum of the monetary system. To this it might be objected that no such

action was necessary as the economy was so stagnant that the few aurei that did circulate would be adequate.

A second objection to my proposed economic basis for gold-imitation is more purely numismatic. It seems to be an established opinion that such coins are "the fabrications of a later age."[9] En passant one could mention here the remarkable gold piece from Caistor-By-Norwich which exactly copies an Ae 3 coin of Helena. In other words, these coins have tended to be regarded as the results of vigorous antiquarianism or artistic commemoration. But according to Dr. J.G. Milne,

"a few of these, proceeding from Romano-British sites, may in fact be contemporary copies, cast in base metal and subsequently gilded over."[10]

In other words not all such coins echo the Flavian practice of "restoring" the types of earlier emperors. The operative words in the Milne hypothesis are those in which he stresses the limited number of these copies which may, and note only may, be contemporary. Thus he points out that any contemporary copying of aurei during the first half of the third century will be on a scale directly comparable to that of the volume of genuine gold coins in circulation. This can be taken to show that although the volume of gold in circulation may have been considered insufficient it seems likely that the inadequacy was met by a very limited degree of inferior production in base metal. Thus the economy seems to have been content to operate on a small amount of real gold and a smaller volume of base aurei. Few more eloquent testimonies to the economic decline in third century Britain can be found.

One last point in connection with these copies of contemporary aurei is that those of the Severi are apparently the most common. This may well reflect a two-fold economic process. First of all

it could indicate the fact that during the Severan period the notable shortage of aurei was to some extent met by the obvious expedient of producing base copies. Furthermore, the known longevity of aurei may well have meant that Severan aurei continued to circulate, however rarely, for many years down into the mid third century and were thus available as the models for copies down to about 250 or 260. If this latter point could be proved and it was to be taken in conjunction with the known fact that Severan copies are the commonest of those featuring third century emperors a significant fact would emerge. It would, in fact suggest that Severan aurei formed the bulk of the Romano-British gold currency from the reign of Severus down to the middle of the third century. To say that Severan arei formed the bulk of such coinage is to imply that the whole volume of gold in the first half of the third century was very small. I have already emphasised the scarcity of Severan aurei in Britain, thus if these were the largest proportion of the currency we find support for the hypothesis of a gold shortage in Britain between 200 and 250. Furthermore, it adds to the existing body of evidence for economic decline in this period. My previous argument that aurei entered a province only at the request of a ~~governor~~ procurator leads us to two, perhaps alternative, perhaps complimentary, conclusions. Either because economic decline made it unnecessary or due to political unrest and some measure of administrative disruption or in view of both these factors it is likely that successive ~~governors~~ procurators of Britain indented for no or only small amounts of aurei. This suggests (a) that no need was felt to boost existing supplies, therefore trade was at least not growing and was probably in active decline, and (b) that existing supplies of aurei would probably dwindle as their rarity grew and their value as bullion appreciated. If this action of private

withdrawal became widespread, it would provide economic justification for the issue of base imitation-aurei in the first half of the mid third century.

In examining the period of the British Empire and the Tetrarchy, I will consider a rather longer phase than this suggests. The Gallic Empire and the years between it and its British counterpart account between them for only very few aurei. Thus, rather than discuss them at length, I will give them attention now. Writing of this period, Collingwood observed,

"The Gallic Emperors Postumus, Victorinus, and Tetricus were unable to arrest the process of decay, and during its temporary independence under Carausius Britain fared no better; but perhaps the Gallic empire and the Carausian period withdrew Britain to some extent from the agonies of the rest, and left it battered and bankrupt, but quiet."[11]

It seems permissible to apply this general comment to numismatics and specifically to aurei. The apparent dearth of them observed during my study of the first half of the third century apparently continued until well into the fourth century. The Gallic Empire period, whatever its political significance for Britain, has only yielded one aureus, one of Valerian I, from south-east Britain; and one of Postumus from Caerleon. This tiny and enigmatic total can tell us nothing about contemporary politics, but is clearly expressive in terms of economic life. The great scarcity of gold coins at this stage must be regarded as a fitting concomitant to the financial ruin caused by the great debasements during the same period.

When we consider the years between 270 and 286 we find much the same situation. Three coins of Carinus and one of Carus comprise the sum total of aurei found representing this relatively

long period. It is not without interest to note that Mattingly, commenting on the Richborough aureus of Carinus and Numerian regarded it as a particularly fascinating specimen because "aurei of these two Emperors are excessively rare."[12]

Rare as they are, a few occur in Britain and serve to add a further complication to our distribution pattern. We find a situation where only small numbers of aurei occur and some of these are rare enough to be considered unlikely to appear at all. In the light of our present knowledge, it would be wrong to deduce too much from these facts; it does, however, seem clear that the economic recession of the earlier third century continued until the time of the British Empire. The presence of rare aurei of Carinus must not be explained in terms of directly relevant historical events in the sense of some military campaign or a political upheaval. Rather, they may represent the occasion of an infrequent replenishment of the gold supply. The three aurei concerned have a predictable distribution, two from Southern Britain and one from the north, another tiny sample but a ratio of 2: 1 in terms of the south-north division of Britain probably reflects accurately enough the limited economic activity now existing in the province.

When we turn to the aurei of the British Empire and the Tetrarchy it is necessary to think in political rather than economic terms. The events that make this period most noteworthy to the historian are the creation and suppression of a breakaway state in Britain and the subsequent restoration work undertaken by Constantius Chlorus. It has long been held on numismatic evidence, largely resting on hoard distribution, that the main support for Carausius centred on South Western Britain.[13] The exact extent of his authority over the more northerly part of

Britain is unknown though a milestone found near Carlisle shows that he may have controlled Britain up to that region at least. Unfortunately, the distribution of Carausian aurei does little to further our knowledge on this point. Two pieces have been found in the south; one being in the south-west and the other in the south-east, and two in Wales, making a mere four in all. This can at least be thought helpful in that it supports more general hoard and casual distribution data with regard to Carausius's sphere of influence.

It seems that two of these aurei were in fact copies; Sutherland says that such imitations are very rare and crude and not always of certain provenance. None the less he quotes N.C. 1886 to the effect that the specimen from Neath is in fact one such copy, another has been found at Silchester. Thus the already small total of four Carausian aurei has been reduced by half, but the interest-value of the coins and their distribution has been considerably increased. Without reiterating all my arguments on the reasons for imitating aurei, I will remark that it seems on balance likely that in this case too the motive was economic rather than criminal. It remains to be considered why such imitation should take place. If Carausius's mints were producing sufficient aurei such a practice would be considered superfluous. But if, due to a possibly linked supply of gold, the official moneyers could not supply enough aurei, how could private individuals get hold of gold in order to produce their copies? Whatever the answer may be, it appears to have been necessary to produce such copies, if only on a small scale.

The distribution of the copies is perhaps more interesting than that of the official Carausian aurei, the latter occur in very likely areas, one at Cirencester and one at Speen (in

Berkshire). Both in the south and neither likely to cause much concern in terms of their distribution-significance. The presence of a Carausian copy in Wales is interesting as tradition ? and numismatic evidence suggest the area was one of those most loyal to the rebel regime. It may be that this copy indicates a scarcity of aurei in Wales under Carausius. If this is true of an area apparently giving active support to the rebel regime, may it be argued that political considerations meant that even less aurei reached the north where the power of Carausius may well have been limited?

If scarcity is accepted as the reason for the imitation of Carausian aurei in Wales, it can also hold good for the same practice in south-east Britain. It is from Wales and Southern Britain that all the known official and imitation aurei and all the official aurei of Allectus - of whose aurei no British copies are known - occur in this province. This is interesting in that, admittedly on inadequate evidence, it suggests that Carausian copies may not have circulated outside the area where his official aurei seem to have been at their most voluminous. This may reflect the fact that such outlying areas, in effect the Midlands and the North received too few Carausian aurei to assist copying on any large scale. On the other hand, the general standard of these copies is crude, which may imply scarcity of, and perhaps excessive wear on, official pieces, as well as, or instead of, poor workmanship by the imitators. We return to our earlier conclusion that a general scarcity of Carausian aurei in Britain seems to have been particularly acute in the North and the Midlands.

The absence of imitative aurei of Allectus is significant, the obvious answer would be that his supplies of official gold coinage were adequate. This is not, however, easy to prove,

although the discovery of one such areus at Erw-Hen may be of special note. The find-spot is near the Dolaucothi gold mine which was worked by the Romans. Probably nothing more than coincidence links the two sites in the present case, but it serves to illustrate my hypothesis. If not for economic reasons of sufficiency it is difficult to conceive of a likely reason for the apparent lack of imitation. The only alternative I can suggest may perhaps be criticised for learning too heavily upon imperial panegyrics. Our sources record the severity of Allectus's government, perhaps some harsh penalty for currency-copying may have served to deter any would-be coiners. Roman laws against counterfeiting were stern and while these copies may arguably not be counterfeits, Allectus may have punished their producers as if such were the case.

Later in our present period, Constantius Chlorus campaigned in Britain defeating Allectus and then restoring Roman authority in the north of the province. This latter phase is probably reflected by the presence of two of his aurei in Scotland. One of these will be referred to again later as it was found to have been re-used as an ornament or amulet prior to its final loss. Both aurei come from an area where economics can provide little reason for their presence, while politics supply a ready solution. Here is one of the rare cases where we can regard a hypothesis as probably correct, rather than merely possible.

The period seems to have been almost devoid of mixed hoards of gold and silver. The only two such caches of which I have record are both in their own way remarkable. The hoard supposedly found in an urn at Alcester is the less reliably reported and can be disposed of quite briskly. The original account was written in the seventeenth century and claimed that "about 1638" the discovery was made of an urn containing ashes and with it another

"full of medals, set edgelong as full as it could be thrust."[14] Some of the coins were apparently dispersed before the writer gained possession of the urn, but on acquiring it he found the remaining contents to be sixteen gold coins and some eight hundred silver. At this point the account begins to gain a fabulous aura as the author goes on to say that no two of the silver coins were alike; even allowing for the great multiplicity of reverse types on Roman coins a total of eight hundred without duplicates seems unlikely. However, this is made to seem insignificant in the light of the further assertion that coins,

"contained the whole history of the Roman Empire from Julius Caesar till after Constantine the Great's time."[15]

The sheer span of this period is too great to accept as at all possible.

Sutherland puts an alternative case with a different set of dates,

"As they stand these dates are misleading and indeed incredible, though it is likely that this hoard may have included AR of the early Empire onwards, with AV from Diocletian onwards."[16]

The fact that the gold coins may be held to have been from the time of Diocletian onwards forms the sole reason for entering a discussion of this hoard under the general title of a study of aurei in the period of the Tetrarchy. Strictly speaking, I would be more correct in leaving it to my tables, where I will list the hoards too vaguely described to allow more formal analysis but as I have in this case a possible foundation period, though not as is more usual a closing date, I have chosen to discuss the hoard now. In the absence of more secure dating evidence I can draw no conclusions as to the specific circumstances causing the hoard's

burial unless a dangerously generous emphasis be given to the noted reference to an urn containing ashes. Could the hoard be the companion for the cremated remains of the founder, the two being preserved together by some grateful descendant? Having accused the report of fabulous narration I must curb my own fancy and leave the hoard to stand as a fascinating exception in a generally rather dull economic era.

The hoard from Sully, near Glamorgan, has been mentioned already. In order to restore the scientific approach necessary in this thesis I will begin by quoting Grueber's matter of fact conclusion to his account of the discovery,

"It is needless to speculate on the circumstances which led to the burial of this hoard. The presence of a skull near the spot affords no clue, as it was probably in no way connected with the treasure. The hoard, which was of considerable value at the time, was evidently buried by a private individual."[17] But if speculation upon the reason for burial is to be discouraged - and there seems no obvious national or local reason for the concealment - there is still much to consider with regard to the hoard's composition. The three elements, silver and gold coins and gold rings are distinct in date and their union here is noteworthy. In order to stress this point, I will quote Grueber at length as he makes the position clear and readily comprehensible.

"With one exception, that of Carausius, the silver coins range from A.D.180 ..... to circ. A.D. 267 ..... The gold coins range from A.D. 286 to about A.D.306 ..... It is quite easy to account for the coins of the two metals being of distinct periods. The original owner of the hoard, who concealed it in the earth, must have desired only to possess coins and other objects of the finer metals, and in this manner the baser pieces

which were current after A.D.267 were excluded from his treasure."[18] Basing his calculations on the fact that the latest coin, an aureus of Maximian, was "in an excellent state of preservation" Grueber thought the approximate date of burial was between 306 and 310.

The theory he advanced to account for the fact that the denarii and antoniniani were uniformly earlier than the aurei is economically feasible. The majority of the silver coins belong to the later third century and the bulk of them are antoniniani. In view of the fact that silver of the years after Postumus had otherwise been excluded, it is interesting that the hoard included a Carausian denarius. The clue lies in the fact that Carausius issued denarii of fine silver of the standard and type of earlier denarii, not debased silver as used in the immediately pre-Carausian antoniniani.

The gold coins include a specimen of the double aureus issued by Diocletian of which Grueber remarked,

"coins of this denomination are of extreme rarity."[19]

The combination of the emperor's more elderly portrait and the reverse type of victory seems to be unique. Such is the hoard from Sully, a splendid discovery in almost total historical isolation.

PART TWO.

CHAPTER FIVE.

CONSTANTINE I TO THE MID FIFTH CENTURY.

Between the reign of Constantine I and the mid fifth century a great change occurred in the history of Britain. At the beginning of this period our island still formed a part of the Roman Empire. By the end of it, Britain had been left to look to its own defence, the Saxons were arriving as immigrant settlers and most westiges of Roman authority and civilisation had dwindled or vanished. Within this economic, political and social structure Roman currency behaved understandably in becoming increasingly scarce after 395. Collingwood notes that there was a "virtual cessation of supplies of coinage for Britain after about A.D.395 owing to the closing or decline of the Crallic mints."[1] Gold had always been less prominent than the other metals, it now gradually disappeared from large scale circulation in Britain if our limited evidence from site-finds can be held to demonstrate as much. On the other hand, a major feature of this period is the relatively large number of gold-silver and gold hoards buried and never recovered. A parallel is provided by the understandably larger total of silver hoards in Britain belonging to the same period. In many, though not all these cases, a link with the Roman army and administration's withdrawal can be established, however tenuous this association may appear. The Anglo-Saxon Chronicle tells us that on leaving Britain,

"the Romans collected all the treasures which were in Britain and hid some in the earth so that no-one afterwards could find them, and some they took with them into Graul."[2]

It may be that the hoards in question provide examples proving the truth of this statement, alternatively reasons such as precautions against the raids of Saxon and Irish pirates must

be given consideration. Finally, there is the sometimes forgotten point that some hoards are buried without any relationship to national or international events, thus the private activities of the populace have a place in this study and serve to emphasise the danger of trying to link every hoard with some economic or political event. In many cases such attempts are valid, but the practice can be overworked.

I will subdivide this chapter by first studying the Constantinian dynasty. Sutherland observed that under this regime gold and silver could only have circulated very rarely in the Romano-British currency system almost uniformly composed of bronze. Furthermore, there was a general tendency from about A.D. 350 onwards for the volume of currency to decline, especially in the northern area connected with Hadrian's Wall. This also occurred on most of the sites farther south in the civil zone. This statement is borne out by the facts that few solidi of the period have been found casually and no gold or gold plus silver hoards closing in this era have apparently been recorded in Britain.

Of the sixteen such gold pieces discovered, six are issues of Constantius II who is approached in terms of volume only by Constantine I of whom four gold coins have been found. This may indicate that the inauguration of the revised currency-system featuring the solidus was accompanied by a general directive on the part of Constantine I that supplies of the new coin should be transmitted to all areas of the empire. This might explain the relative prominence of his issues. No such reason may be advanced in the case of Constantius II, but possibly it was during his reign that the next major supply of new solidi was despatched to Britain. If this were so, we might on the evidence of gold of these two rulers advance a hypothesis to the effect that gold for Britain

was sent out very infrequently.

Distribution of gold of the Constantinian dynasty seems to be of a general nature and covers much of Roman Britain. In no case do many solidi occur in any one region, but no area is totally devoid of them. Two features of the distribution are particularly interesting in terms of economic geography, namely the south-east and Wales. Right from the Conquest of 43, Richborough and its hinterland and then the whole south-eastern region had been the scene of concentrated Roman military and civil activity. This fact is reflected in the steady catalogue of aurei from Tiberius to Allectus spasmodically found there. Now under the Constantinian dynasty this position, though maintained, underwent a form of subordination in that while the south-east has only four examples, the north can boast five contemporary solidi. Trivial though the difference appears, it is none the less significant in a period when gold coins are scaree in general. The paramount economic status of the south-east seems to have experienced a decline at the end of the third century from which recovery was not yet complete. The fact of relatively large-scale distribution in Northern Britain is to some degree due to the presence of one at York and another at Brough-on-Humber. Thus with two of the five pieces being found in forts, we see that the military bias in northern distribution continues. It is not necessary to pursue a dangerous and ill-founded theory regarding a pattern of northern economic growth contemporary with a decline in the south-east.

The distribution of the Constantinian dynasty's gold coins in Wales is particularly striking. Four pieces from this period prompted George Boon to wonder whether we have here evidence for a resurgence of Celtic religion such as that given fully Romanised

form at Lydney, in Gloucestershire, during the next fifty years.[3] As religion has not so far been advanced in this thesis as a reason for gold coin distribution and as Welsh finds are relatively few, I will examine this theory in detail. First of all, it is necessary to say that the evidence is both obscure and fascinating. The coins themselves present several problems regarding provenance. A gold coin of Constantine I found in Anglesey may have belonged to a hoard found at Holyhead composed of ~~bronze~~ gold coins, in about 1820, or may have been an isolated loss. Two more coins of Constantine I were apparently found at Llangaffo, Monmouthshire; thus we must accept a measure of doubt at the outset on the accuracy of site-allocation. In another way the coin of Constantius II from Llanidan creates a problem; it was issued in 330 when Constantius was a Caesar and has been identified as a multiple solidus. This piece is a great rarity, uncertainty exists as to its exact value though Boon suggests it may have functioned at a value of four and a half solidi. We thus have an interesting if somewhat awkward body of evidence to handle.

The use to which Boon put it is explained below. He argued that Anglesey was unlikely to have been in hostile hands at this time and that the fort at Segontium was then held by Rome. He then assumed that the alleged naval base at Caer Crybi also had a Roman garrison at this stage. From this reasoning he proceeded to consider Celtic religion as a distribution factor as I have indicated. While not prepared to rule out this theory completely, I would at least wish to raise some objections and alternative ideas.

Basically I fail to see the connection between Roman gold coins and Celtic religion. If Boon was suggesting that these pieces are a form of religious offering it would be difficult to

substantiate such a theory. If he proposed that the coins indicate a senior official or official body in each case, how do we reach the conclusion that such personnel were churchmen. The geography of the distribution may be invoked to explain the idea of a religious factor in action, but despite the spiritual associations of Anglesey and the Celtic Church, it seems perfectly reasonable to consider associating these coins in the more obvious way with the activities of either soldiers or traders. Having himself noted the military presence at Segontium and probably at Caer Crybi, Boon gives some justification for thinking that some or all of the coins in question may have been lost by soldiers. Furthermore, although the date of the final abandonment of Wales by the Roman army has yet to be established, the traditional association of Magnus Maximus with this event may be accepted for the moment. This means that the garrison of Roman Wales as a whole will still have been of sufficient proportions to increase the chance of a military rather than a religious origin for these solidi. The question of trade in fourth century Wales is one on which a certain amount of reserve may be thought wise. It may be that the economy was not such that large sums of money circulated in the commercial sector, but probably sufficient business was done to allow the use of Roman solidi. In that case we are able to follow a sound precept of detective work and eliminate any reference to the supernatural as an explanation of cause whenever possible.

The distribution and volume of later solidi than those of the Constantinian dynasty in Britain is a more complex and extensive subject and one to which I will now proceed. The period can be considered in two parts as divided by the withdrawal of Roman authority traditionally associated with A.D.410 or can be seen as a whole from the reign of Valentinian I to the mid fifth century,

after the latter date the entry of Roman gold coins into Britain as currency is virtually at an end. I intend to adopt the latter course and discuss the casual losses and hoards of the whole period in a continuous narrative in order to emphasise the fact that gold did not cease its circulation completely when Rome withdrew her last officials and troops from Britain.

First, however, it is necessary to outline the general trends in gold distribution and volume in Britain under the Valentinian and Theodosian dynasties. Having recorded the decline in quantities of solidi circulating under the Constantinians it is perplexing to find that gold suddenly rises in terms of volume in currency. Sutherland records this phenomenon and observes that with the exception of the Cleeve Prior hoard, all the hoards in which gold is prominent come from the eastern half of Britain. From this fact he deduced the following theory:- the efforts made by the central government at the end of the fourth century to assure Britain's security may have included provision for ample payment of defensive troops to whom the gold would be allotted. Sutherland thought that the actions of Stilicho in about 395 may have been connected with this protective preparation. If this was so, the known concentration of gold in the east would suggest that the Romans expected continental invaders or raiders to pose a major threat to Britain at the time of the military run-down in the province.

Though this theory may be partially correct I feel one must still allow some consideration to the position of the south-east as a primary economic sector. Certainly the thriving trade of the earlier centuries had dwindled but within the diminished structure of the Romano-British economy the south-east could surely lay claim to be the most active commercial area. Perhaps this is little of a distinction and a tenuous argument, but it does provide some measure of correction to Sutherland's opinion of military importance

in current distribution-geography.

Once the Roman withdrawal was completed, and even before that, Romano-British currency had suffered constriction of supply. Britain was now left to eke out her previous supplies of coinage with fresh pieces from abroad coming only in small quantities due to private and commercial enterprise. Sutherland considers that:-

"there is every reason to suppose that the currency-system of fifth century Britain was on an Ae basis alone,"[4]

and that, therefore, gold and silver coins of the period reached this country only as bullion. Further he states that during or after the first quarter of the fifth century supplies of gold and silver virtually ceased, which again led to any such pieces as did occur being regarded as bullion.

Despite this apparently total classification of all fifth century gold as bullion, it is necessary to remember that some such pieces represent items of jewellery rather than tokens of commerce. For all his insistence on the non-monetary value of these solidi and their palace as bullion, Sutherland does also consider their latter more ornate use in personal ornament,

"The number of Roman gold or silver coins of the mid-fifth century found in Britain is, at any rate, extremely small, and it may be regarded as certain that such coins later, at least, acquired a value as jewellery rather than as currency, for the economic conditions of fifth century Britain, now denied the benefits of official reciprocating trade with the Continent would have little place for monetary units of such high value."[5]

Pursuing his case even further, Sutherland said that of the small number of Roman coins issued between A.D.425 and A.D.518 that occur in Britain, some almost certainly reached this country after the end of the fifth century. This was, he claimed, particularly

likely in the case of solidi converted to jewellery.

Having thus sketched the general outline history of gold at this late stage, I will move to a discussion of casual losses. Referring to this topic, Sutherland found that sporadic examples of gold and silver coins occur in currency and discoveries more frequently than those of the Constantinian period. Once this has been said, however, little more can be deduced in terms of direct evidence from these coins. It is possible to deduce some theories from the distribution and in a few cases points have been raised in connection with specific coins.

The volume of solidi present reaches its peaks in issues of Valentinian I and of Honorius and Arcadius. In the case of Valentinian this may be a similar situation to that advanced as possible in Constantine the Great's reign; namely a generous inflow of the new emperor and new dynast's gold to boost British supplies and perhaps her economy and his prestige. In the case of Honorius and Arcadius the reason for this relatively high frequency is perhaps more closely linked with historical events. These two ruled the empire at the time of the Roman withdrawal, but prior to that their gold may well have reached Britian in quantities large enough to finance the unusually high level of military activity which has already been posited. In connection with this point it is important to observe that the greater part of casually lost solidi of the latter pair, Honorius and Arcadius, occur as do hoards of like composition in the eastern half of Britain. It must again be stressed that the predominance of South-eastern Britain in terms of distribution-density may be due to more than purely military factors. Even so, the correlation of these two rulers and the eastern half of the country may be regarded as significant. Where, as here, hoards and site-finds agree in emphasising the

paramount status of one area, it is reasonable to assume that solidi probably circulated on a larger scale there than further over in Western Britain.

Having reached this conclusion we are left to draw what we can from it in terms of economic, political and social information. In general, the period from Valentinian I to Honorius and beyond seems to have been one of economic depression and growing political uneasiness. That this should affect the west more than the east is perhaps not greatly surprising. Roman influence is traditionally regarded as being stronger in the south of Britain than in the north. Distribution data given in this thesis serve to underline this position with a general southern predominance of gold; however, within the south there is a difference between the eastern and western areas' volume of gold. South-east Britain generally has more aurei and solidi than the south-west. Thus by a roundabout route we can establish the fact that the presence of more gold in the east than in the west can be seen as a normal occurrence not necessarily involved with any new military precautions. Having thus produced a paradox I will resolve it by saying that in view of the political situation in Britain under Honorius and Arcadius it is more than likely that the eastern bias has an overwhelmingly military origin.

It remains to consider the small number of solidi issued after 410 and before the mid sixth century which have been found in Britain. Without any exceptions they have occurred in the south-east and to most of them might probably be applied the opinion of Sir Cyril Fox with regard to a solidus of Valentinian III from Barrington, Cambridge. This he felt certain had been brought into Britain by an Anglian settler. Such a solution seems reasonable and becomes increasingly likely as the coins become progessively

later than the Roman withdrawal from Britain. There does, however, remain the fact that two of these late solidi, one of Majorian and the other of Libius Severus, were found at Carisbrooke on the Isle of Wight. An unlikely enough site for settlers and here one must wonder whether a final attribution to the ubiquitous traders may be required. Sea-borne trade continued during the Settlement period and these coins may mark the location of a point of call for such purposes.

The period from Valentinian I to Constantine III is particularly rich in hoards of gold and gold plus silver coins. Before examining individual hoards I will estimate the evidential value of the group as a whole. Apart from the earliest few, these can be linked with the historical events attendant upon the Roman withdrawal and the immediately consequent years. Elgee thought that the Wilton hoard was concealed by a Romano-Briton under Honorius, "when Britain was being assailed by the Saxons;"[6] this may well be true and could be applied to most of the hoards now under discussion. But before giving the impression that many Britons were able to gather considerable sums and bury them amid adversity, it would be well to remember Collingwood's opinion that a single solidus, in this case one found at Grayrigg in Westmorland, might, in the early fifth century, represent the owner's total monetary wealth.[7]

It has seemed wise to divide the hoards into two chronological groups, firstly those closing in gold or silver coins of Magnus Maximus and secondly hoards ending in issues of emperors contemporary with the Roman withdrawal. Within the first group fall two hoards of solidi, from Cakeham and Corbridge, and a hoard of solidi and siliquae from Springhead. Dealing with each of these three finds in turn I will discuss their composition and significance.

The Cakeham hoard opens with four solidi of Constantius II and closes with a gold piece of Magnus Maximus. This is by no means an unusual format and the hoard's interest lies more in its economic context. Here, it can be argued, we have a domestic hoard, that is one of no significance to historical and political affairs. Although I will go on later to consider the Springhead hoard in terms of its relationship to contemporary events, I do not regard the Cakeham hoard as being a parallel case. This hoard is small enough to have been formed by a private individual in the course of saving his money over a period of several or even many years. The fact that ehe discovery belongs to South-eastern Britain only strengthens the case for regarding the coins as being evidence of private thrift, the economic position of this region was surely still sufficiently sound to allow sizeable sums to be gained by trade and industry.

The hoard found at Corbridge in 1908 belongs to the same general period as that at Cakeham and was assigned by Craster to about 385. There are a few indications that this too was a domestic hoard of the type found at Cakeham. It is too late a date at which to necessarily associate a Corbridge hoard with military men or activities. The presence of a gold ring in the hoard and the burial within a sheet of lead suggest that the hoard was the wealth of an individual. The date of burial and number of coins may, however, be indications of military ownership. The sum may have been hidden by a civilian alarmed by, or by a soldier participating in, Magnus Maximus's rebellion. In either case forty-eight solidi formed a major treasure in the period of their secretion. It is of note that the coins include an obvious forgery. One is left to wonder why this coin - one of Gratian - was allowed to enter the hoard. It does at least show that forgery was practised now if not also

copying, or does it show the latter at work and at fault? Copies would probably not be needed at this time in terms of coin-supply so forgery is probably the right answer.

In Kent the Springhead hoard of gold and silver ranging from silver of Constantius II to that of Magnus Maximus with two solidi of Gratian and one of Theodosius I presents a complex problem. It has variously been claimed as the wealth of a local citizen on his way to join Magnus abroad (Jessup)[8] or of a local citizen of a thrifty disposition (Penn)[9] or of a company of soldiers (Penn again). Four hundred and forty-seven coins were recovered,

"there is clearly no way of knowing how many coins existed originally, but various reports indicate that there were many more."[10] The siliquae extend from the end of Constantius II's reign until the period shortly after Magnus's death in 388 according to Carson's account.[11] This must disqualify the idea of the hoard being buried prior to its owner joining Magnus's rebellion.

We are thus left with a wealthy citizen and a cohort treasurer as likely owners of the hoard. In defence of the latter suggestion, Penn pointed out that Springhead (Vagniacae) lay on Watling Street and therefore troops about to leave for the continent would pass through the town en route. We are thus invited to imagine a troop movement in about 390 involving the burial of unit funds at a place perhaps not to be revisited by the embarking troops. On balance, the idea of a rich local citizen must be thought more probable.

This brings me on to consider the second group of hoards of which the first is that of some six hundred solidi at Eye. Here again the coins were in a lead cist, they extended from Valentinian I's issues to those of Constantine III. In this second group the dating evidence and likely ownership aspects are largely

overshadowed by the events of the Roman withdrawal, piratical raids and general political instability. Of the eight gold plus silver hoards forming this group, only the hoard from Eye presents a real claim to be seen as exempt from this general classification. Accounts of the discovery give various details regarding a human burial nearby, one reports human bones, another a coffin. Perhaps as, according to Grueber, at Sully the presence of human remains had nothing to do with the hoard. However, it may be that here is a burial of coins with a body parallel to the internment of a coin hoard with the Alcester Cremation Urn. If this is not the case, one must presume that the hoard belongs to the general class already outlined and to which I will now turn.

As has already been observed all these hoards, except the Cleeve Prior hoard, come from the eastern half of Britain. The only point at issue here is whether they represent official, military or civil actions and owners. I am inclined to think that in this case it is almost impossible to distinguish between these categories. The political situation was such that anybody with money, "Jew or Greek, bond or free" and of whatever status, would be likely to protect his wealth by concealment. All the following hoards, those from Reading, Cleeve Prior, Allington, Chelmsford, Sturmer, Bentley and Wilton, seem to have been created and hidden in response to the contemporary economic chaos and political unrest. Here they form a parallel to the many contemporary silver hoards found generally distributed over much of Britain. The conclusion to be drawn from all this is that the situation was such that those, surely the minority, with large sums of money found its concealment a wise measure. Amid troubled times the last gold and gold plus silver hoards of Roman Britain were thus formed in response to economic and political pressures.

PART TWO.

CONCLUSION.

Within the compass of my conclusion I will draw attention to several points which have arisen during my research and seem worthy of further note. One of the fundamental aims has been to examine the established thesis that in terms of gold currency Southern Britain was always more prosperous than the north during the Roman period. It would be possible to approach this problem in many ways. In the present case I have adopted a block method by adding up all the hoards and casual losses from each region over the whole Occupation. It is of course possible to produce figures for individual periods within this larger span. Reference to the accompanying tables will allow such calculations.

The major point at issue when such a procedure is used seems to be the allocation of coins catalogued as Midland discoveries. The presence of this group and more especially their position in the calculation of northern and southern totals is of crucial importance. In view of this fact I will reproduce here in the body of the thesis a table intended to illustrate the import of the Midlands. Before doing so, however, I will offer in defence of my Midland region the justification that this geographical area has economic, if not noteable political reasons, to be considered as a viable entity apart from Northern and Southern Britain. The table is as follows:-

	North	Midlands	South
Gold hoards	5	3	6
Gold plus silver hoards	Some 17	2	Some 7
Casual losses of gold	Some 109	Some 37	Some 115

It thus becomes obvious that by removing a proportion of the coins as Midlands finds a series of significant results can be

produced. Obviously if the Midlands total were added to either the sum of Northern or Southern discoveries, major changes would occur. By adding Northern and Midlands totals, it would be possible to refute the traditional argument by showing that this area has yielded more gold than the south. Conversely in all but the gold plus silver hoard statistics, addition of Midland and Southern totals would confirm established ideas by demonstrating the larger number of gold coins there than in the north.

If it does nothing more, this exercise at least underlines the danger of generalisation. One can fairly claim that over-simplification has been necessary in the production of the above table. The areas labelled north and south could legitimately be divided into north-east and north-west, south-east and south-west. W hat of north-south generalisations then? This is sufficient to show how inconclusive such theories must be and how unsafe it is to place too much reliance on generalised themes and opinions.

A point of some interest is the apparent total absence of the gold of some emperors from British hoards and site-finds. In order to demonstrate this, I have chosen the reign of Gaius (Caligula). The hoard most likely to contain his coins, that from Bredgar, instead passes directly from issues of Tiberius to those of Claudius. As has already been said, this hoard closed with issues of 41-2. Thus, assuming the hoard to be typical of Claudian currency, it seems that even by 42 the aurei of Gaius were rare enough for a hoard of thirty-four gold pieces of the period from Augustus to Claudius to omit them completely.

It is possible that this scarcity occurred only in Britain and other distant provinces whose ~~governors~~ procurators had not indented for new gold supplies during the circulation-life of Gaius's aurei. This raises several points, a study of the hoard and casual loss

tables will show that Pre-Claudian aurei are rare in Britain. This is understandable because prior to the Conquest aurei are unlikely to have entered Britain in large quantities. None the less, the Bredgar hoard shows that in 43 aurei of the late Republic and early Principate still circulated. Thus there is reason to expect that a certain number of such pieces would occur in Britain. In fact one of the coins which I have listed under Augustus in the table of casual losses was issued at the time prior to his accession when he was still Octavian the Triumuir. Similarly, there is the 'hoard' from Alderton with its aureus of Marcus Antonius. Added to these there are the small number of Augustus's imperial aurei and a fairly large group of Tiberian gold pieces. In view of this, the absence of Gaius's aurei calls for comment. Reporting on the Bredgar hoard Carson remarked that "the complete absence of aurei of Caligula is rather odd in view of the amount of earlier coinage represented."[12] The same observation may be applied to the larger problem now under discussion. It is true that the reign of Gaius was brief, but the even shorter rule of Titus did achieve the distribution of its aurei in Britain. It is admittedly a small total and certainly Flavian issues were both prolific and long-circulating, two factors which emphasise the minimal total of such aurei known to have been found in Britain. Even so, the fact of their presence is surely enough to oust any theory that says that the aurei of short reigns like that of Gaius did not reach Britain at all, on grounds of these reigns being too brief and their not coinciding with a provincial procurator's ~~governor's~~ latest request for gold supplies.

The case made out for Gaius may be applied to a group of early emperors including Nerva, Commodus, Pertinax, Julianus and many third century rulers. In some of these cases, however, reasons can be, and have been, advanced for their absence. Conversely,

coins whose rarity is created by brevity of fule do sometimes occur in Britain, for instance an aureus of the interregnum of 69 between the reigns of Nero and Galba and the gold of Titus. Thus there seems to be an element of chance in the pattern of discovery as well as in the original distribution of Roman gold coins in Britain.

There remains a postscript with regard to the use of evidence and its interpretation in this thesis. I have attempted as far as possible to study each specimen, hoard and situation objectively. A major concern has been to avoid any tendency to label a given hoard with a historical context which does not seem appropriate. It has not been my intention to produce a compact survey within which all the problems raised and explored are solved or given the semblance of solution. Instead, I have tried to probe beyond the limits of present knowledge in an attempt to establish new facts and original theories. In so far as this has succeeded, it has done so through foundation on, and adherence to, known facts and due observation of my material's limitations. Within this framework my research has proceeded to the thesis thus concluded.

APPENDIX ONE.

ROMAN COINS IN IRELAND.

Although Agricola contemplated the conquest of Ireland, Rome never occupied the island. None the less, evidence has been compiled which suggests a certain degree of commerce, and, in the later years, of the Roman occupation of Britain, spasmodic incursions by Irish pirates and raiders. In 1913 Haverfield produced a catalogue of Roman material found in Ireland.[1] His list of some thirty discoveries was largely composed of coins, some found singly, some in small groups and some forming large hoards. In 1947 O'Riordain published a new list which included material recorded since the production of Haverfield's article.[2] The overall result given by a study of the two lists is the creation of a predictable picture showing that Roman coins and pottery, together with a small number of glass and metal objects reached Ireland at various times during, and probably after, the Roman period on the British mainland.

I have mentioned trade and piracy as the two major factors in bringing Roman material to Ireland. Of the first of these Haverfield remarked,

"Whatever trade there was can only have been trifling in amount."[3]

On the question of piracy there is the testimony of Marcellinus who recorded that in 365,

"the Picts and Saxons and Scots and Atecotti harassed the Britons with continual afflictions."

In this passage the Scots referred to came from Ireland and it can seen that they took part in the general practice of raiding Britain at that time. An ancient Irish poem described a series of such sorties led by Niall of the Nine Hostages, King of Ireland from 379 to 405. The story of Patrick's enslavement is set against a

background of Irish piracy which menaced Britain in the fifth century. Taken together, these strands form one aspect of the evidence demonstrating the effect of Irish raiding on Britain.

Four Roman solidi have been found and recorded in Ireland. All of them were issues of later fourth century date and thus fall into the period when trade is less likely to account for Roman material in Ireland than is piracy. Indeed the conditions at the time of their production were such that trade would probably have been hazardous and unstable, if not totally defunct. Evidence supplied by the Coleraine hoard of late Roman silver coins supports the literary tradition regarding Irish piracy directed against Britain. In 1937 Mattingly and Pearce examined this hoard and its historical context. They concluded that the earliest possible date for the hoard must be approximately 420 and that,

"there is no reason, as far as the coins go, to reject the most obvious hypothesis, that the hoard came from the exposed West of England."[4]

Thus there is sound reason to support the piracy theory, but less secure evidence for trade in that period. Indeed the presence, if not the predominance, of pirates off the coast would discourage the active pursuit of trade between Britain and Ireland to an even greater degree than would the hardships and risks attendant upon such commerce in even the most peaceful circumstances.

The presence of a solidus at Ballintoy, one near Dublin and two at New Grange presents a problem of an intriguing nature. Bronze and silver coins of first to fourth century date and Roman origin are known from various sites in Ireland. (Some of these locations are marked on my distribution map of Roman coins in Ireland). Gold coins have been discovered of fourth century emperors only. While this may reflect the mere fortunes of discovery and no major

conclusion may be based on such a few coins, it is interesting to note that one of their three find-spots has possibly significant associations. The prominence of the New Grange graves may have made them seem an ideal landmark with which to identify a cache of solidi when a suitable hiding-place was being sought. The coins were found actually on the tumulus, but if they were deliberately concealed the reason for this must remain unknown. The lack of adequate evidence coupled with the balance of probability must incline one to consider these coins as casual losses rather than part of a hoard. Here, as in the case of the two aurei found in a Stirlingshire quarry at Drymen, we have two gold coins isolated from other Roman material. In neither case can one safely posit either a tiny hoard or a fraction of a larger cache. In both cases the carelessness of the owners has to be considered the cause of deposition.

In no case have more than two solidi been found together and the sum total from Ireland is only four. These facts would tend to suggest that trade rather than piracy explains the presence of fourth century solidi in Ireland. Though I have stressed the very limited nature of such trade at this time it seems more likely the solution than piracy as it gives a reason for the discovery of solidi and also for their very small total volume. If piracy were the cause, one might expect to find larger numbers of solidi in hoards composed of raiders' booty. I t has been suggested that the Coleraine silver hoard is really an agglomeration of hoards buried together. If this reflects common practice, one might expect larger deposits of gold than those demonstrated by the discovery of one or two solidi. However, we must remember the format of late Romano-British hoards, here silver is common, gold rare and gold-plus-silver hoards are predominantly formed by silver pieces. Accepting

then that later fourth century solidi are rare in Britain one finds some rationale for the tiny Irish total.

The fact that Solidi have occurred only on coastal and near-coastal sites in Ireland can be seen as favourable to either the trade or the piracy theory; in either case sea transport must necessarily be involved and the only safe deduction from this distribution is that the traders and/or pirates were, as could be expected, concerned with, and perhaps living on, the coast rather than the interior. The location of the great silver hoard at Coleraine also conforms to the coastal-site distribution pattern.

These adventurous traders, savage pirates or perhaps bold travellers have created an enigma in the loss there of four solidi. The Roman empire had little contact with Ireland and yet her gold coins, though very few, reached the coastal area in or after the late fourth century. All these solidi have been found in the eastern part of the island, which suggests that they came from Britain, the most likely geographical point from which they might reach Ireland. The nature, casual or deliberate of these deposits, the identity of their owners, the possible total of solidi yet undiscovered or found and never recorded in Ireland are matters of conjecture and must remain so at the moment.

APPENDIX TWO.

ROMAN GOLD COINS USED AS JEWELS.

The secondary use of Roman gold coins in various forms of jewellery began at least as early as the second century A.D.

"A partir du II^{e} siecle il existe des aurei, des pieces d'or, montees dans des cadres ajoures precieux et que l'on peut considerer comme pendentigs. C'est surtout en Craule et en Italie du nord que l'on a trouve des bijoux de ce genre. On rencontre tojours aussi des monnaies perforees utilisees comme bijoux sous cette forme primitive."[1]

Although this statement lays most of its emphasis on the presence of such pieces in Craul and Northern Italy, similar jewels have been found in Britain. Here the most common type seems to have been the pendant, featuring a gold coin in place of a stone.

Distribution is general with a predictable concentration in South eastern Britain. As I have chosen to restrict this appendix to coins issued before 500 A.D. we are concerned here with only a small number of such pieces. My reason for imposing this limitation lies in the fact that later coins belong to a period long after the Roman occupation of Britain had ended, and their arrival in the form of jewellery can have had no effect on the society that decayed after the Roman withdrawal. In taking notice of earlier fifth century pieces I demonstrate the way in which Roman gold coins continued to reach Britain after their value as currency had evaporated.

The use of a Roman gold coin, as an alternative for a jewel, within a ring setting would appear to have been a fairly standard practice. One such ring was found during the nineteenth century at Ilchester in Somerset. The coin which it displayed was one issued by Severus Alexander. The coin's secondary use raises

an interesting point. Either it was incorporated thus after being made obsolete by time or demonetization, or it was converted into a jewel while still viable as currency. The former alternative might give some clue to the date of secondary use, the latter might intimate opulence and/or vanity in the person of the owner.

The British Museum Collection as catalogued in 1907[2] contained similar rings containing one gold piece each of the following:- Trajan, Marcus, Aurelius, Septimius, Severus, Caracalla, Elagabalus, Severus Alexander, Diocletian, Constantius II, Justinian and one which may be an issue of Arcadius. Thus although only one example of these rings can be quoted as found on a British site, the above list serves to substantiate the claim made by the Congress of Constantinian studies with regard to their frequency.

Five Roman gold coins mounted to be worn as pendants have been found in Britain. An aureus of Constantius I from Birrens was worn completely smooth on one surface due, it has been suggested, to a long period of use as a pendant or even as an amulet. This seems a rather facile explanation unless either the coin was abraded before conversion to a jewel or its use as such continued for a very long time once the coin was already somewhat worn from lengthy circulation.

The late fourth and early fifth century pieces, representing Honorius, Arcadius, Avitus and Anthemius are likely to have been worn as pendants by Germanic immigrants rather than natives of the Sub-Roman period as they, especially the last two, belong to an era when few Solidi reached Britain. In view of Hunter Blair's date of circa 453[3] for Hengist's settlement in Kent it may be held that probability favours my contention. Such a practice is certainly well attested among the Germanic tribes entering Britain after 450.

Finally, let me quote Roach Smith who in commenting on a looped solidus of Magnentius, found at Reculver, expanded his theme to include a general history of such ornaments.

"Roman gold coins are frequently found thus converted into personal decorations. Sometimes they are enclosed in a border of elegant filigree-work," coins of later times, and those of the Lower Empire, are more frequently mounted as this specimen.

It is coins such as these that are alluded to in a passage of Pomponius the civilian when he says, 'the reversion of ancient gold and silver coins worn as jewels, may be devised.' The Saxons followed the Roman custom, and mounted the gold coins either in a border of filigree and garnets, or coloured glass. They chiefly used for this purpose, the coins of the Lower Empire, and those of the Merovingian princes; and numerous examples of them, mounted like the coin of Magnentius, have been found in the Saxon burial places in Kent. Six of them, together with a looped intaglio, and a gold circular ornament were dug up, a few years since, in the yard of St. Martin's Church, near Canterbury, the site of which ..... was presented by Ethelbert to his Queen, Bertha, and her Frankish Bishop, Luidhard."[4]

APPENDIX THREE.

SIR GEORGE MACDONALD'S USE OF NUMISMATIC EVIDENCE.

Taking first the value of coins as an indicator of the probable date of abandonment of a site or area, I consider Sir George Macdonald made sound use of such evidence. An example will show how well he could observe the basic principle of letting the coins give their evidence and noting it without undue speculation. In his Appendix to Curle's "Newstead Report" and in his "Roman Wall in Scotland", Macdonald claimed that it was probable that the area of Scotland conquered by Lollius Urbicus was abandoned by the Romans early in the reign of Commodus. In his "Roman Wall in Scotland" Macdonald pointed out that, apart from Cramond where Severan coins had been found, the latest Roman coins common in Scotland are those of Commodus. From this basis he argued the case outlined above, which seems to me a proper use of numismatic evidence. Later coins are largely absent and this may be taken to infer that Roman personnel left the area at the time of the circulation of the latest coins found there in large numbers.

From the general Macdonald turned to the particular and argued convincingly for a closer dating of the withdrawal from Urbicus's conquests in Scotland. By studying the coins and the sequence of their production he gave an approximate date to the retrenchment. In the Newstead Report Macdonald showed that denarii of Antoninus Pius and his wife circulated in Scotland for some time prior to the withdrawal. However, he continued, the coins of Aurelius and the younger Faustina were as yet rare in the area. Similarly, Commodus was represented only by coins of Crispina whom he married in 178 and discarded soon after becoming sole emperor in 180. Thus the evidence for dating the withdrawal to approximately 180 seems to be secure. Further clarification was

given in Macdonald's 'Roman Wall in Scotland' where he stated that coins were issued in the name of Commodus for some years prior to his accession. From these facts Sir George advanced the claim that a date between approximately 180 and 184 is conceivable for the retreat from the Antonine Limes. To me this seems good deduction carried out logically and producing rational and reasonable results.

Macdonald realised, and ably demonstrated, the use of coins in establishing the general period of an occupation-phase. In the first edition, (1911), of the "Roman Wall in Scotland" he noted that the absence of Pre-Trajanic copper coins agrees with the ceramic evidence in showing that the effective occupation of the Scottish Limes only began in the second century. But for the supporting evidence of the pottery this might seem too bold a statement to base on negative numismatic evidence. But in the circumstances it seems logical that if neither coins nor pottery demonstrate an earlier occupation the second century origin must be considered as proven. In 1934 in the second edition of his "Roman Wall in Scotland" Macdonald stated that four or five Pre-Trajanic copper coins had been found on the Antonine Limes since 1911 but these gave insufficient evidence to alter his conclusion regarding the occupation-period. Certainly so small a number of coins would be too frail a basis for a theory of an earlier occupation of the Scottish Limes. Thus coin evidence was soundly handled in association with the pottery's testimony.

Related to this use of numismatic and non-numismatic evidence in consort is a remark made by Macdonald to the effect that coins can be very misleading if studied in a vacuum. In P.S.A.S.1917-18 an article by Sir George on Roman coins found in Scotland records those from Cappuck. Here, in South-east Scotland, pottery demonstrated both Agricolan and Antonine occupation. But although

first as well as second century coins were found, none of them former group were well enough preserved to justify ruling out the possibility of second century losses. Thus Macdonald showed that numismatics could only give conclusive evidence for Antonine occupation, with an Agricolan phase left as an open question. The illustration raises two points, firstly, that unless it is inevitable, coin evidence should not be studied without reference to all other available data. Secondly, care is necessary when estimating the circulation period of Roman coin issues.

Macdonald's opinion on the importance of the absence of common coins from hoards must be met with reservations. It was his contention that the omission of such coins from hoards of bronze or silver might enable one to reach a date for the act of deposition. If, he argued, the hoard was at all large it could be expected to contain examples of all pieces current at the time of burial. Therefore, if a very common coin is absent this may mean that the hoard was concealed prior to that coin's distribution. The theory seems sound enough and would be useful as long as it was only applied with "rule of thumb" status. Should the principle be over stressed, a situation may occur where adhesion to maxims leads to variance with known historical facts.

An example contradicting Macdonald's claim is given by the behaviour of British hoarders in the Gallic Empire period. Rather than include examples of all currently common coins they avoided some of these as much as possible. When the base coinage of Gallienus poured into Britain, the adverse reaction to it was shown by the hoarding of earlier coinage of better quality bronze and silver. Eventually the situation became so grim that even these base coins were hoarded rather than the yet more inferior ones that followed. Here the absence of common coins was a protest against

economic chaos rather than a direct indication of the hoard's date. However, such cases are rare enough to make Macdonald's point valid and useful.

P.S.A.S. 1917-18 also contained the following dictum by Sir George:-

"Casual finds, if reasonably numerous, reflect more trustworthily than hoards the character of the money circulating throughout the period during which they are lost."

Obviously Macdonald is correct to some extent because one has little control over which coins one loses, they may be of high or low denominations. But a hoarder may use his cache as a savings-bank, regularly adding similar amounts in the same denomination. Methodical though this is, it gives little information regarding the general state of the currency when the hoard was being formed. Certainly casual losses have a function in suggesting the proportions existing between various denominations and issues in contemporary currency, but the major drawback in such cases lies in the casual nature of the evidence. In extreme cases the discovery rate on any given site, in terms of chance detection, may be only a few coins per decade or even worse. As Macdonald rightly said such finds must be, "reasonably numerous" if they are to be helpful. Without this it is unreasonable to place too much weight on the evidence of site-finds. An extract from his Appendix to Curle's Newstead Report shows that Macdonald obs erved his own dictum and its implications. He noted that only five aurei had then, 1911, been found at Newstead, as he said,

"the whole number of these gold pieces is too small to provide a basis for conclusions of moment."

One of Macdonald's generalisations was to the effect that hoards represent the accumulated savings of many years and

therefore contain a proportion of coins that are relatively old at the time of the hoard's termination. Up to a point this view can be accepted, but Macdonald makes no allowance for exceptions. He has overlooked the fundamental point that hoards fall into two categories, those formed of savings and those assembled due to crises.

In the case of a savings hoard formed over many years, it often happens that the owner will draw out some of his money at various times as well as adding to it on other occasions. Thus it is possible that after a while he may have removed all the older coins and replaced them by later issues. Even if he does leave some of the earlier pieces in the hoard they may well form a diminishing proportion as time passes. While this latter possibility does not contravene the rule laid down by Macdonald it reduces its value because, as he himself said, it is unwise to base wide-ranging theories on the evidence of small numbers of coins.

When studying the contents of a coin hoard that has been hurriedly concealed, it may be even more difficult to find a proportion of older pieces than it is in a savings hoard. It seems to me that any hoard which is basically formed of whatever coins can be quickly gathered and promptly hidden, may well contain few or no relatively old issues. Only readily accessible capital is likely to enter such a hoard. Even if older coins do occur in a panic hoard, there is no guarantee that they are representative of the accumulated savings of many years. Thus Macdonald ends by taking too limited a standpoint from which to discuss the nature and format of hoards.

A point to which I must draw adverse criticism - though hesitantly enough as the fault is inherent in numismatics rather

than unique in Macdonald - is Sir George's treatment of the problem of the duration in circulation of specific coins. It is unwise to base theories of importance on calculations readily admitted by their author to be only "rough evidence", a general guide. Yet in his Newstead Appendix, Macdonald uses such methods and results in assessing the Flavian denarii from the site. He observes that quite a large proportion of them are recorded as having been in "very good" or "good" condition when lost. This according to Sir George gives a rough guide that such coins had been in circulation for approximately ten and twenty-five years respectively. Having said that he used this evidence by hypothesis to support the theory of a first century occupation of Newstead, continuing after Agricola's recall.

In the absence of any criteria for estimating the methods by which the terms "very good" and "good" were applied to the coins in the first place, one must rely on the judgement of whoever makes this assessment. This must in itself introduce an element of caution into any use of such evidence. Obviously such terms as "very good" and "good" will be applied variously by their several users, thus they can only be regarded as useful in a very general way. Therefore, I consider that Macdonald was too bold in the assumption that he made on the basis of this evidence. As if the vague "very good" and "good" were not enough, one is asked by Sir George to accept approximate numerical values for these opinions on wear-degree, "say ten and twenty-five years". I have already argued for caution when handling such evidence, I can only say that Macdonald seems to me to draw more exacting theories from the data than can readily be accepted. It is somewhat disturbing to realise that if our only evidence for first century occupation at Newstead lay in numismatics we might have to justify it in terms

of "rough evidence" such as that here demonstrated by Macdonald.

In a memorial address in P.S.A.S. 1939-40 James Curle paid an astute and fitting obituary tribute to Sir George Macdonald as follows:-

"his insistence on sound evidence and his power of deducing therefrom every possible conclusion were characteristic of his work." I endorse Curle's statement that he deduced every possible conclusion, but as I have attempted to demonstrate, I consider that Macdonald sometimes strained his material too far in the quest for further evidence and knowledge.

FOOTNOTES.

PART ONE.

1. Dobson, The Archaeology of Somerset.
2. Craster, A.A.1909.
3. Robertson, Roman Coins; p.266.
4. Robertson, Duntocher, 1957.
5. Macdonald, P.S.A.S. 1917-18.
6. Crawford, Roman Scotland.
7. West, Gold and silver standards in the Roman Empire, p.84.
8. Mattingly, BMCRE iii, pp. lXXXVIII - lXXXVIX.
9. Sperber, N.C. 1970, p.115.

PART TWO.

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1. Sutherland, Coinage in Roman Imperial policy, p.41.
2. Richmond, Roman and Native in North Britain, p.29.
3. " " " " " " " "
4. Church, W.A.N.H.M., XIV, 1874, pp. 188-9.
5.

CHAPTER TWO.

1. Sutherland, Coinage and Currency, p.8.
2. Carson, N.C. 1959, p.21.
3. Frere, Britannia, p.64.
4. Jessup, South East England, p.165.
5. Sutherland, Coinage and Currency, p.22.
6. Collingwood, The Archaeology of Roman Britain.
7. Sutherland, Coinage and Currency, p.17.
8. Fox, A.C., XCV, 1940, pp.123-4.
9. Boon, Isca, pp.12-13.

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1. Sutherland, Coinage and Currency, p.33.
2. " " " " "
3. Craster, A.A. 1911.
4. Fenwick, Treasure Trove in Northumberland, p.42.
5. Sutherland, Coinage and Currency, p.32.
6. " " " " p.28.
7. " " " " p.29.
8. Craster, A.A. 1911.
9. Collingwood, The Archaeology of Roman Britain, p.231.
10. Craster, A.A. 1911, p.80.
11. Frere, Britannia, p.153.
12. " " p.152.
13. Scriptores Historia Augustae, 8,7.
14. Craster, A.A.1911, p.84.

CHAPTER FOUR.

1. Laing, Coins and Archaeology, p.227.
2. Suetonius, Tiberius, Lives of the Caesars, 32.
3. Mattingly, J.R.S., XXII, 1932. p.89.
4. Collingwood and Myres, Roman Britain & the English Settlements, p.203.
5. " " " " " " " " p.204.
6. Sutherland, Coinage and Currency, p.78.
7. " " " " "
8. " " " " p.42.
9. " " " " "
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11. Collingwood and Myres, Roman Britain & the English Settlements, p.205.
12. Mattingly, British Museum Quarterly, VII, 1932-33, p.85.
13. Work being done by Mr.Norman Shiel, B.A., may confirm or alter this opinion.

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15. " " " "

16.Sutherland,Coinage and Currency, p.75.

17.Grueber, N.C. 1900, p.65.

18. " " " p.31.

19. " " " p.57.

CHAPTER FIVE.

1. Collingwood,The Archaeology of Roman Britain, p.230.

2. Anglo-Saxon Chronicle.

3. Boon, B.B.C.S., XXII, 1968.

4. Sutherland,Coinage and Currency, p.98.

5. " Anglo-Saxon Gold Coinage, p.15.

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8. Jessup, South East England.

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11.Carson, N.C., 1965, pp.177-82.

CONCLUSION.

1. Carson, N.C., 1959, p.20.

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1. Haverfield,E.H.R., 1913.

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3. Haverfield,E.H.R. 1913

4. Mattingly and Pearce, Antiquity 1937, XI, pp.39-45.

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1. Congress of Constantinian Studies, p.165.

2. Finger Rings, Marshall.

3. Hunter-Blair, An Introduction to Anglo-Saxon England.

4. Roach Smith, The Antiquities of Richborough, Reculver and Lymne in Kent.

A REGISTER OF ROMAN GOLD COINS FOUND IN BRITAIN.

HOARDS CONTAINING GOLD COINS ONLY.

Scotland.

1. Broomholm, Dumfriesshire. 6 aurei,
3 Nero, 2 Vespasian, 1 Domitian.

North East England.

2. Corbridge, 1908. 48 solidi,
4 Valentinian I, 2 Valens, 16 Gratian, 8 Valentinian II, 5 Theodosius I, 13 Magnus Maximus.

3. Corbridge, 1911. 160 aurei. Nero - M. Aurelius.

4. Darfield; No details of number or persons represented. Yorkshire.

North West England.

5. Scalesceugh; Cumberland; No details of number, or persons represented.

Midlands.

6. Charlton, Northants; A supposed hoard, regarded as non-existent.

7. Callingwood, Staffordshire. Approx.30 aurei, Augustus, Nero, Galba, Vespasian, Domitian.

8. Alton, Staffordshire. 3 aurei, 1 Vespasian, 1 Titus, 1 Domitian.

9. Hemmingford Abbots, Huntingdon. An unsubstantiated account of gold coins dated to c.50 A.D. found in the third beaker contained, with a skeleton, in a stone coffin. The beaker and coffin have been authenticated.

10. Ellastone, Staffordshire. Some gold coins of the Roman period are said to have been found here.

South-West England.

11. Chard, Somerset. An urn containing many gold coins of Claudius; the coins may have been orichalcum.

South-East England.

12. Brodger, Kent. 34 aurei: 1 Julius Caesar, 12 Augustus, 17 Tiberius, 4 Claudius.

13. Eye, Suffolk. 600 solidi, Valentinian I - Constantine III.

14. Cakeham, Sussex. Constantius II - Julian II. (12 in all).

Wales.

15. Llanelon, Monmouthshire. Unspecified number, Claudius I, aurei.

16. Caerleon, Monmouthshire. 5 aurei; 2 Nero, 1 Vespasian, 1 Titus, 1 Domitian.

17. Crug y Durn, Carmarthenshire. "Some aurei of Hadrian."

HOARDS OF GOLD PLUS SILVER.

North-East England.

1. Rudchester, Northumberland. 15 aurei; Nero - M. Aurelius.
470 denarii; M. Antony - Faustina Junior.

2. Thorngrafton, Northumberland. 3 aurei; 1 Claudius, 1 Nero, 1 Vespasian.
60 denarii; Republican - Hadrian.

3. South Shields, Co.Durham. 12 aurei, Nero to A. Pius.
200-300 denarii.

4. Wilton, Yorkshire. 1 Solidus, Theodosius I, Honorius or Theodosius II.
79 or 80 siliquae; Valens - Theodosius II.

5. Dewsbury Moor, Yorkshire. Unspecified number of aurei.
Unspecified number of denarii, including one, at least, of A. Pius.

6. Corbridge, Northumberland. 7 denarii, - Hadrian.
1 aureus, Domitian.

North-West England.

7. Shap, Westmorland. 19 aurei)Pre-Trajan, Imperial, mainly
580, or 50, silver coins)Vespasian and Domitian.

8. Carlisle, Cumberland. Nero 1 aureus, 1 denarius, coins of unstated metal from Galba to Aelius. The composition of this "find" suggests that it was a hoard.

Midlands.

9. Alcester, Warwickshire.

16 gold coins) said to be of the period from Julius Caesar to
about 800 silver coins) after Constantine the Great (!)

Sutherland suggested the hoard might be likely to have included silver from the early Imperial period onward, and gold from Diocletian onward.

10. Cleeve Prior, Worcestershire.

450-600 solidi, Valentinian I - Arcadius. c 3,000 siliquae and 1 denarius of Vespasian. Siliquae - range from Constantius II -Honorius.

South-East England.

11. Reading, Berkshire. 1 Solidus, Valentinian II.
119 Siliquae, Constantius II - Arcadius.

12. Chelmsford, Essex. c 26 Solidi, Valens - Honorius,
c 300-400 Siliquae, Constantius II - Honorius.

13. Sturmer, Essex. 1 Solidus, Honorius.
29 Siliquae, Julian - Honorius.

14. Bentley, Middlesex. c 50 solidi, Constantine II - Honorius.
Some small silver and bronze coins of Valentinian.

15. Allington, Hampshire. 1 Solidus, Arcadius.
c 50 siliquae, Julian II - Honorius.

16. Springhead, Kent. 3 Solidi; 2 Gratian, 1 Theodosius I, 444 silver, Constantius II - M. Maximus.

Wales.

17. Sully, Glamorgan. 7 aurei, 2 Diocletian, 5 Maximian.
301 silver coins, M.Aurelius (1 coin)-Carausius (1 coi

18. Diserth Parish, Flintshire. A hoard possibly c 20 silver and 1 gold.

South-West England.

19. Brean Down, Somerset. A Possible Hoard. Some coins found under the turf include gold pieces of Augustus, Nero and the Elder Drusus.

Midlands.

20. Alderton, Northants.

A gold coin of Antony and some Republican denarii.

CASUAL LOSSES OF GOLD COINS.

Scotland.

A. North of the Antonine Wall.

1. One aureus, Emperor unspecified; Ardoch, Perthshire.

2. Nero; 2 aurei; Callander, Perthshire 1.
Drymen, Stirlingshire 1.

Vespasian.

4. 1 or 2 aurei; Port Elphinstone, Aberdeenshire, 1.

5. Catch Knowe, Roxburghshire. 1.?

Titus.

6. 1 aureus; Dalginross, Perthshire.

7. Domitian. 1 aureus; Catch Knowe, Roxburghshire. 1.?

8. Trajan. 1 aureus; Drymen, Stirlingshire.

9. Plotina. 1 " Camelon, Stirlingshire.

10. Marciana. 1 " Crieff, Perthshire.

(11. _____ 1 Birrens, Dumfs.

(12. Constantius I 2 " 1 Leochel-Cushnie, Aberdeenshire.

13. Honorius. 1 solidus; Slains, Aberdeenshire.

B. The Antonine Wall.

1. Vespasian. 2 aurei; Corriden, West Lothian, 1.

2. Duntocher, Dumbartonshire, 1.

3. Trajan. 1 aureus. Auchendavy, Dumbartonshire.

4. Hadrian. 1 " Duntocher, Dumbartonshire.

C. South of the Antonine Wall.

1. Augustus(?) 1 aureus. Dumfries, Dumfriesshire, 1.

2. Nero. 11 or 12 aurei. Canonbie, Dumfriesshire, 1.

3.			Carluke, Lanarkshire, 1.
4.			Near Glasgow, Lanarkshire, 1.
5.			Newstead, Roxburghshire, 2.
6.			Eccles, Berwickshire, 1.
7.			Dunbar, East Lothin, 1.
8.			Drummond Parish, Dumbartonshire, 1.
9.	Otho	3 aurei.	Wauchope Bridge, Dumfriesshire, 1.
10.			Carluke, Lanarkshire, 1.
11.			Near Glasgow, Lanarkshire, 1.
12.	Vitellius.	1 aureus.	Penicuik, Midlothian, 1.
13.			
14.	Vespasian.	4 aurei.	Biggar, Lanarkshire, 1.
15.			Inveresk, Midlothian, 1.
16.	Titus.	1 aureus.	Newstead, Roxburghshire, 1.
17.			Watch Knowe, Roxburghshire, 1.
18.	Trajan.	5 aurei.	Dumfries, Dumfriesshire, 1.
19.			Newstead, Roxburghshire, 2.
20.			Inveresk, Midlothian, 1.
21.			Drummond Parish, Dumbartonshire, 1.
22.	A. Pius.	3 aurei.	Newstead, Roxburghshire, 1.
23.			Cramond, Midlothian, 1.
24.			Kinneil, Forfarshire, 1.
25.	Caracalla.	1 aureus.	Cramond, Midlothian, 1.
26.	Crete.	1 aureus.	Cramond, Midlothian, 1.

D. Unknown Provenance.

1.	Nero.	1 aureus.	
2.	Trajan.	1 aureus.	

E. Imprecise References.

North of the Antonine Wall.

Ardoch, Perthshire.

1695 Sibbald's Appendix to Gibson's Camden; "a large Roman medal of gold was found there."

Casual losses of gold coins.

South of the Antonine Wall.

Cramond, Midlothian.

1727 Gordon: Itinerarium Septentrionale, p.116.

"an incredible quantity of Roman coins of Gold, Silver, and brass, of all sorts."

Wauchope Bridge, Dumfriesshire.

P.S.A.S.1917-18, Vol. LII, p.242.

Two other gold coins may have been found with the aureus of Otho already recorded.

Addenda.

North of the Antonine Wall.

Cold Castle, Perthshire.

Gold or silver coins may have been found here.

The Topography of Scotland North of the Antonine Wall, Crawford, 1949, p.63.

Northern England.

1.	Augustus.	1 aureus.	Watercrook, Westmorland,	1.
2.	Nero.	16 aurei.	Carrawburgh, Northumberland,	1.
3.			Canoran, "	1.
4.			Corbridge, "	1.
5.			Gilesgate Moor, Durham,	1.
6.			Bowes, Yorkshire.	1.
7.			York.	1.
8.			Netherby, Cumberland,	1.
9.			Scalesceugh, "	2.
10.			Siddick, "	1.
11.			Carlisle, "	4.
12.			Maryport, "	1.
13.			Ribchester, Lancashire,	1.
14.	Galba.	2 aurei.	Chester-le-Street, Co. Durham.	1.
15.			Burgh-By-Sands, Cumberland,	1.

Casual losses of gold coins.

16.	Otho	1 aureus.	Manchester, Lancashire, 1.
17.	Vitellius.	1 "	Wigan, " 1.
18.	Vespasian.	6 aurei.	Chester-le-Street, Durham, 2.
19.			Ravenglass, Cumberland, 1.
20.			Carlisle, Cumberland, 1.
21.			Hatland, Westmorland, 1.
22.			Kirkham, Lancashire, 1.
23.	Titus.	2 aurei.	Templeborough, Yorkshire, 1.
24.			Carlisle, Cumberland, 1.
25.	Domitian.	2 "	Corbridge, Northumberland, 1.
26.			Carlisle, Cumberland, 1.
27.	Trajan.	5 "	Piercebridge, Durham, 1.
28.			Aldborough, Yorkshire, 1.
29.			Brampton, Cumberland, 1.
30.			Ribchester, Lancashire, 1.
31.			South Shields, Durham, 1.
32.	Hadrian.	1 aureus.	Carlisle, Cumberland, 1.
33.	Sabina.	1 "	Carrawburgh, Northumberland, 1.
34.	A.Pius.	1 "	" " 1.
35.	Diva Faustina.	1 "	Ribchester, Lancashire, 1.
36.	M.Aurelius.	2 aurei.	South Shields, Durham, 1.
37.			Kendal, Westmorland, 1.
38.	Julia Domna.	1 aureus.	Carrawburgh, Northumberland, 1.
39.	Carinus.	1 "	Holmfirth, Yorkshire,
40.	Constantine I.	1 solidus.	Brough-on-Humber, Yorkshire,
41.	Crispus.	1 aureus.	York.
42.	Constantius II.	3 solidi.	Harlow Hill, Northumberland, 1.
43.			Beverley, Yorkshire, 1.
44.			York, 1.
45.	Magnentius.	1 solidus.	Falstone, Northumberland, 1.

Casual losses of gold coins.

46.	Valentinian I.	2 solidi.	Saltburn, Yorkshire, 1.
47.			Grayrigg, Westmorland, 1.
48.	Gratian.	2 "	Vinestead, Yorkshire, 1.
49.			Ribchester, Lancashire, 1.
50.	Theodosius I.	1 solidus.	Muncaster, Cumberland, 1.
51.	Arcadius.	1 "	Whorl Hill, Yorkshire.

Imprecice References.

Brough-under-Stainmore, Westmorland.

1860. Whellan, p.728, refers to discoveries of Roman coins; "Few gold ones, but many silver and thousands of brass ones."

Ivegill.

1860. Whellan, p.736, refers to a field nearby where "a few Roman coins" have been found, "one a gold piece."

Carlisle, Cumberland.

1895. C.W.J. 13, p.149. The President showed..... some gold coins found in Carlisle.

Aldborough, Yorkshire.

Gibson, Gough et al say Roman gold coins were "of not infrequent occurrence" at Aldborough, cited by H.Smith in his Reliquae Isurianae, 1852, p.56.

Patrington, Yorkshire.

Malton Report 5.

Mary Kitson Clark, 1935, p.210. Several gold, silver and copper coins, from Tiberius to Constantine.

Stainton, Yorkshire.

Elgee, The Romans in Cleveland, 1923, p.13.

"A Roman gold coin is reported from Stainton."

Grosmont, Yorkshire.

Source as cited for Patrington above but p.86. An account of a report that a Roman gold coin was found near Grosmont.

Casual losses of gold coins.

Midlands.

1.	Augustus.	2	Belper, Derbyshire,	1.
2.			Houghton, Northants,	1.
3.	Tiberius.	5	Towcester, Northants,	1.
4.			Sealand, Cheshire,	1.
5.			Letton, Herefordshire,	1.
6.			Droxeter, Shropshire,	1.
7.			Upper Aerley, Worcestershire,	1.
8.	Nero.	4	Chester, Cheshire,	2.
9.			Alvanley, "	1.
10.			Butlers Marston, Warwickshire,	1.
11.	Galba.	2	Tiverton, Cheshire,	1.
12.			Droitwich, Worcestershire,	1.
13.	Otho.	1	Wall, Staffordshire,	1.
14.	Vespasian.	2 or 3	Charlton, Northants,	1.?
15.			Brough-on-Noe, Derby,	1.
16.			Birmingham, Warwick,	1.
17.	Titus.	3,4 or 5	Charlton, Northants,	1.?
18.			Chester,	3 or 4.
19.	Trajan.	2	Leicester,	1
20.			Chester,	1.
21.	Faustina Senior.	1	Chester,	1.
22.	Julian II.	1	Kibworth Harcourt, Leics,	1.
23.	Valentinian I.	1 or 2 or 3.	Thrapston, Northants,	1.?
24.			Melton Mowbray, Leics,	1.
25.			Frisby, Leicestershire,	1.?
26.	Valens.	3	Stratford, Warwickshire,	1.
27.	[illegible]		Melton Mowbray, Leics,	2.
28.	Valentinian II.	1 or 2(?)	Thrapston, Northants,	1.
29.			Frisby, Leicestershire,	1.?

Casual losses of gold coins.

30.	Arcadius.	1	Uppingham, Rutland,	1.
31.	Eugenius.	1	Irchester, Northants,	1.
32.	Honorius.	1	Leicester,	1.
33.	Anastasius.	1	Near Leicester,	1.

Imprecise References.

Brough on Noe, Derbyshire.

A gold coin of 'Augustus', it is not clear whether the word is a title or the first emperor's own 'royal name'.

Kelsall, Cheshire. T. Watkin Roman Cheshire.

A Roman gold coin.

Thornhaugh, Northants. V.C.H. Northants, I, p.220.

A Roman gold coin.

Wroxeter, Shropshire.

T. Wright, Uriconium, p.406; Mr. S. Wood remarked on the very small total of Roman gold coins found at Wroxeter, "I have not seen more than four or five."

Wall, Staffordshire. V.C.H. Staffordshire I, p.194.

Coins periodically found, of Tiberius and others, gold, silver and copper.

Witherley, Leicestershire.

"Great numbers of coins, brass and silver, and some gold." Stukeley, Itinerarium Curiosum, i, p.20.

Alcester, Warwickshire.

"Roman coins of all metals..... in great abundance", Gough's Camden, II, 457

Upper Aerley, Worcestershire.

Roman coins, some said to be gold, have been found here. Pitt; History of Staffordshire, i, 202.

South-East England.

Tiberius.

1.	Colchester, Essex.	2	2

	Claudius.		
2.	Colchester, Essex.	2	4
3.	Abbots Langley, Herts.	1	
4.	Ring Hill, Cambridgeshire.	1	
	Nero.		
5.	Elmstead, Essex.	1	7
6.	Chelmsford, Essex.	2	
7.	Richborough, Kent.	2	
8.	Whaddon, Bucks.	1	
9.	Caister-by-Norwich, Norfolk.	1	
	Vespasian.		
10.	Helmingham, Suffolk.	1	At least four.
11.	Harrow Weald, Middlesex.	1 or more.	
12.	Totternhoe, Bedfordshire.	1	
13.	Boxworth, Cambridgeshire.	1	
	Domitian.		
14.	Grimsby, Lincolnshire.	1	2
15.	Croydon, Surrey.	1	
	Trajan.		
16.	Ashwell, Herts.	1	1
	Hadrian.		
17.	Colchester, Essex.	1	1
	Verus.		
18.	Colchester, Essex.	1	1
	Severus.		
19.	Colchester, Essex.	1	1
	Valerian I.		
20.	Littleport, Cambridgeshire.	1	1
	Carus.		
21.	Silchester, Hants.	1	
	Carinus.		

Casual losses of gold coins.

22. Sandwich, Kent. 1

23. Richborough, Kent. 1

Diocletian.

24. Silchester, Hants.1

Maximian. 1

25. Chale, Isle of Wight.1

Carausius. 2

26. Silchester, Hants.1

27. Speen, Berkshire. 1

Allectus. 2

28. Silchester, Hants.1

29. Reading, Berkshire. 1

Licinius I. 1

30. Chesterford, Essex.1

Constantius II. 2

31. Seaford, Sussex. 1

32. Colchester,Essex.1

Magnentius. 1

33. Richborough,Kent.1

Valentinian I. 8

34. Nene Valley. 1

35. Glatton, Huntingdonshire.1

36. Norwood, Cambridge. 1

37. Wisbech, Cambridge. 1

38. Croydon, Surrey. 2

39. Lympne, Kent. 1

40. Springhead, Kent.1

Valens. 2 or 3

41. Colchester,Essex. 1

42. Richborough, Kent.1

Casual losses of gold coins.

43. Yaxley, Huntingdonshire. 1?

Gratian. 1

44. Richborough, Kent. 1

Theodosius I. 2

45. Colchester, Essex. 1

46. Eccleshourne, Sussex. 1

Maximus. 1

47. Colchester, Essex. 1

Arcadius. 11

48. Colchester, Essex. 2

49. Richborough, Kent. 8

50. Norwich, Norfolk. 1

Honorius. 7

51. Colchester, Essex. 2

52. Richborough, Kent. 2

53. Norwich, Norfolk. 1

54. Hoxne, Suffolk. 1

55. Little Dunmow, Essex. 1

Valentinian III. 4

56. Chichester, Sussex. 1

57. Chatham, Kent. 1

58. ? Bury St. Edmunds, Suffolk. 1

59. Barrington, Cambridgeshire. 1

Avitus. 2

60. Hoo, Kent. 1

61. Lowestoft, Suffolk. 1

Majorian. 1

62. Carisbrooke, Isle of Wight. 1

L. Severus. 1

63. Carisbrooke, Isle of Wight. 1

Casual losses of gold coins.

Anastasius. 1

64. Canterbury, Kent. 1

Justin I. 1

65. Colchester, Essex. 1

Imprecise References.

66. Clopton, Suffolk. A Roman gold coin.

67. Dunstable, Bedfordshire, many site finds in all metals,
Augustus - Dalmatius.

68. Nene Valley, Huntingdonshire. About ten Roman gold coins.

69. Chesterton, Huntingdonshire. Roman coins, one gold, several silver.

South-West England.

Claudius. 1

1. Cirencester, Gloucestershire. 1

Nero. 4

2. Cirencester, Gloucestershire. 1

3. Lydney, " 1

4. Bath, Somerset. 1

5. Exeter, Devon. 1

Nero-Galba Interregnum. 1

6. East Cornwall. 1

Vespasian. 1

7. Cirencester. 1

Titus. 1

8. Lydney. 1

Domitian. 1

9. Near Exeter. 1

Carausius. 1

10. Cirencester.

Constantius II. 1

11. Taunton, Somerset. 1

Julian II. 1

12. St. Agnes, Cornwall.1

Valentinian I. 3

13. St. Agnes, Cornwall. 1

14. Topshorn, Devon. 1

15. Cirencester. 1

Valens. 3

16. Cirencester. 1

17. Horley. 1

18. Marlborough. 1

Gratian. 1

19. Cirencester. 1

Valentinian II. 1

20. Cheddar, Somerset. 1

Theodosius I. 2

21. Shepherdine, Gloucestshire.1

22. Near Barnstaple. 1

Honorius.

23. Cirencestor.

24. Thame, Oxfordshire.

Imprecise References.

25. Dorchester, Oxfordshire.

26. Cirencester.

27. Long Ashton, Somerset.

28. Barnwood, Gloucester.

29. Cadbury, Somerset.

30. Red Hill, Wiltshire:- Roman coins periodically found, many bronze, some silver, at least one gold.

31. Monkton Down, Wiltshire:- A Roman gold coin.

Casual losses of gold coins.

Wales.

Tiberius. 1

1. Carnarvon. 1

Nero. 5

2. Y Gaer, Brecon. 2

3. Caerleon, Monmouthshire.1

4. Moel Fenlli,Denbighshire.1

5. Llanrhudd, Denbighshire. 1

Otho. 1

6. Abergavenny, Monmouthshire.1

Vespasian. 2

7. Mold Parish. 1

8. Caersws,Montgomeryshire.1

Trajan. 1

9. Llanwrda Parish, Carmarthenshire.1

Hadrian. 1

10. Caerleon. 1

Pius. 1

11. Caerleon. 1

Postumus. 1

12. Caerleon. 1

Carausius. 1

13. Neath, Glamorgan. 1

Allectus. 2

14. Erw-Hen,Carmarthenshire.1

15. Chapel Hermon, " 1

Arcadius. 1

16. Safn Elen, " 1

Vague References.

17. Diserth Parish, Flintshire, A Roman gold coin.

Casual losses of gold coins.

18. Cwm Mountain, Prestatyn. Near here, 20 coins found in 1868, a possible hoard; 19 silver, one gold.

Addenda.

South-East England.

Tiberius	1	London
Nero	1	"
Galba	1	"
Maximian	2	"
Crispus	1	"
Honorius	1	"
Arcadius	2	"

South-West England.

Valentinian I	1	Brixton, Isle of Wight.

REFERENCES TO THE COIN REGISTER.

	Serial Number	Source	Region.
Gold Hoards	1	P.S.A.S.1917-18,p.241	Scotland
	2	A.A. 1908.	N.E. England
	3	A.A. 1911.	" "
	4	N.C. 1948, p.79.	" "
	5	R. Bellhouse.	N.E. "
	6	V.C.H. Nhnts, I,p.216.	Midlands.
	7	G.M. 1796, p.983.	"
	8	V.C.H. Staffs, I.p.189.	"
	9	" Hunts, I, p.266.	"
	10	" Staffs,I, p.190.	"
	11	" Somerset I, p.359.	S.W. England
	12	N.C. 1957, pp.17-22.	S.E. "
	13	" 1891, proceedings,p.10.	" "
	14	S.A.C. 8, p.290.	" "
	15	Lon.Antiq.I,1.	Wales
	16	A.C. 1940, p.122 ff.	"
	17	A.C. 1875.	"
Gold plus silver hoards.	1	A.A. 1911. pp. 83-4.	N.E. England
	2	N.C. 1963. pp. 61-6.	" "
	3	A.A. 1911. p. 271.	" "
	4	Cleveland.	" "
	5	Hull Museum.	" "
	6	A.A. 1911.	" "
	7	G.M.; 1833, p.4.	N.W. "
	8	A., 1787, p.428.	" "
	9	Clarke.	Midlands.
	10	A.73, pp.90-1; 1922-3.	"
	11	V.C.H., Berks, I, p.212.	S.E. England

	12	Arch.J., 1846, p.162.	S.E. England
	13	Fox; 1923, p.226.	" "
	14	Gough's Camden, II.	" "
	15	N.C.1869, p.372.	" "
	16	A. Cant., 1967, p.116.	" "
	17	N.C. 1900.	Wales.
	18	Flintshire; Davies	"
	19	Dobson, 1931.	S.E. England
	20	V.C.H. Nhts, I, p.215.	Midlands
Casual A. Losses. of gold.	1	P.S.A.S. 1917-18	Scotland
	2	" " "	"
	3	" " "	"
	4	" 1923-4	"
	5	" 1949-50	"
	6	" 1917-18	"
	7	" 1956-7	"
	8	" 1917-18	"
	9	" "	"
	10	" 1949-50	"
	11	" 1917-18	"
	12	" "	"
	13	" "	"
B.	1	" "	"
	2	Duntocher, Robertson.	"
	3	P.S.A.S.1917-18	"
	4	Duntocher, Robertson.	"
C.	1	P.S.A.S.1917-18	"
	2	" " "	"
	3	" " "	"

References to the Coin Register.

	4.	P.S.A.S. 1917-18.	Scotland.
	5.	" " "	"
	6.	" " "	"
	7	" " "	"
	8	" " "	"
	9	" " "	"
	10	" " "	"
	11	" " "	"
	12	" 1923-24	"
	13	" 1917-18	"
	14	" " "	"
	15	" " "	"
	16	" " "	"
	17	" 1949-50	"
	18	" 1917-18	"
	19	" " "	"
	20	" " "	"
	21	Stukeley, Letters.	"
	22	P.S.A.S. 1917-18	"
	23	" " "	"
	24	" " "	"
	25	" " "	"
	26	" " "	"
D.	1	" " "	"
	2	" " "	"
	1	Bishop Nicholson, 1688.	N. England.
	2	A.A.^{2} 8. 40.	"
	3	Hodgson, History of North'B'land 1840	"
	4	1970 Excavations.	"
	5	Bowes Museum Catalogue.	"

References to the Coin Register.

6	Home, Roman York.	N. England.	
7	" " "	" "	
8	C.W. Tcns; 2. 53. 8	" "	
9	Bulmer: E. Cumberland, 1884, 88	" "	p.302
10	C.W. Tcns. 2. 26. 547.	" "	
11	" " 2. 5. 267.	" "	
12	" " 2. 15. 170.	" "	
13	Watkin, Roman Lancashire.	" "	
14	B.M. Catalogue.	" "	
15	Hodgson's Notebook, m.s. 14.	" "	
16	Watkin, Roman Lancashire. p.121	" "	
17	" " " p.201	" "	
18	B.M. Catalogue.	" "	
19	C.W. Tcns. 2. 58. 20.	" "	
20	" " 1. 12. 59	" "	
21	Nicholson; Annals of Kendal, 1832,	" "	p. 14f.
22	Watkin, Roman Lancashire. p.206	" "	
23	May, Templeborough. p.63.	" "	
24	C.W. Tcns. 2. 6. 301.	" "	
25	A.A. 1911.	" "	
26	Hodgson's Notebook, m.s. 14.	" "	
27	A.A. 2. 7. 89.	" "	
28	Reliquae burianae p. 56	" "	
29	C.W. Tcns. 2. 4. 353.	" "	
30	Watkin, Roman Lancashire.	" "	
31	A.A. 2. 10. 275 ff	" "	
32	C.W. Tcns. 1. 13. 149	" "	
33	A.A. 2. 8. 40	" "	
34	A.A. 2. 8. 40	" "	
35	Watkin, Roman Lancashire.	" "	
36	Surtees: Durham, 2, 1820, p. 101.	" "	

References to the Coin Register.

37.	Nicholson. cf. C.W. Tcns. 1.9.178	N. England.
38	A.A. 2.8.40.	" "
39	Hull Museum. Roman Guide. P114.	" "
40	Malton 5. P.56.	" "
41	Home, Roman York.	" "
42	P.S.A.N. 2.4.228	" "
43	Malton, 5. P.65	" "
44	Home, Roman York.	" "
45	P.S.A.N. 2.4.10.	" "
46	Malton, 5. P.125	" "
47	C.W. Tcns. 2.28.546 f.	" "
48	Malton, 5. P.140.	" "
49	Watkin, Roman Lancashire	" "
50	C.W. Tcns. 2.48.219	" "
51	Malton, 5. P.137.	" "

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2	" Nhts, I, 218.	"
3	" Nhts, I,p.185.	"
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14	" Nhts, I, p.216.	"
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16	Bhm. Soc. 1961, P.117	Midlands
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18	Watkin, Roman Cheshire. P.239	"
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19	" " " " "	" "
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45	Colchester Museum,1928,pp.57-60.	"	"
46	B.M. Catalogue.	"	"
47	Colchester Museum,1928,pp.57-60.	"	"
48	" " " " "	"	"
49	Richborough V.	"	"
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3	N.C.1890, p.263.	"

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5	Denbighshire; Davis, p.317.	"
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7	" " " " " "	"	"

TABLES.

TABLE ONE.

A CHRONOLOGICAL AND REGIONAL CATALOGUE OF ROMAN GOLD COINS FOUND IN BRITAIN. (EXCLUDING HOARDS).

	Scotland.	Northern England.	Midlands.	Southern England.	Wales.
Augustus	1 (?)	1	2		
Tiberius			5	3	1
Claudius				5	
Nero	14 or 15	16	4	12	4
Interregnum					
Galba		2	2	1	
Otho	3	1	1		1
Vitellius	1	1			
Vespasian	7 or 8	6	2 or 3	5 or more	3
Titus	2	2	3,4 or 5	1	
Domitian	3	2		2	
Trajan	8	5	2	1	1
Marciana	1				
Plotina	1				
Hadrian	1	1		1	1
Sabina		1			
Pius	3	1			
Faustina I		1	1		
Verus				1	
Aurelius		2			
S.Severus				1	
J. Domna		1			
Caracalla	1				
Creta	1				
Valerian I				1	
Aurelian					1
Carus				1	
Carinus		1		2	

TABLE ONE. (Cont.)

	Scotland.	Northern England.	Midlands.	Southern England.	Wales.
Diocletian				1	
Maximian				3 ?	
Caruasius				3	1
Allectus				2	2
Constantius I	2				
Constantine I		1			3
Licinius I				1	
Crispus		1		1	
Constantius II		3		3	1
Magnentius		1		1	
Julian II			1		
Valentinian I		2	1,2,or 3	12	
Valens			3	5 or 6	
Gratian		2		2	
Valentinian II			1 or 2(?)	1	
Theodosius I		1		4	
Arcadius		1	1	13	1
Eugenius			1		
Honorius	1		1	8	
M. Maximus				1	
Valentinian III				4	
Avitus				2	
Majorian				1	
L.Severus				1	
Anastasius			1	1	
Justin I				1	

TABLE TWO.

THE COMPOSITION OF FIRST CENTURY GOLD HOARDS.

A. The Bredgar, Kent, Hoard.

	Aurei.
Julius Caesar.	1
Augustus.	12
Tiberius.	17
Claudius.	4

The latest coins included were issues of 41-2 A.D.

B. The Llanelen, Monmouth, Hoard.

An uncertain number of aurei, all of them Claudian.

C. A Comparison of Later First Century Aurei Hoards.

	Alton Staffordshire.	Caerleon Monmouth	Broomholm Dumfries
Nero	0	2	3 or 4
Vespasian	1	1	2
Titus	1	1	0
Domitian	1	1	1

D. The Callingwood, Staffordshire, Hoard.

Approximately thirty aurei of Augustus, Nero, Galba, Vespasian and Domitian. Date range 29 B.C. - 96 A.D.

TABLE THREE.

A COMPARATIVE TABLE OF THE AUREI FROM SCOTLAND, THE CORBRIDGE GOLD HOARD OF 1911, THE THORNGRAFTON HOARD; AND OF THE LATTER HOARD'S DENARII.

	Scotland.	Corbridge.	Thorngrafton.	
	aurei	aurei.	aurei	denarii
Republican	0	0	0	9
Augustus	1 (?)	0	0	0
Claudius	0	0	1	0
Nero	14	10	1	1
Galba	0	3	0	3
Otho	3	3	0	1
Vitellius	1	1	0	0
Vespasian	7	15	1	16
Titus	2	11	0	0
Domitian	3	5	0	8
Nerva	0	0	0	1
Trajan	8	47	0	17
Plotina	1	0	0	0
Marciana	1	1	0	0
Hadrian	1	35	0	4
Aelius	0	1		
Sabina	0	3		
A. Pius	3	13		
Faustina I	0	7		
Aurelius	0	4		
Caracalla	1	0		
Creta	1	0		
C.Chlorus	2	0		

TABLE FOUR.

A COMPARATIVE TABLE OF THE THORNGRAFTON, BIRDOSWALD 1930 and 1949, and CORBRIDGE 1911, HOARDS.

	Thorngrafton		Birdoswald	Corbridge
	Aurei	Denarii	Denarii	Aurei
Republican	0	9	17	
Antony	0	0	7	
Augustus	0	0	2	
Claudius	1	0	0	
Nero	1	1	2	10
Galba	0	3	3	3
Otho	0	1	CIVIL	3
Vitellius	0	0	WARS	1
Vespasian	1	16		15
Titus		0	14	11
Domitian		8	FLAVIANS	5
Nerva		1	1	0
Trajan		17	9	47
Marciana		0	0	1
Hadrian		4	3	36
Sabina				3
Aelius				1
A. Pius				13
Faustina I				7
Aurelius				4

TABLE FIVE.

LATE ROMAN GOLD AND SILVER COINS FOUND IN IRELAND. (CASUAL LOSSES OF SOLIDI AND A TABLE OF THE COLERAINE SILVER HOARD).

	Solidi	Coleraine Siliquae	
		22	Constantius II
		75	Julian II
		1*	Jovian
Ballintoy & New Grange	2	34	Valentinian I
Near Dublin	1	71	Valens
		85	Gratian
		17	Valentinian II
New Grange	1	41	Theodosius I
		52	M. Maximus
		8	Victor
		37	Eugenius
		142**	Arcadius
		141	Honorius
		5	Constantine III

* Also 1 miliarense

** Including 1 half-siliquae

In addition to these 731 coins the Coleraine hoard contained 751 unidentified siliquae, 195 more siliquae - Valens, Gratian and Honorius - are said to have been found later near the same spot.

TABLE SIX.

ROMAN GOLD COINS UTILISED IN JEWELLERY.

1. Severus Alexander	Ring	Ilchester, Somerset.
2. Constantius I	Pendant	Birrens, Dumfriesshire.
3. Magnentius	Pendant	Reculver, Kent.
4. Arcadius	Pendant	Kirkby Knowle, Yorkshire.
5. Honorius	Pendant	Kirkby Knowle, Yorkshire.
6. Avitus	Pendant	Lowestoft, Suffolk.
7. Anthemius	Pendant	Chatham, Kent.

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Derby	Lancashire	Warwick
Devon	Leicester	Wiltshire
Dorset	Lincoln	Worcester
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MAPS.

KEY

• CASUAL LOSS

○ HOARD (GOLD)

○ GOLD-SILVER HOARD

MAP ONE.

DISTRIBUTION OF AUREI IN THE PRE-HADRIANIC PERIOD

KEY

- CASUAL LOSS
- GOLD HOARD
- GOLD-SILVER HOARD

MAP 2

DISTRIBUTION OF AUREI ; (HADRIAN-SEVERUS).

KEY

▪ CASUAL LOSS

○ GOLD HOARD

◦ GOLD-SILVER HOARD

MAP 3

GOLD COIN DISTRIBUTION (SEVERI – CONSTANTIUS I).

KEY

. CASUAL LOSS

O GOLD HOARD

O GOLD-SILVER HOARD

MAP 4.

SOLIDUS DISTRIBUTION; (CONSTANTINE I TO MID FIFTH CENTURY)

KEY

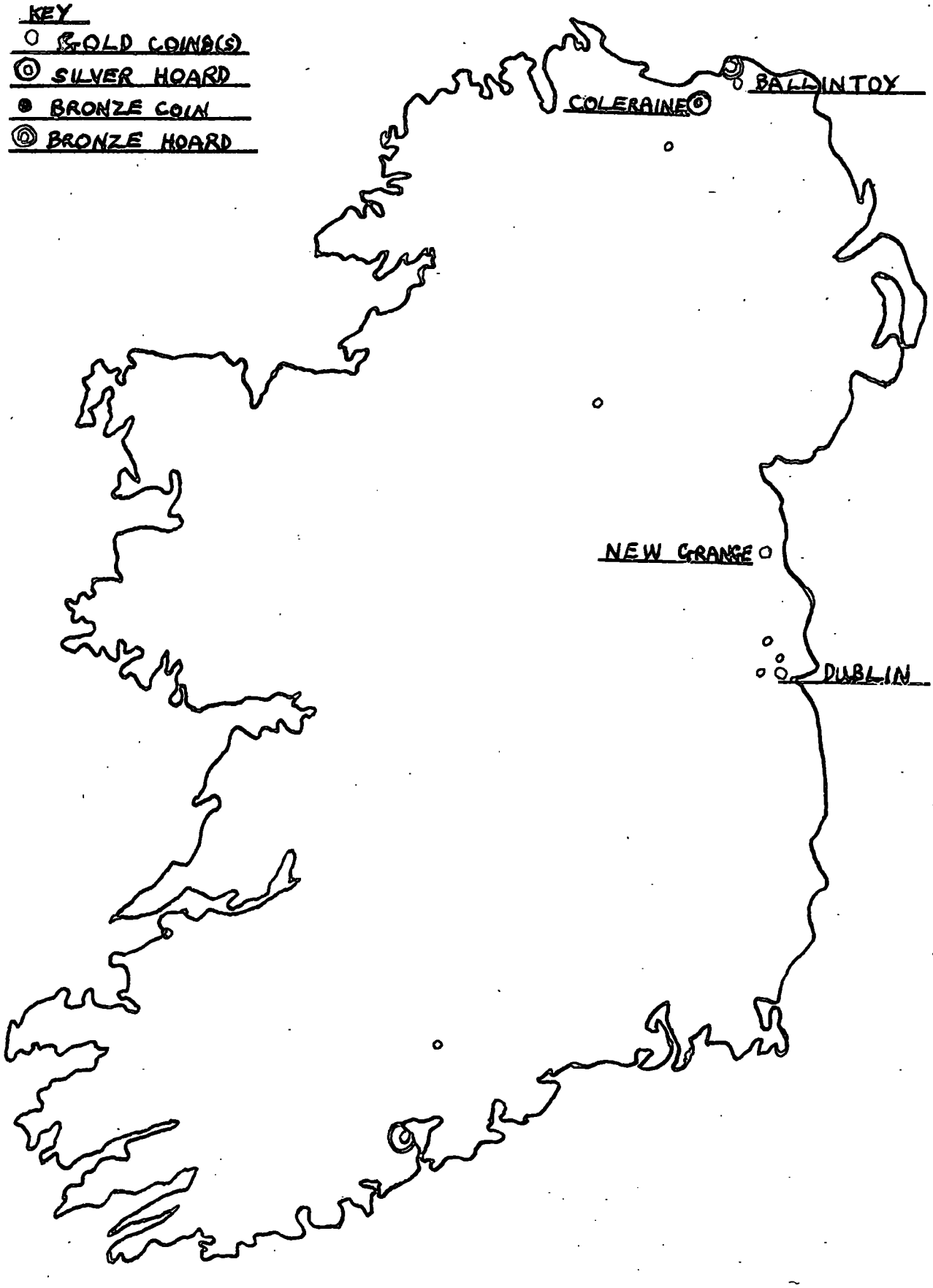
° CASUAL LOSS

O GOLD HOARD

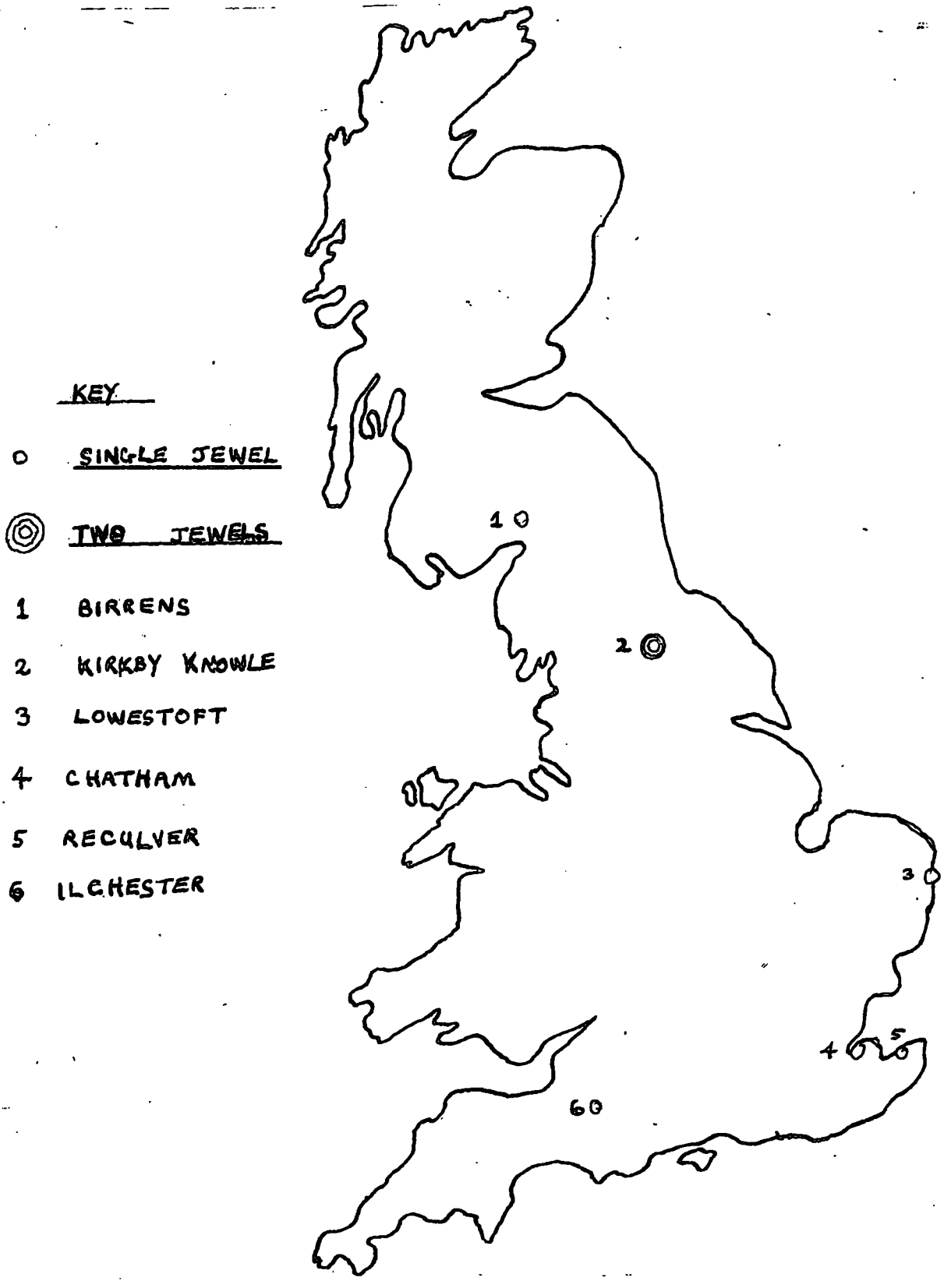
° GOLD-SILVER HOARD

MAP 5

HOARDS AND CASUAL LOSSES: DOUBTFUL, OR VAGUELY RECORDED.



MAP 6. ROMAN COINS IN IRELAND



MAP 7. ROMAN COIN-JEWEL DISTRIBUTION.

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