

Coin Hoards  
The Example of Walle





I velle  
q3 ma  
alaa  
truch  
expe  
tbla

Tunc ego Lecta quida



et ozone  
stam ad  
quodam  
unidi atq;  
diendi ser  
f. lacus.  
m. m. qm





# Coin Hoards The Example of Walle

DEUTSCHE BUNDESBANK  
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Harpy, the arms of East Friesland. These harpies, winged female wind-spirits, come from ancient mythology. According to Hesiod, they were two daughters of the Oceanide Electra and Thaumias.

Illustration on the front and back flyleaf:

A coin hoard is buried. Miniature from the so-called "Boethius Manuscript", a French manuscript of the 15th century.

The illustrations in the catalogue all show the coins at actual size. Some of the illustrations in the text are enlargements, in order to bring out the points made in the verbal description more clearly.

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# Contents

	Page
Foreword	5
Coin Hoards	7–19
Coin Finds and their Interpretation	8
Hoards	
Settlement and stray finds	
Finds from burials	
Votive deposits	
The state of coins on discovery	
Treasure Trove and the Law	14
The Hoard of Walle	21–74
The County of East Friesland	22
Walle	26
The Find Spot	30
The Container of the Hoard	32
Number, State of Preservation and Statistical Analysis of the Coins	34
The 1573 Countermarking	41
Types of Coin in the Hoard	42
Die-identical East Frisian Coins	60
The Emden Mint	62
Value, Purchasing Power and Origin of the Hidden Money	70
Catalogue	75–163
Appendix	165–196
Tables and Charts	167
Analysis of Material	185
Source of Illustrations	188
Select Bibliography	189
Map of the Mints	193





# Foreword

In 1972 the *Geldmuseum* of the Deutsche Bundesbank was able to acquire an important coin hoard, together with its container. The find had been discovered in the previous year during the extension and modernisation of a farmhouse in the East Frisian village of Walle, today a suburb of Aurich.

The Walle hoard, containing 468 silver coins, is the largest coin hoard of the early modern period known from this area and probably one of the few which have been recovered and preserved entire. It is therefore a pleasant task to publish this hoard and present it herewith in public as a monograph.

Coin finds are sources for the reconstruction of the historical circulation of coinage. Foreign money streamed into territories through trade and exchange, war, as pay for troops and in the form of subsidies. Political and ecclesiastical alliances, dynastic intermarriages and personal contacts promoted the influx and distribution of exotic types which circulated alongside the domestic currency to a greater or lesser degree.

Today we safeguard our assets in the form of cash, securities or jewellery by depositing them in the bank or having them managed by it. In earlier centuries a private hiding-place, as a rule carefully selected, performed the function of a strong-room, which guarded against robbery, theft and destruction. The times of unrest which the numerous wars brought with them naturally caused the inhabitants to place their valuables out of reach of plundering soldiers and to deposit them in a place secure from discovery. The size of the concealed capital is always dependent on the social standing of the owner: a coin hoard may just as well be the

fortune of a rich merchant as the meagre savings of an impecunious workman.

The concealed money was obviously not intended to be hidden for ever, but was fetched out and spent when necessary. The hoards which have become known to us today have remained in their hiding places for a great variety of reasons, most of which we are unable to explain in detail. Often they have been found only by accident at a much later date.

Hoard finds have always fired men's imagination and stimulated searches, perhaps out of greed, perhaps from an understandable desire to acquire sudden riches as easily as possible. The reason for this lay in vague information, long handed down – sometimes for centuries; details, wrapped in mystery, of the hiding of treasure and occasionally dim, mostly incomplete hints about where to find it. It thus comes as no surprise that treasure finds have also been embodied in literature, forming the ideal setting for tales of discovery, crime and mystery, as encountered by generations of young readers, in childhood and at school, through (for example) the father of criminal fiction, Edgar Allan Poe, or through Robert Louis Stevenson's famous "Treasure Island".

For their kind assistance on a great variety of specialist questions encountered during our research, we wish to thank: Prof. Dr. Peter Berghaus, Münster; Johann Collmann, Aurich; Dr. Walter Deeters and Dr. Herbert Reyer, Niedersächsisches Staatsarchiv, Aurich; Dr. Albrecht Eckhardt, Niedersächsisches Staatsarchiv, Oldenburg; Dr. Helmut Eichhorn, Ostfriesisches Landesmuseum, Emden; Dr. Gert Hatz, Museum für Hamburgische Geschichte, Hamburg; Dr. Bernd Kappelhoff,

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kindly permitted copies to be made of originals in their possession.

This publication has been enriched and rounded off in two important respects by the contributions of Dr. Emmerich Pászthory and Dr. Heinz Christian Hafke. Incidentally, the definition of treasure and find quoted by the latter in the section "Treasure Trove and the Law" was not used in the historical text, for which other definitions hold true.

Frankfort on the Main, December 1987

# Coin Hoards

# Coin Finds and their Interpretation

In the 14th century, when men began to take a greater interest in coinage as a historical source, the individual object (the coin) was the focus of their studies. Francesco Petrarca (1303–1374), the Italian poet and scholar, made the earliest recorded systematic attempt to interpret his collection of ancient coins. He was, in fact, primarily a collector, but in studying and appraising coin inscriptions he consulted the testimony of ancient authors.

The period from the 14th to the 18th centuries was characterised by an increasingly widespread desire to establish, enlarge and catalogue collections and coin "cabinets". Alongside this came ever-multiplying attempts, purely descriptive and more or less uncritical, to record the coins of given periods or regions as completely as possible.

This situation only changed at the end of the 18th century, with the publication of two pioneering works, some of whose statements remain valid right up to the present. In his *"Doctrina Numorum Veterum"* (The Science of Coins of Antiquity) the Austrian abbot J. H. Eckhel produced in 1792–98 the first well-reasoned and critical treatise on the coinage of antiquity; and the Prague professor J. Mader published his *"Kritische Beyträge zur Münzkunde des Mittelalters"* (Critical Articles on Medieval Numismatics) in 1803.

But the importance and evidential value of coin finds was not recognised even in these two works. As ever, concern centred on the coins themselves, and each newly-discovered find was initially scrutinised for rarities or hitherto unknown issues. As a general rule, these found their way into the great coin cabinets of the sovereigns, but pieces which came from hoards were also much esteemed by

private collectors, since they could be sure they were obtaining only undoubtedly genuine coins and not modern forgeries. In the case of finds of gold and silver coins, those pieces which were of no further interest were melted down. To modern eyes this was a very regrettable practice, but it persisted sporadically until the early 20th century.

Only relatively late, towards the end of the 19th century, was the evidential value of coin finds gradually appreciated. Now the centre of attention was no longer the coins as individual objects but the scientific potential of the finds as such – their quantity, their nature, their composition and the circumstances of their discovery. Coin finds may be divided into the following basic types:

## Hoards

If several coins are discovered together at the same spot, they are always described numismatically as a hoard. However, one must distinguish between deliberate concealment and accidental loss. Intent is suggested if there is a container which would not normally be used for the storage or transport of money. On the other hand, leather or cloth bags, or their remains, do not necessarily allow one to deduce a deliberate burial, since these could equally have been lost accidentally and unnoticed. If there is no container, intent can perhaps be recognised from the details of the find.

The commonest and surest way to hide a container was to bury it. The simple and cheap pottery vessels of everyday use were best suited for this. In the



*This miniature from the so-called "Boethius Manuscript," a French manuscript dating from the 15th century, shows a hoard being buried at night. A large pit has been dug in the ground for the three earthenware jars full to the rim with coins.*

ground they afforded essential and durable protection; besides which, they were available about the house and easily spared. Often a pot used for this purpose was already damaged and of little or no utility value; the sites of old breaks not caused by damage on discovery are the evidence of this. In many cases the coins were wrapped in a cloth or a leather bag before being placed in the container they were hidden in. This was closed by a clay lid, a flat stone or with fabric: sometimes even a suitable stopper was made from these materials.

The size of the sum hoarded may range from a few pieces to a very great number, according to the owner's intentions and his available means. A hoard may represent cash removed from the cur-

rency available at a given moment, or else be the result of long saving. In the latter case, there may even be pieces in it which at the time of concealment possessed no purchasing power, but only their intrinsic worth. The composition of the hoard gives information about the period of its formation.

The find spot, contents and size of a hoard, supported by the testimony of other sources, may allow conclusions to be drawn concerning the occupation and social standing of the hoarder. In addition, hoards can demonstrate trading links and give insights into the coin circulation of the time. In interpreting coin finds, the following principles must be taken into consideration:

- The coins available to us for examination and analysis today are only a portion of the total which have been found at any time. Many have been lost or were not brought to numismatists' notice by their finders.
- What has been found is again only a part of the total which were lost or hidden.
- Likewise, the sum total of the coins which came to be lost represents only a fraction of the numbers which were originally in circulation.

The latest coin in a hoard provides a *terminus post quem* for its concealment or for the loss of knowledge about the hoard or the impossibility of finding it again.

The intention which lies behind a concealment cannot always clearly be discovered. In times of political unrest and war, everyone will naturally have striven to protect his assets (coins) from the clutches of strangers. Where several contemporary hoards are known from one region, this is described as a find-horizon, which may often be connected with a known event. But since theft and robbery were not confined merely to times of unrest but could be daily occurrences, money could just as well be concealed during peaceful times. The hiding-place could be situated in a house, in its immediate neighbourhood or further afield. Thus a Finnish farmer is said to have kept his money under several different stone cairns in the forest as recently as the sixties of our century.

The question of why coins were hoarded is easily answered. Alongside gemstones and objects of precious metal, coins represented readily portable capital. They offered the advantage of being usable in two ways: on the one hand they could be used for their original purpose as currency, but on the other they also formed a reserve of precious metal,

which could be melted down if necessary. The hoards of the type described known to us today are witnesses of human tragedies, since their owners or their owners' descendants were not in a position to recover the money and make use of it themselves. As a rule hoards became lost because only a single person knew the hiding-place and took this knowledge with him to the grave, often indeed deliberately; or because the spot was only recorded inaccurately or vaguely. Sometimes the knowledge of a no longer traceable hoard has survived over the centuries as a treasure legend. Two examples may be quoted here.

In 1899 a hoard of 12 talers came to light near a farmstead at Wiesede in East Friesland. The coins confirmed what had been handed down over three centuries: at the outbreak of the Thirty Years War the Wiesede district was afflicted by the plague. A man wished at that time to visit his relatives at the aforementioned farm, but found only one survivor, who called to him from a window that he should turn back and take himself to safety; and even described to him the place where the family's money was buried. However, subsequent repeated searches remained unsuccessful. The coins were only found by chance at the end of the 19th century, during forest clearance near the house. Their dates of issue confirmed the treasure legend, since the find consisted entirely of pieces from the period down to 1620, the third year of the Thirty Years War.

In the early thirties of the present century a large hoard of medieval silver coins was likewise found by chance in the small Thuringian village of Mosa. From knowledge of the hoard kept alive for nearly 700 years through successive generations of the family, the reason for the concealment of the coins was also believed to be known. The story ran that the farmer to whom the property belonged at

the time (the hoard was hidden in 1255) had quarrelled with his wife. To prevent her from getting possession of the money after his death he placed the coins in a pot and buried it. On his death-bed all he could say to his son, who asked him where the money lay, was "deep, deep" – and then he died. Here again repeated searches were fruitless. When the hoard came to light accidentally during rebuilding work, the grandmother of the family, in no way surprised, merely commented laconically: "Well, there it is."

All finds which have been associated with treasure legends have one thing in common: in no case was the hoard concerned found by organised searching, even when the locality in question was approximately or even precisely known. It was always chance which brought the coins to light, a circumstance which led one numismatist of the first half of the 20th century to the conclusion: "Hoards do not have to be sought – they have to be found."

### Settlement and stray finds

Unlike hoard finds, the coins found in settlements or in the open countryside represent the quantity of pieces which have become lost over a long period. In the main these are single coins or small quantities, such as the contents of a purse. By their fortuitous nature, they may give an undistorted glimpse of the monetary circulation of a region, different from that of the hoards. The coins found in towns and villages are important dating evidence for the study of settlement history.

In favourable cases the accumulation of scattered finds along old roads and paths provides information about their significance as arteries of communication and trade. But, in the light of human behaviour which can still be observed today, it is

evident that settlement and stray finds cannot provide an absolutely dependable picture of the whole currency of a given time. While the loss of small denominations may be taken for granted, the mislaying of higher values occasions an intensive search.

It was the same in earlier times. One resigned oneself to the loss of gold and the larger silver coins only after prolonged searching, whereas smaller silver coins or base metal pieces were more rapidly given up. The nature of the search depended crucially upon the economic circumstances in which the loser lived and what subjective value the coins represented for him.

### Finds from burials

Since antiquity it has been the custom to place coins in a grave, a habit which has survived, with changing motives, into the 20th century. Originally the dead man needed the coins to pay Charon, the ferryman who took him in his boat across the waters of the Underworld to the gates of Hades. In later times this custom was transferred to St. Peter, who unlocked the gates of Heaven against payment, an idea which could hardly be reconciled with Christian doctrine. For this reason, the gift of money was made in secrecy by the relatives of the dead man, and not in full view of the public.

Apart from their use as a fare or entrance fee, the coins also served other purposes in popular belief and practice at various times. Thus the dead man was supposed to be able to lead in the hereafter a life suitable to his station, with the help of the money placed with him. According to another idea, the deceased was provided symbolically with his whole property in the form of a few

coins, so that he was prevented from returning to life in order to take his money to the kingdom of the dead. Also, the connection between a dead man and the possibility of a buried treasure is broken by the deposition of money. Anyone who has hidden money in his lifetime finds no rest until it has been discovered. But if the deceased is supplied with money in his grave, he is quieted and does not return, even if he has hidden a hoard.

It can often be observed that the dead were, in a sense, defrauded. The dead did not receive good, current money, but coins of low value, worn-out, damaged, foreign or withdrawn from circulation, sometimes even merely imitations of genuine coins. The reason for this behaviour is to be sought on the one hand in the greed of the survivors, but also on the other hand in their economic circumstances.

### Votive deposits

This class of finds embraces all those coin offerings which men have made for a great variety of reasons, most of them religious. Offerings to deities of springs, fountains or the earth, made in thanks or with a request for favour, are attested abundantly in antiquity. Moreover, offerings at springs are known from as early as the Stone Age.

Offerings at fountains survive to the present, divested of their original significance. For example, a belief in fate or higher powers, not admitted to others or even to oneself, plays a part when someone throws coins into the Fontana di Trevi in Rome, which as everyone knows should ensure that he will at some point in his life revisit the city.

In the case of a large number of coins it is not always easy to decide, from the circumstances of discovery and the composition of the find, whether one is dealing with a votive deposit or the buried assets of an individual.

### The state of coins on discovery

Like all objects made of organic materials or metal, silver coins and coins of base metal buried in the earth are subject to the degenerative influences of their environment. Silver coins were never made from the pure precious metal since firstly this was too soft in its pure form and therefore not robust enough for circulation and secondly this would have required too great a quantity of silver, which would have raised costs to an unacceptable level.

As a result the silver was mixed (i.e. alloyed) with a proportion of base metal (usually copper) determined by the coining authorities and later also by imperial coinage decrees. When such coins were placed in the earth, deposits were formed on the coins through the chemical influences of the soil itself. Equally, given a high proportion of copper, this was dissolved from the body of the coins and deposited in oxidised form on their surfaces. Sulphides were formed if the hydrogen sulphide present in the soil reacted with the silver contained in the coins. However they are formed, these encrustations can in extreme cases cover the coin completely with a thick layer of variable coloration. In addition, they may form a kind of cement between the pieces, so that many finds come to light as shapeless lumps. It is possible for a coin find like this to be totally unrecognised as such by the untutored eye. It may perhaps be carelessly thrown aside, all the more so if no container is present.





*The coin hoard from St. Martin's Church in Sindelfingen. The pennies, dating back to 1130–1160, can be seen as rolls in the earthenware vessel. Oxidation has caused them to stick together.*

and the surviving remains reached competent hands, but the date of the hoard and its academic significance were almost completely lost, owing to its inexpert treatment.

The separation of such a find and the cleaning of the pieces should only be undertaken by a specialist in this field since both the integrity of the individual coins and the observation of their vertical stratification in the container or in the ground are important. Unfortunately, we see time and again that the finder in his thoroughly understandable excitement and curiosity does the separation himself. The following example dating from 1981 may demonstrate how drastic such a procedure can be:

After discovering a lump of coins fused together, the finder tried to separate them with a hammer and chisel. But since he was dealing with relatively thin silver coins, this endeavour did not have the desired effect. The result of his efforts was that he had merely made several smaller lumps from one big one. The man now tried chemical methods by immersing the fragments in hydrochloric acid. Of course, instead of being freed from one another, the coins were corroded by the acid and made even smaller. The find eventually escaped complete destruction only because its existence had leaked out

# Treasure Trove and the Law

Nobody knows to whom the Walle coins belonged; nobody can say who buried them. Time has passed over the original identity of their owner. The long burial of the coins and the impossibility of identifying their owner turns the coins into "treasure". This designation involves the fields of ethnology and jurisprudence alike. It opens up fascinating perspectives of the borderline between the two disciplines, which fuse in legal ethnology.

## Treasure superstition ...

Belief in buried treasure and in magical means of getting hold of it has long played an important part in people's lives. Accidental discoveries, and the hope of getting rich quickly and effortlessly by raising a treasure, constantly reinvigorate treasure superstition in particular. The demands made of treasure-seekers, amongst whom there are predestined and privileged persons (priests, gypsies, beggars and students), correspond to the ends pursued by a treasure's guardians and possessors when concealing it. Special expectations are also entertained with respect to the times at which a treasure can be found, for instance on Christmas Eve and Midsummer's Day. Divining rods and jumping through St. John's fire are valid means of discovering treasure. The finding of treasure is facilitated by previous sacrifice, conjuration of the Devil and of spirits, and by Holy Water. Roving treasures are made stationary by charming them with a rosary and iron objects.

Treasure-seeking probably had a rational basis, in particular, during the period following the Thirty Years War, with its ravages and the necessity to save goods and chattels from plundering

soldiers, just as the concealment of valuables had already served as a precaution during this life. In this context treasure-seeking has been revitalised from time to time, but without its irrational basis ever disappearing completely.

## ... and enlightened legislation

The interface between superstitious roots and the rational registration of treasure finds also appears in law. The older law sources already include provisions concerning treasure trove. A typical example of enlightened legislation which at the same time took account of old popular beliefs may be seen in more recent times in the *Allgemeines Landrecht* for the Prussian States dating from 1794. "If anyone in searching for treasure makes use of supposed spells, conjuration of spirits and contact with the dead, or other similar trickery, whether from deception or from superstition, he loses his title to any treasure he may actually find by chance, as well as incurring the normal penalties" (I. 9 § 86 ALR). The law itself bases this on the aim of preventing the abuse of religion. The famous "Koch's Commentary" on the Prussian *Allgemeines Landrecht* contents itself in this context with a reference to a source of Roman law and to the possibility of the criminal offence of fraud being involved. Altogether, this period mirrors the intention of the legislature to curb superstition, to secularise the law on treasure hunting and treasure trove and to develop rational criteria. The Prussian *Allgemeines Landrecht* dealt conclusively with the matter in



ALLGEMEINES  
LANDRECHT

FÜR DIE  
PREUSSISCHEN STAATEN.

11  
Gericht Meyenburg

ERSTER THEIL

ZWEYTE AUFLAGE.

BERLIN, 1794.  
BEY GOTTFRIED CARL NAUCK



Allgemeines Landrecht for the Prussian States, 1st part, 2nd ed., Berlin 1794, published by Gottfried Carl Nauck. – The illustration opposite the title page shows Justitia, seated. Above – in a roundel – there is a portrait of the then reigning Prussian King Frederick William II (1786–1797), called in the associated legend "der Gesetzgeber" (i. e. the legislator). Allgemeines Landrecht for the Prussian States (ALR) was also used in East Friesland, which belonged to Prussia from 1744.

§. 83. Ein Gleiches findet statt, wenn Gefinde oder Arbeitsleute, bey ihren gewöhnlichen Verrichtungen, einen Schatz entdecken.

§. 84. Ferner alsdann, wenn jemand, mit Bewilligung des Eigenthümers, auf fremdem Grunde nach einem Schatze gefucht, und dergleichen wirklich entdeckt hat; in so fern nicht durch besondere Verabredungen unter den Parteyen, wegen der Belohnung des Finders ein Anderes bestimmt ist.

§. 85. Wer aber ohne Bewilligung des Eigenthümers auf fremdem Grunde Schätze fucht und findet, kann keine Belohnung fordern, sondern die ihm sonst gebührende Hälfte fällt dem Fiskus anheim.

§. 86. Wer zur Nachfuchung von Schätzen vermeintlicher Zaubermittel, durch Geisterbannen, Citiren der Verstorbenen, oder anderer dergleichen Gaukeleyen, es sey aus Betrug oder Aberglauben, sich bedient; der verliert, aufser der sonst schon verwirkten Strafe, sein Anrecht auf einen etwa zufälliger Weise wirklich gefundenen Schatz. (Th. II. Tit. XX. Abschn. V.)

§. 87. Wer bey Nachfuchung eines Schatzes Polizeygesetzen, welche zur Verhütung von Feuersbrünsten, oder andern gemeinen Beschädigungen gegeben sind, entgegen handelt, der wird dadurch seines Anrechts auf den Schatz ebenfalls verlustig.

§. 88. In beyden Fällen (§. 86. 87.) tritt der Fiskus an die Stelle des Uebertreters.

§. 89. Der Eigenthümer sowohl als der Fiskus haben das Recht, von dem Finder, nach bewandten Umständen, die eydliche Angabe seines Funds zu fordern.

*§ 83 to § 89 of the ALR deal with treasure hunting.*

more than thirty separate provisions. Alongside the definition of the concept of treasure there were rules governing the duty to report the finding of treasure and the ownership relations between the finder and the owner of the property in which the treasure was hidden, with special reference to finding by employees. There followed fire police regulations and provisions concerning the influence of property boundaries on the ownership of the treasure find, the bare usufruct in a piece of land and the forfeiture of the title to a find in cases of breaking the law. Even the case mentioned in the New Testament as a simile for the kingdom of heaven was regulated. The evangelist writes: "The Kingdom of Heaven is like unto treasure

hid in a field; the which when a man hath found, he hideth, and for joy thereof goeth and selleth all that he hath and buyeth that field." (Matthew 13, 44). The Prussian legislature solves the case underlying the metaphor in its own way, in line with its legal system: "If the buyer has knowledge of the treasure hidden in the plot of land, and does not inform the seller of it, he can subsequently be regarded only as the finder" (I. 9 § 101 ALR); as the finder, only half the treasure is due to him, while the other half goes to the (here: former) owner of the plot of land (I. 9 § 82 ALR). These illustrations serve to demonstrate the significance which legislators generally attached to treasure trove, right up to the early modern period.

Current regulations ...

The German "Civil Code" (BGB) covers the matter only seemingly more elegantly in three provisions (§§ 984 and 1040 BGB and Art. 73 EGBGB). In this respect, current civil law makes things easy for itself, in part no doubt in view of the rarity of treasure finds. It refers, apart from one fundamental and one supplementary regulation, to the continued validity of state law. Thereby it confirms the continued effectiveness of any treasure prerogative under state law, in the sense of the State's exclusive right of appropriation. But matters of public law are also specially regulated under state law; these may be implied by the terms *Bodenfund* (finds from the soil) and *Denkmalschutz* (protection of monuments).

... in civil law

Current German civil law defines treasure as "things which have lain hidden for so long

that their owner can no longer be identified" (§ 984 BGB). The concept thus encompasses all things which have some value, but not, for instance, fixed parts of a plot of land (such as the mosaic floor of an excavated ancient house). Natural components of the ground, such as ores and related precious stones, are not included either. In addition to this, the literature sometimes demands that the objects in question must have been hidden in another, "concealing" thing (a plot of land or a piece of furniture). This additional requirement must, however, be queried. Neither the wording of the law nor its sense and purpose suggest this conclusively. Had the Walle coin hoard been found not in part of a plot of land, but perhaps through fortuitous circumstances between the walls of two buildings, it would in these circumstances not be "treasure" according to the restrictive view, because it had not been found "in" a concealing thing. Regardless of these precise circumstances, however, the owner of the coins could no longer have been identified anyway, as a result of the passage of time. What legal label should the hoard therefore have borne? Perhaps that of a find?

German law distinguishes between a "find" and a "treasure". A "find" is always something that has been lost. An object is "lost" when it has become ownerless but can still be assigned to an owner. In contrast to this, there is uncertainty about the ownership of treasure as a result of its long concealment. In other words, a causal connection is assumed between the passage of time and the objective impossibility of identifying the owner ("... hidden for so long that ... can no longer be identified"). The concept of the finder applies both to a person who happens upon a find and to a person who raises or discovers a treasure. This, too, shows that the boundaries between treasure and find are fluid. For instance, concealed objects

are not lost. They remain (at least at first) in the possession of whoever had hidden them. He knows where, when and how he can get them back again. If the objects remain in his possession until his death, they do not become "lost", but ownership is transferred to his heirs, even if the heirs have never heard anything about the hiding place. For example, in a judgement of the Hanseatic Higher Regional Court in Hamburg, the discoverer of some pieces of jewellery and coins in a forest which from their issue dates had been buried at the beginning of the Second World War did not discover treasure. For among the pieces of jewellery there was a wedding ring, engraved with fore- and surnames and a date, presumably that of the marriage. This opened up the possibility of undertaking an investigation to identify the bearer of the name or his heirs. After all, anyone who derives rights from a treasure trove must establish that the object has been concealed for so long that there appears to be no hope of identifying the owner.

The rule as to whom a discovered treasure belongs can turn out to be no less difficult. Basically, German civil law awards half of the object to the finder and the other half to the owner of the property in which it was hidden. There are however exceptions deriving from a state "treasure prerogative" based on still valid state law (Art. 73 EGBGB). Some Federal states are accordingly endowed with an exclusive right of pre-emption which applies to the finding of ownerless objects of value in the ground and is sometimes restricted as to objects (such as those of art-historical value) and find spot (such as protected archaeological areas). In these cases the finder can never obtain a share of the ownership, because the whole object already belongs to the state.

The basic, apparently clear division of treasure trove, following German civil law, between the finder and the owner of the property in which it was hidden also poses numerous questions which are not without influence on the scientific exploitability of finds from the earth. Who the "finder" or discoverer of a treasure is, is by no means always certain. Sometimes the actual discoverer feels himself handicapped by legal or contractual provisions and defrauded of his share of the object, so that failure to disclose the find and its secret unscientific exploitation through private collectors prevent access to major historical findings. These fears relate, in particular, to the legal assignment of treasure found in the course of paid employment.

Prussian *Allgemeines Landrecht* had already stipulated, in the sense of a protective provision of labour law, that the finder is entitled to one-half of the object even if he discovers the treasure as a servant or workman going about his normal work (I. 9 § 83 ALR). Under the jurisdiction of German civil law, the Supreme Court of the German Reich, in a lawsuit over the find of a hoard of coins by a workman, gave a detailed ruling on the question of who the discoverer of a treasure is. It was the Prussian *Allgemeines Landrecht* that served as the authority! According to this illuminating judgement, the discoverer of a treasure is normally the person who "lays it bare". But this does not apply to organised treasure-hunting involving the use of assistants. The finder or discoverer is then the person who has systematically organised and led the business of discovering the treasure. This accords with everyday experience as well as the sense of law. "It is the originator and director of such activity who retrieves the concealed object from its concealment and thus has put it back in circulation", while the others in their directed and ancillary

rôle "can be considered only as his assistants or instruments."

The Contracting Regulations for Construction Work have extended these findings. According to these, if objects of historical, artistic or scientific value are discovered while construction work is being carried out on a plot of land, the client has the rights of the discoverer. Thus, half the treasure belongs to him. Title to the other half of the discovered objects belongs to the owner of the property in which they were discovered, in accordance with the treasure trove provisions of the Civil Code. As a rule this will be the owner of the land. Frequently, client and landowner will be one and the same person. Then the client alone is the owner of the discovered objects. Where the agreement between client and contractor under the Contracting Regulations is also included in the agreements between the contractor and his employees (as can normally be assumed), the employee gets nothing out of discovering a treasure trove. It remains legally disputed, however, whether such an agreement can lead to the negation of real treasure trove rights. At all events, considering that the law may be unfavourable to the finder, the suspicion has been expressed – no doubt rightly – that those who have suffered from those provisions might act as "potential multipliers" of the notion that it could perhaps be better to keep quiet about finds from the start; publicly discussed disagreements about the ownership of such finds tend, it is thought, to impede the care of find spots in the future.

... and in public law

A treasure consisting of coins can in itself be of considerable scientific interest for the study of cultural history, because of the passage of time from its concealment to its discovery. The actual

situation of the find also plays an important part in further findings. Consequently the provisions of state law already stipulate that investigations such as the scanning of areas with metal-detecting devices and excavations aimed at discovering ancient monuments are subject to authorisation. These provisions also include an obligation to notify the proper authorities of finds in respect of which there may be a public interest in their preservation on scientific, artistic or local historical grounds. This obligation affects alike the finder, the owner and occupier of the plot of land, and the contractor and foreman of the work which has led to the find. At the same time the law in many cases places a limited ban on alteration of the find spot.

Moreover, for discovered movable objects, the state laws in many cases recognise an obligation to hand over the object for a limited period for scientific evaluation and documentation. Behind these provisions there is normally an obligation corresponding to the social commitment of ownership and legitimately restricting the use of the property. Several regional statutes also establish a duty of delivery with the aim of depriving the finder of the ownership of the object found, in the public interest under certain preconditions against payment of compensation (cf. Art. 109 EGBGB, Art. 14 GG). This case is to be distinguished from that of the State's fundamental acquisition of ownership on the basis of asserted treasure prerogative. For obligations of delivery in cases not covered by the treasure prerogative mean that finder and landowner initially become owners of the concealed object, half each. The title thus already established is then withdrawn as a result of the balancing of public and private interests. The crucial point here is that the withdrawal of title, the toughest means of intervention in private law, is an essential measure for the general good, and that the

public interest cannot be secured by use of milder measures (for instance restoration following scientific evaluation). The Federal Administrative Court has likewise clarified this point explicitly in connection with litigation over a coin find.





# The Hoard of Walle

# The County of East Friesland

East Friesland, as a more or less united territory with a single ruler at its head, only emerged in the first half of the 16th century. Previously, individual territorial chieftains, "*Häuptlinge*," had attempted to enlarge their power and spheres of influence at the expense of their respective neighbours. Swiftly changing alliances, sometimes even with powers from outside Friesland, created a political power-vacuum which the family of Cirksena, resident in Greetsiel, ultimately exploited skilfully to their own advantage.

From Hamburg, which had occupied the two economically important towns of Emden and Leerort, Ulrich Cirksena obtained the privilege of administering these two posts of the Ems on behalf of Hamburg after that city had withdrawn. In order to be better able to ward off the claims of the Bishop of Münster to Emden and its neighbourhood, which claims were based on old county rights, Ulrich sought the title of Count from the Emperor Frederick III. In 1463 he was appointed Count of Norden, which however had no effect in the face of Hamburg's rights to Emden and the claims of Münster. Only through a gift of money to the court in Vienna did Ulrich obtain, a year later, the desired document which made him Count "*in Norden, Emeden, Emesgonien, in Ostfriesland*": the foundation stone for the further ascent of the house of Cirksena was laid.

The outstanding personality in East Frisian history was to be Ulrich's son and successor, Count Edzard I, the Great. After the death of his two brothers, he succeeded to sole rule in 1491. First of all, he obtained definitive possession of Emden and Leerort through two cash payments:

10,000 Lübeck marks went to Hamburg in 1493 and 10,000 Rhenish gulden to the Bishop of Münster in 1495. These two sums, together with additional trading concessions granted by Edzard, induced both parties to abandon their rights or claims.

The Count, who pursued his expansionist policies with much skill and consistency, was also not averse to deception in his dealings. When in 1495 Edzard applied to King Maximilian I for a renewed enfeoffment with the county, he produced not the document issued by Frederick III in 1464, but a forged document, dated back to 1454. According to the latter, the possessions of the Cirksena purportedly stretched eastwards as far as the river Weser, an assertion which in no way corresponded to political reality. However Maximilian, presumably in ignorance of East Frisian affairs, credited the forgery and confirmed it with an appropriate new tenure document. With the appearance of legitimacy, Edzard now strove to extend his dominions towards the east and tried at first to force Esens and Jever under his rule, but eventually had to abandon both attempts as unsuccessful.

In 1498, besides the internal Frisian difficulties with which Edzard had to battle in his attempts to extend and secure his power, external danger threatened. In that year King Maximilian appointed Duke Albrecht of Saxony as permanent Governor and Overlord of Friesland, which also included the East Frisian lands of the Cirksena. Edzard bowed to the inevitable, and instead of insisting on his most recently documented rights, he placed himself under the Saxon duke and recognised the latter as overlord.

*Jakob Cornelisz van Amsterdam: Count Edzard of Friesland – probably painted in 1517 during his travels through the Netherlands.*





Ubbo Emmius: East Friesland (1595), a map in the form of a coloured copperplate engraving, printed by Johann Janssonius in "Novus Atlas", Amsterdam 1638 ff. – Under Count Edzard I the County of East Friesland reached the extent we have marked in red; the Harlinger Land was added to it in 1600.

In 1506, however, Edzard broke with Albrecht's son and successor George, when he withdrew the support he had initially given the Saxon in besieging Groningen. He took the city into East Friesland's possession, and was fêted on his entry, a former enemy turned saviour. Duke George, who turned to his own account Edzard's arrogant (and absolutely untruthful) assertion that he was exercising sovereignty over Groningen on behalf of the Empire, obtained from Maximilian in 1513 the imposition of an Imperial Ban on the East Frisian. In 1514, with the start of the "Saxon Feud", Edzard feared for the survival of his county. In the west he

was beset by Duke George, while the combined army of the Dukes of Brunswick-Lüneburg, the Archbishop of Bremen and the Count of Oldenburg simultaneously invaded his territory from the south-east. In this hopeless position Edzard placed himself under the protection of Burgundy and thus the House of Habsburg. The latter's power halted the further advance of the Welfs, Bremen and Oldenburg. From the repeal of the Imperial Ban in 1517 until his death in 1528, Edzard again risked everything to enlarge his area of power. But dominion over Harlingerland, Wangerland, Jever, Rüstringen, Budjadingen and Stadland was still

denied him. In 1600, Enno III was able to add only Harlingerland, by political means, to the County; East Friesland thereby achieved its greatest territorial extent.

After Edzard I's death the gradual decline of the House of Cirksena was already looming. The position of subsequent counts and countesses was weakened on the one hand by fraternal discord and incapable rulers, and on the other by the constantly growing influence of the estates of the nobility, the peasantry and the urban middle classes. The diverse disagreements were aggravated even more by the advent of the Reformation, with its different trends in religious thinking, at the beginning of the 1520s.

The ruling family was in permanent conflict with the city of Emden, which in the 17th century, having achieved a powerful position with the protection of the United Netherlands, even dared with impunity to usurp the right of its own coinage. The Cirksena were already no match for the city of Emden, and knew full well that they were unable to resist an external threat. Thus Counts Enno III and Ulrich II had to look on passively as their land was thrice occupied by foreign troops in the course of the Thirty Years War.

The sequence of incompetent and unsuccessful counts, under whose rule the estates were continually able to build up their power, was only broken once, and then by a woman. Christine Charlotte, widow of George Christian, on whom the hereditary imperial princely dignity was conferred in 1662, tried to put new life into the princely title which had come down to her. Her attempt to secure absolute rule over East Friesland with the aid of hired troops foundered on the resistance of the estates and the new political conditions resulting therefrom.

With the Emperor Leopold II's award of their own coat of arms to the East Frisian estates in 1678, they became a second ruling power alongside the Countess. The hardened opposition of the estates and the princely house led both parties to seek allies outside the boundaries of the state. Christine Charlotte directed her attention to the Netherlands and actually found an ally in William III of Orange, but the power which afforded protection to the East Frisian estates was ultimately stronger. In 1681 the Emperor commissioned the Bishop of Münster, the Elector of Brandenburg and the Count Palatine of Neuburg to undertake the protection of the estates. Only Frederick William I of Brandenburg, guided by his own economic interests, devoted himself to this task. In concert with the city of Emden and the leader of the estates, Brandenburg troops landed in Greetsiel in 1682. What the Great Elector had begun came to an end in 1744, with the death of the last Cirksena: East Friesland was now Prussian.

In the ensuing period, East Friesland was repeatedly the plaything of the great powers: in 1807 it went to the Kingdom of Holland, in 1810 to the French Empire. Prussian again from 1813, it became part of the Kingdom of Hanover as early as 1815. The last change of rule took place in 1866, when Prussia again and now finally took the land into its possession as a province.

# Walle

Walle lies about 2 km north-west of Aurich on the edge of the geest immediately adjoining the Tannhausener Moor. Together with eight other villages it is one of the nine so-called *Loogen* (a particular form of village which originally consisted only of the houses of yeomen) of the parish of Aurich. The spot was crossed by the old main road connecting Aurich, the seat of the counts from the middle of the 16th century, and Norden. There was another link to the city of Emden along the Ehe, a stream running through the locality.

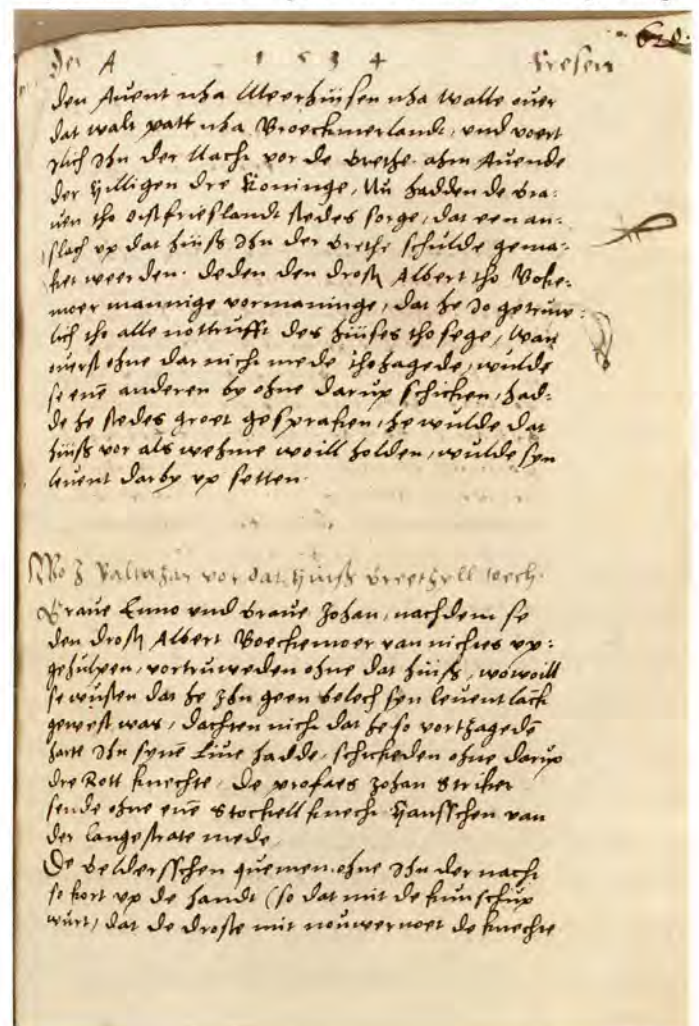
Although this trading route to the most important port and trading city in East Friesland was advantageous, it nevertheless involved the farmers living in the Walle valley in great difficulties. In its upper course the Ehe picked up the waters which flowed off the surface of the neighbouring moors and geest. In rainy weather this led to flooding of the much lower-lying Walle valley and the land often stood under water for weeks. On the other hand, in the summer months it was possible for the riverbed to dry out completely, since the high moors then retained the water. Consequently the Ehe was only of limited, seasonal navigability.

Walle appears to have been destroyed at the beginning of the Saxon Feud in 1514. Without actually mentioning Walle, a written source states that the market town of Aurich and its surrounding villages went up in flames. The name Walle occurs for the first time in the Frisian Chronicle compiled around 1550 by Eggerik Beninga (1490–1562).

The related events of 1534, which Beninga was personally able to observe at first hand, may be described briefly here. In the course of the confrontation between Count Enno II of East Fries-

land and Balthasar of Esens, ruler of Harlingerland, the latter caused quite considerable damage to many places in the county; Aurich too was to be pillaged and destroyed. His intention was discovered, however, and so Balthasar marched past the area in the direction of his seat at Esens. In Meerhusen, about 5 km from Aurich, the army split up. Balthasar and his troop turned back and marched again under the cover of darkness past Aurich, by way of Walle through Brokmerland to Greesiel, family seat of the House of Cirksena. The other part of the army marched on to Esens, to fetch the artillery necessary to besiege Greesiel.

*The first mention of Walle – top line – in the Frisian Chronicle by Beninga.*







Johannes Florianus: Frisia Orientalis (1579), a map in the form of a coloured copperplate engraving, taken from: Abraham Ortelius: Theatrum Orbis Terrarum, Antwerp 1579 ff. – A great number of maps of the County of East Friesland came into being in the second half of the 16th century. On this sheet, towns, villages – with and without churches – and castles are indicated by different symbols, whose meaning is explained in a legend on the left-hand edge of the map. The supplementary map shows the area flooded in 1277 and 1287, known today as the "Dollart".

Since Balthasar was in a hurry to achieve his objective and did not want burning buildings to draw his opponent's attention to his real intentions, Walle was spared from looting and destruction.

The name Walle is encountered again in the register of the sluice tax relating to Countess Anna's sluices decree of 1546. This register listed those places which had to make a contribution to the upkeep of the Petkum Sluice; for Walle nine persons liable to pay were named, presumably the owners of whole or shared hearths, i. e. yeomen.

Further records from a later period give information about Walle's size, notably:

Register of corn tithes 1580	– 14 names
Register of the sluice tax 1593	– 12 names
Land register, end of the 16th century	– 16 names
One percent rating 1618	– 17 names.

In 1595, eight full and two shared hearths were counted; in 1802 ten full and eight shared. In 1805 Walle had about 150 inhabitants, among whom were distributed ten full and eight shared hearths,





Enlarged detail of the East Friesland map of Johannes Florianus shown opposite. Seven of the nine so-called "Loogen" belonging to the parish of Aurich – then, in 1579, already the Count's residence – are named: Warl (Walle), Axtum (Extum), Kerckdorp, Rha (Rahe), Popens, Egels and Wallinghusen (Wallinghausen). The cartographer attached great importance to the depiction of the stream Ebe, which flows into the River Ems near Emden. However, it is not drawn geographically correctly, because the Ebe runs directly past Walle.

as well as 15 *Warfen*, dwellings of more recently arrived settlers. Situated close to the Count's residence, the inhabitants of Walle, as well as those of the other eight *Loogen*, were obliged to appear personally at the Castle for its defence in times of danger. The villages which lay further away were freed of this obligation by payment of a guard-tax.

Walle is recorded cartographically, in the form "Warl", as early as Johannes Florianus's 1579 map of East Friesland. In terms of accuracy, of course, this map cannot be compared to the sheet published by Ubbo Emmius in 1595, but the Aurich district is

rendered in essentially the same way on both maps. All but two (Sandhorst and Haxtum) of the aforementioned *Loogen* belonging to Aurich are shown: Wallinghusen (Wallinghausen), Egels, Popens, Kerckdorp (Kirchdorf), Rha (Rahe), Axtum (Extum) and Warl (Walle).

## The Find Spot



*View of the farmhouse, erected in 1864, where the hoard was found during modernisation work; the place of discovery is marked by an arrow.*

The coin hoard was discovered on 18 May 1971 in Walle, today a part of the town of Aurich. In that year, the living quarters of the East Frisian farmhouse shown in the illustration on the right were partly demolished, so that they could be rebuilt in extended form. The vessel was struck during the excavation of the new foundations. It lay between about 0.60 and 0.80 metres below the surface, close to the large tree shown in the illustration. The pot was broken on discovery, but could be almost completely reconstructed at the area's Ancient Monuments Office in Emden.

Thanks to extensive enquiries by the present owners of the house, further information has been forthcoming about the find spot. The predecessor of the present farm is known to have been de-

stroyed in 1864, reputedly by arson. This building lay immediately adjacent and at right angles to the dwelling reconstructed in 1971, so that the find spot must have lain within its foundations. However, old masonry was not observed during the excavations.

There are thus two possibilities: if yet further buildings existed, whose locations are not known, one cannot decide whether the pot with the coins was buried inside or outside the house. On the other hand, if one assumes that back in the 16th century the farm occupied the same spot as the edifice burnt down in 1864, then the hoard was concealed inside the house. Whichever of the two possibilities one decides upon, the fact remains that the coins were hidden in the building or not far from it,



*View of the farmhouse, erected in 1864, where the hoard was found during modernisation work; view from the fields.*

since in accordance with the agrarian structure of the time, it was impossible to bury something on one's own land any further from the house. The fields and common pasturage lay outside the village, and the landed property of each farmer within the settlement was restricted solely to his house and lot.

The original size of the property in whose proximity the hoard must have been hidden is not known. Information exists only from the year 1814; these records refer to a shared hearth. On the basis of this information and taking into account the value represented by the hoard, we may assume that the original owner of the hoard probably possessed a hearth, and was thus a yeoman.

The family history of the present owners of the house can be traced back to the years between 1744 and 1700. The earlier period and thus the history of the farm in the 17th and 16th centuries lie in obscurity, so that no information can be obtained about the character of the man who concealed the hoard.

## The Container of the Hoard



*It was in this vessel, an earthenware jug c. 26 cm high, that the hoard was hidden. The 468 silver coins filled the vessel approximately one-third full. This jar, without any large-scale decoration, was a simple pot for everyday use in the rural kitchen.*

An earthenware vessel was used for the storage and burial of the money. Its height is approximately 26cm and its diameter 20cm at its widest point; the inner diameter of the mouth is 9 cm.

The egg-shaped body of the vessel rises above a slightly wavy foot. The cylindrical neck is separated from this by a small bulge and from the rim of the vessel (i. e. its lip) by a sharp edge. On the shoulder in a band about 3 cm wide are five or six narrow horizontal grooves lying side by side. These may have been put on as decoration, but on

the other hand it is known, for example, that double grooves were originally scratched on to serve to mark the position for the handle. The tubular handle of our pot is attached at the lower end exactly within this band of grooves and at its upper end to the neck and lip. The curve of the handle thus projects above the edge of the lip, as the profile drawing makes clear. On the opposite side traces of a former spout, now broken off, may be seen. This "snout" (or nozzle) and the easily grasped handle identify the vessel as a jug, whose function lay exclusively in pouring out liquids.

The shape may perhaps be explained by this: as visible in the side view, it is not totally symmetrical, but leans towards the handle. If one takes the jug in one's hand and makes a pouring motion, the centre of gravity of the jug clearly shifts considerably to the part of the body which lies beneath the spout, making pouring much easier. This effect was achieved by a thicker wall in the upper part of the body of the pot.

The jug is of a poor clay, recognisable in its sandy fabric and the rough notches. Since we are dealing with a biscuit-fired pot, fired at c. 800°C, the shards are porous, i. e. water-permeable. To make the jug usable for holding liquids such as milk, a glaze was applied to the inside before firing, in the case of earthenware usually a lead glaze. This facilitated cleaning because of its smooth surface and in addition increased the stability of the fabric.

The outside of the jug is mostly rough, i. e. unglazed, with only the lip and the area beneath the spout (the neck, shoulder and upper half of the body) covered with the same dark brown glaze as the inside. This exterior glazing, at first sight remarkable, was not the result of accident, but deliberately applied to this area either with a brush or sprayed on. Any liquid spilt when pouring was thus unable to enter the porous clay.

The jug was a simple working vessel lacking any large-scale decoration, in daily use on the farm, to be found in the cellar or the dairy. When it no longer fulfilled its purpose because of cracks or accidental damage, for example in that it leaked or could no longer pour because of its damaged spout, it was discarded. This appears to be the case with the Walle jug. As well as new breaks caused by the discovery and identifiable from their light colour, old cracks and damage can be seen. The

spout and part of the foot had also already been broken through constant use.

No longer serving its purpose in the house, the pot was nevertheless useful for the safe keeping of the cash and its concealment in the earth. Then, as now, one was very unlikely to take a good, intact and serviceable container and devote it to such a use. The jug also had the advantage of a mouth which was sufficiently wide for even large coins such as talers to pass through. Perhaps these could, or even had to be placed inside by hand. If the owner had thrown them in, the smaller thin coins would certainly have been broken and the pot probably shattered. The 468 silver coins which the jug contained filled it to a depth of about 8 cm.

When and where the jug was made remain questions which cannot definitely be answered. It may have come from a nearby pottery, perhaps from Friesland and Groningen. It was certainly made before 1585, since the latest coin in the hoard comes from that year.

# Number, State of Preservation and Statistical Analysis of the Coins



*A small coin, stuck to a bigger one.*



*A silver coin, partly covered with a thick layer of verdigris.*

The find consists of 468 coins and the remains of several more broken coins which could not be reassembled as complete objects. Their thinness suggests that the fragments all come from the lower denominations, i.e. the small change. These small thin types were either crushed by the weight of the hoard during the centuries they were immured in the jug (if they lay at the bottom) or they fell to pieces on discovery and during the subsequent cleaning, since the small coins were sometimes stuck to the larger sorts. On account of the small size of the fragments and their consistently poor preservation, it was no longer possible to identify them. A large proportion of the coins were covered in verdigris.

Gold and copper coins are not represented in the hoard: it consists exclusively of silver coins, albeit of varying fineness.

Unfortunately it was no longer possible to discover how the coins had been stacked in the jug. Were they thrown in randomly, as they came into the hands of their owner? Did the large types (the

talers belonging to the later issues) form a first layer, which was covered by the lighter small coins? Were the foreign issues perhaps separated from the indigenous East Frisian domestic currency? The answers to these questions may possibly have provided information about the date at which the hoard was gathered. It might perhaps have been possible to decide whether the hoard was gathered as savings over one or more generations or whether it was short-term capital entrusted to the earth at a single moment (in our case after 1585), for whatever reason.

Despite what one might have supposed from the large number of pieces, this quantity by no means filled the jug to the rim. The pot was barely one-third full of coins.

The coins in the hoard are divided amongst the following countries and coinage authorities:

Habsburg Lands (nos. 1–2)		Emperor Charles V, 1506–1555	4
King Ferdinand I, 1531–1558	1	King Philip II of Spain, 1555–1598	19
Emperor Ferdinand I, 1558–1564	1		
Electorate of Saxony (nos. 3–5)		Duchy of Guelders (nos. 366–386)	
Augustus I, 1553–1586	3	King Philip II of Spain, 1555–1598	21
Bishopric of Halberstadt (no. 6)		County of Flanders (nos. 387–399)	
Albrecht of Brandenburg, 1513–1545	1	Philip the Fair,	
		Duke of Burgundy, 1494–1506	2
		Emperor Charles V, 1506–1555	2
Bishopric of Liège (nos. 7–9)		King Philip II of Spain, 1555–1598	9
Cornelius of Berghes, 1538–1544	1		
Robert of Berghes, 1557–1564	1	County of Holland (nos. 400–413)	
Gerhard of Groesbeeck, 1564–1580	1	Emperor Charles V, 1506–1555	1
		King Philip II of Spain, 1555–1598	13
Abbey of Stavelot-Malmedy (nos. 10–11)		Lordship of Utrecht (nos. 414–420)	
Christopher of Manderscheid, 1545–1576	2	King Philip II of Spain, 1555–1598	7
Abbey of Thorn (nos. 12–13)		Lordship of Overijssel (nos. 421–427)	
Margaret of Brederode, 1557–1577	2	King Philip II of Spain, 1555–1598	7
County of Horn (no. 14)		United Netherlands	
Philip of Montmorency, 1540–1568	1	Province of Guelders (nos. 428–431)	4
County of East Friesland (nos. 15–329)		Province of Holland (nos. 432–433)	2
Joint coinage of Edzard I, 1491–1528,		Province of Friesland (no. 434)	1
and the City of Groningen	1	City of Groningen (nos. 435–453)	19
Enno II, 1528–1540	5		
Edzard II, Christopher and John,		Kingdom of France (no. 454)	
1558–1566	12	Charles IX, 1560–1574	1
Edzard II and John, 1566–1591	297	Kingdom of Castile (nos. 455–461)	
		Isabella I of Castile and	
Imperial City of Aachen (nos. 330–333)	4	Ferdinand I of Aragon, 1474–1504	7
Imperial City of Cologne (nos. 334–336)	3		
Imperial City of Lübeck (no. 337)	1	Kingdom of Spain (nos. 462–465)	
Imperial City of Nijmegen (no. 338)	1	King Philip II of Spain, 1555–1598	4
Imperial Cities of Deventer, Campen			
and Zwolle (Nr. 339)	1	Spanish Colonial Empire: Mexico (no. 466)	
		King Philip II of Spain, 1555–1598	1
Burgundian and Spanish Netherlands		Duchy of Milan (nos. 467–468)	
Duchy of Brabant (nos. 340–365)		Emperor Charles V, 1506–1555	2
King Maximilian I, for Philip the Fair,			
Duke of Burgundy, 1482–1494	3		468

The find encompasses a wide geographical area. The map of the mints represented in the find, shown in the appendix, extends from Lübeck in the north to Milan, Granada and Seville in the south. Prague and Joachimstal are the most easterly mints, while Emden, Dordrecht, Antwerp, Bruges and Bayonne are numbered amongst those lying in the west. One coin comes from a mint in the New World: Mexico.

As can be seen from the tables and charts (see page 168), 315 of the 468 coins (or two-thirds of the total find) come from East Friesland. The remaining 153 coins are from diverse provenances. Of these, Netherlands issues form a clear focal point, above all the 88 pieces from the Burgundian and Spanish possessions, which from 1543 together formed seventeen provinces, whose north-eastern frontier was the river Ems. The Spanish peninsula is represented by 12 coins, over 2.5% of the total. Groningen contributes a larger proportion, to be explained by its proximity and close economic relations with East Friesland. Seven examples are provided by three of the seven united northern Netherlands provinces, which seceded from Philip II in 1581 and issued their own coinage.

The German territories' share is small. From the ten administrative districts, or "*Kreise*" into which the German Empire had been divided since 1512 to perform common tasks, there are two coins each from the Austrian and Lower Saxon, and three from the Upper Saxon district. The northern and eastern parts of the German Empire (South Germany is completely absent) are represented by a total of only seven coins, from the Habsburg Lands, Halberstadt, Saxony and Lübeck. Compared with the others, Saxony and the Habsburg Lands were among those territories which were characterised by constant and sizeable issues of

talers, resulting from their wealth in silver. They are represented by three and two coins, respectively. The Lower Rhenish-Westphalian district is more strongly represented in the hoard; excluding East Friesland, there are 17 coins, which come chiefly from the Rhenish cities and the territories of the Meuse region. The provenance of the coins is thus rather obviously concentrated in western and southern Europe.

The earliest coin is the Brabant stuiver or briquet dated 1492 and the latest coins are East Frisian flindrichs of 1585. The hoard therefore covers a period of no less than 93 years. Such a large date span is not unusual. Finds are known whose earliest and latest coins are separated by up to 200 years.

The undated Spanish coins can also be fitted into the period of manufacture of our find as fixed by secure dates: the seven coins in the names of Queen Isabella I of Castile and King Ferdinand of Aragon were produced after 1497. They bear the new designs for the silver unit, the real de plata, introduced in that year by the second coinage reform, known as the Pragmática of Medina del Campo. The attribution of these coins to Isabella and Ferdinand is doubtful, however, despite the fact that they are expressly named in the inscriptions. The coins continued to be struck for years by Charles I (V), who reigned jointly with his mother Johanna from 1516. The five undated coins of Philip II (1555–1598), which come from Spanish and Mexican mints, were surely struck before the latest date present in the hoard: this is suggested by the considerable signs of wear on their surfaces. Moreover, from 1586 Spanish coins were dated.

The total surviving weight of the 468 coins is 2926.49 g (about six pounds) or, expressed in





*A Spanish coin, heavily worn through long circulation.*

contemporary coinage standards,  $12\frac{1}{2}$  Cologne marks, each of 233.856 g. This does not correspond to the prescribed weight of the coins found, since for various reasons a large number no longer possess their original full weight. Thus the older types, stuivers of Brabant, Groningen and East Friesland, are so heavily worn through long circulation that the obverse and reverse designs can now hardly be seen. In the case of the oldest coin in the hoard, the 1492 briquet, the difference between the standard weight of 2.88 g and the weight recorded today (1.97 g) is 0.91 g, almost one-third. Even though the prescribed weight was not normally

*Stuiver, 1499, of the City of Groningen, with its rim broken away.*



*East Frisian schaf – a coin with obvious signs of wear.*

achieved exactly, a high weight loss is to be assumed.

The younger, smaller coins from the middle of the 16th century show clear traces of prolonged circulation. About 25 coins, more than 5% of the total number, are damaged to a greater or lesser extent. As a rule those affected are the small denominations. The Spanish reales and their multiples are sometimes so heavily clipped that the inscriptions are completely lacking or legible only in parts, even as single letters. Compared with standard weights of c. 3.48 g, 6.96 g and 13.92 g for 1, 2 and

*The legend of this clipped real is legible only in parts.*



4 reales, the weight differences measured range from 0.21 g to 3.91 g.

Added together, the amount of metal gained from clipping and filing the seven denominations of reales in the names of Isabella and Ferdinand comes to about 9.50 g, which in turn corresponds to a value of  $2\frac{3}{4}$  reales. This is more than 17% of the sum of 16 reales formed by the different denominations, and thus a considerable loss or gain. Ten coins of Philip II from his Netherlands provinces are also clipped, but to a much lesser degree; they consist of eight  $\frac{1}{5}$  Philip daalders, one whole and one  $\frac{1}{10}$  Philip daalder.

The clipping or filing of coins did not happen by chance. As long as the principle of real worth held, the weight and fineness of a precious-metal coin were of decisive importance to its value. Since the edges of coins were not protected by decoration and by a motto until later, the removal of metal at the edge was simple. The money thus manipulated was then put back into circulation. This profitable exercise was apparently easier to carry out on the lesser-known foreign coins than on those in everyday circulation. Thus, all examples of the Spanish and French coins in the hoard, i. e. those produced in the most distant mints, have been treated in this way, sometimes to the utmost possible limit.

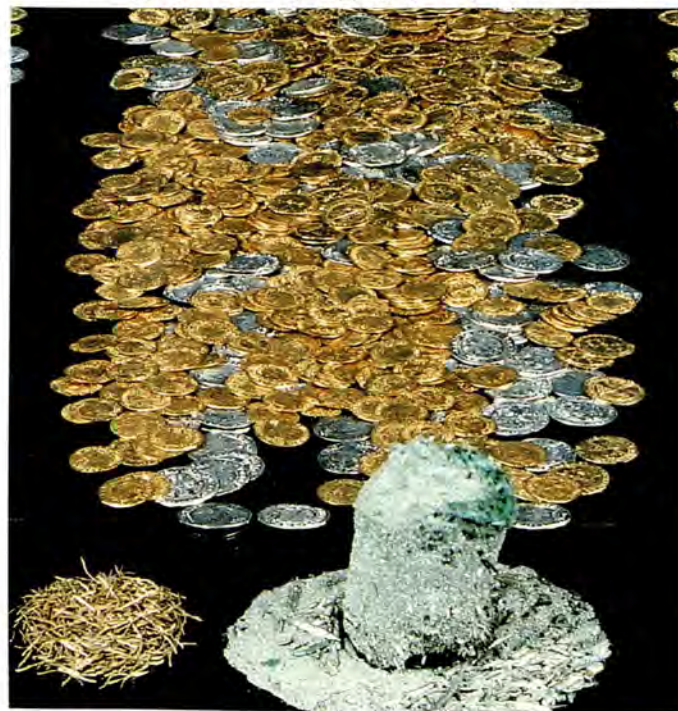
Comparable observations show that the Walle hoard is by no means an isolated example in this respect. The hoard of gold coins hidden after 1607 at Ney-Dieler, district of St. Goar, likewise shows clipped edges only on the Spanish coins, mainly the large fourfold and double escudos of Philip II; and the more or less contemporary hoard of silver coins from Kinzweiler, in the Aachen district, also contains Spanish coins so heavily clipped that the inscriptions no longer exist or survive only in traces. In the coin hoard from Werfen, near

Salzburg, buried after 1535, the French écus d'or, gold coins which were evidently less commonly used and therefore less well known, are more greatly reduced in weight by clipping than the German gold coins.

That this practice was known to the authorities and classed as a more or less everyday occurrence can be inferred from the printed ordinances that governed the coinage system. These refer time and again to "clipping" and "scraping" and classify these practices – the falsification of good coinage – as fraud. Anyone who was convicted of such activity had to reckon with a penalty affecting his "Gelt, Gut, Leib unnd Blut" (money, goods, body and blood).

The Philip daalders and their fractions are not only all badly worn, some of them through circulation, but they are also poorly struck and sometimes not well centred.

*A hoard of gold and silver coins from Werfen near Salzburg; it also contained large quantities of clippings from precious metal coins.*





*Philip daalder on which the double striking is especially easy to see.*



*Brabantish patard with a countermark.*



*The sharp burrs resulting from punching in an unworked state.*



*The burrs resulting from punching have been carefully hammered flat.*

The latest coins in the hoard, the East Frisian 2/15 talers of 1579 and the flindricks dated 1583, 1584 and 1585 show hardly any signs of circulation. Their conspicuously poor appearance results from their apparently being manufactured in a great hurry. Sixty of these pieces, 19% of the East Frisian portion of the hoard, are misstruck.

Moreover, the large number of pierced coins is noteworthy: 17 East Frisian, 2 from Groningen and one issue of the Spanish Netherlands. Here again the East Frisian issues are dominant. Only the smaller types, such as schaf, ciffert, witte, flindrich, sesling and 2/15 taler have been pierced. The

holes are coarsely punched. The protruding, pointed burrs which resulted on the other side were not worked any further, for instance by being hammered flush with the surface of the coin.

This clearly argues against one initially possible explanation, that the coins were punched through for use as jewellery, for instance. The edges of the piercings were carefully bent over and hammered flat in only three cases: here an intended use as ornament can be assumed. The other piercings are frequently placed at random, in the centre or more often at the edge, without reference to the designs.

This type of piercing, with sharp angular edges, suggests that these pieces were nailed. It was, for instance, usual for shopkeepers to fasten poor coinage to their counters in this way as a reminder and a deterrent.

Finally, seven coins in all bear countermarks, small punchings applied subsequent to their issue. Three punchings are found on early patards of the Spanish provinces of Brabant and Flanders. Four coins bear the 1573 countermarks of the provinces of Holland and Zeeland: these will be discussed in detail below.

The tables and charts (see page 167) show the distribution of the coins in the hoard according to their date of issue, in five-yearly intervals. The contents of the whole hoard are shown in one chart, and two further diagrams subdivide the East Frisian and the remaining portions. Undated coins whose production dates can only be fixed within certain intervals have been ascribed to the earliest possible date of issue. The possible shifting of a period of only two years or a little more into the next time-span of a table is not significant. The production period may even amount to decades. Compared with the total of dated pieces or those which can be assigned to short periods, the proportion of undated pieces from wide date intervals is so small that this method has only the slightest additional distorting influence on the overall information in the tables.

Only the twelve Spanish examples remain problematic. The reales in the names of Isabella and Ferdinand and those of Philip II are included under the years of their earliest possible production: 1497 and 1555 respectively. The former,

especially, may belong to a considerably later date since King Charles I of Spain continued to issue them unaltered for a long time.

The division by date of all coins in the hoard indicates only a very small proportion (6.4%) down to 1550, rising by a further 34.6% to 1575 and reaching a peak in the following decade, the source of 59% of the total. Of these, 96% were produced at the Emden mint (see the table of the East Frisian portion), mainly 2/15 talers and flindrichs, together with a relatively insignificant amount (20 specimens) of the smaller types. These account for a proportion of 4% of the East Frisian coins. Only 16% (49 examples) were actually produced earlier, six of these before the middle of the 16th century.

The remaining ten coins (or 4% of the period 1576–1585) come from other territories, with a most interesting distribution: one Saxon taler, two pieces from the Spanish Netherlands and seven issues from the northern Netherlands provinces of Holland, Guelders and Friesland, which together with Zeeland, Utrecht, Overijssel and Groningen formed the United Netherlands, which seceded from Spain. The non-East Frisian types are most strongly represented in the third quarter of the 16th century: 119 out of 153 pieces from the period 1550–1575 contained in the hoard; 24 come from the period before 1550.

## The 1573 Countermarking



*As a countermark, the arms of the Province of Holland: in an oval beaded border, a rampant lion to the left on a shield.*



*As a countermark, the arms of the Province of Zeeland: a shield with a half-lion, rampant, above three waves.*

Four Spanish Netherlands coins have subsequently-applied countermarks which originate from an ordinance of William of Orange. The decree published in Delft on 7 February 1573 ordered that all coins circulating in the two provinces of Holland and Zeeland were to be stamped with the arms of the respective provinces. For Holland, on whole and half-daalders, this was a rampant lion to the left on a shield, with an oval beaded border, as can be seen on the two examples in question, the 1564 and 1573 1/2 Philip daalders of Guelders and Holland. Zeeland's counterstamps bore a half-lion above waves, mostly framed by a beaded oval. The variant in a shield, present on both the 1/5 Philip daalder of 1566 or 1567 from Overijssel and the 1572 1/10 Philip daalder from Brabant, is rarer.

Circulation of uncountermarked money was forbidden, but the townsfolk were allowed to possess (i. e. to hoard) unstamped coins as well. Offices were provided in the towns to carry out the ordained stamping. One-eighth of the money brought in for stamping was retained, in return for a negotiable, interest-free bond. This loan, fixed for one year, was a method of financing war. It brought the necessary financial resources to relieve the city of Haarlem, besieged by the Spaniards since 11 December 1572.

As the pieces in the hoard show, these countermarked coins also managed to cross the provincial boundaries of Holland and Zeeland into neighbouring areas. The pieces dated 1564 and 1572 were thus certainly not put aside as savings in Walle until after 1573.

## Types of Coin in the Hoard

The find contains coins of low, medium and high values. The latter include talers, which in addition to the full denomination are also represented by fractions, that is, values of half and quarter talers. The taler was a new type of coin, and indeed the first large silver coin of the early modern period. It was introduced in the late 15th century as an equivalent of the goldgulden, as was reflected in the names used initially for it, "*Guldiner*" and "*Gulden*" (= golden).

The name taler refers to the district of St. Joachims-tal, situated in the Bohemian part of the Erzgebirge. From 1520 the rich silver deposits exploited here were coined into immense numbers of the new large silver coin. While this term began to take root during the 1530s, "*Guldengroschen*" prevailed in Saxony after 1534 and was for decades analogous. In the following pages no differentiation is made and the name taler is used for all pre-1566 issues of this new denomination.

In the course of the 16th century the taler was integrated into the currency system of the German Empire through imperial coinage decrees, and finally in 1566 it became the standard currency coin, the reichstaler.

From this crucial period of monetary history, the Walle find includes both pieces struck before 1566 and examples of the obligatory imperial talers introduced in that year. There are also the comparable large silver coins (and their fractions) from the Spanish Netherlands, the united northern Netherlands provinces and Spain. At first sight these pieces of money seem to represent a single unit, but the weight and fineness of the

individual issues and thus their value at the time might differ considerably, even within a single territory.

Saxony, blessed with rich silver deposits, struck the new large silver coin continuously and in great quantities from 1500 onwards, so that it soon became the dominant coin in northern Germany. This owed something to treaties with the neighbouring territories which stipulated the adoption of the Saxon coinage standard and thus ensured an area of currency which extended across national boundaries. One such pact with the county of Mansfeld and the bishoprics of Magdeburg and Halberstadt dates from 1519; another, with the counts of Schlick in Joachimstal, from the following year. Around the middle of the 16th century Upper and Lower Saxony had virtually adopted the Saxon coinage standard or one modelled on it.

Two examples are represented in Walle. One is the 1538 taler of the bishopric of Halberstadt (which stood in personal union with Magdeburg) – the earliest of the large silver coins contained in the hoard. According to the coinage decree published in Saxony on 20 January 1534, eight coins were to be struck from the Cologne mark of 233.856 g, giving a gross weight of 29.23 g. The weight of fine silver was fixed at 26.39 g, whence the fineness amounted to c. 902/1000.

The 1559 half-taler of the city of Lübeck, which also coined on the Saxon standard from 1537, was likewise struck on this basis, which for the higher values was unaltered in the next coinage decree of 1549. From Saxony itself the find contains only relatively late taler-denominations, one-quarter



*Above: Taler, 1538, of the Bishopric of Halberstadt.  
Below: Saxon 1/4 taler from the Freiberg mint.*

*Above: 1/2 taler, 1559, of the Imperial City of Lübeck.  
Below: Saxon 1/4 taler from the Dresden mint.*

taler from each of the years 1554 and 1568. They were produced at Freiberg, the Erzgebirge mint (closed in 1558) and Dresden, newly established in 1556.

East Friesland did not align itself to the Saxon standard. This emerges from Countess Anna's coinage contract of 3 May 1563, which has survived. According to this, the mintmaster Dietrich Iden was to "... mint a taler; eight and a quarter talers from one Cologne mark, containing 13 lot 3 quentin of fine silver...". The East Frisian taler, with a gross weight of 28.35 g and fineness which converts to 859/1000, thus had a lower value than the Saxon issues, for which a gross

weight of 29.00 g and a silver weight of 26.18 g (c. 902/1000) was prescribed from 1558.

This is reflected in its tariffing by neighbouring coinage states. Hamburg, for instance, valued the good talers at 31 schillings and the East Frisian issues, recognised to be poorer, only at 29 schillings. Indeed, complaints were made about the Emden mintmaster Iden's talers. Cologne merchants directed their grievances at the East Frisian counts, because they considered themselves to be cheated by the underweight and low-value large silver coins; these are often referred to in the sources as "*böse Taler*" (bad talers).



*East Frisian taler, 1564 (on the left the original issue, on the right the later striking), and taler of the Habsburg Lands, 1560. The East Frisian taler imitates the Habsburg coin, except that the double eagle is replaced by the local arms, the harpy.*

The talers struck in accordance with Countess Anna's instructions all bear the date 1564. In the seventies, probably between 1574 and 1576, these pieces were secretly produced again with the same designs and the old date. Our researches show that their fineness, at about 830/1000, lay even lower than the norm fixed in 1563.

Officially, East Friesland struck the reichstalers prescribed in the imperial coinage decree of 1566. The later-produced talers are distinguishable from the earlier ones by details of their design. In the adjoining illustration an original issue of 1564 (left) may be compared with a later striking which comes from the Walle find (right). On the original only the cross upon the crown interrupts the inscription and the mintmaster's mark (a four-leafed clover combined with a hook) is placed on the left of the crown, whereas on the later coin part

of the crown is in the legend and the mintmaster's mark is placed on the other side of the crown. These later strikings were not intended for circulation in East Friesland and the Empire (they would quickly have been noticed at the regular coinage trials by reason of their poor quality); rather, they served in payments for grain in Danzig and the Baltic. The rye obtained thence was sold by the Emden trade to Münster and Osnabrück and as far as Spain. The reason for the small number of East Frisian talers in the find (two) appears to lie in this trade. The more or less contemporary East Frisian hoard from Esens, in the Wittmund district, confirms this, containing only one local product amongst 113 talers. At home, they scarcely circulated as currency.

In its design the East Friesland taler of 1564 takes its pattern from the issues of the House of Habsburg.





Above: Habsburgian 1/4 taler from the Prague mint.  
Below: County of Horn, silver taler of inferior quality.

The hip-length portrait of Ferdinand I on one side was copied faithfully, including the date placed in the field; on the other side the coat of arms, a harpy, replaced the imperial eagle. As the illustrated examples of the two specimens from the hoard make clear, an East Frisian taler of this type could easily be taken to be the better-quality Habsburg issue, and this may well have been intentional.

The two Habsburg coins, the Joachimstal taler of 1560 and the 1557 Prague quarter-taler, were struck in accordance with the Nuremberg coinage decree promulgated for the patrimonial lands in 1524. This prescribed for the large silver coins known as guldiner an output of  $9\frac{3}{4}$  pieces from the Vienna mark of 281 g (=  $8\frac{1}{8}$  from the Cologne mark), giving a gross weight of 28.82 g per piece. The silver weight lay at 25.78 g, which corresponds to a fineness of 895/1000. Joachimstal first coined at this

standard from 1547, the year in which the Schlick counts lost all their existing rights to the mint.

The Prague mint started coining again in 1557 after a prolonged interval. The imperial coinage decrees of 1551 and 1559 were not applied to either of these issues. The first was not enacted in Bohemia at all, and that of 1559 was not introduced until two years later, on 1 August 1561. From 1548, a year after the death of Queen Anna, only the bearded portrait of Ferdinand I still appeared on the full, half and quarter-talers.

While the Saxon talers were set at 24 groschen or 72 kreuzers from the 1540s, the Austrian were current in 1549 at 70 kreuzers.

The remaining three taler issues in the find are concentrated in the Netherlands region, with one example each from the county of Horn and the cities of Deventer, Campen and Zwolle (which coined jointly in Overijssel) and the Liège sprenger, which rated as a quarter-taler. After 1554, many of the small lordships located in this area coined mainly sub-standard talers. One of these, indeed, was the count of Horn. According to the analysis of its fineness, his taler, struck at the mint of Weert, shows a value of only about 810/1000.

The products of these so-called "hedgerow" mints were decried time and again in the Empire, probably with little success. At the beginning of March 1566 merchants came to the Aurich cattle market wishing to buy oxen with inferior Netherlands talers of this type, *inter alia* from Nijmegen, and ostensibly unaware that they had been banned.

The number of reichstalers contained in the hoard (12 full and 3 halves) is about 50%, higher than the total of 10 talers and their fractions from the period before 1566. At the Augsburg Imperial Diet in

1566, the dominance achieved meanwhile by the Saxon taler was recognised, in that the new reichstaler was created the standard coin of the Empire, using the former's slightly reduced coinage standard. The arguments about a standardised large silver coin, which had dragged on through three imperial coinage decrees, were thus ended. The reichstaler was to be struck at 8 pieces to the Cologne mark, with a silver weight of 25.98 g, or 889/1000. Its value in small change was fixed at 68 kreuzers, which corresponded to 24 groschen in Saxon currency. Saxony itself acceded to the imperial coinage decree in 1571.

Fourteen of the twelve reichstalers and three half-reichstalers included in the Walle find come from the years 1567, 1568, 1569 and 1570, i. e. the period immediately following the Augsburg Imperial Diet. In addition, 13 issues come from minting states in the triangle formed by the Rhine and Meuse in the west of the Lower Rhenish-Westphalian District, bounded by the mints of Nijmegen situated to the north, and of the cities of Cologne, Aachen and Poulseur, located on a line running southwards.

Only the Saxon taler of 1582 falls outside this group, as the single large silver coin from a later time and as the sole issue from a distant mint. As the examples from the find show, the coinage states complied with the designs prescribed for the reichstaler, which had to bear on one side the imperial eagle and the name and titles of the reigning emperor.

Numerically, the Philip daalders and their fractions form the largest group in the hoard. This issue, also described as the king daalder, succeeded in 1557 the Carolusgulden, introduced in 1540 by Charles V as the first larger silver coin. In 1562 the new value was supplemented by fractions of



*Joint coinage of the three cities of Deventer, Campen and Zwolle.*



*Sprenger or 1/4 taler of the Bishopric of Liège, struck about 1560.*

*Reichstaler from Nijmegen, the arms supported by two lions.*





*Reichstaler of the Bishopric of Liège with the helmeted arms on the obverse and the crowned double-headed imperial eagle on the reverse.*

*Reichstaler of the City of Cologne with the helmeted city arms; the three crowns refer to the saints of the city, the Three Wise Men.*



1/2, 1/5, 1/10 and 1/20 and in 1571 this series was rounded off with the 1/40 Philip daalder as its lowest denominational step.

For the pictorial designs of the new Netherlands issues the king summoned to the Brussels mint the Florentine-born goldsmith, medallist and die-engraver Gianpolo Poggini, who had made a name for himself in Italy by his work for the great Medici, Este, Gonzaga and Sforza families. Philip's portrait, facing both right and left, appeared on the daalders and on the fractions, with the exception of the two smallest denominations, which are not represented in the hoard.

As shown by a comparison with a contemporary portrait, the depiction of the King's features is very true to life. The Philip daalder was not only heavier than its forerunner the Carolusgulden of c. 22 g, but also exceeded the weight of the rest of the talers issued at this time, as well as that of the comparable Spanish 8-reales pieces. The new Netherlands coin weighed 34.27 g, had a fineness of 833/1000 and, when introduced, a value fixed at 35 patards or stuivers.

The raw material for the Philip daalders, struck in immense amounts, was provided by the silver-rich Spanish colonies. It flowed out of the Spanish

peninsula in the form of struck coins, through France to the economically dominant Netherlands, where it was melted down and recoined.

King Philip II's issues soon gave offence in the German Empire. Valued so highly against the German taler, they inundated the neighbouring territories and soon dominated the currency; this is shown by their increasing share in the finds from the second half of the 16th century.

In addition, the Philip daalders were apparently produced with very variable weight and fineness, as emerges from the 1570 account of a visit by Georg Stumpfheldt, Warden-General of the Lower Saxon District, who as chief supervisory authority was also responsible for the valuation of circulating foreign specie. He made this irregularity the occasion to undertake a journey via Bremen to the Netherlands and to Antwerp, to make painstaking and thorough enquiries into the standard of coining at the mint there; also to make some tests on the spot and to inform himself, by inspection, about the manufacture of money.

His journey was a failure: he was rebuffed with specious excuses. He was able, however, to learn that the Philip daalder had an exchange rate of 32 stuivers, but his own talers, of comparable

*The Philip daalder and its fractions of 1/2, 1/5 and 1/10 Philip daalder. Comparison with the contemporary painting of King Philip II shows the lifelike representation of his portrait on the coins, originating from the Italian medalist Poggini.*





*Burgundian rijksdaalder with its fractions of 1/2 and 1/4 rijksdaalder. The obverse shows an oblique ornamental cross with a superimposed fire-steel, and not the portrait of King Philip II named in the legend.*



quality, were to be had for 30 stuivers, which made it profitable to consign them to the melting pot. Amongst themselves, however, merchants gave and received German talers for 32 stuivers. If, for example, someone obtained a taler in the Lower Saxon District for 30 stuivers, he could sell it in the Spanish Netherlands for 32 stuivers and thus make a profit of 2 stuivers.

Of course, this practice did not completely kill off the production of the large types by many coinage states, but it inhibited it significantly and this also explains why the German taler part of the Walle find ends so abruptly in 1570. Neighbouring France also had to contend with this problem and on 4 July 1570 banned the "silver pieces presently struck in Flanders, called Philip daalders, and other Burgundian silver pieces...".

The eloquent, ever-increasing complaints and a request from the Emperor Maximilian II led Philip II to introduce, with the Ordinance of 4 June 1567, the Burgundian rijksdaalder, which corresponded in standard to the reichstaler. The design was altered vis-à-vis the Philip daalder: the King's portrait gave way to the cross of St. Andrew, a motif retained on the coins of the southern Netherlands provinces until the Austrian period. Like the reichstaler, the Burgundian daalder had smaller fractions of half and quarter value; they are also present in the find. However, the production of Netherlands and German coins to a common standard did not last long. The beginning of the Revolt of the Netherlands, which eventually led to the breaking away of the seven northern provinces, and the financial stresses which were connected with it led Philip II to return to the higher-value Philip daalder by 1571.

The portion of the find from the seventies and eighties reflects in part these conflicts. Thus there

are significantly fewer Philip daalders from the second period present, even allowing for events and the irregular operation of the mints which they caused. Our examples come from the years 1571–1574, with two stragglers from 1576 and 1580; the last were made at the mints of Brussels and Dordrecht.

The coining house at Brussels was opened on 24 October 1576 as a branch of Antwerp to enable the necessary volume of coinage to be produced. Dies available from the Antwerp mint were used, as can be seen from the mint mark, the hand assigned to Antwerp. The coins were also marked with the letter "B" for Brussels, their place of manufacture.



*A hand and the letter B, the marks for the Antwerp and Brussels mints. A rosette, mark for the Hollandish mint Dordrecht.*



In its three months' activity 52,242 Philip daalders were struck there. In 1580 Philip II was able to coin again at Dordrecht in Holland, which lay in the insurgent area, after a break of several years. The northern Netherlands, whose seven provinces finally broke away from Spanish rule in 1581, are represented in the hoard by two examples of a taler created by the ordinance of 25 August 1575 and first struck in Holland. They were called lion daalders from the design of a rampant lion on one side. The other side displayed a knight over the appropriate provincial coat of arms. The lion daalders, manufactured in large numbers, were issued with an exchange rate of 32 stuivers, even though their intrinsic value was only about 29 stuivers. This



*A lily, the mark for the Bruges mint, located in Flanders. A cross, the mark for the Guelders mint of Nijmegen.*





*Lion daalder of the Province of Holland, struck according to the Ordinance of 25 August 1575; these coins got their name from the rampant lion.*



*Duchy of Milan, Emperor Charles V, 8 soldi e 3 denari, after 1535.*

*Kingdom of France, King Charles IX, teston dating from 1570.*



*4 reales, 2 reales, real of the Kingdom of Spain with the quartered arms of Castile/Leon, Aragon/Sicily and the pomegranate symbolising Granada.*

*Symbols of Isabella and Ferdinand, the bundle of arrows and the yoke.*

*The arms of Castile and Leon, a castle and a rampant lion.*





difference, known as the reserve, was a kind of war tax, comparable to the 1573 countermarking discussed on p. 41.

Among the larger and medium-sized types, the hoard also contains issues from France, Spain and Italy. The teston, struck according to the Italian model, was the largest French silver coin until the 17th century. The name is derived from *testone* (i. e. head) and goes back to the coins first struck in Milan in 1474 bearing the head of Galeazzo Maria Sforza. The French teston corresponded roughly to one-third of a taler, with a weight of 9.60 g and a fineness of 899/1000. They were commonly found in circulation in the Netherlands during the 16th century.

The Spanish reales and their multiples were even more widespread in the Netherlands than the testons from neighbouring France. The eightfold multiple, the *real de a ocho*, introduced at the end of the 15th century but at first produced only in small quantities, is the type comparable to the taler with a weight of about 28 g. Only the fractions of 2 and 4 reales and the single real are found in Walle. The yoke and bundle of arrows, symbols of the King and Queen, which formed the reverse design of the pieces issued in the names of Ferdinand and Isabella, were replaced under Philip II by the Castilian tower and the lion of Leon. As previously mentioned, Spanish coins, above all the large denominations, served as raw material for the coinage of other territories.

The soldo was the silver unit of Milan. The taler-sized coin introduced by Charles V in the middle of the 16th century was the ducato of 100 soldi.

The second group, larger by far with 350 specimens, consists above all of stuivers and the coins

which were tarified in stuivers. The stuiver is thus both a struck coin and a unit of account.

The name *stuiver* soon became established for the double gros which from 1434 were produced to a uniform coinage standard for Philip the Good in the Netherlands provinces of the House of Burgundy. In the French-speaking area they were called *patards*. The Netherlandish expression "*stuiver*" may be traced back to the spark-emitting ("*stiebende*") fire-steel which was depicted on many coins; together with the French and Netherlandish terms "*briquet*" and "*vuerstal*" or "*vueryser*" it was also used directly as a coin name for the gros denomination. Fire-steels and flints formed components of the collar of the Order of the Golden Fleece, on which a golden ram's hide hangs beneath a flint as the badge of the order. Philip the Good founded this order on the occasion of his marriage to Philippa of Lancaster, celebrated at the beginning of 1430.

The oldest stuivers contained in the hoard are the Burgundian *briquet*, *patards*, gros of 1/2 *stuiver* and as multiples the 4-*patard* pieces. The Burgundian *stuiver*, known to most as the Brabantish, also influenced the monetary system in neighbouring regions, in that it was frequently imitated, for

*The Burgundian emblem, a spark-emitting fire-steel. The Netherlandish expression "stuiver" (= to emit sparks) for one type of coin is said to have been derived from this fire-steel.*



example in the bishopric of Liège. In fact, its value evolved variously, through differing monetary policies. Thus in the 16th century the Liège stuiver or aidant was worth one quarter of a Brabantish stuiver.

The historical development of East Friesland's coinage was largely based on Netherlands influence, and this is even indicated by the

names of the coins. The only exception is the witte, represented in the hoard by two specimens. It was first struck in Lübeck in 1365 and found many imitators in the north German area. But even the krummsteert, struck in Emden from 1430, harks back to a Flemish prototype. The double gros struck between 1416 and 1430 owes its name to the lion with a very curved ("krumm") tail shown on one side. The krumm-



*The oldest coin in the hoard, the 1492 briquet.*



*Patard or stuiver dating from 1499 (not from the hoard).*



*Gros (= 1/2 stuiver), one of the smaller denominations of the hoard.  
Denier of 16 aidants from Liège, rated as 4 Brabantish stuivers.*



*4 patards (= stuivers) dating from 1545 (not from the hoard).*



*East Frisian krummsteert, the second groschen coin besides the stuivers.*

steert of 4 witten was at the time the gros unit of East Friesland.

The name *stuiver* (*stüber*) is encountered for the first time in East Friesland in 1491. In Count Edzard's coinage decree the Emden grote (groschen of 6 witten, which imitated the corresponding Groningen issues) were equated with it and all circulating coins were expressed in this unit.



*East Frisian schaf of Count Enno II from the Emden mint.*

Thus two types of groschen circulated side by side in East Friesland, krummsteert and stuiver. The latter was valued 50% higher. Groningen and Emden stuivers were worth the same at the time; in 1507 both were altered from 6 to 5 witten in a new tariffing and given the name *ciffert*.

With the growing influence of the Brabantish stuivers on the East Frisian monetary system, the production of the krummsteert was suspended in 1531. The rôle of groschen was taken over by the *schaf*, already produced in Emden since 1516; the hoard contains two examples of this type from the period around 1532. The popular name ("*sheep*") goes back to the 3 stuiver coin struck in the Burgundian Netherlands from 1496. From the badge of the Golden Fleece (the ram's hide) and the coinage metal, it was called the silver fleece.

The Groningen stuiver gradually lost its importance in East Friesland, while in comparison the Brabantish stuiver turns up more frequently in the written sources. For example, in a house sale in Emden in 1524, the amount specified was "25 Rynsgulden, XX brabantische Str. voir eynen Gulden" i. e. 25 Rhenish gulden (*goldgulden*), at 20 Brabantish stuivers to the gulden. The intrusion of the Brabant stuiver was promoted by the



*The name of a denomination is derived from the Golden Fleece.*

large numbers of refugees forced by the political conflicts to leave the Netherlands and seek a new home in East Friesland.

Virtually all of the important coin-types of the East Frisian monetary system, as it operated in the second half of the 16th century, are represented in the Walle find: *witte*, *oortje*, *ciffert*,  $\frac{1}{15}$  and  $\frac{2}{15}$  *taler*, *flindrich* and *dicke penning*. It lacks only the Emden Brabants-stuiver, introduced in 1568 and equal in value to the Brabant stuiver.

The *dicke penning*,  $\frac{2}{15}$  *taler*, *flindrich* and  $\frac{1}{15}$  *taler* are multiples of 6, 4, 3 and 2 stuivers. The East Frisian *taler*, reckoned at 30 stuivers, was subdivided into several denominations in the same way as the Netherlandish Philip daalder: the *dicke penning* of 6 stuivers corresponded to a  $\frac{1}{5}$  daalder and the *flindrich* of 3 stuivers to a  $\frac{1}{10}$  daalder.

The flindrichs make up the largest share of the hoard, predominantly of the years 1583–1585. This 3-stuiver piece was first introduced in 1564. The Groningen double jager, of equal value, served as its prototype. Groningen had only resumed minting in 1560, after a long interval. As well as the double jager of 1562 and 1568, examples of stuivers and ¼ stuivers dated 1560 may be noted in the hoard. It appears from contemporary ordinances

for their production that the double jager "gelden sal veer Groninger stuiver, ofte drie Brabants stuiver" i. e. the double jager issued in Groningen at 4 stuivers corresponded to the East Frisian flindrich of 3 Brabant stuivers. A shift in value had thus occurred since the beginning of the century between the Groningen and the East Frisian stuiver (which matched the Brabantish stuiver), in that the latter lay 33% above the Groningen coin.



*Oortje and ciffert are among the smaller East Frisian denominations.*



*1/15 taler or schaf – only three of these coins are present in the hoard.*



*The hoard contains 108 2/15 talers – double schafs.*



*Flindrichs were struck on a large scale between 1583 and 1585.*

*The so-called dicke penning was rated as six Brabantish stuivers.*

*Two coins of the City of Groningen, stuiver and 1/4 stuiver, 1560.*



The East Frisian flindrich is analogous in exchange to the Groningen double jager, also known as flabbe. Only the coats of arms and the obverse legends indicate their respective origins. The name flindrich probably arises from the low German "Flinmerk" for the butterfly which was believed to be visible in the coat of arms.

The East Frisian 4-stuiver piece is the  $\frac{2}{15}$  taler, which was struck in large numbers, in 1572/73 (undated) and especially in 1579. The 108 specimens in the hoard testify to this. In contrast, the  $\frac{1}{15}$  taler of 2 stuivers is very poorly represented, with three pieces. The dicke penning of 6 stuivers is the

largest stuiver-type in this series. It is the only East Frisian silver denomination in the 16th century which bears the portrait of the land's ruler. The smallest coin present in the find is the East Frisian witte of  $\frac{1}{10}$  stuiver; the next higher values, the oortje and the ciffert of  $\frac{1}{4}$  and  $\frac{1}{2}$  stuiver, are much better represented.

The snaphaan is the only type of coin of medium size from the neighbouring northern Netherlands provinces, independent since 1581. Four specimens come from Guelders and one from Friesland. All five pieces date from the year 1582. With the Saxon reichstaler of the same date, they are the latest

*The illustrations show on the left the Groningen double jager of 4 stuivers and on the right the East Frisian flindrich of 3 stuivers, which is almost indistinguishable from it. Only the coats of arms and the obverse legends indicate their respective origins, the legends on the reverse are identical.*





*Portrait of Count Edzard II of East Friesland, presumably painted by the Netherlandish painter and copperplate engraver Hendrik Goltzius (1558–1616). The dicke penning (= 6 stuivers) shown beside it and also bearing the portrait of the Count is the only East Frisian silver denomination of the 16th century with the effigy of a territorial ruler.*



foreign coins in the hoard. Guelders introduced this 6 stuiver denomination with the ordinance of 11 October 1581. The silver rider, struck here at the beginning of the 16th century, served as prototype. The term *snaphaan* is a combination of the verb "*snappen*" and Haen, the proper name of the ringleader of a band of mounted highwaymen who carried out their rapacious excesses in Guelders. People transferred the name coined for this band to the coins, which likewise depicted Charles, Duke of Egmont, on horseback. The word is encountered in an official document as early as the coinage decree of 13 July 1525.

The denominations contained in the hoard are summarised in two tables in the appendix. One table covers the taler and its fractions, including the Spanish, French and Italian issues, the other the stuivers, together with a small number of earlier East Frisian coins. The taler table shows very clearly that apart from two East Frisian pieces, the large and medium-sized types originate exclusively from other territories, some of them far away.

*So-called snaphaan of the Province of Guelders, rated as 6 stuivers.*



Also, the full talers outweigh numerically the issues of half and quarter-talers. Denominations below the quarter-taler are not found. Of the smaller pieces, only the proportion of  $\frac{1}{5}$  and  $\frac{1}{10}$  Philip daalders is comparatively high: the lower values are absent.

The table of the various stuiver-types presents the opposite picture. Here the 313 specimens from East Friesland form almost the entire bulk. Neighbouring Groningen is, however, well represented with 19 pieces. The Netherlands stuiver issues of the Burgundian House all come from the end of the 15th and the first half of the 16th century; at this time they were the highest values issued in silver. The East Frisian portion of the medium-sized and small types is almost 90% and from this it is clear that where the hoard was buried the local small change circulated in greater quantity than comparable types of foreign currency. From this we see, as already mentioned elsewhere, that East Friesland needed the large types for long-distance trade.

## Die-identical East Frisian Coins

In the 16th century the manufacture of coinage was still largely carried out by hand. The mechanisation of individual operations was first gradually introduced around the middle of that century. Production of the two dies needed to strike a coin was a task carried out by the appropriate craftsmen, goldsmiths and ironcutters.

The prescribed designs were engraved in iron and the striking surfaces next hardened. Punches were used for certain frequently-recurring elements of the design, such as punctuation in the form of stops (· · ·), annulets (· ◊) and small crosses (× + ×), as well as the letters of the legend, numbers, and even for parts of the pictorial designs. Punches are understood to mean small metal rods on whose ends the details mentioned were carved in relief. The punches were used to strike the aforementioned details into the surface of the die, as yet unhardened. As a result, each of these hand-made dies has its own individual appearance, recognisable in the unequal spacing of the letters, the digits of the date not placed in alignment and the varying use of punctuation and ornamental marks.

The lower die was anchored in a wooden block by means of a long spike and the upper die was held free in the hand. Between the dies lay the flan, the flat coin blank to be struck. Insufficient hardening of the iron dies led to their rapid abrasion and thus to the necessity of making new coining irons as described above. It can thus be demonstrated that coins of a single year with similar designs can differ from each other in minute details, scarcely recognisable to the untutored eye.

Upper and lower dies had different lifetimes. The upper die, which received the hammerblows directly, had to be renewed more frequently than the lower die. The upper part of the die became increasingly frayed by the powerful blows. The burred-over metal fragments had to be removed from time to time since they represented a hazard to the mint personnel working in the workshop. The moneyers could injure their hands on the sharp edges, while flying fragments detached from the die might hit others in the eye.

*The enlarged details of these two coins, flindrichs dating from 1585, show clearly that the coins were struck with the same die. The coin hoard of Walle contains a great number of die-identical East Frisian flindrichs and 2/15 talers.*







*Upper die, severely worn and no longer suitable for striking coins. The protruding bulge was caused by powerful hammer blows.*

It follows that a series of coins can exist in which one side is completely identical, i. e. struck by the same die, while the other sides demonstrate the use of two or more different dies. In addition, a find can contain pieces which were struck using the same pair of dies, i.e. their obverse and reverse sides are completely identical.

The East Frisian coins contained in the Walle hoard were examined for die-identities and the result is reproduced in tabular form in the appendix. From the results obtained, the question arises as to how so many die-duplicate pieces got into the hoard. From the middle of the 16th century, the coins struck in Emden were put into circulation in Aurich, the residence of the counts. The large number of die-duplicate coins suggests the idea that the owner of the hoard, who lived in the

immediate neighbourhood of Aurich, obtained the pieces soon after their issue by the local ruler. He either obtained the money from the inhabitants of Aurich or, for whatever reason, directly from the count's treasury. In the close environs of the very place at which the coins were put into circulation, the likelihood of obtaining die-identical pieces was naturally very much greater than in a district which lay a long way from the point of issue.

# The Emden Mint

Pennies from the mid-11th century bearing on their reverse the name Amuthon (= Ehemünde, which in due course developed into Emden) represent the earliest evidence of coining in Emden. The first documentary mention of the Emden mint is found in 1244. A feudal document of King Henry VII issued in that year mentions in addition to other property *"monetam in Emethen"*.

The ensuing centuries are characterised by the issues of the East Frisian *"Häuptlinge"*, who had coins struck within the areas they controlled. Finally, the Cirksena family were able to resolve the struggle for predominance in East Friesland in their own favour. In 1464 the Emperor Frederick III elevated Ulrich Cirksena and his wife Theda to the rank of Count of the Empire. While mints in Norden, Esens and Emden were active under Ulrich I (1464–1466) and still in Norden and Emden under Theda (1466–1483), the sole place of minting under their son and successor Enno I (1483–1491) was Emden. This was confirmed in the 1491 coinage decree of his brother Edzard, who succeeded him.

Like Enno, all subsequent East Frisian rulers had their coins produced exclusively in Emden until the 17th century. Those coins which Count Edzard produced jointly with the city of Groningen form the only exception (cf. Catalogue, no. 15).

To avoid having to submit to the Saxon Duke George, who had inherited the title of Eternal Governor and Overlord of East Friesland from his father, Groningen had in 1506 concluded an alliance with Edzard I, who took the city into East Friesland's possession. The joint issues of the East Frisian count and the Netherlandish city, which



*The joint coinage of the City of Groningen and the County of East Friesland shows a 1/2 stuiver, struck at the Groningen mint in 1507.*

reflect these political circumstances, were only produced in Groningen. They bear the symbols of both parties to the treaty, the coat of arms of Groningen and the East Frisian harpy. These winged female creatures come from ancient mythology. According to Hesiod, they were two daughters of the Oceanide Electra and Thaumás, winged and swifter than the wind. When and why the East Frisian Cirksena family chose the depiction of one of these spirits of the wind for their coat of arms cannot be determined. The harpy appeared on the coins of East Friesland, at first exclusively and later as part of the arms, until 1744. The ruling family of East Friesland died out in that year and the land fell to Prussia.

Until the closure of the Emden mint and its transfer to Esens by Ulrich II (1628–1648), its coining activity was suspended twice, namely in the period from c.1540 to 1558 and later again from 1566 to 1568. In the first case, the suspension was voluntary, since Countess Anna, widow of



*Bird's-eye view of the City of Emden. Coloured copperplate engraving from: G. Braun and F. Hogenberg, Civitates Orbis Terrarum, Vol. 2, Cologne 1575. The view, dating from the years 1574/1575, shows Emden from the south. The numerous sailing ships on the Dollart in the foreground and on the Delft extending deep into the city indicate Emden's significance as a trading centre. Streets, houses and major buildings – such as the castle of the East Frisian counts, the Cirksena, in the south-west corner – are clearly to be seen in this plan. In the top corners of the sheet are depicted, on the left, the coat of arms of the counts and, on the right, the coat of arms of Emden.*

Enno II, was unable and unwilling to resolve to keep up the production of coinage during her regency as guardian of her under-age sons.

In the second case the mint had to be shut down, since *inter alia* the East Frisian counts came into conflict with the imperial coinage laws and had their minting rights suspended in 1566. Following repeated efforts by East Friesland and a promise henceforth to follow the imperial prescriptions, the emperor consented to the resumption of

coining in 1568. In addition, Counts Edzard II and John were awarded the appointment of their own die-engraver, for which they had already applied in 1567 to the Council of the Lower Rhenish-Westphalian District, to which East Friesland belonged. Three years later, in 1571, Emden was admitted as the fifth mint of the District, alongside Cologne, Aachen, Münster and Minden. According to the imperial rules, those coinage states of the Lower Rhenish-Westphalian District which had no precious metal reserves of



*Detail of the plan: residential and mint buildings of Mattheus Nycamer.*

their own now had to have their coinage struck at one of these five places.

Information concerning the location of the mint(s) in Emden survives from the end of the 15th century and from the 16th century. From the end of the 15th century the mint was no longer accommodated in a public building, but the mintmasters coined in their own houses or rented workshops. Two of these building-complexes are illustrated in an overall view of Emden produced in the years 1574/1575: the house of Mattheus Nycamer, who worked under Counts Enno I and Edzard I, and the property of Dietrich Iden, who was in the service of the counts of East Friesland from 1563.

The enlarged details of the coloured etching indicate that both mints were quite sizeable, imposing properties consisting of several buildings. Nycamer built the mint, which incorporates a strikingly tall tower, about 1500; on the plan it is clearly labelled "*Die Münze*" (the mint).

In 1572 Dietrich Iden bought in Neutor (New Gate) Street – not far from the spot where



*Detail of the plan: residential and mint buildings of Dietrich Iden.*

Emden Town Hall was erected shortly afterwards – a plot of land on which a house and the mint were built. The house bore the name "the promised Land".

Descriptions from the years 1576 and 1578 give an idea of the functions of individual buildings in Iden's property. According to these, the complex consisted of the tower, the mint house and the "*Loethaus*". Coining itself took place in the building to the north of the tower. The lower part of the latter acted as a storeroom for the wooden barrels necessary for the despatch of the coined money. In the upper part were stored jugs of aqua fortis, which was used in the preparation of the blanks. The "*Loethaus*" was probably the building in which the metal was smelted, alloyed and cast into strip-ingots.

The count's mint remained in the same spot until it was transferred to Esens under Count Ulrich II (1628–1648).

A contemporary pictorial representation, the so-called mintmaster's stone, illustrates the technical course of coinage manufacture in Emden.



*View of a 16th century mint; the operations shown here are explained in detail in the illustrations below and overleaf.*

Originally this relief, measuring 0.93 x 0.38 m, was built into the front of the complex described above as its gable stone. (It should be noted that the shield in the centre of the band bearing the date appears to be secondary, i. e. added subsequently by a later owner of the house.) The illustration shows that even in the second half of the 16th century the method of manufacture of a coin was almost identical with the procedure used since antiquity. Truly, cylinder and screw-presses were invented in about 1550 for the mechanisation of the coining process, but a long time was yet to pass before mechanical manufacture of coins became the rule. Only at Hall in Austria was the "hammered" coining shown here completely given up as early as 1571.

The sequence of operations depicted begins with the cutting-up of the prepared metal strips ("Zaine"). The preceding processes are not illustrated: smelting, alloying and casting of the coinage metals, and the hammering flat of the strip-ingots. The man standing on the right of the picture, perhaps the mintmaster himself, holds a strip in his left hand, which he cuts into pieces using a pair of shears. These shears were anchored

in a wooden block by one of their handles, so that only one hand was required to operate them. The same shears were next used to bring the pieces cut from the strips into the desired, approximately circular shape and to the stipulated weight. After this adjustment of the metal discs (not illustrated) these had to be prepared for striking. Their treatment could create sharp projecting edges, which had to be removed.





The mint worker ("*Obm*") sitting in the centre hammers the blanks flat on an anvil and thus gives their two sides the smoothness necessary for striking. Before being hammered out, each blank was dipped in a dish filled with water, known as the "*Quetschschale*". Whether the flat round container in front of the worker represents such a dish or is simply a storage container cannot be decided.



After being hammered flat, the edges of the blanks still had to be flattened. This is carried out by the man seated on the right. In his left hand he holds a device like a pair of tongs, between whose two jaws are wedged several blanks placed together in a roll. The blanks received their final desired form by being tapped with a wooden mallet, visible in his raised right hand.



The third journeyman, seated on a stool at the very left-hand edge of the scene, carried out the last and most important process: striking the coins. Between the man's legs may be seen a large round wooden block, above which projects the upper part of the lower die, securely fixed in it. Since the vibrations produced by the hammer-blows of the striking are transmitted to the block, it must be secured against splintering or splitting by broad encircling iron bands. The mint worker places the upper die upon the heated blank, which lies on the lower die, and holds a hammer in his upraised right hand. The blank acquires the coin design through one or more blows to the upper die.

One may well assume that the lower die bore the design of that side of a coin which was harder and took longer to engrave than that of the other side. This follows from the fact that the upper die, which was directly exposed to the hammer-blows, had a shorter lifetime than the lower die and as a result had to be replaced more often.

Lying in front of the workman on the block there is also a rectangular object. This is the so-called "Faßholz" or "Faßbrett", a form of wooden basin in which the prepared blanks or finished coins lay. The sack-like shape hanging under the wooden basin and apparently clamped to it may also have served to accommodate the coins already struck.

Only small or thin coins, in the striking of which the mint employee was able to hold the upper die in one hand and strike with a hammer held in the other, can have been struck using the method shown here. The production of larger and thicker pieces, such as talers, could not have been carried out in this manner, since a much higher relief was required, which at first could only be achieved using a sledgehammer or a drop-hammer.

In the middle of the scene stands the mint's apprentice with a jug in his left hand and a drinking-vessel held out in his right. In accordance with contemporary custom he is dressed in a clown's costume; two small bells are attached to its hem and likewise to the fool's cap which he is wearing on his head. As depicted, one of his duties was to provide the mintmaster and journeymen with wine.

Two mint journeymen from Iden's time are known by name, Johann Thomas and Dirk Kloppenburg. It would be going too far, though, to wish to identify these as two of the three workmen depicted on the relief. The illustration was



intended only as an indication of the activities carried out in the building-complex and not as an authentic rendering of specific persons.

Neither the relief nor contemporary sources give any information about the staffing levels of the Emden mint, the actual number of persons involved in the manufacture of the coins. However, one may presume that the Emden mintmaster's stone does not show all of the persons working on coinage manufacture, for the following reasons: in the year the stone was erected (1572) about 922,049 pieces in all were struck in the Emden mint, comprising about:

4,937	goldgulden
22,587	talers
10,813	double schafs
3,033	stuivers
176,777	cifferts
278,628	oortjes
290,106	witten
135,168	half-witten

The term "about" arises from the circumstance that the surviving production figures are often divided into periods covering two different years, for

instance May 1572 to April 1573. In these cases the number of pieces was divided by the number of months and the resulting simple arithmetical mean multiplied by the number of months falling in 1572.

Now, if one assumes that the coiner depicted carried out his work alone, his production would have been as follows:

about 922,000 pieces  $\div$  300 working days (surely somewhat too high)  $\div$  12 hours per day from Monday to Saturday (clear working time without breaks)  $\div$  60 minutes = 4 pieces per minute.

It is reasonable that this feat could not be achieved on grounds of effort alone. Moreover, the coiner would not have been able to achieve the production of over 22,000 talers without the help of an assistant.

One must also bear in mind that the persons depicted will also have had to carry out the activities which are not illustrated: smelting and alloying the metal, casting and hammering out the strips, as well as repeated annealing of the blanks and their cleaning. If in these considerations one takes into account the numbers from other mints (Hall in the Tyrol for instance had a complement of 30 in 1487), one comes inevitably to the conclusion that even in Emden there were more at work than are represented in the relief, but were not depicted, probably on grounds of space or perhaps cost.

We may gain information about the relationship between ruler and mintmaster from Dietrich Iden's certificate of appointment, issued by Countess Anna on 3 May 1563. This document demonstrates that Iden was no regular salaried official of the territorial ruler, as the 16th century coinage decrees required, but an entrepreneur

bound by contract to the ruler. As such, he had to pay the countess, as seigniorage, 10 schafs or 20 Brabantish stuivers for each mark of coined gold which left the mint and one schaf or 2 Brabantish stuivers for each mark of fine silver (the mark = the Cologne mark of 233.856 g).

The mintmaster's profit lay in the difference between the nominal value of the struck coins, allowing for seigniorage, and the costs of materials and manufacture. Consequently, to achieve the best possible profits, the mintmaster had to be in a position to buy the metal as cheaply as possible, keep the wages of the mint personnel low, and negotiate an acceptable price with the die-engraver for the preparation of the coining irons.

In accordance with Countess Anna's instructions, the coined pieces remained in the mint. There the warden (a person appointed by the ruler to superintend the mintmaster) had to record the stock and enter it in a book. When needed, the required sum was transported at the count's command to the Residence at Aurich. There survives an original requisition for 300 talers from Count Edzard II to Heinrich Meinerts, Dietrich Iden's predecessor.

A series of contemporary documents gives details of Iden's activities as East Friesland's mintmaster. From these it emerges that he had not worked exclusively for the counts of East Friesland, and apart from his receipts as mintmaster other sources of income were also available to him. Before Iden took up his activities in Emden in 1563, he had struck coins for Lady Maria of Jever since 1560. In his estate were found three certificates of appointment at Jever from the years 1560, 1565 and 1566, which show that Iden had coined at least twice more for Lady Maria after 1563. It is also recorded that, besides this, the Emden mint-



master also took part in trade in agricultural produce. Further earnings flowed to Iden from dealings in property.

In the course of his life, Iden was many times reproached for dishonest dealings, and an Antwerp creditor described him as a complete "bankrupt, cheat and perjurer". In 1577 Count John – brother and co-regent of Edzard II – even wished to execute the former mintmaster, who had in 1571 resigned his office in favour of his son, but Count Edzard II, Iden's patron and protector, was able to prevent this and secure his release in 1578.

The following incident demonstrates how close the relationship was between Edzard and his mintmaster: in 1574/76 Dietrich Iden's financial affairs had deteriorated so much that he sought to escape from his hopeless position by the secret production of a greatly debased reissue of the 1564 taler. To the arguments and warnings of his niece and mistress he replied that he was making these coins with the knowledge and approval of Count Edzard II. Edzard's part in this exceeded mere connivance, since he even lent Iden 6000 gulden for this secret and illegal activity and in addition gave him a letter of recommendation with the help of which Iden was able to obtain a further 3000 gulden in Emden. The "bösen Taler", large numbers of which were produced, were probably shipped to Danzig, where they could be sold profitably as "genuine" issues.

After the events of the years 1577/78 referred to above, Dietrich Iden lived for about another 15 years, in which he remained active in East Frisian monetary affairs, probably mostly as an adviser.



*The mark of the mintmaster Dietrich Iden, who worked at the Emden mint from 1563. It shows a hook, the tool used for transporting the red-hot metal strips ("Zaine") in the mint, combined with a four-leafed clover. By this mark, which is always to be found in the legend – either at its beginning or at its end – the products of mintmaster Iden can be unequivocally identified. Each mintmaster had his own mark.*

# Value, Purchasing Power and Origin of the Hidden Money

One of the most interesting questions posed by a treasure trove, apart from that of the owner, concerns the value formerly represented by the concealed coins. While the first question invariably remains unanswered, the second can be settled in many cases. In determining the value which a coin hoard possessed at the time of its concealment, one normally attempts to convert the foreign types included in the hoard into the local denominations current at the time in the area of the find. For relatively recent times this procedure is quite promising, using the numerous surviving documentary sources at one's disposal, but for earlier periods it raises considerable problems. However, a fairly reliable result can be obtained if the number of domestic and foreign types is limited and the interval between the oldest and the youngest coin is not too great. In these circumstances a conversion into a single unit of account can perhaps be effected by means of contemporary tariffing-books, valuation placards and private records.

This technique is largely or wholly inapplicable in the case of the Walle find: valuations in East Frisian currency are not available from the sources for many of the foreign coins, especially for the older pieces and those which come from distant lands. In addition, there is a requirement (which cannot be met) that the value of all types must be known at a specific time – the date of the latest coin. Valuations from an earlier period may differ considerably from later assessments, so that a reliable picture cannot be obtained.

In the present case the method of determining the value of the hoard on the basis of the amount of precious metal included in it promises to be more successful. The standards prescribed for the vast



Adam Berg, *New Müntz Buech*, Munich 1597. – Page 66 shows, as wood-cuts, coins of the Counties of Horn and East Friesland. Coinage books such as this, sometimes of considerable size, in which the authors included all the coins they could reach, were issued from the end of the 16th century. They imparted to merchants the necessary basic knowledge about the circulating currency.

majority of the pieces are known, i. e. one knows how many grams of fine silver a coin should contain, according to regulation. For pieces whose fineness is not known, one can be more or less sure of their coinage standard on the basis of their geographical origin. Their number is so small, however, that they do not seriously affect the result. If even this criterion is lacking, the present silver fineness can be determined by physical methods.

A second uncertainty factor to be taken into account lies in the circumstance that many pieces were issued below standard, with a somewhat lower fineness than prescribed. The analyses and calculations yielded the results summarised in the table below. The table shows that the number of East Frisian coins is almost exactly twice as large as the number of foreign pieces represented in the hoard. However, considered from the point of view of value, a quite different picture emerges. Compared with the foreign coins, the domestic currency represents barely 40% of the entire value of the hoard. This fact is not so surprising, however, because the East Frisian part consists almost without exception of pieces of medium and small

1530–1580, of which only a single piece came from East Friesland; all other coins were of foreign origin. Here too, like the Walle find, the issues of King Philip II of Spain formed the largest portion of the foreign types in the hoard. The value of the Esens hoard may be calculated to have lain between 95 and 99 reichstalers.

The purchasing power of the sum calculated for the Walle find cannot be determined for the 1580s since no information on prices and wages exists for this period. We are only well informed about circumstances around the middle of the century and the time around 1600. But the following table illustrates what great changes prices may undergo

	Number	Gross weight	Fine weight	Value in reichstalers	Percentage of true value
All foreign coins	153	1893.87 g	1602.48 g	61.68129	71.46239
All East Frisian coins	315	1032.62 g	639.93 g	24.6314	28.53761
Total	468	2926.49 g	2242.41 g	86.31293	100.00000

size, whereas the foreign part contains a multitude of large silver denominations.

Allowing for the uncertainties outlined above, one may say with all due caution that the value of the assets, calculated at 86⅓ reichstalers, lay between 85 and 87 reichstalers. With a single exception, there are no similar contemporary finds from the East Friesland area which may be used for a comparison. The Esens hoard, buried after 1580, contained 113 talers and half talers of the period

over a short period (the prices are expressed in reichstalers):

	1597	1602
1 pound of sheep's wool	0.11	0.11
1 tonne of rye	4.44	2.96
2 beef carcasses	19.63	34.81

Steady, high or low prices were on the one hand the result of supply and demand but on the other hand depended much more than nowadays on agricultural success or failure: losses from crop failure and cattle disease could hardly be offset

2.

Anno 63.	
Der guldent. zu	15. L.
Anno 65.	
Der guldent. zu	15 1/2 L.
Anno 72.	
Der guldent. zu	17 L.
Der guldent. zu	15 1/2 L.
Anno 78.	
Der guldent.	18 L.
Der philip. guldent.	17 1/2 L.
Der philip. guldent.	19 L.
Der rindenguldent.	12 L.
Der künig. guldent.	11 L.
Der künig. guldent.	16 L.
Anno 80.	
Der guldent. zu	16 L.
Anno 81.	
Der guldent. zu	21 L.
Anno 86.	
Der guldent.	25 L.
Der guldent.	22 1/2 L.
Anno 92.	
Der guldent.	27 L.
Rindenguldent.	18 L.
künig. guldent.	26 1/2 L.
künig. guldent.	24 L.

Survey of coin valuations for the years 1563-1592 from the Aurich archives, dating from the end of the 16th century. During the second half of the 16th century the value of the gold and large silver coins rose continuously. The reichstaler, for instance, was valued in 1578 at 16 schafs = 32 stuivers; 14 years later it was rated at 24 schafs = 48 stuivers, i. e. its value increased by 50% within this relatively short time.

by favourably-priced substitutes from some distance away. As a result, the price data preserved from earlier periods can only reflect conditions at the moments specified and permit no conclusions at all to be drawn about conditions shortly before or after the years in question.

The situation is similar with regard to information on wages. It appears from the account books of an

East Frisian monastery that around 1600 the farmhands received annual wages which work out at between 3.8 and 5 reichstalers. It can be seen that even the figures for one and the same time can vary considerably.

Wages and prices are thus "snapshots" which can only say something about conditions in a given place at a given time. Information on the economic

and social situation in a larger region can only be gained from the analysis of a large number of facts, but for earlier times these are, as a rule, unavailable. If it is impossible to infer conditions in 1585 (the date of the latest coins in the hoard) from data on the period around 1600, it is all the more impossible to determine the value of the hoard in present-day terms. The economic and social changes which have taken place since then are so profound that not even an approximately correct figure can be calculated. Two examples may illustrate this:

1) The permanent staff of Barthe monastery in 1597 included a master builder. He stood at the top of the wage-scale, a long way above other employees, with an annual salary of 24 Emden gulden. In the same year, the monastery obtained the same sum (24 gulden) by selling a little two-year-old mare. The master builder would thus have had to disburse his entire annual salary to buy the animal.

2) Likewise, in 1603 some bricklaying had to be done at Barthe monastery. The master mason's wages were 4 schafs (double stuivers) per day for an eight-day job. If one compares this with the price of a beef carcass, which was between 11 and 15 reichstalers, the mason would have had to work for between 74 and 101 days, or  $2\frac{1}{2}$  to 3 months, to buy one. In comparison, the monthly average earnings of a present-day master mason (foreman) are between 3,500 and 4,000 German marks, and the price of a beef carcass is about 1,800 German marks. The beast thus roughly represents the equivalent of half a month's salary. This example alone shows how much relationships have shifted and that any attempt to calculate the present-day value of a coin hoard from an earlier period is doomed to failure from the start.

The question as to how the hoard's concealer collected his capital cannot be answered with absolute certainty. The economic basis of the farm must have been arable and stock farming, as in all geest farms. Nearby Aurich was then the most important centre of the cattle trade in the North Sea region. Seven cattle markets a year were held there during the second half of the 16th century, to which there came buying agents from as far afield as the Netherlands and Westphalia. Buying and selling outside these markets was forbidden by decree of the Count. Selling cattle is thus a possible way the concealer could have obtained his money. In this connection one may suppose that the acquisition of the assets was directly associated with the rapid increase in Emden's population from the middle of the 16th century. This was based on the influx of Netherlandish emigrants who moved to Emden during the course of the war between Spain and the Netherlands. Starting around the middle of the 1540s, the number of immigrants had reached a figure of c. 2,000 to 3,000 by the middle of the 1560s. This number increased again between 1569 and 1573 to over 5,000; as a result, the population of Emden doubled within a period of barely 30 years.

The area around Emden had to meet an increased demand for foodstuffs, as well as for building materials and fuel. The Netherlandish immigrants, well funded and equipped with good trading contacts, not only helped the city of Emden to achieve prosperity: the inhabitants of the plain also profited from this growth. The incoming Netherlandish capital is reflected very clearly in the coins contained in the hoard. One can therefore conclude with some certainty that the owner of the hoard owed part of his wealth to the very events described.

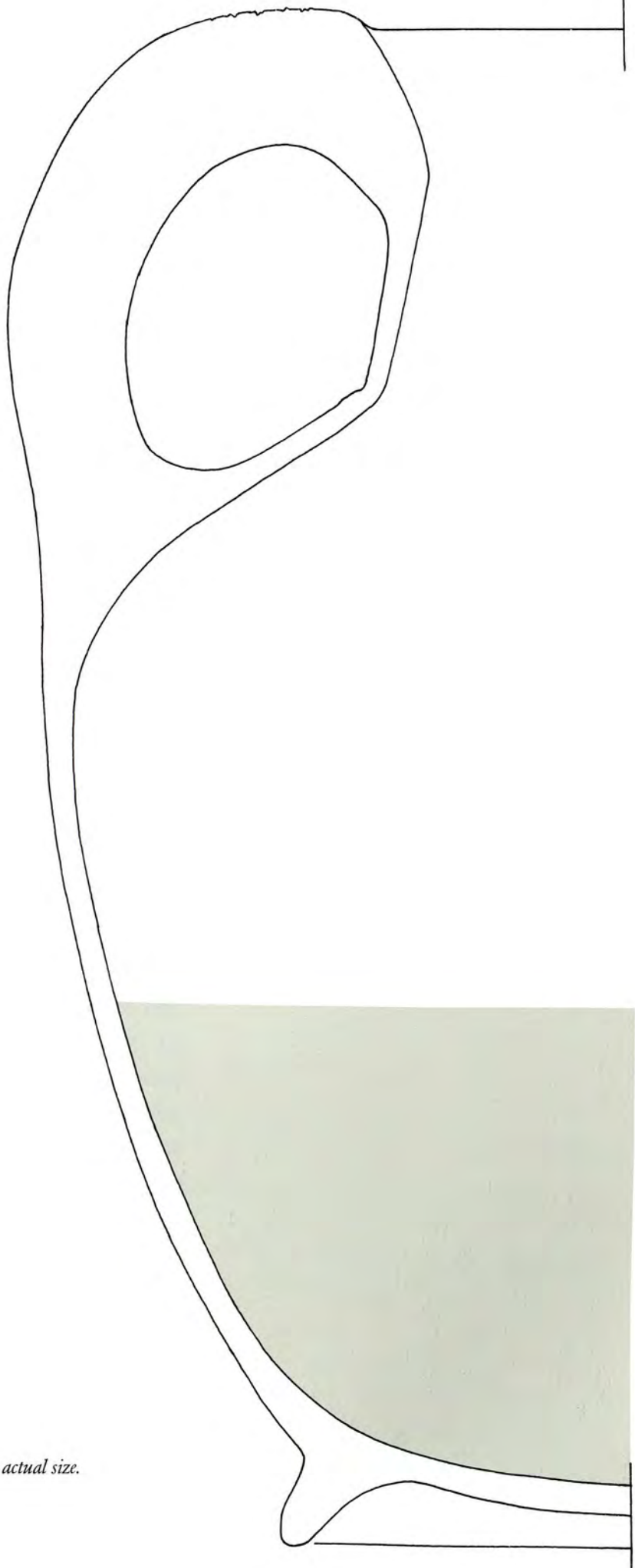
The proportion of East Frisian coins increases in the last years before the hoard was buried.

We may presume that the  $\frac{2}{15}$  talers of 1579 and the flindricks of the years 1583 to 1585 were used in the payment of larger sums, in the light of the many die-links observed. Both sorts were evidently the highest local denominations in circulation in East Friesland at the end of the 1570s and during the 1580s. Taken together, the quantity of the two sorts represents a calculated value of about  $15\frac{1}{2}$  reichstalers, more than one-fifth of the total value of the hoard. As already explained elsewhere (see p. 61) the concealer of the hoard most probably obtained this money in Aurich.

To summarise: 87.4% of the coins originate from the years between 1561 and 1585, of which the last ten years alone furnish a proportion of 59%. Beginning in the 1560s, the concealer of the hoard managed to get hold of a much larger range of money – more specifically, of foreign money. The commencement of his accumulation of capital and the economic development of Emden appear to be causally connected. It was only later on, in the last ten years, that larger sums of domestic coinage were added.

The lack of flindricks of 1590 supplies a clue as to the date of burial of the hoard. This denomination was not struck in East Friesland between 1585 and 1590. With the resumption of the striking of flindricks in the last decade of the 16th century, examples of this issue would be expected in the find, but since these (as well as still later coin types) are absent, the hoard must have been buried between 1585 and 1590.

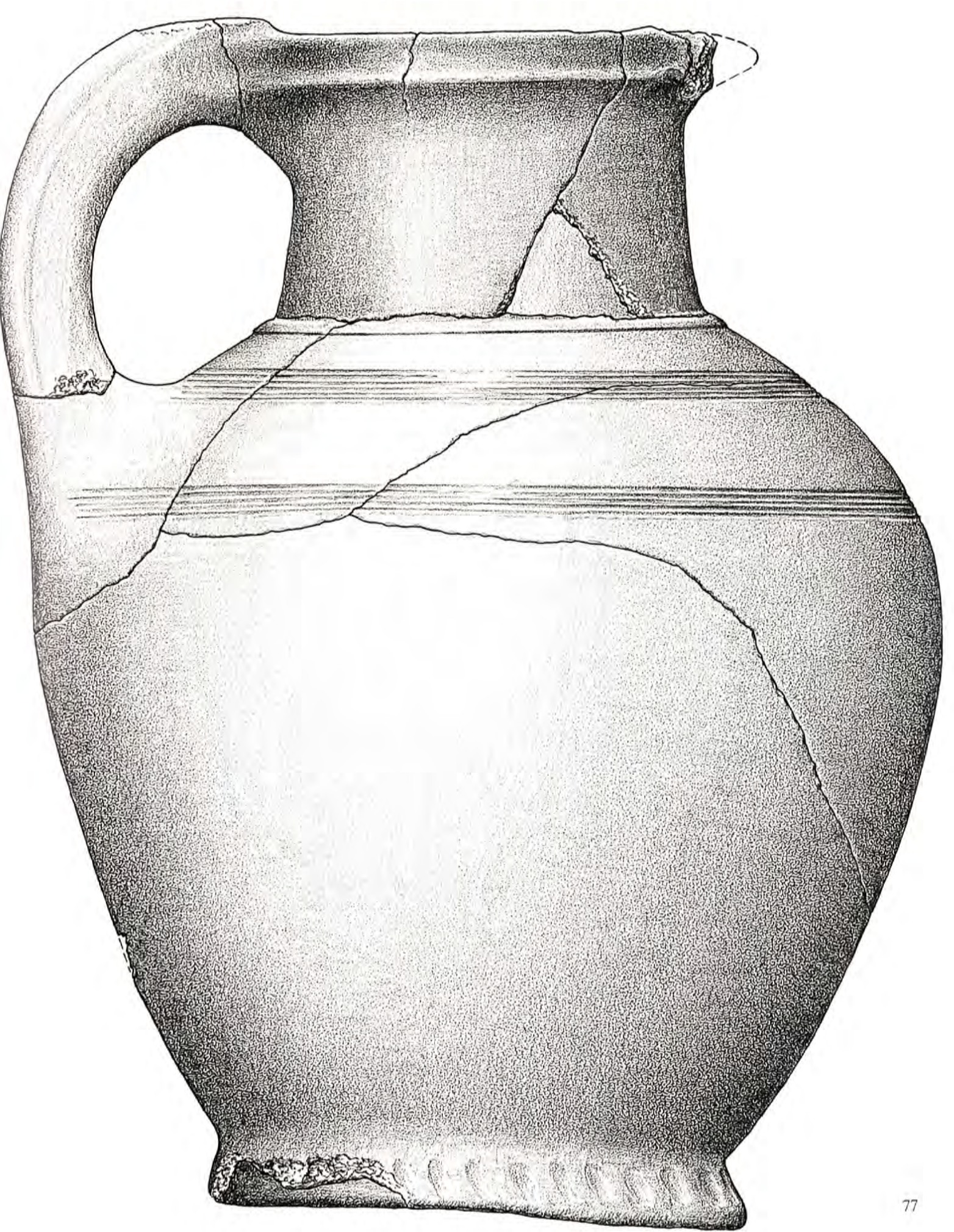
# Catalogue



The 468 coins  
filled the jug c. 8 cm high.

*Sectional drawing and drawing of the jug at actual size.*





## Introductory notes to the catalogue

The coin design as a whole is described from the point of view of the observer, as is usual nowadays, except that figures are dealt with in the opposite (heraldic) fashion: for instance, the right hand of a standing figure lies in the left half of the coin design. The date of issue is as a rule stated on the coins and is indicated in the description after the name of the coin. Dates in brackets indicate that the date of production has been inferred from information on the coin itself or from other sources.

Letters of the legends which do not survive or are illegible are indicated by dots, and in the expansions of the legends such parts are placed in square brackets. Only in the case of the very poorly struck East Frisian coins is an uncertain letter marked with a question mark at the appropriate point in the legend since, given the multiplicity of variants, the letter in question cannot be identified. The illustrations in the catalogue are at actual size.

	Page
Habsburg Lands	80
King Ferdinand I, 1531–1558	
Emperor Ferdinand I, 1558–1564	
Electorate of Saxony	81
Augustus I, 1553–1586	
Bishopric of Halberstadt	83
Albrecht of Brandenburg, 1513–1545	
Bishopric of Liège	84
Cornelius of Berghes, 1538–1544	
Robert of Berghes, 1557–1564	
Gerard of Groesbeeck, 1564–1580	
Abbey of Stavelot-Malmedy	86
Christopher of Manderscheid, 1545–1576	
Abbey of Thorn	87
Margaret of Brederode, 1557–1577	
County of Horn	88
Philip of Montmorency, 1540–1568	
County of East Friesland	89
Joint coinage of Edzard I, 1491–1528, and the City of Groningen	
Enno II, 1528–1540	
Edzard II, Christopher and John, 1558–1566	
Edzard II and John, 1566–1591	
Imperial City of Aachen	117
Imperial City of Cologne	118
Imperial City of Lübeck	119
Imperial City of Nijmegen	120
Imperial Cities of Deventer, Campen and Zwolle	121
Duchy of Brabant	122
King Maximilian I, for Philip the Fair, Duke of Burgundy, 1482–1494	
Emperor Charles V, 1506–1555	
King Philip II of Spain, 1555–1598	
Duchy of Guelders	131
King Philip II of Spain, 1555–1598	
County of Flanders	135
Philip the Fair, Duke of Burgundy, 1494–1506	
Emperor Charles V, 1506–1555	
King Philip II of Spain, 1555–1598	
County of Holland	140
Emperor Charles V, 1506–1555	
King Philip II of Spain, 1555–1598	
Lordship of Utrecht	145
King Philip II of Spain, 1555–1598	
Lordship of Overijssel	148
King Philip II of Spain, 1555–1598	
Province of Guelders	150
Province of Holland	152
Province of Friesland	153
City of Groningen	154
Kingdom of France	158
Charles IX, 1560–1574	
Kingdom of Castile	159
Isabella I of Castile and Ferdinand I of Aragon, 1474–1504	
Kingdom of Spain	161
Philip II of Spain, 1555–1598	
Spanish Colonial Empire: Mexico	162
King Philip II of Spain, 1555–1598	
Duchy of Milan	163
Emperor Charles V, 1506–1555	

# Habsburg Lands

King Ferdinand I, 1531–1558

1

1/4 taler, 1557  
Mint: Prague  
Mintmaster: Ludwig Neufahrer  
Literature: Markl 748. –  
von Miller z. Aichholz p. 40

Weight: 6.90 g –  $\varnothing$  29.0 mm



*Obverse:* FERDINAN · D · G · R – O · BOE · HVN · REX rose (mintmaster's mark)  
(Ferdinandus dei gratia Romanorum Bohemiae Hungariae rex)

Crowned bust, right, holding a shouldered sceptre with his right hand and the sword-hilt with his left; in the field, left and right, the date 15 – 57 and below, in the legend, the mint mark: a small shield with a crowned F

*Reverse:* INF · HISPA · ARCHIDVX · AVSTRIE · DVX ☉

(Infans Hispaniarum archidux Austriae dux)

Single-headed uncrowned eagle; on its breast a shield quartered with the arms of Bohemia/Hungary charged with Austria/Castile

Emperor Ferdinand I, 1558–1564

2

Taler, 1560  
Mint: Joachimstal  
Mintmaster: Ruprecht Puellacher  
Literature: Markl 888. –  
von Miller z. Aichholz p. 43

Weight: 27.95 g –  $\varnothing$  39.6 mm



*Obverse:* ✦ FERDINANDVS · D · G · EL – RO · IMP · S · AVG · GER · H  
(Ferdinandus dei gratia elector Romanorum imperator semper augustus Germaniae Hungariae)

As 1, but dated 15 – 60 and with mintmark a small shield bearing the arms of Austria

*Reverse:* · BOHEM · & · REX · INF · HISP · ARCHID · AVS · & ·

(Bohemiae etc rex infans Hispaniarum archidux Austriae etc)

Crowned double-headed imperial eagle; on its breast a shield quartered with the arms of Bohemia/Hungary charged with Austria/Castile

# Electorate of Saxony

Augustus I, 1553–1586

3

Reichstaler, 1582  
Mint: Dresden  
Mintmaster: Hans Biener  
Literature: Schnee 725. –  
Haupt p. 223

Weight: 29.18 g –  $\varnothing$  40.0 mm



*Obverse:* Imperial orb · AVGVSTVS · D · G · DVX · SAXO · SA · ROMA · – IMP ·  
(Augustus dei gratia dux Saxoniae sacri Romani imperii)  
Hip-length portrait in armour with a shouldered sword, right; in the field, left and right,  
the date 15 – 82

*Reverse:* · ARCHIMARS – CHAL · ET · ELEC  
(Archimareschallus et elector)  
Complex coat of arms, with three helmets and ornamentation; above right, the mint-  
master's initials HB

4

1/4 taler, 1554  
Mint: Freiberg  
Mintmaster: Andreas Alnpeck  
Literature: Haupt p. 222. –  
Merseburger 705

Weight: 6.79 g –  $\varnothing$  29.3 mm



*Obverse:* · AVGVSTVS · D · G · DVX · SAX · SA · RO · IMPERI  
Bust in elector's robes with shouldered sword, right

*Reverse:* · ARCHIWARSCHALLI · ELECTOR eagle's head (mintmaster's mark)  
Shield bearing the elector's and ducal arms of Saxony; beside it, left and right,  
the date 15 – 54

5

1/4 taler, 1568  
Mint: Dresden  
Mintmaster: Hans Biener  
Literature: Haupt p. 223. –  
Merseburger 710

Weight: 7.09 g –  $\varnothing$  29.6 mm



*Obverse:* ❖ AVGVSTVS · DEI · GRA – TIA · DVX · SAXO – NIAE  
Bust in elector's robes with shouldered sword, right; in the field, left and right, the date 15 – 68; below, in the legend, the electoral and ducal arms of Saxony

*Reverse:* ❖ SACRI · ROM · IMP · ARCHIM · ET · ELECT ❖ HB (mintmaster's initials)  
Shield bearing the electoral and ducal arms of Saxony

# Bishopric of Halberstadt

Cardinal Albrecht of Brandenburg as Administrator, 1513 – 1545

6

Taler, 1538  
Mint: Halberstadt  
Mintmaster: Hans Tornau  
Literature: Thaler-Cabinet  
Schulthess-Rechberg 4257

Weight: 28.28 g –  $\varnothing$  40.7 mm



*Obverse:* ALBERT ▼ CARDI ▼ ADMI ▼ HALBER ▼

(Albertus cardinalis administrator Halberstadiensis)

Beneath a cardinal's hat, a shield quartered with the arms of Brandenburg, Pomerania-Stettin, Nuremberg and Hohenzollern, with inescutcheons of Mainz, Magdeburg and Halberstadt; behind the arms a sword and crosier

*Reverse:* Mintmaster's mark tower – SANCT ▼ STEF – ▼ PROTO ▼ MARTIR ▼

(Sanctus Stefanus protomartyr)

Stephen (patron saint of the bishopric) nimbate, in deacon's vestments, holding a palm in his left hand and three stones in his right; in the field, left and right, the date 15 – 38

# Bishopric of Liège

Cornelius of Berghes, 1538–1544

7

Denier of 16 aidants, n. d.  
Mint: Hasselt  
Literature: Chestret de Haneffe 461

Weight: 5.19 g –  $\varnothing$  33.5 mm



*Obverse:* Branch with two leaves CORNELIVS • DE • BERGES • EPS • LEODIE  
(Cornelius de Berghes episcopus Leodiensis)  
Ornamental shield bearing the arms of Brabant, Berthout and Bautoershem

*Reverse:* DVX • BV – ILONE – ET • COM • – LOSSE'  
(Dux Bulloniensis et comes Lossensis)  
Cross fleury

Robert of Berghes, 1557–1564

8

Sprenger (1/4 taler), n. d. (c. 1560)  
Mint: Liège (?)  
Literature: Chestret de Haneffe 506

Weight: 7.09 g –  $\varnothing$  32.3 mm



*Obverse:* ROBERTVS • A • BERGIS • EPS • LEOD  
(Robertus a Berghes episcopus Leodiensis)  
Helmeted shield bearing the arms of Brabant, Berthout and Bautoershem

*Reverse:* DVX • B – VLLON – COMES – LOSSE'  
Cross fleury



Gerard of Groesbeeck, 1564–1580

9

Reichstaler, 1570  
Mint: Hasselt  
Mintmaster: Balthasar von  
Bomershoven (?)  
Literature: Chestret de Haneffe 514

Weight: 29.24 g – ø 41.0 mm



*Obverse:* GERARD' • A • GROISB' • EP' • LEO' • D' • BVL' • CO' • LOSS  
(Gerardus a Groesbeeck episcopus Leodiensis dux Bullionensis comes Lossensis)  
Helmeted shield bearing the arms of Groesbeeck

*Reverse:* MAXIMIL' • II' • ROMA' • IM' • SEM' • AVG' • 1570  
(Maximilianus II Romanorum imperator semper augustus)  
Crowned double-headed imperial eagle

# Abbey of Stavelot-Malmedy

Christopher of Manderscheid, 1545–1576

10

Reichstaler, 1570  
Mint: Poulseur  
Mintmaster: Hermann Bex  
Literature: Chestret de Haneffe, Stavelot et  
Malmédy 9 var. – Delmonte 511

Weight: 29.00 g –  $\varnothing$  40.8 mm



*Obverse:* CHRIS' • CO' • A • MAND' • D' • G' • AB' • STAB' • ET' • PR  
(Christophorus comes a Manderscheid dei gratia abbas Stabulensis et Prumensis)  
A helmeted ornamental shield quartered with the arms of Manderscheid, Blankenheim and Schleiden charged with Daun; above the embellishment of the helmet, a small shield bearing the arms of Blankenheim

*Reverse:* ✦ MAXIMILP' • II' • ROMA' • IMP' • SEM' • AVGVSTV  
(Maximilianus II Romanorum imperator semper augustus)  
Crowned half-length portrait of the emperor, right, his right hand holding a shouldered sceptre, his left the imperial orb; in the field, left and right, the date 15 – 70

11

1/2 reichstaler, 1569  
Mint: Poulseur  
Mintmaster: Hermann Bex  
Literature: Chestret de Haneffe, Stavelot et  
Malmédy 10 var. – Delmonte 512

Weight: 14.47 g –  $\varnothing$  33.6 mm



*Obverse:* CHRIS' • CO' • A' • MAND' • D' • G' • AB' • STAB' • ET' • P'  
As 10

*Reverse:* ✦ MAXIMILP' • II' • ROMA' • IMP' • SEM' • AVGVST  
As 10, but dated 15 – 69

# Abbey of Thorn

Margaret of Brederode, 1557–1577

12

Reichstaler, 1569

Mint: Thorn

Literature: v. d. Chijs, Brabant en Limburg  
p. 203 no. 22 var. – Delmonte 774

Weight: 28.96 g –  $\varnothing$  40.5 mm



*Obverse:* MO · LIB · IMPERIA · FVNDAT · I · THORE'

(Moneta liberi imperialis foundationis in Thoren)

Ornamental shield quartered with the lion arms; above it a half-length portrait of the Virgin Mary with the infant Jesus, between the date 15 – 69; to the sides of the shield the letters M – IB (Margaretha de Brederode). The legend is interrupted by three small shields bearing a lion, an eagle and the arms of Brederode

*Reverse:* MAXIMILIA · II · ROMA · IMP · SEM · AVGVST

(Maximilianus II Romanorum imperator semper augustus)

Crowned double-headed eagle with the imperial orb on its breast

13

Reichstaler, 1570

Mint: Thorn

Literature: v. d. Chijs, Brabant en Limburg  
p. 203 no. 23. – Delmonte 774

Weight: 29.00 g –  $\varnothing$  40.6 mm

*Obverse:* MO · LIB' · IMPERIA' · FVNDAT · IN · THORE'

As 12, but dated 15 – 70

*Reverse:* MAXIMILIA · II · ROMA · IMP · SEM · AV

As 12

# County of Horn

Philip of Montmorency, 1540–1568

14

Daalder, n. d. (c. 1560–1567)

Mint: Weert

Literature: v. d. Chijs, *Brabant en Limburg*  
p. 141 no. 13 var. – Delmonte 751

Weight: 28.42 g –  $\varnothing$  41.3 mm



*Obverse:* PHILIPPVS • A • MONTMOR - E' • CO' • D • HORN

(Philippus a Montmorency comes de Horn)

Helmeted shields bearing the arms of Montmorency and Horn, inclined towards each other; the shield of Montmorency is surrounded by the collar of the Order of the Golden Fleece, whose jewel projects into the inscription; between the shields, an ornament

*Reverse:* SANCTVS • MARTIN - PATRONVS • WERDEN'

(Sanctus Martinus patronus Werdensis)

St. Martin on horseback riding to the left, cutting his cloak with his sword; beneath the horse, a beggar

# County of East Friesland

## Joint coinage of Edzard I, 1491–1528 and the City of Groningen

15

1/2 stüber, 1507  
Mint: Groningen  
Mintmaster: Johann Braemsche (?)  
Literature: Kappelhoff 108

Weight: 1.24 g – ø 27.5 mm –  
rim broken away



*Obverse:* † MΘ • NΘ • CΘ..... – 'Z' – SENΛT' • GRΘ'  
(Moneta nova comitum et senatus Groningensis)

The arms of East Friesland (a harpy) and of Groningen leaning against each other beneath a double eagle

*Reverse:* • ΛNΔΘ – ΔΘIII • MCCC – CC • VII •  
(Anno Domini 1507)

An ornamental cross, dividing the legend

## Enno II, 1528–1540

16

Schaf, n. d. (before 1532)  
Mint: Emden  
Mintmaster: Hinrich  
Literature: Kappelhoff 164

Weight: 2.69 g – ø 29.6 mm – pierced



*Obverse:* ENNO : CO' : ET : DNS' : PHRSIE : ORGE' -  
(Enno comes et dominus Phrisiae Orientalis)

Helmet with a lily as crest

*Reverse:* ✚ IN ✚ DEO ✚ SPERA' ▶ NO ✚ TIME' ▶ Q' ▶ FACI' ▶ M' ▶ H'  
(In deo speravi, non timebo, quid faciat mihi homo)

Harpy in a scalloped shield

17

Schaf, 1532  
 Mint: Emden  
 Mintmaster: Martin Nycamer  
 Literature: Kappelhoff 177

Weight: 2.37 g – ø 30.8 mm – pierced



*Obverse:* ... NNO ♣ C ..... T ♣ DNS' ♣ PHRSIE ♣ ORIENT ♣  
 (Enno comes et dominus Phrisiae Orientalis)  
 Helmet with a lily as crest

*Reverse:* ♣ DA ♣ PACEM ♣ DOMIN ..... NOST  
 (Da pacem domine [in diebus] nostris)  
 Harpy in a scalloped shield; above, 153Z

18

Ciffert, 1530  
 Mint: Emden  
 Mintmaster: Hinrich  
 Literature: Kappelhoff 159

Weight: 0.69 g – ø 23.7 mm –  
 pierced and rim broken away



*Obverse:* ..... RISIE · ORG .....  
 ([Enno comes et dominus] Phrisiae Orientalis)  
 Harpy in a scalloped shield

*Reverse:* outer: ..... OMINE · IN · D .....  
 ([Da pacem] domine in diebus [nostris])  
 inner: ANO – · DNI – MD – · .... XX  
 (Anno domini 1530)  
 Cross with divided ends; in its centre, a quatrefoil containing a pellet

19

Krummsteert, 1529  
Mint: Emden  
Mintmaster: Hinrich  
Literature: Kappelhoff 151

Weight: 1.50 g –  $\varnothing$  25.5 mm – pierced



*Obverse:* † ENN ..... CO · ET · DN · PHRSIE · ORGE  
(Enno comes et dominus Phrisiae Orientalis)  
Harpy in a scalloped shield

*Reverse:* outer: · DA · PACEM ... E · IN · D ..... NO  
(Da pacem domine in diebus nostris)  
inner: · ANNO · DOE · 1 · 5 · .... 9  
(Anno domini 1529)

Small lily-cross, whose petals are united as a form of four-petalled rose

---

20

Witte or its half (uncertain), n. d.  
Mint: Emden  
Mintmaster: Johann (?)  
Literature: Kappelhoff 148/149

Weight: 0.49 g –  $\varnothing$  17.8 mm –  
pierced and rim broken away



*Obverse:* · E · COM · & · DNS · PHRI · ORIEN  
(Enno comes et dominus Phrisiae Orientalis)  
Harpy in a quatrefoil with inset spikes

*Reverse:* · D .... ACE · DOM · IN · DIE · NOS  
(Da pacem domine in diebus nostris)  
Cross, its ends undivided, with lilies in the angles

---

Edzard II, Christopher and John, 1558 – 1566

21

Taler, 1564 (later striking of 1574/76)  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 205

Weight: 27.78 g – ø 41.5 mm



*Obverse:* † MO • EDZ • CR • IO • C • E • D • PH • O • DA • PA • D • I • DI • N  
(Moneta Edzardi Christophori Johannis comitum et dominorum Phrisiae Orientalis.  
Da pacem domine in diebus nostris)  
Harpy

*Reverse:* ✠ FERDI ✠ ROMA ✠ IMPERA ✠ SE ✠ AVGVSTVS  
(Ferdinandus Romanorum imperator semper augustus)  
Hip-length portrait of the emperor, right; in the field, left and right, the date 15 – 64

22

Dicke Penning, 1562  
Mint: Emden  
Mintmaster: Heinrich Meinerts  
Literature: Kappelhoff 185

Weight: 7.05 g – ø 30.7 mm



*Obverse:* ♠ EDZ • CHR • IOH • CO • ET • DO • PHRI • ORI •  
(Edzardus Christophorus Johannes comites et domini Phrisiae Orientalis)  
Bust of Edzard, three-quarters left

*Reverse:* Lily DA • PACE • DNE • IN • DIEBVS • NOS • 156Z  
(Da pacem domine in diebus nostris 1562)  
Harpy



23

Flindrich, n. d. (from 1564)  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 198

Weight: 4.16 g – ø 30.8 mm



*Obverse:* ★ MO • EDZ – CHRI • IO – CO • E • DO – PHR • OR  
(Moneta Edzardi Christophori Johannis comitum et dominorum Phrisiae Orientalis)  
Richly decorated harpy arms on a three-armed cross

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEBVS • NOSTRIS  
(Da pacem domine in diebus nostris)  
Small harpy arms in an ornamental quatrefoil on a cross fleury

24

Weight: 3.82 g – ø 29.9 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEB • NOSTRIS

25

Weight: 4.23 g – ø 30.7 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEB • NOSTRIS •

26

Weight: 4.13 g – ø 30.5 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEB • NOSTRI

27

Weight: 4.11 g – ø 30.9 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEBVS • NOSTRI

28

Weight: 4.25 g – ø 30.8 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEBVS • NOST

29

Weight: 4.19 g – ø 29.5 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACEM • DNE • IN • DIEB • NOSTRIS

30

Weight: 4.17 g – ø 31.2 mm

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACE • DNE • IN • DIEBVS • NOSTRIS

31

Weight: 3.97 g – ø 30.0 mm – pierced

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACE • DNE • IN • DIEBVS • NOSTRIS

32

Weight: 4.18 g – ø 31.2 mm – pierced

*Obverse:* ★ MO • EDZ – CHR • IOH – CO • E • DO – PHR • OR

*Reverse:* ✠ DA • PACE • DNE • IN • DIEBVS • NOSTRI

Edzard II and John, 1566–1591

33

Reichstaler, 1570  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 233

Weight: 29.22 g – ø 41.5 mm – misstruck



*Obverse:* EDZ : E : IOH : CO : E • - - - • DO : PPHRISI : ORIE  
(Edzardus et Johannes comites et domini Phrisiae Orientalis)

Harpy in an ornamental shield; above, a helmet with a lily as crest; in the field, left and right, the date 15 – 70

*Reverse:* DA • PACEEM • DOMINE • IN • DEBVS • NOSTR • ✠  
(Da pacem domine in diebus nostris)

Crowned double-headed imperial eagle with the imperial orb on its breast

34-141

2/15 taler, 1579

Mint: Emden

Mintmaster: Johann Iden

Literature: Kappelhoff 262

*Obverse:* (Edzardus et Johannes comites et domini Phrisiae Orientalis)

Harpy in a wavy shield; above, a richly decorated helmet with crown and lily; in the field, the two digits of the date, 7-9

*Reverse:* (Da pacem domine in diebus nostris)

Crowned double-headed imperial eagle with the imperial orb on its breast; within the orb, in two lines, Z/15



Picture of the coin 40

Variations of the legend I

IA	<i>Obverse:</i>	EDZ • E • IO • CO – E • DO • PHR • O
	<i>Reverse:</i>	DA • PACEM • DNE • IN • DIEB • NOST ✽
IB	<i>Obverse:</i>	_____ • E _____
	<i>Reverse:</i>	_____
IC	<i>Obverse:</i>	_____ CO • – • E _____
	<i>Reverse:</i>	_____
ID	<i>Obverse:</i>	_____
	<i>Reverse:</i>	_____ DIE _____
IE	<i>Obverse:</i>	_____
	<i>Reverse:</i>	_____ NOST • ✽ •
IF	<i>Obverse:</i>	_____
	<i>Reverse:</i>	_____ DIE • NOST • ✽ •
IG	<i>Obverse:</i>	_____ • E _____
	<i>Reverse:</i>	_____ DIE • NOST • ✽ •

Variations of the break marks  
in the legends I

1	<i>Obverse:</i>	+ –	<i>Reverse:</i>	•
2	<i>Obverse:</i>	• –	<i>Reverse:</i>	•
3	<i>Obverse:</i>	+ –	<i>Reverse:</i>	•
4	<i>Obverse:</i>	• –	<i>Reverse:</i>	•
5	<i>Obverse:</i>	• –	<i>Reverse:</i>	•
6	<i>Obverse:</i>	• –	<i>Reverse:</i>	•

## Variations of the legend II

IIA	<i>Obverse:</i>	EDZ • E • IO • CO – E • DO • PHR • O
	<i>Reverse:</i>	DA • PACEM • DNE • IN • DIEB • NOS ☒
IIB	<i>Obverse:</i>	_____ CO – • E _____
	<i>Reverse:</i>	_____
IIC	<i>Obverse:</i>	_____ CO – • E _____
	<i>Reverse:</i>	_____ DIEBS _____

## Variations of the break marks in the legends II

1	<i>Obverse:</i>	+ –	<i>Reverse:</i>	+
2	<i>Obverse:</i>	: –	<i>Reverse:</i>	:
3	<i>Obverse:</i>	• –	<i>Reverse:</i>	•
4	<i>Obverse:</i>	• –	<i>Reverse:</i>	•
5	<i>Obverse:</i>	• –	<i>Reverse:</i>	:



## Variations of the legend III





















IIIA	<i>Obverse:</i>	EDZ • E • IO • CO – E • DO • PHR • O
	<i>Reverse:</i>	DA • PACEM • DNE • IN • DIEB • NO ☒
IIIB	<i>Obverse:</i>	_____ PHRI _____
	<i>Reverse:</i>	_____

## Variations of the break marks in the legends III

1	<i>Obverse:</i>	+ –	<i>Reverse:</i>	+
2	<i>Obverse:</i>	• –	<i>Reverse:</i>	•
































## Crowns

Two types of crown may be observed above the double eagle on the reverse:  and 

No.	Legend	Crown	Weight in g	∅ in mm	Misstruck	Pierced
34	IA		4.55	30.0		
35	IA		4.47	29.5		
36	IA		4.53	30.1		
37	IA		4.30	30.5	○	
38	IA		4.31	29.8		
39	IA		4.50	29.5		
40	IA		4.38	30.5		
41	IA		4.48	29.5		
42	IA		4.38	30.3		○
43	IA		5.04	29.8		
44	IA		4.16	29.7		○
45	IA		4.48	29.6		
46	IA		4.48	30.2		
47	IA		4.49	30.0		
48	IA		4.35	30.0		
49	IA		4.48	30.2		
50	IA		4.52	29.8	○	
51	IA		4.60	29.6		
52	IA		4.50	30.2		
53	IA		4.09	29.7	○	

No.	Legend	Crown	Weight in g	∅ in mm	Misstruck	Pierced
54	IA		4.60	28.9	○	
55	IA		4.60	29.5		
56	IA1		4.50	29.9		○
57	IA2		4.31	30.2		
58	IA2		4.50	30.0		
59	IA2		4.58	29.5		
60	IA2		4.28	29.7		
61	IA2	?	4.28	30.7	○	
62	IA3		4.48	30.9	○	
63	IA4		4.58	28.9		
64	IA5		4.36	30.3		
65	IA6		4.53	29.7		
66	IB		4.44	29.7	○	
67	IB		4.86	29.4		
68	IB		4.46	29.7		
69	IB		4.39	30.2	○	
70	IB		4.82	29.2		
71	IB		4.64	31.6	○	
72	IB		4.26	29.8		○
73	IB3		4.44	29.8		
74	IC		4.90	30.1		
75	ID		4.12	29.2	○	
76	IE		4.20	29.3		
77	IF		4.47	29.2		
78	IF		4.53	29.9		
79	IF		4.36	30.0		
80	IF		4.43	29.8		
81	IF		4.49	29.8	○	
82	IG		4.43	29.8		
83	IG		4.48	30.2		
84	IIA		4.46	30.4		
85	IIA		4.39	29.5	○	
86	IIA		4.58	29.4		
87	IIA		4.46	29.8		
88	IIA		4.35	29.7		
89	IIA		4.49	29.8		
90	IIA		4.46	29.6		
91	IIA		4.18	29.4		
92	IIA		4.43	30.2	○	
93	IIA		4.39	30.2		
94	IIA		4.37	29.5		
95	IIA		4.34	30.1		
96	IIA		4.50	30.5	○	
97	IIA		4.49	29.7		
98	IIA		4.25	29.6	○	
99	IIA		4.50	29.3		
100	IIA		4.08	30.2		
101	IIA		4.22	29.5		
102	IIA		4.41	29.4		
103	IIA		4.52	30.3	○	
104	IIA		4.53	29.2		
105	IIA		4.49	29.5		
106	IIA		4.52	29.4		
107	IIA		4.41	30.2		
108	IIA		4.41	30.2	○	

# County of East Friesland

No.	Legend	Crown	Weight in g	∅ in mm	Misstruck	Pierced
109	II A		4.46	29.9		
110	II A		4.55	30.4		○
111	II A		4.42	29.6		
112	II A		4.52	29.2		
113	II A		4.50	30.4	○	
114	II A		4.31	30.5		
115	II A		4.33	29.7		
116	II A		4.42	29.7		
117	II A		4.48	29.8		
118	II A	?	4.52	30.5	○	
119	II A	?	4.44	30.0*		
120	II A1		4.42	30.1	○	
121	II A1		4.47	31.0		
122	II A2		4.50	31.1		
123	II A2		4.34	29.2		
124	II A2		4.39	29.8	○	
125	II A3		4.43	30.4	○	
126	II A3		4.39	29.4		
127	II A3		4.36	29.8		
128	II A4		4.47	30.4		
129	II A4		4.48	30.1		
130	II A5		4.55	29.7		
131	II B		4.52	29.8		○
132	II B1		4.53	30.1		
133	II C		4.39	30.8		
134	III A		4.55	29.7		
135	III A		4.47	30.0		
136	III A		4.25	30.1	○	
137	III A		4.36	30.5		
138	III A		4.47	30.2	○	
139	III A1		4.37	29.9		
140	III A2		4.57	29.7		
141	III B		4.59	29.6		

\* rim broken away

142 – 279

Flindrich, 1583, 1584 and 1585

Mint: Emden

Mintmaster: Joest Janssen

Literature: Kappelhoff 258, 259 and 260

*Obverse:* (Edzardus et Johannes comites et domini Phrisiae Orientalis  
1583, 1584 and 1585)

Ornamental harpy shield on a cross which lacks its upper arm

*Reverse:* (Rodolphus II Romanorum imperator semper augustus)

Cross fleury; in its centre, a shield bearing a double eagle in an ornamental quatrefoil

## Coinage year 1583



Picture of the coin 159

### Variations of the legend I

IA	<i>Obverse:</i>	• EDZA : E · – IOH : CO : E – : DO : PHR – I : ORI : 83
	<i>Reverse:</i>	✠ RODO : II : ROMAN : IMPER : SE : AVGVSTV
IB	<i>Obverse:</i>	_____ E – _____ – DO _____
	<i>Reverse:</i>	_____

### Variations of the legend II

II A	<i>Obverse:</i>	• EDZA : E – IOHA : CO – E : DO : PH – RI : OR : 83
	<i>Reverse:</i>	✠ RODOL : II : ROMANO : IMPER : SE : AVGVS
II B	<i>Obverse:</i>	_____ PH – RI · _____
	<i>Reverse:</i>	_____ III _____
II C	<i>Obverse:</i>	_____ IOH _____ PH – R : OR 83
	<i>Reverse:</i>	_____
II D	<i>Obverse:</i>	_____ IOH : CO : E – DO : PHR – I : _____
	<i>Reverse:</i>	_____

### Variations of the legend III

III A	<i>Obverse:</i>	• EDZA : E – IOH : CO – E : DO : PH – R : OR : 83
	<i>Reverse:</i>	✠ RODOL : II : ROMANO : IMPER : SE : AVGV
III B	<i>Obverse:</i>	_____ PH – ORI : 83 :
	<i>Reverse:</i>	_____
III C	<i>Obverse:</i>	_____ PH – ORI : 83 :
	<i>Reverse:</i>	_____ AVGV :

Variations of the legend III

IIID	<i>Obverse:</i>	_____ PH - ORI : 83 :
	<i>Reverse:</i>	⌘ RODOL II _____
IIIE	<i>Obverse:</i>	_____ E · _____ CO : E - : DO : PHR - I : ORI : 83
	<i>Reverse:</i>	_____
IIIF	<i>Obverse:</i>	_____ E · _____ : E : DO PH - RI : OR 83
	<i>Reverse:</i>	_____
IIIG	<i>Obverse:</i>	_____ PH - RI : OR 83
	<i>Reverse:</i>	_____
IIIH	<i>Obverse:</i>	_____ IOHA _____ PH - RI : OR 83
	<i>Reverse:</i>	_____ AVGV :
IIIJ	<i>Obverse:</i>	• EDZ · E · I - OH · CO · E - · DO · PHR - I · OR · 83
	<i>Reverse:</i>	⌘ RODOL II · ROMANO · IMPER · SE · AVGV

Variations of the legend IV

IV A	<i>Obverse:</i>	• EDZA : E - IOH : CO - E : DO : PH - RI : OR 83
	<i>Reverse:</i>	⌘ RODOL : II : ROMANO : IMPER : SE : AVG
IV B	<i>Obverse:</i>	_____
	<i>Reverse:</i>	_____ AVGV :
IV C	<i>Obverse:</i>	_____ PH - ORI : 83 :
	<i>Reverse:</i>	_____ AVGV :
IV D	<i>Obverse:</i>	_____ CO : E - DO : PHR - I : OR : 83
	<i>Reverse:</i>	_____
IV E	<i>Obverse:</i>	• EDZ · E · I - OH · CO · E - · DO · PHR - I · OR · 83
	<i>Reverse:</i>	_____

Variations of the legend V

VA	<i>Obverse:</i>	• EDZA : E - IOH : CO : E - DO : PHR - I : OR : 83
	<i>Reverse:</i>	⌘ RODOL : II : ROMANO : IMPER : SE : AV
VB	<i>Obverse:</i>	_____ CO - E : _____ PH - ORI : 83 :
	<i>Reverse:</i>	_____



Coinage year 1584



Picture of the coin 202

Variations of the legend I

I A	<i>Obverse:</i> * EDZA : E - IO : CO : E - DO : PHR - I : OR 84 <i>Reverse:</i> ✠ RODOL : II : ROMANO : IMPER : SE : AVGV S
I B	<i>Obverse:</i> _____ PHR - ORI : 84 <i>Reverse:</i> _____
I C	<i>Obverse:</i> _____ PHR - ORI : 84 : <i>Reverse:</i> _____
I D	<i>Obverse:</i> _____ E : _____ PHR - ORI 84 <i>Reverse:</i> _____
I E	<i>Obverse:</i> _____ IOH : CO : - E : DO : PH - ORI : 84 <i>Reverse:</i> _____ IMPE _____

Variations of the legend II

II A	<i>Obverse:</i> * EDZA : E - IOH : CO : E - DO : PHR - ORI : 84 : <i>Reverse:</i> ✠ RODOL : II : ROMANO : IMPER : SE : AVGV :
II B	<i>Obverse:</i> _____ <i>Reverse:</i> _____ AVGV
II C	<i>Obverse:</i> _____ : 84 <i>Reverse:</i> _____ AVGV
II D	<i>Obverse:</i> _____ 84 <i>Reverse:</i> _____ AVGV .
II E	<i>Obverse:</i> _____ 84 <i>Reverse:</i> RODOL II _____ AVGV
II F	<i>Obverse:</i> _____ : C : - E : DO : PH ORI : 84 <i>Reverse:</i> _____ AVGV
II G	<i>Obverse:</i> _____ IO _____ <i>Reverse:</i> _____ AVGV
II H	<i>Obverse:</i> _____ IO _____ : 84 <i>Reverse:</i> _____ AVGV

Variations of the legend II	IIJ	<i>Obverse:</i> _____ IO _____ : 84 <i>Reverse:</i> _____ ROMAN _____ AVGV
Variations of the break marks in the legends II	1	<i>Obverse:</i> : - <i>Reverse:</i> :
	2	<i>Obverse:</i> : - <i>Reverse:</i> :
	3	<i>Obverse:</i> : - <i>Reverse:</i> :
	4	<i>Obverse:</i> : - <i>Reverse:</i> :

Variations of the legend III	III A	<i>Obverse:</i> * EDZA : E - IO : CO : E - DO : PHR - ORI : 84 : <i>Reverse:</i> ✠ RODOL : II : ROMANO : IMPER : SE : AVG
	III B	<i>Obverse:</i> _____ <i>Reverse:</i> _____ AVGV :
	III C	<i>Obverse:</i> _____ : 84 <i>Reverse:</i> _____
	III D	<i>Obverse:</i> _____ : 84 <i>Reverse:</i> _____ IMPERA _____
	III E	<i>Obverse:</i> _____ : 84 <i>Reverse:</i> _____ IMPE _____
	III F	<i>Obverse:</i> _____ : 84 <i>Reverse:</i> _____ AVGV :
	III G	<i>Obverse:</i> _____ IOH : CO : - E _____ PH - ORI : 84 <i>Reverse:</i> _____
	III H	<i>Obverse:</i> _____ IOH : CO : E _____ PH - ORI : 84 <i>Reverse:</i> _____ AVGV :
	III J	<i>Obverse:</i> _____ <i>Reverse:</i> _____ : III : _____

Variations of the break marks in the legends III	1	<i>Obverse:</i> : - <i>Reverse:</i> :
	2	<i>Obverse:</i> : - <i>Reverse:</i> :
	3	<i>Obverse:</i> : - <i>Reverse:</i> :
	4	<i>Obverse:</i> : - <i>Reverse:</i> :
	5	<i>Obverse:</i> : - <i>Reverse:</i> :
	6	<i>Obverse:</i> : - <i>Reverse:</i> :

Variations of the legend IV	IVA	<i>Obverse:</i> * EDZA : E - IO : CO : E - DO : PHR - ORI : 84 <i>Reverse:</i> ✠ RODOL : II : ROMANO : IMPERA : SE : AV
	IVB	<i>Obverse:</i> _____ : 84 : <i>Reverse:</i> _____

## Coinage year 1585



Picture of the coin 267

### Variations of the legend I

IA	<i>Obverse:</i>	• EDZA · E · IO · CO · E · DO · PHR – ORI · 85
	<i>Reverse:</i>	⌘ RODOL · II · ROMANO · IMPER · SE · AVGV
IB	<i>Obverse:</i>	◦ EDZ · E · I – OH · CO · E · DO · PHR – I · OR · 85
	<i>Reverse:</i>	⌘ RODOL · II · ROMANO · IMPER · SE · AVGV

### Variations of the break marks in the legends I

1	<i>Obverse:</i>	· –	<i>Reverse:</i>	· :
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### Variations of the legend II

IIA	<i>Obverse:</i>	• EDZA · E · IO · CO · E · DO · PHR – ORI · 85
	<i>Reverse:</i>	⌘ RODOL · II · ROMANO · IMPER · SE · AVGV
IIB	<i>Obverse:</i>	_____
	<i>Reverse:</i>	_____ IMPE _____
IIC	<i>Obverse:</i>	_____ · 85 ·
	<i>Reverse:</i>	_____ IMPE _____
IID	<i>Obverse:</i>	_____ ORI 85
	<i>Reverse:</i>	_____
IIE	<i>Obverse:</i>	_____ · 85 ·
	<i>Reverse:</i>	_____ ROMAN _____

Coinage year 1583 or 1585

276 *Obverse:* • EDZ · E · I – OH · CO · E – DDO · PHR – I · OR · 8.. (83 or 85)  
*Reverse:* ✠ RODOL · II · I · ROANO · IMPER · SE · AVGV  
 From the defective striking, probably 1583

277 *Obverse:* • EDZA · E – IOH · CO · E – DO · PHR – I · OR · 8.. (83 or 85)  
*Reverse:* ✠ RODO · II · ROMA? · IMPER · SE · AVGVSTV  
 From the legends, probably 1583

278 *Obverse:* • EDZA · E – IO CO · E – DO · PHR – ORI · 8.. (83 or 85)  
*Reverse:* ✠ RODOL · II · ROMANO · IMPE · SE · AVG  
 From the legends, probably 1585

279 *Obverse:* • EDZA · E – IO · CO · E – DO · PHR – ORI · 8.. (83 or 85)  
*Reverse:* ✠ RODOL · II · ROMANO · IMPE · SE · AVGV  
 From the legends, probably 1585

1584

256 *Obverse:* Completely misstruck, but traces of the date are legible  
*Reverse:* ✠ ROMANO ROMANO · IMPER · SE · AVG

Date	No.	Legend	Weight in g	∅ in mm	Misstruck	Pierced
1583	142	IA	2.75	29.7		
	143	IB	2.92	29.0		
	144	II A <sup>1)</sup>	2.70	31.7		
	145	II A <sup>1)</sup>	2.70	30.5	○	
	146	II B	2.72	30.0	○	
	147	II C	2.79	30.9		
	148	II D	2.63	29.7		
	149	III A	2.86	30.0		
	150	III B	2.67	28.9		
	151	III B	2.75	30.6	○	
	152	III B	2.87	30.0		
	153	III C	2.91	30.3		
	154	III C	2.65	29.6	○	

<sup>1)</sup> *Obverse* begins with •

<sup>2)</sup> *Obverse* begins with •

<sup>3)</sup> *Obverse* begins with •

# County of East Friesland

Date	No.	Legend	Weight in g	Ø in mm	Misstruck	Pierced
1583	155	IIID <sup>2)</sup>	2.98	29.9	○	
	156	IIIE	2.96	29.3		
	157	IIIF	2.87	30.0		
	158	IIIG	2.94	30.2		
	159	IIIH	2.69	29.9		
	160	IIIJ <sup>1)</sup>	2.59	29.5		○
	161	IIIVA	2.77	29.6		
	162	IIIVB	2.82	30.5		
	163	IIIVB	2.60	30.2		
	164	IIIVB	2.91	30.7		
	165	IIIVC	2.87	29.3		
	166	IIIVC	2.89	28.8		
	167	IIIVC	2.86	29.5		
	168	IIIVC	2.95	29.9		
	169	IIIVD	2.85	29.6		
	170	IIIVE	2.77	29.4		
	171	IIIVA	2.83	29.4	○	
	172	IIIVB	2.92	31.0	○	
	173	IIIVB	2.53	28.8		
	1584	174	IIIA	2.38	29.8	
175		IIIB	2.63	31.8		
176		IIIC	2.40	30.8		
177		IIID	2.97	30.4	○	
178		IIIE <sup>1)</sup>	2.76	30.1	○	
179		IIIA	2.64	31.0	○	
180		IIIB <sup>2)</sup>	2.73	29.8		
181		IIIC	2.78	30.5	○	
182		IIIC	2.93	30.5		
183		IIIC <sup>3)</sup>	2.75	31.8		
184		IIID <sup>1)</sup>	2.83	29.9		
185		IIIE	2.60	30.2		
186		IIIF	3.14	30.1	○	
187		IIIG	2.32	29.8	○	
188		IIIG	2.98	29.4		
189		IIIG	2.72	30.3		
190		IIIG	2.72	29.7	○	
191		IIIG	2.98	29.9		
192		IIIG	2.63	29.4		
193		IIIG <sup>2)</sup>	2.83	29.9		
194		IIIH	2.82	30.3		
195		IIIH	2.63	29.8		
196		IIIH	3.00	29.1		
197		IIIH	2.93	29.4	○	
198		IIIH	2.94	29.8		
199		IIIH	2.98	29.4		
200		IIIH	3.05	29.4	○	
201	IIIH	2.85	29.2			
202	IIIH	2.80	29.0			
203	IIIH	2.89	30.4	○		
204	IIIH <sup>2)</sup>	2.32	30.0			
205	IIIH	2.96	29.8			
206	IIIH	2.83	30.0			
207	IIIH	2.95	30.2	○		

Date	No.	Legend	Weight in g	Ø in mm	Misstruck	Pierced	
1584	208	IIH2	2.83	29.5			
	209	IIH4	3.21	30.4	○		
	210	IIJ3	2.75	29.2			
		211	III A	2.73	30.8		
		212	III A	2.93	29.5		
		213	III A	2.59	29.5		
		214	IIIB	2.71	29.9		
		215	IIIB <sup>2)</sup>	2.76	29.4		
		216	IIIB	2.88	29.3		
		217	IIIB <sup>2)</sup>	2.99	30.4	○	
		218	IIIB <sup>2)</sup>	2.92	29.6		
		219	IIIB4	2.95	29.7		
		220	IIIC	2.54	29.2		
		221	IIIC	2.70	30.0		
		222	IIIC	2.91	29.9		
		223	IIIC	2.79	29.9	○	○
		224	IIIC1	2.91	30.6		
		225	IIIC2	2.90	29.5		
		226	IIIC3	2.59	30.2		
		227	IIIC3	2.77	29.2		
		228	IIIC3	3.25	30.2		
		229	IIIC3	2.76	29.5	○	
		230	IIIC3	2.89	29.9	○	
		231	IIIC3	2.87	29.0	○	
		232	IIIC3 <sup>2)</sup>	2.77	30.0	○	
		233	IIIC3	3.04	29.6		
		234	IIIC3	2.93	30.4		
		235	IIIC3	2.94	29.3		
		236	IIIC4	2.86	29.6		
		237	IIIC4	2.90	29.8		
		238	IIIC4	2.73	29.8	○	
		239	IIIC4	3.11	29.8		
		240	IIIC4	2.57	29.7		
	241	IIIC5 <sup>1)</sup>	2.93	29.4			
	242	IIIC6	2.94	29.6			
	243	IIID3	2.85	29.5			
	244	IIID3	2.83	30.0			
	245	IIIE2	2.84	29.8			
	246	IIIE2	2.80	29.7			
	247	IIIE2	2.57	30.2			
	248	IIIE2	2.84	29.5			
	249	IIIE3	3.07	29.0			
	250	IIIF2	3.00	29.7			
	251	IIIG	2.31	30.8	○		
	252	IIIH	2.70	29.5			
	253	IIIJ	2.97	29.3			
	254	IVA	2.51	29.9			
	255	IVB	2.52	29.8			
	256	see summary of legends	2.62	30.2			
1585	257	IA	2.93	30.4			
	258	IA	2.79	30.0	○		
	259	IA1	2.82	30.3			
	260	IB <sup>3)</sup>	2.92	29.5			

Date	No.	Legend	Weight in g	∅ in mm	Misstruck	Pierced
1585	261	II A <sup>2)</sup>	2.89	30.2		
	262	II A <sup>2)</sup>	2.90	30.6		
	263	II A <sup>2)</sup>	2.82	30.4		
	264	II A	2.81	29.5		
	265	II A <sup>2)</sup>	2.63	30.7	○	
	266	II B	2.86	30.4		
	267	II B	2.92	29.7		
	268	II B	2.87	31.0		
	269	II C	2.77	29.5		
	270	II C	2.94	30.1		
	271	II C	2.57	30.4		
	272	II C	2.59	30.4		
	273	II C	2.27	31.5		
	274	II D <sup>2)</sup>	2.90	31.0	○	
	275	II E	2.72	30.5		
1583 or 1585	} 276	see summary of legends	2.90	29.2		
		see summary of legends	2.83	29.2		
		see summary of legends	2.90	30.2		
		see summary of legends	2.84	29.8		

280

1/15 taler, 1580  
Mint: Emden  
Mintmaster: Johann Iden  
Literature: Kappelhoff 256

Weight: 2.67 g –  $\varnothing$  27.9 mm



*Obverse:* ✠ EDZ • E • IOH • CO • E • DO • PHRI • ORI  
(Edzardus et Johannes comites et domini Phrisiae Orientalis)  
Harpy in a scalloped shield; in the field, the last two digits of the date, 8–0

*Reverse:* DA • PACEM • DNE • IN • DIEB • NOS •  
(Da pacem domine in diebus nostris)  
Crowned double-headed imperial eagle with the imperial orb on its breast; within the orb, in two lines, 1/15

281

Weight: 2.91 g –  $\varnothing$  27.4 mm

*Obverse:* as 280

*Reverse:* as 280

282

Weight: 2.93 g –  $\varnothing$  26.2 mm

*Obverse:* as 280

*Reverse:* as 280

283

Sesling, 1581  
Mint: Emden  
Mintmaster: Johann Iden  
Literature: Kappelhoff 251

Weight: 1.13 g –  $\varnothing$  19.8 mm –  
misstruck



*Obverse:* : EDZ : E : IO : C : E : D : P : O ✠ – 1581  
(Edzardus et Johannes comites et domini Phrisiae Orientalis 1581)  
Harpy in a Spanish shield

*Reverse:* DA : P – A : DO – IN : D – I : NO  
(Da pacem domine in diebus nostris)  
Imperial orb with 1/60, on a cross ancrée



284

Weight: 0.46 g (two fragments) –  
 ∅ 18.1 mm

*Obverse:* ? EDZ · E · IO · C ..... 1581

*Reverse:* ... A · P – A · DO – IN · D – .....

285

Weight: 0.83 g – ∅ 18.6 mm –  
 rim broken away

*Obverse:* ... DZ · ? O · C · E · D · PH · O ✠ – 1581

*Reverse:* DA ... – A · DO – IN · D – I · N

286

Weight: 1.00 g – ∅ 19.0 mm

*Obverse:* · EDZ · E · IO · C · E · D · PH · O ✠ – 1581

*Reverse:* DA · P – A · DO – IN · D – I · NO

287

Sesling, 1582  
 Mint: Emden  
 Mintmaster: Johann Iden or  
 Joest Janssen  
 Literature: Kappelhoff 252

Weight: 0.82 g – ∅ 19.0 mm –  
 rim broken away



*Obverse:* ..... · E · IO .... D · P · O ✠ – 158Z

([Edzardus] et Johannes [comites et] domini Phrisiae Orientalis 1582)  
 Harpy in a Spanish shield

*Reverse:* DA · P – A ? DO – IN : .....

(Da pacem domine in [diebus nostris])  
 Imperial orb with 1/60, on a cross ancrée

288

Weight: 1.13 g – ∅ 19.9 mm

*Obverse:* · EDZ · E · IO · C · E · D · P · O ✠ – 158Z

*Reverse:* DA · P – A · DO – IN · D – I · NO

289

Weight: 1.00 g – ∅ 20.1 mm

*Obverse:* EDZ · E · IO · C · E ..... P · O ✠ – 158Z

*Reverse:* DA · P – A · DO – IN · D – I ..... O

290

Weight: 0.80 g –  $\varnothing$  19.6 mm

*Obverse:* EDZ · E · IO · C · E · D · P · O – .... 8Z

*Reverse:* · DA · P – ?CE · D – O · IN · – D · N ·

---

291

Weight: 1.07 g –  $\varnothing$  20.6 mm –  
rim broken away

*Obverse:* EDZ · E · IO ..... P · O ✂ – 158Z

*Reverse:* DA · P – A · DO – IN · D – I · NO

---

292

Weight: 0.98 g –  $\varnothing$  19.0 mm

*Obverse:* EDZ · E · IO · C · E · D · P · O ✂ – 158Z

*Reverse:* DA · P – A · .... – IN · D – I · NO

---

293

Weight: 0.57 g –  $\varnothing$  19.0 mm –  
rim broken away

*Obverse:* · ED ..... P · O ✂ – 158Z

*Reverse:* DA ..... D – I · NO

---

294

Weight: 1.05 g –  $\varnothing$  19.5 mm –  
pierced

*Obverse:* EDZ · E ..... C · E · D · P · O ✂ – 158Z

*Reverse:* D ..... A · DO – IN · D – .....

---

295

Sesling, 1581 or 1582  
Mint: Emden  
Mintmaster: Johann Iden or  
Joest Janssen  
Literature: Kappelhoff 251/252

Weight: 0.65 g –  $\varnothing$  19.2 mm –  
rim broken away

*Obverse:* .... Z · E · IO .... C · E · D · P · O ✂ + – 15 ....  
(Edzardus et Johannes comites et domini Phrisiae Orientalis 15 ..)  
Harpy in a Spanish shield

*Reverse:* DA · P – A · DO – IN ... I · NO  
(Da pacem domine in diebus nostris)  
Imperial orb with 1/60, on a cross ancrée

---

296

Weight: 0.94 g –  $\varnothing$  19.2 mm –  
rim broken away

*Obverse:* EDZ · E · IO · C · E · D · PH · O ✂ – 15..

*Reverse:* DA · P – A · DO – IN · D ..... O

---

297

Ciffert, 1568  
 Mint: Emden  
 Mintmaster: Dietrich Iden  
 Literature: Kappelhoff 219

Weight: 0.97 g –  $\varnothing$  20.6 mm



*Obverse:* EDZ · E · IO · C · E · D · PH · O · · 1568 · ·  
 (Edzardus et Johannes comites et domini Phrisiae Orientalis 1568)  
 Harpy in a Spanish shield

*Reverse:* DA · PA – CE · D : – IN · DI – E · NO ·  
 (Da pacem domine in diebus nostris)  
 Imperial orb with 1/60, on a cross ancrée

298

Ciffert, 1572  
 Mint: Emden  
 Mintmaster: Dietrich Iden  
 Literature: Kappelhoff 220

Weight: 1.12 g –  $\varnothing$  19.3 mm



*Obverse:* † EDZ † E † IO † C † E † D † PH † O † † † – † 7Z †  
 (Edzardus et Johannes comites et domini Phrisiae Orientalis 1572)  
 Harpy in a Spanish shield

*Reverse:* DA † P – A † DO † – IN † D – I † NO  
 (Da pacem domine in diebus nostris)  
 Imperial orb with 1/60, on a cross ancrée

299

Weight: 0.98 g –  $\varnothing$  19.5 mm

*Obverse:* EDZ † E † IO † C † E † D † PH † O † † – † 7Z †

*Reverse:* DA † P – A † DO † – IN † DI – † NO †

300

Weight: 0.89 g –  $\varnothing$  18.8 mm

*Obverse:* EDZ † E † IO † C † E † D † PH † O † ... – † 7Z †

*Reverse:* DA † P – A † D ... – IN † DI – † NO †

301

Weight: 1.15 g –  $\varnothing$  18.7 mm –  
misstruck

*Obverse:* EDZ † E † IO † C † E † D † PH † O † † · – · 7Z ·

*Reverse:* DA † P – A † DO † – IN † D – I † NO

302

Weight: 1.24 g –  $\varnothing$  19.0 mm

*Obverse:* EDZ † E † IO † C † E † D † PH † O † † · – · 7Z ·

*Reverse:* DA † P – A † DO † – IN † D – I † NO

303

Weight: 1.09 g –  $\varnothing$  19.4 mm –  
misstruck, pierced

*Obverse:* EDZ † E † IO † C † E † D † PH † O † ... – · 7Z ·

*Reverse:* DA † P – A † DO † – IN † II – † NO

304

Weight: 0.94 g –  $\varnothing$  19.5 mm –  
misstruck

*Obverse:* EDZ † IO † C † E † D † PH † O † ? – · 7Z ·

*Reverse:* DA · P – AE · D – O · IN · – DI · N

305

Ciffert, 1572  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 221

Weight: 0.89 g –  $\varnothing$  20.8 mm



Same type as above, but with the date in full on the obverse

*Obverse:* EDZ † E † IO † CO † E † DO † PH † O † † – 157Z

*Reverse:* † DA · PA – CE · DO – IN † DI – E † NO

306

Weight: 1.01 g –  $\varnothing$  21.1 mm –  
misstruck

*Obverse:* ED? † E † IO † CO † E † DO † PH † O † † – 157Z

*Reverse:* DA † P – ACE · D – O † IN † – DI † N

307

Oortje, 1568  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 214

Weight: 0.75 g – ø 20.1 mm –  
rim broken away



*Obverse:* • ❁ • – • EDZ • E • IO • C • E • D • PH • O  
(Edzardus et Johannes comites et domini Phrisiae Orientalis)  
Harpy in a Spanish shield

*Reverse:* DA • PACE • DO • IN • DIE • NO • •  
(Da pacem domine in diebus nostris)  
Imperial orb bearing the value 2; in the field, left and right, the date 15 – 68

308

Oortje, 1568  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 215

Weight: 1.11 g – ø 19.8 mm



Same type as above, but with a scalloped shield on the obverse

*Obverse:* ❁ EDZ † E † IO † COM † E † DOM † PHR † O

*Reverse:* † DA † PACEM † DNE † IN † DIE † NO †

309

Weight: 1.06 g – ø 19.8 mm

*Obverse:* ❁ EDZ † E † IO † COM † E † DOM † PHR † O

*Reverse:* † DA † PACEM † DNE † IN † DIE † NO †

310

Weight: 0.69 g – ø 19.0 mm

*Obverse:* ❁ EDZ † E † IO † COM † E † D ..... I † O

*Reverse:* † DA † PACEM † DNE † IN † DIE † NO † †

311

Weight: 1.01 g – ø 19.0 mm

*Obverse:* ❁ EDZ † E † IO † COM † E † DOM † PHR † O

*Reverse:* ..... ACEM † DNE † IN † DIE † NO

312

Weight: 0.94 g – ø 19.2 mm –  
misstruck

*Obverse:* ✠ EDZ † IO † CCCC † E † DO † OM † ....

*Reverse:* D ... ACE?EM † D?E † IN † ?E † NO

313

Weight: 0.91 g – ø 19.0 mm

*Obverse:* ✠ EDZ † E † IO † CO † E † DO † PHRISI † O ...

*Reverse:* † DA † PACEM † DNE † IN † DIE † NO †

314

Oortje, 1572  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 217

Weight: 1.11 g – ø 18.1 mm



*Obverse:* ✠ EDZ † E † IO † CO † E † DO † PHRISIE † OR  
(Edzardus et Johannes comites et domini Phrisiae Orientalis)  
Harpy in a scalloped shield

*Reverse:* † DA † PACEM † D ... † IN † DIE † NO †  
(Da pacem domine in diebus nostris)

Imperial orb bearing the value Z; in the field, left and right, the date 15–7Z

315

Weight: 0.96 g – ø 19.2 mm

*Obverse:* ✠ EDZ † E † IO † COM † E † DOM † PHRIS † OR

*Reverse:* † DA † PACEM † DNE † IN † DIEB † NO

316

Weight: 0.90 g – ø 19.1 mm

*Obverse:* ✠ EDZ † E † IO † CO ... † DOM † PHRIS † OR

*Reverse:* ... A † PACEM † DNE † IN † DIEB?S † NO

317

Weight: 0.90 g – ø 17.9 mm

*Obverse:* ✠ EDZ † E † IO † COM † E † DOM † PHR † OR

*Reverse:* † DA † PACEM † DNE † IN † DI † N

318

Weight: 0.90 g – ø 17.5 mm

*Obverse:* ✠ EDZ † E † IO † CO † E † DO † PHRI † ..

*Reverse:* DA † PACEM † DNE † IN † ..... NO †

319

Weight: 0.96 g – ø 16.7 mm –  
on a small flan

*Obverse:* ... DZ † E † IO ..... DOM † PHRI † O

*Reverse:* DA † PA ..... NE † IN ..... NO

320

Weight: 0.88 g – ø 19.0 mm

*Obverse:* ♣ ED .... E † IO † COM † E † DOM † PHR † O

*Reverse:* DA † PACEM † DNE † IN † DI † N

321

Weight: 0.92 g – ø 17.2 mm

*Obverse:* ♣ EDZ † E † IO † COM † E † DOM † PHR † O

*Reverse:* DA † PACEM ..... † IN † DI † N

322

Weight: 0.91 g – ø 17.9 mm

*Obverse:* ♣ EDZ † E † IO † COM ..... PHR † O

*Reverse:* DA † PACE ..... N † DI † N

323

Weight: 0.76 g – ø 18.2 mm –  
rim broken away

*Obverse:* ..... IO † COM † E † DOM † PHR † O

*Reverse:* DA ..... CEM † DNE .... † DIE † NO

324

Oortje, 1572  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 218

Weight: 0.97 g – ø 18.3 mm



Same type as above, but with the imperial orb empty

*Obverse:* ♣ EDZ † E .... O † COM † E † DOM † PHR † O

*Reverse:* DA † PACEM † DNE † IN † DI † N

325

Weight: 0.99 g – ø 17.6 mm

*Obverse:* ♣ EDZ † E † IO † CO † E † DO ..... RI †

*Reverse:* ..... CEM † DNE † IN † DIE † N ...

326

Oortje, 1580  
Mint: Emden  
Mintmaster: Johann Iden  
Literature: Kappelhoff 250

Weight: 0.73 g – ø 17.7 mm



*Obverse:* ✠ EDZ · E · IO · COM · E · DO · PHR · O  
(Edzardus et Johannes comites et domini Phrisiae Orientalis)  
Harpy in a scalloped shield

*Reverse:* DA · PACEM · DNE · IN · DI · N ·  
(Da pacem domine in diebus nostris)  
Imperial orb; in the field, left and right, the date 15–80

327

Weight: 0.51 g – ø 18.5 mm –  
rim broken away

*Obverse:* ..... O ..... PHR · O ....

*Reverse:* ..... PACE ..... IN · D .... N ·

328

Weight: 0.72 g – ø 18.1 mm –  
rim broken away

*Obverse:* ... DZ · E · IO · CO · E · DO ..... H ....

*Reverse:* · D ..... DNE · IN · DI · N ·

329

Witte, 1572  
Mint: Emden  
Mintmaster: Dietrich Iden  
Literature: Kappelhoff 213

Weight: 0.25 g – ø 15.5 mm –  
rim broken away



*Obverse:* ..... IO † CO † E † DO † PH .....  
([Edzardus et] Johannes comites et domini Phrisiae [Orientalis])  
Harpy

*Reverse:* ..... M † DNE † I † DIN  
([Da] pacem domine in diebus nostris)  
Imperial orb bearing the value 1; in the field the last two digits of the date, 7–Z



# Imperial City of Aachen

330

Reichstaler, 1568  
Mint: Aachen  
Literature: Menadier 132 b

Weight: 29.18 g –  $\varnothing$  40.9 mm



*Obverse:* ✠ MO' • REGIÆ • SEDIS • – VRBIS • AQVISGRANI  
(Moneta regiae sedis urbis Aquisgrani)

The Emperor Charlemagne, seated, holding sceptre and imperial orb; at his feet a shield bearing an eagle; in the field, left and right, the date 15–68

*Reverse:* MAXIMI' • II' • ROMA' • CÆSAR • SEMP' • AVGV' •  
(Maximilianus II Romanorum caesar semper augustus)

Crowned double-headed eagle with the imperial orb on its breast

331

Weight: 29.13 g –  $\varnothing$  40.5 mm

*Obverse:* as 330

*Reverse:* as 330

332

Reichstaler, 1569  
Mint: Aachen  
Literature: Menadier 133 b

Weight: 29.23 g –  $\varnothing$  40.3 mm

*Obverse:* as 330, but dated 15–69

*Reverse:* MAXIMI' • II' • ROMA' • CÆSAR • SEMP' • AVGV' •  
As 330

333

1/2 reichstaler, 1570  
Mint: Aachen  
Literature: Menadier 134 d

Weight: 14.52 g –  $\varnothing$  33.6 mm



*Obverse:* as 330, but dated 15–70

*Reverse:* MAXIMI' • II' • ROMA' • CÆSAR • SEMP' • AVGV' •  
As 330

# Imperial City of Cologne

334

Reichstaler, 1567  
Mint: Cologne  
Mintmaster: Ludwig Gronwalt  
Literature: Noss, Stadt Köln 124 var.

Weight: 29.22 g – Ø 41.9 mm



*Obverse:* · · MO · NO · AR – GE · · · CI – V – COLON ·  
(Moneta nova argentea civitatis Coloniensis)  
Helmeted city arms supported by a griffin and a lion; above, the date 15–67

*Reverse:* · MAXIMILIA · II · IMP · AVG · P · F · DECRETO ·  
(Maximilianus II imperator augustus pius felix decreto)  
Crowned double-headed eagle with the imperial orb on its breast

335

Reichstaler, 1570  
Mint: Cologne  
Mintmaster: Ludwig Gronwalt  
Literature: Noss, Stadt Köln 160, obv. d, rev. a

Weight: 29.21 g – Ø 40.5 mm –  
rim broken away

*Obverse:* \* MO \* NO \* – – – AR · · · CI · · · V · · · COLON ·  
As 334, but dated 15–70

*Reverse:* \* MAXIMILI \* – II \* IMP – \* AVG \* P \* F \* DECRETO  
As 334

336

1/2 reichstaler, 1570  
Mint: Cologne  
Mintmaster: Ludwig Gronwalt  
Literature: Noss, Stadt Köln 161 a

Weight: 14.64 g – Ø 33.0 mm



*Obverse:* × MO × NO × A – – – RG · · · CI · · · V · · · COLON ×  
As 334, but dated 15–70

*Reverse:* \* MAXIMILI \* I – I \* IMP \* – \* AVG \* – P \* F \* DECRETO ·  
As 334

# Imperial City of Lübeck

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337

1/2 taler, 1559  
Mint: Lübeck  
Mintmaster: Joachim Dalemann  
Literature: Behrens 203 c

Weight: 14.32 g – ø 34.8 mm



*Obverse:* ❖ MONETA ❖ NOVA ❖ LVBECENSIS ❖ 1559  
Double-headed imperial eagle

*Reverse:* CIVITATIS - IMPERIALIS bird (mintmaster's mark)  
Hip-length portrait of St. John holding the Lamb of God, over the city arms of Lübeck;  
to either side, left and right, the mark of the burgomaster Anton von Stiten between  
rosettes

# Imperial City of Nijmegen

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338

Reichstaler, 1569  
Mint: Nijmegen  
Mintmaster: Dirck Vlemingh  
Literature: v. d. Chijs, Gelderland p. 73  
no. 39. – Delmonte 641

Weight: 29.13 g – Ø 41.2 mm



*Obverse:* Imperial orb CIVITATIS • IMPERIALIS • NOVIOMAGIENSIS  
Crowned city arms supported by two lions; below, in the exergue, the date 1569

*Reverse:* MAXIMI • II • IMPE • AVGVS • P • F • DECRETO  
(Maximilianus II imperator augustus pius felix decreto)

Crowned double-headed imperial eagle with the imperial orb on its breast

# Imperial Cities of Deventer, Campen and Zwolle

339

Taler, 1555  
Mint: Deventer  
Literature: v. d. Chijs, Overijssel p. 252  
no. 33 var. – Delmonte 673

Weight: 28.55 g – ø 40.6 mm



*Obverse:* • DAVENTRIENSIS • CAMPENSIS • ZWOLLENSIS  
The arms of the three cities placed as a triangle

*Reverse:* • MONETA • NOVA • TRIVM • CIVITATVM • IMPERIALIV •  
(Moneta nova trium civitatum imperialium)

Crowned hip-length portrait of the emperor, right, his right hand holding a shouldered sceptre, his left the imperial orb; in the field, left and right, the date 15 – 55



342

Gros, n. d. (1493–1495)  
 Mint: Antwerp  
 Mintmaster: Pierre Cobbe  
 Literature: de Witte 592. –  
 van Gelder and Hoc 102-1

Weight: 1.31 g – ø 22.8 mm

*Obverse:* ✠ PhS • ARCHIDVX • AVSTRIE • BVRG' • BRV  
 As 341

*Reverse:* • BENED • – • ANIMV • – • MEL • D – OMINO •  
 As 341

Emperor Charles V, 1506–1555, from 1516 King of Spain as Charles I, from 1519 Holy Roman Emperor  
 343

4 patards, 1540  
 Mint: Antwerp  
 Mintmaster: Pierre Jongelinck  
 Literature: de Witte 672 var. –  
 van Gelder and Hoc 189-1

Weight: 5.33 g – ø 31.4 mm



*Obverse:* KAROLVS × D × G × RO × IM'Σ × HISP × RE × X × 1540  
 (Karolus dei gratia Romanorum imperator et Hispaniarum rex)  
 Crowned double-headed imperial eagle

*Reverse:* Hand (mintmark) DA – MICH × VI – RTV × CO – TR HOS × T – VOS  
 (Da mihi virtutem contra hostes tuos)  
 On a cross of St. Andrew, a crowned shield bearing the arms of Castile/Leon (1 and 4),  
 Austria/New Burgundy/Old Burgundy/Brabant (2 and 3)

344

Patard, n. d. (1521–1542)  
 Mint: Maastricht  
 Literature: de Witte 681. –  
 van Gelder and Hoc 192-2 a

Weight: 2.62 g – ø 26.1 mm –  
 rim broken away – countermarked



*Obverse:* ..... D × G × ROM – IMP × Z × H – ISP ...  
 An ornamental cross charged with a crowned coat of arms (an eagle); its ends intersect a  
 quatrefoil and the legend; in the outer angles of the quatrefoil and above the ends of  
 the cross, small five-pointed stars as mintmarks

*Reverse:* (Crown) DA × MICH × VIRTUTE .....  
 Crowned shield bearing the arms of Castile/Leon, Austria/New Burgundy/  
 Old Burgundy/Brabant; on either side a small cross of St. Andrew

345

Gros, n. d. (1542–1556)  
Mint: Antwerp  
Literature: de Witte 682. –  
van Gelder and Hoc 193-1 b

Weight: 1.53 g –  $\phi$  23.1 mm



*Obverse:* CAROLVS · D · G · RO · IMP · HIS · REX · D · B · Z · BR  
(Carolus dei gratia Romanorum imperator Hispaniarum rex dux Burgundiae et Brabantiae)  
Beneath a crown, the arms of Austria/New Burgundy/Old Burgundy/Brabant, charged with Flanders

*Reverse:* CAROL – D · G · RO – IMP · HI – SP · REX  
(Carolus dei gratia Romanorum imperator Hispaniarum rex)  
Ornamental cross with two lilies and two lions in its angles; in its centre the mintmark, a hand

346

Gros, n. d. (1542–1556)  
Mint: Antwerp or  
Maastricht (mintmark  
no longer legible)  
Literature: de Witte 684–686. –  
van Gelder and Hoc 193-1 or 2

Weight: 1.42 g –  $\phi$  22.5 mm

*Obverse:* CAROLVS DG ROM · IMP ..... · Z  
As 345

*Reverse:* DA · MIH · – VIRTVT – CO ... S TVOS  
As 345



## King Philip II of Spain, 1555–1598

347

Philip daalder, 1557  
Mint: Antwerp  
Mintmaster: Adrien Noirot  
Literature: de Witte 710. –  
van Gelder and Hoc 210-1 c

Weight: 33.87 g –  $\varnothing$  41.7 mm



*Obverse:* · PHS · D · G · HISP · ANG · Z · REX · DVX · BRAB ·  
(Philippus dei gratia Hispaniarum Angliae etc rex dux Brabantiae)  
Bust left; below, the date · 1557

*Reverse:* · DOMINVS · MIC – HI · ADIVTOR · hand (mintmark) ·  
Placed upon a cross of St. Andrew, a crowned shield bearing the arms of Castile/Leon, Aragon/Sicily, Austria/Valois/Burgundy/Brabant charged with Flanders/Tyrol, from which hangs the Lamb of the Order of the Golden Fleece; on either side of the shield, left and right, a fire-steel

348

Philip daalder, 1557  
Mint: Maastricht  
Mintmaster: Guillaume van Libbeke  
Literature: de Witte 714. –  
van Gelder and Hoc 210-2 c

Weight: 33.37 g –  $\varnothing$  41.2 mm



*Obverse:* · PHS · D · G · HISP · ANG · Z · REX · DVX · BRAB  
Bust left; below, the date 1557

*Reverse:* · DOMINVS · MIC – HI · ADIVTOR · star (mintmark) ·  
As 347

349

Philip daalder, 1572  
Mint: Antwerp  
Literature: de Witte 713. –  
van Gelder and Hoc 210-1 g

Weight: 34.29 g –  $\varnothing$  42.6 mm

*Obverse:* · PHS · D · G · HISP · Z · REX · DVX · BRA ·  
Bust left; below, the mintmark (a hand), dividing the date 15–72

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 347

350

Philip daalder, 1576  
Mint: Brussels  
Mintmaster: Florent Florissone  
Literature: de Witte 718. –  
van Gelder and Hoc 210-3 a

Weight: 34.30 g –  $\varnothing$  42.8 mm



*Obverse:* PHS · D · G · HISP Z REX · DVX · BRA ·  
Bust left; below, the mintmark (a hand), dividing the date 15–76; in the field, right, the letter B for the Brussels mint

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 347

351

1/2 Philip daalder, 1564  
Mint: Antwerp  
Mintmaster: Jean Noirot  
Literature: de Witte 720. –  
van Gelder and Hoc 211-1 b

Weight: 16.91 g – 35.5 mm



*Obverse:* · PHS · D · G · HISP · Z · REX · DVX · BRA · hand (mintmark) dividing  
the date 15–64  
Bust left

*Reverse:* DOMINVS · MIHI · ADIVTOR ·  
As 347

352

1/2 Philip daalder, 1564  
 Mint: Maastricht  
 Mintmaster: Clément d'Embrughe  
 Literature: de Witte 721. –  
 van Gelder and Hoc 211-2 a

Weight: 16.98 g – Ø 34.6 mm



*Obverse:* PHS · D · G · HISP · Z · REX · DVX · BRAB ·  
 Bust left; below, the mintmark (a star) dividing the date 15 – 64

*Reverse:* · · DOMINVS · MI – HI · ADIVTOR · ·  
 As 347

353

1/2 Philip daalder, 15.. (illegible)  
 Mint: illegible  
 Literature: van Gelder and Hoc 211-1 or 2

Weight: 16.10 g – Ø 34.5 mm

*Obverse:* PHS · D · G · HISP · REX · DVX · BRA ·  
 Bust left

*Reverse:* · · DOMINVS · MIHI · AD .....  
 As 347

354

1/5 Philip daalder, 1564  
 Mint: Antwerp  
 Mintmaster: Jean Noirot  
 Literature: de Witte 722. –  
 van Gelder and Hoc 212-1 b

Weight: 5.74 g – Ø 26.6 mm – clipped



*Obverse:* · PHS · D · G · HISP Z REX · DVX · BR  
 Bust right; below, the mintmark (a hand) dividing the date 15 – 64

*Reverse:* DOMINVS – MIHI – ADIVTOR  
 As 347

355

1/5 Philip daalder, 1565  
Mint: Antwerp  
Mintmaster: Jean Noirot  
Literature: de Witte 724. –  
van Gelder and Hoc 212-1 b

Weight: 6.80 g –  $\varnothing$  29.0 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · B  
Bust right; below, the mintmark (a hand) dividing the abbreviated date 6 – 5

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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356

1/5 Philip daalder, 1566  
Mint: Antwerp  
Mintmaster: Jean Noirot  
Literature: de Witte 724. –  
van Gelder and Hoc 212-1 b

Weight: 6.69 g –  $\varnothing$  28.8 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · BR  
As 355, but dated 6 – 6

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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357

Weight: 6.67 g –  $\varnothing$  29.5 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · BR  
As 355, but dated 6 – 6

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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358

Weight: 6.86 g –  $\varnothing$  29.1 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · B  
As 355, but dated 6 – 6

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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359

Weight: 6.89 g –  $\varnothing$  28.7 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · B ·  
As 355, but dated 6 – 6

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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360

1/10 Philip daalder, 1571  
Mint: Antwerp  
Mintmaster: Jean Noirot  
Literature: de Witte 729. –  
van Gelder and Hoc 213-1 b

Weight: 3.35 g –  $\varnothing$  25.5 mm



*Obverse:* PHS DG HISP Z REX · DVX · BRA ·  
Bust right; below, the mintmark (a hand) dividing the date 15–71

*Reverse:* DOMINVS · MIHI · ADIVTOR ·  
Beneath a crown, a cross of St. Andrew with a fire-steel laid on it, from which hangs the Lamb of the Order of the Golden Fleece; sparks in the angles of the cross

361

Weight: 3.30 g –  $\varnothing$  25.6 mm

*Obverse:* PHS DG HISP Z REX · DVX BRA ·  
As 360

*Reverse:* DOMINVS · MIHI · ADIVTOR ·  
As 360

362

Weight: 3.30 g –  $\varnothing$  26.3 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · BRA ·  
As 360

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 360

363

Weight: 3.37 g –  $\varnothing$  26.5 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · BRA ·  
As 360

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 360

364

1/10 Philip daalder, 1572  
Mint: Antwerp  
Mintmaster: Jean Noirot  
Literature: de Witte 729. –  
van Gelder and Hoc 213–1 b

Weight: 3.31 g –  $\varnothing$  26.9 mm – pierced –  
countermark: forepart of a lion over waves

*Obverse:* PHS · D · G HISP Z REX · DVX BRA ·  
As 360, but dated 15 – 72

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 360

365

1/10 Philip daalder, 1571  
Mint: Maastricht  
Mintmaster: Emmanuel Meynarts  
Literature: de Witte 730. –  
van Gelder and Hoc 213-2 b

Weight: 3.39 g –  $\varnothing$  25.7 mm



*Obverse:* PHS DG HISP Z REX DVX BR ·  
Bust right; below, the mintmark (a star) dividing the date 15 – 71

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 360

# Duchy of Guelders

King Philip II of Spain, 1555 – 1598

366

Philip daalder, 1557

Mint: Nijmegen

Literature: van Gelder and Hoc 210-6 a

Weight: 34.12 g –  $\varnothing$  43.5 mm



*Obverse:* PHS · D · G · HISP · ANG · Z · REX · DVX · GEL · 1557  
(Philippus dei gratia Hispaniarum Angliae etc rex dux Geldriae)  
Bust left

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

367

Philip daalder, 1558

Mint: Nijmegen

Literature: van Gelder and Hoc 210-6 a

Weight: 30.89 g –  $\varnothing$  39.8 mm –  
clipped

*Obverse:* PHS · D · G · HISP · ANG · Z · REX · DVX · GEL · 1558  
Bust left

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

368

Weight: 33.97 g –  $\varnothing$  41.9 mm

*Obverse:* PHS · D · G · HISP · ANG · Z · REX · DVX · GELR · 1558  
Bust left

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

369

Philip daalder, 1561

Mint: Nijmegen

Literature: van Gelder and Hoc 210-6 b

Weight: 34.23 g –  $\varnothing$  41.8 mm

*Obverse:* PHILIPPVS · D · G · HISPA · REX · DVX · GEL · 1561  
Bust left

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

370

Weight: 34.10 g –  $\varnothing$  42.5 mm

*Obverse:* PHILIPPVS · D · G · HISPA · REX · DVX · GELR · 1561  
Bust left

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

371

Weight: 33.94 g – Ø 41.6 mm

*Obverse:* as 370

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

372

Weight: 34.28 g – Ø 43.2 mm

*Obverse:* · PHILIPPVS · D · G · HISP · REX · DVX · GEL · 1561  
Bust left

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

373

1/2 Philip daalder, 1564  
Mint: Nijmegen  
Literature: van Gelder and Hoc 211-6 b

Weight: 17.01 g – Ø 35.6 mm



*Obverse:* PHS · D · G · HISP Z REX · DVX · GEL ·  
Bust left; below, the mintmark (a cross) dividing the date 15 – 64

*Reverse:* DOMINVS · MIC – HI · ADIVTOR cross (mintmark)  
As 347

374

Weight: 16.95 g – Ø 36.0 mm –  
countermark: lion



*Obverse:* · PHS · D · G · HISP Z REX · DVX · GEL ·  
As 373

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 347



375

1/5 Philip daalder, 1563  
Mint: Nijmegen  
Literature: van Gelder and Hoc 212-6 d

Weight: 6.92 g –  $\varnothing$  27.8 mm



*Obverse:* PH S · D · G · HISP Z REX DVX GEL  
Bust right; below, the mintmark (a cross) dividing the date 15 – 63 ·  
*Reverse:* · · DOMINVS – MIHI – ADIVTOR – ·  
As 347

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376

Weight: 5.54 g –  $\varnothing$  27.2 mm –  
clipped

*Obverse:* PH S · D · G · HISP Z REX · DVX · GEL  
As 375  
*Reverse:* · · DOMINVS – MIHI – ADIVTOR – ·  
As 347

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377

1/5 Philip daalder, 1566  
Mint: Nijmegen  
Literature: van Gelder and Hoc 212-6 d

Weight: 6.70 g –  $\varnothing$  28.2 mm

*Obverse:* · PH S · D · G · HISP · Z · REX · DVX · GEL ·  
Bust right; below, the mintmark (a cross) dividing the date 15 – 66  
*Reverse:* · · DOMINVS – MIHI – ADIVTOR – ·  
As 347

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378

Weight: 6.22 g –  $\varnothing$  27.9 mm

*Obverse:* · PH S · D · G · HISP · Z · REX · DVX · GEL ·  
Bust right; below, the mintmark (a cross) dividing the date 15 – 66 ·  
*Reverse:* · · DOMINVS – MIHI – ADIVTOR – ·  
As 347

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379

Weight: 6.69 g –  $\varnothing$  31.3 mm

*Obverse:* as 378  
*Reverse:* · · DOMINVS – MIHI – ADIVTOR – ·  
As 347

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380

Weight: 6.76 g –  $\varnothing$  29.7 mm

*Obverse:* as 378  
*Reverse:* · · DOMINVS – MIHI – ADIVTOR – ·  
As 347

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381

Weight: 6.99 g –  $\varnothing$  29.6 mm

*Obverse:* as 378

*Reverse:* · · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

382

1/5 Philip daalder, 1567  
Mint: Nijmegen  
Literature: van Gelder and Hoc 212-6 d

Weight: 6.74 g –  $\varnothing$  29.8 mm

*Obverse:* as 377, but dated 15 – 67

*Reverse:* · · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

383

Weight: 6.62 g –  $\varnothing$  30.4 mm

*Obverse:* as 377, but dated 15 – 67

*Reverse:* · · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

384

Weight: 7.03 g –  $\varnothing$  29.6 mm

*Obverse:* as 377, but dated 15 – 67

*Reverse:* · · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

385

1/5 Philip daalder, 1571  
Mint: Nijmegen  
Literature: van Gelder and Hoc 212-6 d

Weight: 6.79 g –  $\varnothing$  30.7 mm

*Obverse:* PHS · D · G · HISP Z REX · DVX · GEL ·  
As 377, but dated 15 – 71

*Reverse:* · · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

386

1/10 Philip daalder, 1563  
Mint: Nijmegen  
Literature: van Gelder and Hoc 213-6 b

Weight: 2.47 g –  $\varnothing$  23.3 mm –  
clipped



*Obverse:* · PHS · D · G · HISP Z REX DVX · GEL  
Bust right; below, the date 1563

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 360

# County of Flanders

Philip the Fair, Duke of Burgundy, 1494–1506

387

Patard, n. d. (1499–1503)

Mint: Bruges

Literature: van Gelder and Hoc 120-5 a

Weight: 2.40 g –  $\varnothing$  28.2 mm –  
countermarked



*Obverse:* PH $\varsigma$   $\blacktriangleright$  DEI  $\blacktriangleright$  GR $\Lambda$   $\blacktriangleright$  ARCHID  $\blacktriangleright$  AVST  $\blacktriangleright$  DVX  $\blacktriangleright$  ..... F  
(Philippus dei gratia archidux Austriae dux [Burgundiae comes] Flandriae)  
Beneath a large crown, a shield bearing the arms of Austria/New Burgundy/  
Old Burgundy/Brabant charged with Flanders

*Reverse:* SIT  $\blacktriangleright$  NO – MEN  $\blacktriangleright$  D – NI  $\blacktriangleright$  BEN – EDIC  
(Sit nomen domini benedictum)  
Ornamental cross, with lily mintmark in its centre

388

Patard, n. d. (1504–1506)

Mint: Bruges

Literature: van Gelder and Hoc 120-5 b

Weight: 1.74 g –  $\varnothing$  25.7 mm –  
rim broken away, countermarked



*Obverse:* PH $\varsigma$   $\times$  DEI  $\times$  GR $\Lambda$   $\times$  ARCHI ..... BVRG ..  
As 387

*Reverse:* .. TNO ... DO – MINI  $\times$  . ENEDI  
As 387

Emperor Charles V, 1506–1555, from 1516 King of Spain as Charles I, from 1519 Holy Roman Emperor  
389

Gros, n. d. (1506–1518)  
Mint: Bruges  
Literature: van Gelder and Hoc 173-5 a var.

Weight: 1.38 g – ø 21.8 mm



*Obverse:* MO • ARG • ARCHID • AVSTRIG • DVX • BVRG • CO • F •  
(Moneta argentea archiducis Austriae ducis Burgundiae comitum Flandriae)  
Beneath a crown, the arms of Austria/New Burgundy/Old Burgundy/Brabant charged with Flanders

*Reverse:* SIT • NOM – E • DOMI – NI • BEN – EDICTV  
Ornamental cross, with two lilies and two lions in its angles; in its centre the lily mintmark

390

Gros, n. d. (1545–1553)  
Mint: Bruges  
Literature: van Gelder and Hoc 193-5

Weight: 1.49 g – ø 23.6 mm –  
rim broken away



*Obverse:* CAROLVS D G ROM IMP HIS .....  
(Carolus dei gratia Romanorum imperator Hispaniarum [rex dux Burgundiae comes Flandriae])  
As 389

*Reverse:* CAROLV – D : G · ROM – IMP · HIS – P REX  
(Carolus dei gratia Romanorum imperator Hispaniarum rex)  
As 389

King Philip II of Spain, 1555–1598

391

Philip daalder, 1557

Mint: Bruges

Literature: van Gelder and Hoc 210-7 c

Weight: 34.17 g – ø 41.2 mm



*Obverse:* · PHS · D · G · HISP · ANG · Z · REX · COMES · FLAN ·  
(Philippus dei gratia Hispaniarum Angliae etc rex comes Flandriae)  
Bust right; below, the date 1557

*Reverse:* · DOMINVS · MICHI · ADIVTOR · lily (mintmark) ·  
As 347

392

Weight: 34.06 g – ø 40.7 mm

*Obverse:* as 391

*Reverse:* · DOMINVS · MICHI · ADIVTOR · lily (mintmark) ·  
As 347

393

Weight: 34.10 g – ø 39.9 mm

*Obverse:* PHS · D · G · HISP · ANG · Z · REX · COMES · FLAN ·  
As 391

*Reverse:* · DOMINVS · MICHI · ADIVTOR · lily (mintmark) ·  
As 347

394

Philip daalder, 1573

Mint: Bruges

Literature: van Gelder and Hoc 210-7 d

Weight: 33.67 g – ø 39.5 mm

*Obverse:* · PHS · D · G · HISP · Z · REX · COMS · FLAN  
Bust right; below, the date 1573

*Reverse:* · DOMINVS · MI – CHI ADIVTOR lily (mintmark) ·  
As 347

395

1/5 Philip daalder, 1566  
Mint: Bruges  
Literature: van Gelder and Hoc 212-7 a

Weight: 5.36 g –  $\varnothing$  27.4 mm –  
clipped



*Obverse:* · PHS · D · G · HISP · Z · lily (mintmark) · REX · COMES · FLAN ·  
Bust right; below, the date 1566

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 347

396

1/5 Philip daalder, 1567  
Mint: Bruges  
Literature: van Gelder and Hoc 212-7 a

Weight: 6.75 g –  $\varnothing$  30.2 mm

*Obverse:* · PHS · D · G · HISP · Z · lily (mintmark) · REX · COMES · FLAN ·  
As 395, but dated 1567

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 347

397

Weight: 6.57 g –  $\varnothing$  29.4 mm

*Obverse:* · PHS · D · G · HISP · Z · lily (mintmark) · REX · COMES · FLAN ·  
As 395, but dated 1567

*Reverse:* · DOMINVS · MIHI · ADIVTOR ·  
As 347

398

1/10 Philip daalder, 1565  
Mint: Bruges  
Literature: van Gelder and Hoc 213-7 b

Weight: 3.32 g –  $\varnothing$  24.7 mm



*Obverse:* · PHS · D · G · HISP · Z · REX · COMES · FLAN ·  
Bust right; below, the date 1565

*Reverse:* · DOMINVS · MIHI · ADIVTOR · lily (mintmark) ·  
As 360

399

1/4 Burgundian rijksdaalder, 1570  
Mint: Bruges  
Literature: van Gelder and Hoc 242-7

Weight: 7.30 g – ø 27.5 mm



*Obverse:* Lily (mintmark) · PHS · - D · G · H · - SP · Z · REX · COMES · FLAN ·  
Cross of St. Andrew with superimposed fire-steel; to the sides, the date 15-70

*Reverse:* · DOMINVS · M · HI · ADIVTOR ·  
Beneath a crown, a shield bearing the arms of Austria, Valois, Burgundy, Brabant,  
charged with Flanders/Tyrol, surrounded by the collar of the Order of the  
Golden Fleece

# County of Holland

Emperor Charles V, 1506–1555, from 1516 King of Spain as Charles I, from 1519 Holy Roman Emperor  
400

Gros, n. d. (1506–1520)  
Mint: Dordrecht  
Literature: van Gelder and Hoc 173-6 a

Weight: 1.11 g –  $\varnothing$  22.5 mm



*Obverse:* ..... AVS ..... C x h  
([Moneta argentea archiducis] Austriae [ducis Burgundiae] comitum Hollandiae)  
Beneath a crown, the arms of Austria/New Burgundy/Old Burgundy/Brabant charged with Flanders

*Reverse:* .... NO –  $\Omega$  ..... NEDI ....  
([Sit]nomen [domini] benedictum)  
Ornamental cross, with two lilies and two lions in its angles; in its centre the rosette mintmark

King Philip II of Spain, 1555–1598

401

Philip daalder, 1557  
Mint: Dordrecht  
Literature: van Gelder and Hoc 210-11 b

Weight: 34.72 g –  $\varnothing$  42.0 mm



*Obverse:* · PHILIPPVS · D · G · HISP · ANG · Z · REX · G · HOL rosette (mintmark)  
(Philippus dei gratia Hispaniarum Angliae etc rex comes Hollandiae)  
Bust left; below, the date 1557

*Reverse:* · D – OMINVS – · MIHI · A – DIVTOR – rosette (mintmark)  
As 347

402

Philip daalder, 1563  
Mint: Dordrecht  
Literature: van Gelder and Hoc –  
cf. 210-11. –  
v. d. Chijs, Holland pl. XXX, 21

Weight: 33.99 g –  $\varnothing$  40.6 mm

*Obverse:* · PHILIPPVS · D · G · HISP · REX · CO · HOL · rosette (mintmark)  
Bust left; below, the abbreviated date 63

*Reverse:* · DOMINVS · – · MIHI · – · ADIVTOR ·  
As 347



403

1/2 Philip daalder, 1573  
Mint: Dordrecht  
Literature: van Gelder and Hoc 211-11 b

Weight: 17.01 g –  $\varnothing$  35.7 mm – misstruck –  
countermark: lion



*Obverse:* PHS · D · G · HISP · Z · REX · COES · HOL ·  
Bust left; below, the mintmark (a rosette) dividing the date 15 – 73  
*Reverse:* · DOMINVS · MI – HI · ADIVTOR  
As 347

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404

1/5 Philip daalder, n. d. (1562–1564)  
Mint: Dordrecht  
Literature: van Gelder and Hoc 212-11 a

Weight: 6.72 g –  $\varnothing$  29.3 mm



*Obverse:* PHILIPPVS · D · G · HISP · REX · C · HOL rosette (mintmark)  
Bust left  
*Reverse:* Rosette (mintmark) – DOMINVS – MIHI – ADIVTOR  
As 347

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405

Weight: 6.69 g –  $\varnothing$  28.5 mm

*Obverse:* as 404  
*Reverse:* DOMINVS – MIHI – ADIVTOR  
As 347

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406

Weight: 5.95 g –  $\varnothing$  27.6 mm –  
clipped

*Obverse:* as 404  
*Reverse:* DOMINVS – MIHI – ADIVTOR  
As 347

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407

Weight: 6.72 g –  $\varnothing$  28.5 mm

*Obverse:* as 404

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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408

Weight: 6.69 g –  $\varnothing$  28.8 mm

*Obverse:* PHILIPPVS · D · G · HISP · REX · C · HOL rosette (mintmark) ·  
Bust left

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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409

Weight: 6.70 g –  $\varnothing$  28.6 mm

*Obverse:* as 408

*Reverse:* · – DOMINVS – MIHI – · ADIVTOR – ·  
As 347

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410

1/5 Philip daalder, 1571

Mint: Dordrecht

Literature: van Gelder and Hoc 212-11 d

Weight: 6.85 g –  $\varnothing$  29.8 mm



*Obverse:* PHS · D · G · HISP Z REX · COES · HOL ·  
Bust right; below, the mintmark (a rosette) dividing the date 15 – 71

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

411

1/5 Philip daalder, 1580  
Mint: Dordrecht  
Literature: van Gelder and Hoc 212-11 e

Weight: 6.66 g – ø 28.3 mm



*Obverse:* ✦ PHS · D · G · HISP · REX · CO · HOL ·  
Bust left; below, the mintmark (a rosette) dividing the date · 15 – 80

*Reverse:* · – DOMINVS – · MIHI – ADIVTOR – ·  
As 347

412

Burgundian rijksdaalder, 1567  
Mint: Dordrecht  
Literature: van Gelder and Hoc 240-11 a

Weight: 29.19 g – ø 39.6 mm



*Obverse:* · Rosette (mintmark) · PHS · D · G · HISP · Z · REX · COES · HOL ·  
Beneath a crown, a cross of St. Andrew with superimposed fire-steel; to the sides, the date 15 – 67; sparks in the lower angle of the cross

*Reverse:* DOMINVS · MI – HI · ADIVTOR ·  
As 399

413

1/2 Burgundian rijksdaalder, 1568  
Mint: Dordrecht  
Literature: van Gelder and Hoc 241-11

Weight: 14.58 g – ø 34.0 mm



*Obverse:* Rosette (mintmark) PHS · D · G · HISP · Z · REX · CO · HOL  
Beneath a crown, a cross of St. Andrew with superimposed fire-steel; to the sides, the date 15 – 68

*Reverse:* DOMINVS · MI · HI · ADIVTOR  
As 399

# Lordship of Utrecht

King Philip II of Spain, 1555 – 1598

414

Philip daalder, 1574

Mint: Utrecht

Literature: van Gelder and Hoc 210-16 b

Weight: 34.05 g –  $\varnothing$  40.9 mm



*Obverse:* PHS · D · G · HISP · REX · DNS · TRAIEC  
(Philippus dei gratia Hispaniarum rex dominus Traiectum)  
Bust left; below, the mintmark (a shield) dividing the date 15 – 74

*Reverse:* · DOMINVS · MI – HI · ADIVTOR ·  
As 347

415

1/5 Philip daalder, 1571

Mint: Utrecht

Literature: van Gelder and Hoc 212-16 a

Weight: 6.51 g –  $\varnothing$  29.7 mm



*Obverse:* · PHS · D · G · HISP · Z · REX · DNS · TRAIEC ·  
Bust right; below, the mintmark (a shield) dividing the date 15 – 71

*Reverse:* DOMINVS – MIHI – ADIVTOR – ·  
As 347

416

Weight: 6.77 g –  $\varnothing$  30.6 mm –

*Obverse:* PHS · D · G · HISP · Z · REX · DNS · TRAIEC ·  
As 415

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

417

Weight: 5.97 g –  $\varnothing$  27.4 mm –  
clipped

*Obverse:* PHS · D · G · HISP · Z · REX · DNS · TRAIEC  
As 415

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

418

1/10 Philip daalder, 1571  
Mint: Utrecht  
Literature: van Gelder and Hoc 213-16 a

Weight: 3.26 g –  $\varnothing$  25.5 mm



*Obverse:* PHS · D · G · HISP · Z · REX · DNS · TRAIEC  
Bust right; below, the date 1571

*Reverse:* DOMINVS · MICHI · ADIVTOR shield (mintmark)  
As 360

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419

1/10 Philip daalder, 1572  
Mint: Utrecht  
Literature: van Gelder and Hoc 213-16 c

Weight: 3.35 g –  $\varnothing$  25.1 mm



*Obverse:* PHS · D · G · HISP · Z · REX · DNS TRAIEC 157Z  
Bust right

*Reverse:* · DOMINVS · MICHI · ADIVTOR shield (mintmark)  
As 360

420

Burgundian rijksdaalder, 1568

Mint: Utrecht

Literature: van Gelder and Hoc 240-16

Weight: 28.91 g –  $\phi$  40.1 mm



*Obverse:* Shield (mintmark) PHS · D · G · HISP · Z · REX · DNS · TRAIEC  
Beneath a crown, a cross of St. Andrew with superimposed fire-steel; to the sides, the date 15 – 68; sparks in the lower angle of the cross

*Reverse:* · DOMINVS · MI – HI · ADIVTOR ·  
As 399

# Lordship of Overijssel

King Philip II of Spain, 1555 – 1598

421

1/2 Philip daalder, 1563

Mint: Hasselt

Literature: van Gelder and Hoc 211-17 a

Weight: 16.90 g –  $\varnothing$  36.2 mm



*Obverse:* · PHS · DEI · G · HISP · REX · D · TRS · ISSV

(Philippus dei gratia Hispaniarum rex dominus Transissulania)

Bust left; below, the mintmark (a small cross) dividing the date 15 – 63

*Reverse:* · DOMINVS · MIC – HI · ADIVTOR small cross (mintmark)

As 347

422

1/2 Philip daalder, 1562, 1563 or 1566

Mint: Hasselt

Literature: van Gelder and Hoc 211-17 a

Weight: 15.52 g –  $\varnothing$  34.2 mm

*Obverse:* PHS · DEI · G · HISP · REX · D · TRS · ISSV

Bust left; below, the mintmark (a small cross, no longer legible) dividing the date 15 – ..

*Reverse:* · DOMINVS · MIC – HI · ADIVTOR small cross (mintmark)

As 347

423

1/5 Philip daalder, 1566

Mint: Hasselt

Literature: van Gelder and Hoc 212-17 c

Weight: 6.40 g –  $\varnothing$  28.5 mm



*Obverse:* · PHS · D · G · HISP · Z · REX · D · TRS · ISSV ·

Bust right; below, the mintmark (a small cross) dividing the date 15 – 66

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·

As 347



424

Weight: 5.87 g –  $\varnothing$  28.0 mm –  
clipped

*Obverse:* · PHS · D · G · HISP · Z · REX · D · TRS · ISSV ·  
As 423

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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425

Weight: 5.82 g –  $\varnothing$  25.8 mm –  
clipped

*Obverse:* · PHS · D · G · HISP · Z · REX · D · TRS · ISSV ·  
As 423

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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426

1/5 Philip daalder, 1567  
Mint: Hasselt  
Literature: van Gelder and Hoc 212-17c

Weight: 6.03 g –  $\varnothing$  28.0 mm

*Obverse:* · PHS · D · G · HISP · Z · REX · D · TRS · ISSV ·  
Bust right; below, the mintmark (a small cross) dividing the date 15 – 67

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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427

1/5 Philip daalder, 1566 or 1567  
Mint: Hasselt  
Literature: van Gelder and Hoc 212-17c

Weight: 5.27 g –  $\varnothing$  25.4 mm –  
clipped – countermark:  
forepart of a lion over waves



*Obverse:* PHS · D · G · HISP · Z · REX · D · TRS · ISSV  
Bust right; below, the mintmark (a small cross) dividing the date 15 – 66 or 67

*Reverse:* · – DOMINVS – MIHI – ADIVTOR – ·  
As 347

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# Province of Guelders

428

Snaphaan, n. d. (1582)  
Mint: Zutphen  
Mintmaster: Hendrik Wijntgens  
Literature: Verkade 73, pl. 15,1. –  
Delmonte 793

Weight: 5.97 g – ø 33.5 mm



*Obverse:* DEVS – ♣ CONSTITVIT ♣ REGNA ♣ – ❖

Armoured horseman galloping left, with a raised sword in his right hand; below the horse, the letters GST (Geldriae Stufferorum Triginta)

*Reverse:* ♣ MONE – NO ♣ DV – C ♣ GEL ♣ – CO ♣ 3VT

(Moneta nova ducatus Geldriae comitatus Zutphaniae)

Cross fleury with a superimposed shield bearing the arms of Guelders and Zutphen

429

Snaphaan, n. d. (1582)  
Mint: Zutphen  
Mintmaster: Hendrik Wijntgens  
Literature: Verkade 74, pl. 15,2. –  
Delmonte 794

Weight: 6.21 g – ø 33.0 mm



*Obverse:* DEVS ✕ CONSTITVIT ✕ R – E – GNA – ❖

Armoured horseman galloping right, with a raised sword in his right hand; below the horse, the letters GST

*Reverse:* ✕ MONE – ✕ NO ✕ DV – C ✕ GEL ✕ – CO ✕ 3VT

As 428

430

Weight: 6.17 g – ø 33.8 mm

*Obverse:* DEVS ✕ CONSTITVIT ✕ R – E – GNA – ❖

As 429

*Reverse:* ✕ MONE – ✕ NO ✕ DV – C ✕ GEL ✕ – CO ✕ 3VT

As 428

431

Snaphaan, 1582  
Mint: Zutphen  
Mintmaster: Hendrik Wijntgens  
Literature: Verkade 75, pl. 15,3. –  
Delmonte 795

Weight: 6.27 g – ø 34.5 mm



*Obverse:* D<sup>E</sup>9 ✕ – TRANSFET (!) ✕ ET ✕ CONSTITV – IT ✕ REGNA ❖❖  
(Deus transfert et constituit regna)

Armoured horseman galloping right, with a raised sword in his right hand; on the horse's armour, the arms of Zutphen; below the horse, the letters GST

*Reverse:* MONE – NO ✕ DV – GEL ✕ – CO ✕ ZVT

Cross fleury with a superimposed shield bearing the arms of Guelders and Zutphen; in an ornament hanging from the cross, the date (15)82

# Province of Holland

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432

Lion daalder, 1576  
Mint: Dordrecht  
Mintmaster: Rochus Grijp  
Literature: Verkade 264, pl. 48,3. –  
Delmonte 831

Weight: 26.80 g – Ø 41.5 mm



*Obverse:* × MO × NO × ARG × – × ORDIN × HOL ×

(Moneta nova argentea ordinum Hollandiae)

Knight in armour standing left behind the lion coat of arms, his head turning to the right; below, the date 15 – 76

*Reverse:* Rosette (mintmark) × CONFIDENS × DNO × NON × MOVETVR ×

(Confidens domino non movetur)

Lion rampant left

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433

Weight: 26.58 g – Ø 41.8 mm

*Obverse:* • MO • NO • ARG • – • ORDIN • HOL

As 432

*Reverse:* Rosette (mintmark) CONFIDENS • DNO • NON • MOVETUR

As 432

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# Province of Friesland

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434

Snaphaan, 1582  
Mint: Leeuwarden  
Mintmaster: Lodewijk Alewijnsz  
Literature: Verkade 699, pl. 128,2. –  
Delmonte 800

Weight: 5.05 g – ø 35.5 mm



*Obverse:* MONE ✦ – NOVA ✦ – ORDI ✦ – FRISI ✦  
(Moneta nova ordinum Frisiae)  
Cross fleury, with the arms of Friesland superimposed

*Reverse:* NISI ✦ DOMINVS ✦ NOBISCVM – ✦ – ✦  
Armoured horseman galloping left, with a raised sword in his right hand; below the horse, the date ✦ 1582 ✦; at the end of the legend, the arms of Leeuwarden as a mintmark

# City of Groningen

435

Stuiver, 1499  
Mint: Groningen  
Literature: v. d. Chijs, Friesland,  
Groningen en Drenthe 101, pl. XIV

Weight: 1.43 g – Ø 28.4 mm –  
rim broken away



*Obverse:* ✠ M ..... NOV – .. ONINGENS  
(Moneta nova Groningensis)  
Double eagle above the arms of Groningen, placed obliquely

*Reverse:* ✠ ANNO – DN ..... CCCC – XCIX  
(Anno domini 1499)  
Ornamental cross with an eight-pointed star in its centre

436

Stuiver, 1560  
Mint: Groningen  
Literature: v. d. Chijs, Friesland,  
Groningen en Drenthe 138, pl. XVI

Weight: 1.48 g – Ø 26.2 mm –  
rim broken away, pierced



*Obverse:* ... MONETA • NOVA • GRONINGEN ...  
Double eagle above the arms of Groningen

*Reverse:* ... OM • D – O • BEN – A° • 1560  
([Sit]nomen domini benedictum anno 1560)  
Ornamental cross with the arms of Groningen in its centre

437

Weight: 1.75 g – Ø 26.2 mm

*Obverse:* Lily MONETA • NOVA • GRONINGENSIS  
As 436

*Reverse:* SIT • N – OM • D – O • BEN – A° • 1560  
As 436

438

Weight: 1.74 g – Ø 25.9 mm

*Obverse:* Lily MONETA • NOVA • GRONINGENSIS  
As 436

*Reverse:* SIT • N – OM • D – O • BEN – A° • 1560  
As 436

439

Weight: 2.19 g – ø 25.6 mm

*Obverse:* Lily MONETA • NOVA • GRONINGENSIS  
As 436

*Reverse:* SIT • N – OM • D – O • BEN – A° • 1560  
As 436

440

Weight: 0.92 g – ø 24.8 mm –  
rim broken away

*Obverse:* Lily ....TA • NO – A • G.....SIS  
As 436

*Reverse:* .IT • N – .... – O .... – ..... 60  
As 436

441

Weight: 0.60 g – ø 24.7 mm –  
fragment (less than half)

*Obverse:* ..ONETA • NOVA • G.....  
As 436

*Reverse:* ..... – O • BEN – A° • 1560  
As 436

442

Stuiver, 1560 or 1568  
Mint: Groningen  
Literature: v.d. Chijs, Friesland,  
Groningen en Drenthe 138,  
pl. XVI or 148, pl. XVII

Weight: 1.50 g – ø 26.1 mm –  
rim broken away

*Obverse:* Lily MONETA • NOVA • GR.....NSIS  
As 436

*Reverse:* ..... – OM • D – O • BEN – .....  
As 436

443

1/4 stuiver, 1560  
Mint: Groningen  
Literature: v.d. Chijs, Friesland,  
Groningen en Drenthe 139, pl. XVI

Weight: 0.89 g – ø 19.3 mm



*Obverse:* ❀ MONE • NOVA • GRONINGENS  
As 436

*Reverse:* SIT • N – O • DO – BENE – A° • 1560  
As 436

444

Weight: 0.86 g – ø 19.1 mm –  
rim broken away

*Obverse:* ✦ MONE • NOVA • .RO...GENS  
As 436

*Reverse:* SIT • N – O .. O – BENE – A° • 1560  
As 436

445

Weight: 0.83 g – ø 19.3 mm

*Obverse:* ✦ MONE • NOVA • GRONINGENS  
As 436

*Reverse:* SIT • N – O • DO – BENE – A° • 1560  
As 436

446

Double jager, 1562  
Mint: Groningen  
Literature: v. d. Chijs, Friesland,  
Groningen en Drenthe 144, pl. XVII

Weight: 4.27 g – ø 30.5 mm



*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
(Moneta nova argentea Groningensis)  
On an ornamental cross, a shield bearing a double eagle with the arms of the city of  
Groningen on its breast

*Reverse:* ✦ DA • PACEM • DNE' • IN • DIEB' • NOSTRIS • 156Z  
(Da pacem domine in diebus nostris 1562)  
The city arms of Groningen on an ornamental cross

447

Weight: 4.49 g – ø 29.9 mm

*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ DA • PACEM • DNE' • IN • DIEB' • NOSTRIS • 156Z  
As 446

448

Weight: 3.80 g – ø 29.8 mm

*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ DA • PACEM • DNE' • IN • DIEB' • NOSTRIS • 156Z  
As 446



449

Double jager, 1568  
Mint: Groningen  
Literature: v. d. Chijs, Friesland,  
Groningen en Drenthe 147, pl. XVII

Weight: 4.45 g –  $\varnothing$  29.6 mm



*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ SIT • NOMEN • DNI • BENEDICTVM • 1568  
As 446

450

Weight: 4.24 g –  $\varnothing$  28.7 mm

*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ SIT • NOMEN • DNI • BENEDICTVM • 1568  
As 446

451

Weight: 4.31 g –  $\varnothing$  29.4 mm

*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ SIT • NOMEN • DNI • BENEDICTVM • 1568  
As 446

452

Weight: 4.53 g –  $\varnothing$  29.7 mm

*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ SIT • NOMEN • DNI • BENEDICTVM • A<sup>o</sup> • 1568  
As 446

453

Weight: 4.23 g –  $\varnothing$  30.2 mm – pierced

*Obverse:* Double eagle MONETA – NOVA • AR – GEN • GRO – NINGEN  
As 446

*Reverse:* ✦ SIT • NOMEN • BENEDICTVM • A • 1568  
As 446

# Kingdom of France

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Charles IX, 1560–1574

454

Teston, 1570  
Mint: Bayonne  
Mintmaster: Guillaume de Castelnau  
Literature: Lafaurie and Prieur 899

Weight: 9.30 g –  $\varnothing$  28.5 mm –  
clipped



*Obverse:* · KAROLVS · 9 · D · G · FRANCOR REX  
(Karolus 9 dei gratia Francorum rex)

Laureate, armoured bust left; below, the mintmaster's mark, a tower (castle), with an anchor and a crescent moon

*Reverse:* XPS · VINCIT · XPS · REGNAT · XPS · IMP · 1570  
(Christus vincit Christus regnat Christus imperat)

Crowned arms of France between crowned Ks; below the shield, the mint-letter L

# Kingdom of Castile

Queen Isabella I of Castile and King Ferdinand I of Aragon, 1474–1504

455

4 reales, n. d. (after 1497)  
Mint: Seville  
Literature: Vidal Quadras y Ramón  
6553 var.

Weight: 13.51 g – ø 32.1 mm –  
clipped



*Obverse:* FERNANDVS · ET · ELISABET  
Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily and Granada, between S – IIII

*Reverse:* · REX · ET · REGINA · CASTELE · LEGIO ·  
(Rex et regina castelegionis)  
Yoke and bundle of arrows; in the field, P – P

456

Weight: 11.07 g – ø 30.6 mm –  
clipped

*Obverse:* ...RN.....  
As 455

*Reverse:* no longer legible: heavily clipped  
Yoke and bundle of arrows; in the field, P

457

2 reales, n. d. (after 1497)  
Mint: Granada  
Literature: Vidal Quadras y Ramón  
6562 var.

Weight: 5.79 g – ø 26.5 mm –  
clipped



*Obverse:* FER..... BE.  
Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily and Granada, between G/G – II/II

*Reverse:* ..... NA · CAST  
Yoke and bundle of arrows; in the field the letter R (mintmaster's mark) and several small trefoils

458

2 reales, n. d. (after 1497)  
 Mint: Segovia  
 Literature: Vidal Quadras y Ramón  
 6564 var.

Weight: 5.97 g – ø 27.0 mm –  
 clipped

*Obverse:* ..... ISABE ·

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily and Granada, between P – II

*Reverse:* ✱ REX ..... CASTELE

Yoke and bundle of arrows; in the field, an aqueduct (mintmark)

459

2 reales, n. d. (after 1497)  
 Mint: Seville  
 Literature: Vidal Quadras y Ramón 6566

Weight: 5.14 g – ø 25.2 mm –  
 heavily clipped

*Obverse:* ..... · ET · ELIS .... DE ·

([Fernandus] et Elisabet dei)

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily and Granada, between S – II

*Reverse:* No longer legible: heavily clipped

Yoke and bundle of arrows; in the field, an eight-pointed star

460

Real, n. d. (after 1497)  
 Mint: Cuenca (?)  
 Literature: Vidal Quadras y Ramón –

Weight: 2.14 g – ø 23.9 mm –  
 heavily clipped



*Obverse:* ..... S · ET · ELISABE ·

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily and Granada, between P – II

*Reverse:* ✱ REX ..... NA CASTE · LE · GIO · ARA

(Rex [et] regina castelegionis Aragonensis)

Yoke and bundle of arrows

461

Weight: 2.56 g – ø 24.0 mm –  
 clipped

*Obverse:* ..... ELISABET · D ·

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily and Granada, between D – P

*Reverse:* ✱ · REX · ET · REGINA · CASTE LEGIO ARA ·

Yoke and bundle of arrows

# Kingdom of Spain

King Philip II of Spain, 1555–1598

462

4 reales, n. d.  
Mint: Seville  
Literature: Vidal Quadras y Ramón 7422

Weight: 13.63 g –  $\varnothing$  30.9 mm –  
clipped



*Obverse:* PHILIP ... II DEI GRAT ..  
(Philippus II dei gratia)

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily, Austria/  
Valois/Burgundy/Brabant charged with Flanders/Tyrol, between S – III

*Reverse:* .... PANIARVM REX  
(Hispaniarum rex)

Eight-arched border containing a cross with the arms of Castile and Leon in its angles;  
in one of the outer angles of the border, P

463

Weight: 13.71 g –  $\varnothing$  32.6 mm –  
heavily clipped

*Obverse:* PHILIPPVS · II · DEI GR ....  
As 462

*Reverse:* ⊕ HISPANIARVM REX  
As 462

464

Weight: 13.64 g –  $\varnothing$  31.5 mm –  
clipped

*Obverse:* P ... IPP ... ..IA

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily,  
Austria/Valois/Burgundy/Brabant charged with Flanders/Tyrol, between S – ....

*Reverse:* ⊕ HISPAN ... .. REX

Eight-arched border containing a cross with the arms of Castile and Leon in its angles

465

4 reales n. d.  
Mint: Seville  
Literature: Vidal Quadras y Ramón  
7422 var.

Weight: 10.01 g –  $\varnothing$  33.0 mm –  
clipped

*Obverse:* PHILIPPVS · DEI GRATIA

Beneath a large crown, a shield bearing the arm of Aragon/Sicily, Castile/Leon,  
Burgundy/Brabant/Austria/Valois charged with Flanders/Tyrol, between III – S

*Reverse:* ⊕ HISPANIARVM REX  
As 462

# Spanish Colonial Empire: Mexico

King Philip II of Spain, 1555 – 1598

466

4 reales, n. d.

Mint: Mexico

Literature: Vidal Quadras y Ramón 7489

Weight: 13.50 g – Ø 32.2 mm –  
clipped



*Obverse:* P ... PPVS · II · DEI GRATIA

Beneath a large crown, a shield bearing the arms of Castile/Leon, Aragon/Sicily, Austria/Valois/Burgundy/Brabant charged with Flanders/Tyrol, between IIII – M

*Reverse:* ✚ HISPANIARVM · ET · INDIAE .. M REX

(Hispaniarum et Indiarum rex)

As 464

# Duchy of Milan

---

Emperor Charles V, 1506–1555, from 1519 Holy Roman Emperor, from 1535 Duke of Milan  
467

8 soldi e 3 denari, n.d. (after 1535)  
Mint: Milan  
Literature: CNI, Lombardia 76

Weight: 2.72 g –  $\varnothing$  25.0 mm



*Obverse:* · CAROL – VS · V · IMP ·  
(Carolus V imperator)

Beneath a mitre, two columns entwined with a ribbon bearing the inscription  
PLVS · V LT RA; between the columns, a pellet

*Reverse:* · S · AMBR – OSIVS ·  
(Sanctus Ambrosius)

St. Ambrose standing, with a scourge in his right hand and a bishop's crozier in his left

---

468

Weight: 2.77 g –  $\varnothing$  25.0 mm

*Obverse:* · CAROL – VS · V · IMP ·  
As 467

*Reverse:* · S · AMBR – OSIVS ·  
As 467





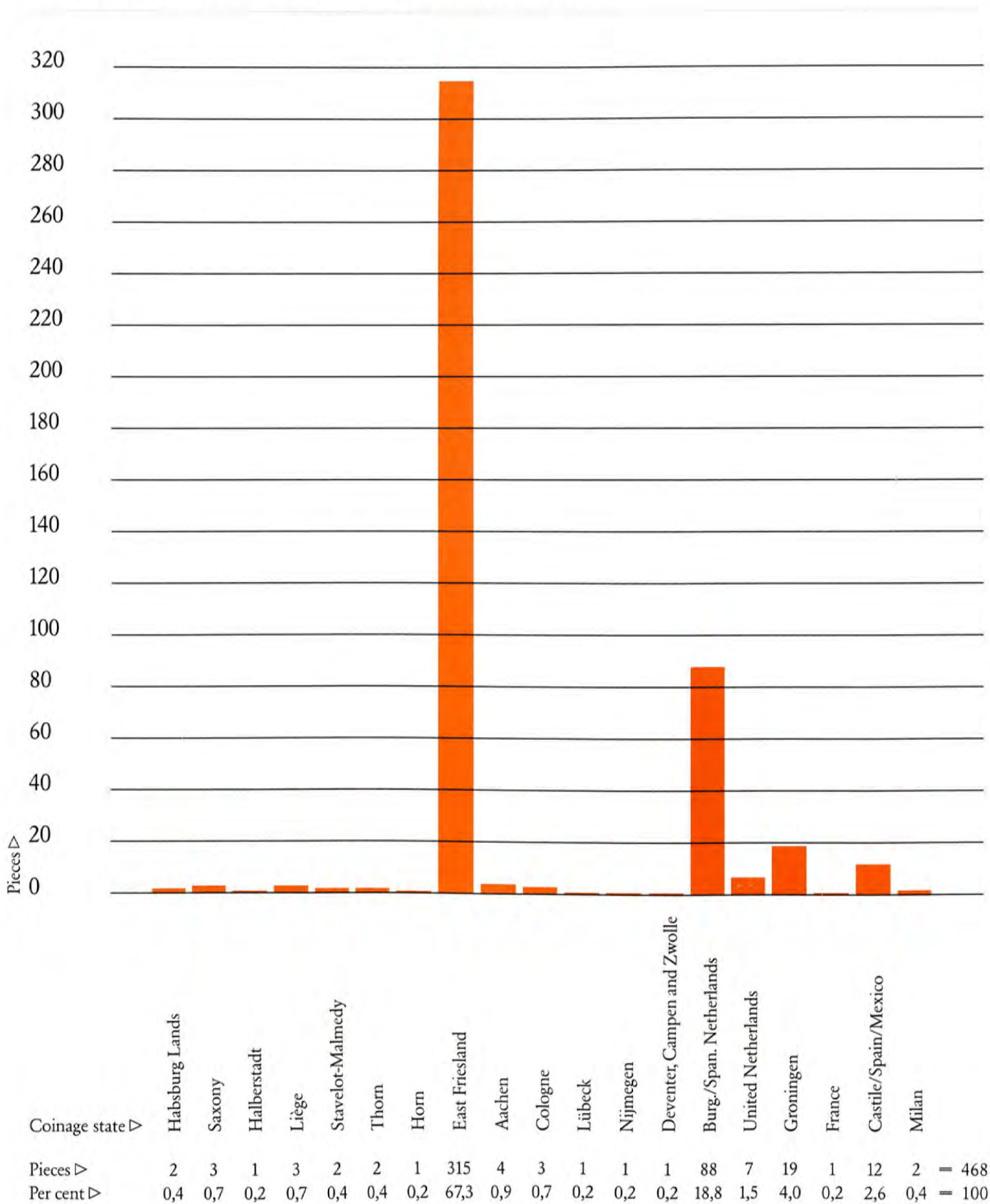
# Appendix



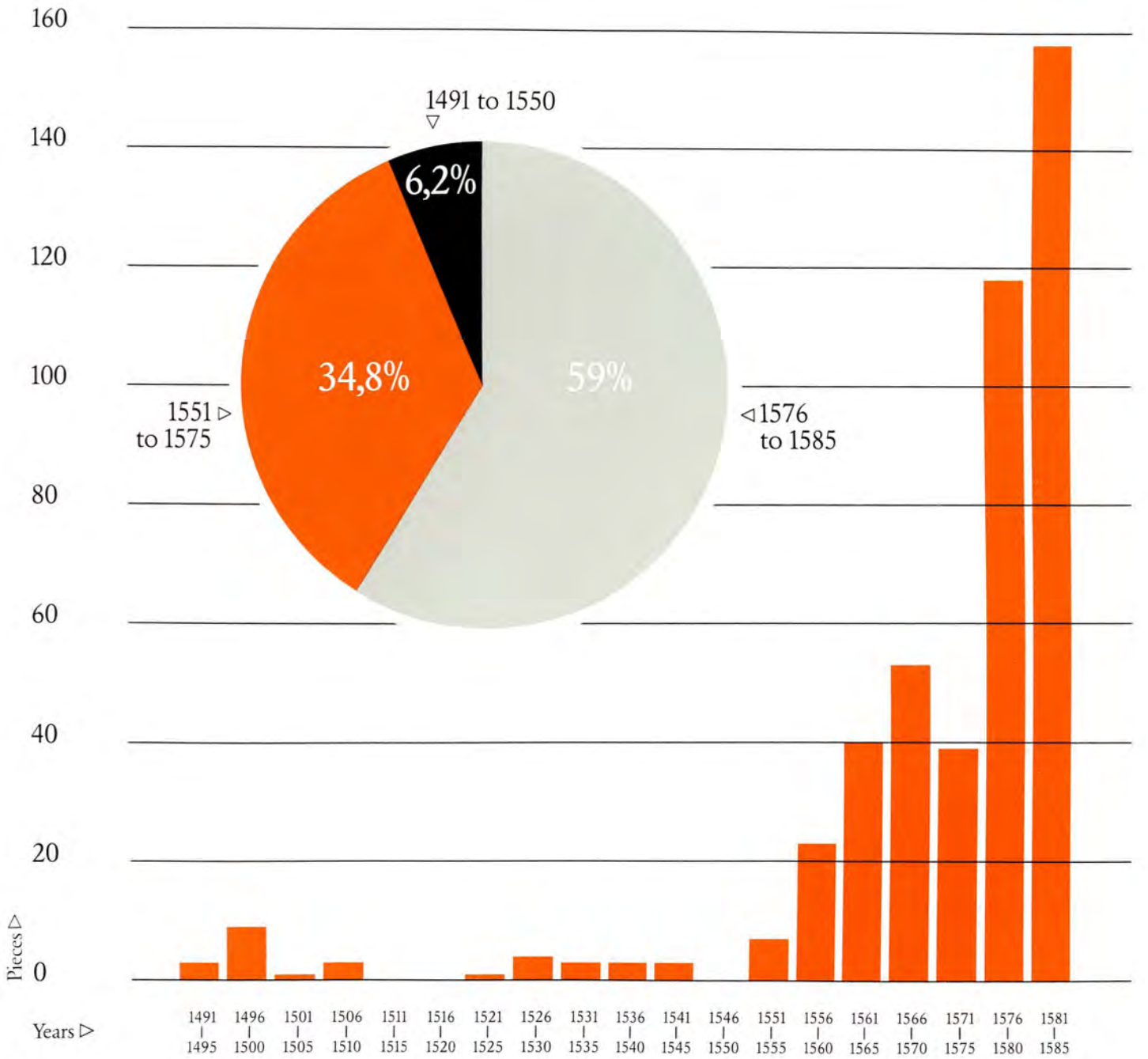
# Tables and Charts

	Page
Number of Coins according to Territories	168
Chronological Distribution of all Coins	169
Chronological Distribution of Foreign Coins	170
Chronological Distribution of Coins of East Friesland	171
Synopsis of Silver Coins struck in East Friesland between 1528 and 1585 completely	172
Foreign Coin Types	174
Talers and their Fractions	176
East Frisian Coin Types pre-1540 and Stuiver Types	177
Die-identical East Frisian Coins	179
2/15 Taler, 1579: Die-Links	180
Flindrich, undated, 1583, 1584 and 1585: Die-Links	182
Ciffert, 1572 and Oortje, 1568 and 1572: Die-Links	183

# Number of Coins according to Territories

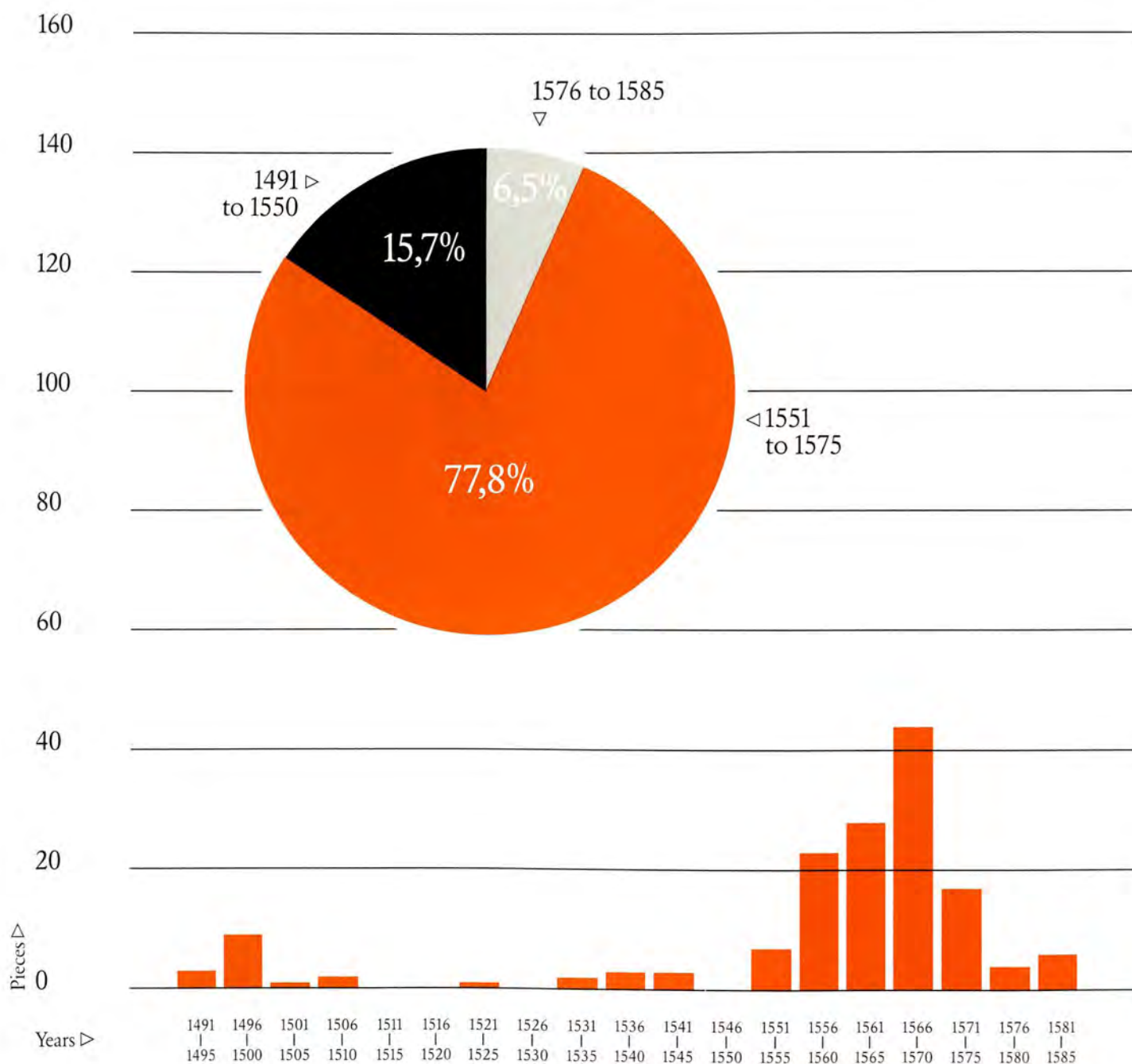


# Chronological Distribution of all Coins



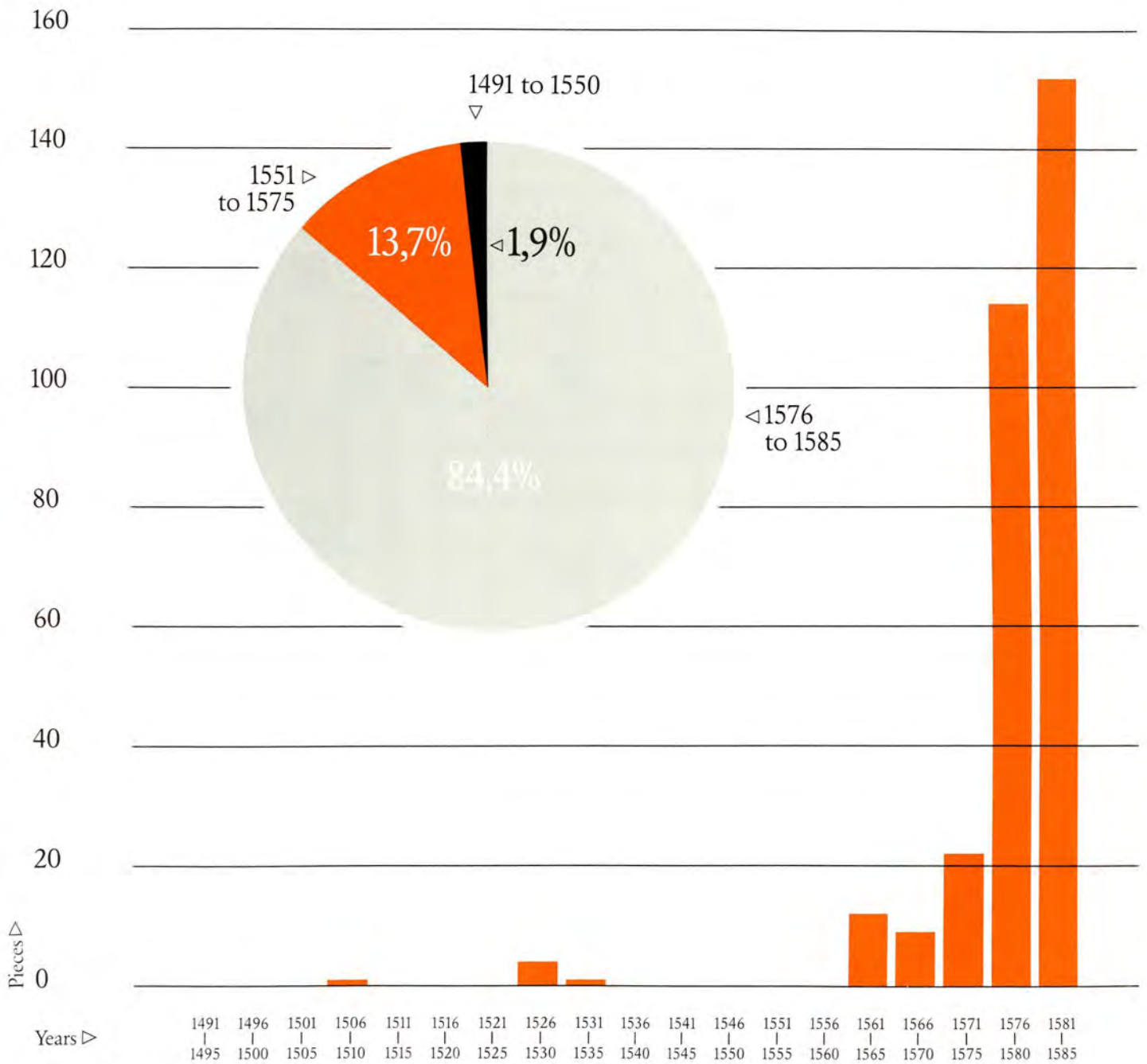
Pieces ▷	3	9	1	3	0	0	1	4	3	3	3	0	7	23	40	53	39	118	158	= 468
Per cent ▷	0,6	1,9	0,2	0,6	0,0	0,0	0,2	0,9	0,6	0,6	0,6	0,0	1,5	4,9	8,6	11,4	8,4	25,2	33,8	= 100

# Chronological Distribution of Foreign Coins



Pieces ▷	3	9	1	2	0	0	1	0	2	3	3	0	7	23	28	44	17	4	6	= 153
Per cent ▷	2,0	5,9	0,6	1,3	0,0	0,0	0,6	0,0	1,3	2,0	2,0	0,0	4,6	15,0	18,3	28,8	11,1	2,6	3,9	= 100

# Chronological Distribution of Coins of East Friesland



Pieces ▷	0	0	0	1	0	0	0	4	1	0	0	0	0	0	0	0	12	9	22	114	152	= 315
Per cent ▷	0,0	0,0	0,0	0,3	0,0	0,0	0,0	1,3	0,3	0,0	0,0	0,0	0,0	0,0	0,0	0,0	3,8	2,9	7,0	36,2	48,2	= 100

# Synopsis of Silver Coins struck in East Friesland

Type of coin \ Year	1507	1528	1529	1530	1531	before 1532	1532	n.d. 1528-1540	1560	1561	1562	1563	1564	1565	n.d. 1564-1566	n.d. 1558-1566	1568	1569
Double taler													■					
Reichstaler																	■	■
Taler												■	■			■		
1/2 reichstaler																	■	
1/2 taler													■			■		
1/4 reichstaler																	■	
Dicke penning				■				■			1	■				■		
2/15 taler																		
1/8 reichstaler																	■	
Flindrich															10			
1/15 taler																		
Schaf			■	■		1	1	■					■				■	
1/4 dicke penning													■					
1/30 taler (= 5/4 stüber)																		
1/30 taler (= 1 stüber)																	■	
Sesling																		
Ciffert				1			■						■	■			1	
1/2 stüber	1																	
Krummsteert			1		■													
3 witten																	■	
Oortje																		7
1/2 krummsteert								■	■	■							■	
Witte		■					■	1									■	
1/2 witte		■					■									■		
Pieces	1		1	1		1	1	1			1				10		8	

1 Number of pieces in hoard    ■ Struck, but not represented in hoard



# between 1528 and 1585 completely

1570	1571	1572	1573	n. d. 1572- 1573	1574	1575	1574- 1576	1577	1579	1580	1581	1581 or 1582	1582	1583	1584	1585	1583 or 1585	Year / Type of coin
																		Double taler
1																		Reichstaler
							1											Taler
																		1/2 reichstaler
																		1/2 taler
																		1/4 reichstaler
																		Dicke penning
																		2/15 taler
																		1/8 reichstaler
																		Flindrich
																		1/15 taler
																		Schaf
																		1/4 dicke penning
																		1/30 taler (= 5/4 stüber)
																		1/30 taler (= 1 stüber)
																		Sesling
																		Ciffert
																		1/2 stüber
																		Krummsteert
																		3 witten
																		Oortje
																		1/2 krummsteert
																		Witte
																		1/2 witte
1																		Pieces



# Talers and their Fractions

Coinage state	Type of coin																Pieces			
	Taler	1/2 taler	1/4 taler	Reichstaler	1/2 reichstaler	Philip daalder	1/2 Philip daalder	1/5 Philip daalder	1/10 Philip daalder	Burgundian rijksdaalder	1/2 Burgundian rijksdaalder	1/4 Burgundian rijksdaalder	Lion daalder	4 reales	2 reales	Real		Teston	8 soldi e 3 denari	
Habsburg Lands	1		1																	2
Saxony			2	1																3
Halberstadt	1																			1
Liège			1	1																2
Stavelot-Malmedy				1	1															2
Thorn				2																2
Horn	1																			1
East Friesland	1			1																2
Aachen				3	1															4
Cologne				2	1															3
Lübeck		1																		1
Nijmegen				1																1
Deventer, Campen and Zwolle	1																			1
Brabant – Antwerp						2	1	6	5											14
– Brussels						1														1
– Maastricht						1	1		1											3
– illegible							1													1
Guelders						7	2	11	1											21
Flanders						4		3	1										1	9
Holland						2	1	8		1	1									13
Utrecht						1		3	2	1										7
Overijssel							2	5												7
Province of Holland															2					2
France																			1	1
Castile															2	3	2			7
Spain															4					4
Mexico															1					1
Milan																			2	2
Pieces	5	1	4	12	3	18	8	36	10	2	1	1	2	7	3	2	1	2		118

5 = Number of pieces

# East Frisian Coin Types pre-1540 and Stuiver Types

Type of coin \ Coinage state/Currency	Dicke penning	Snaphaan	4 patards	Denier of 16 aidants	Double jager	2/15 taler	Flindrich	Schaf	1/15 taler	Brinquet	Patard	Stuiver	Krummsteert	Gros	1/2 stüber	Giffert (Sesling)	1/4 stuiver	Oortje	Witte	Pieces
<b>before 1540</b>																				
East Friesland								2					1		1	1			1	6
<b>Brabant stuivers</b>	6		4	4		4	3		2	1	1			1/2		1/2		1/4	1/10	
Liège				1																1
East Friesland	1					108	148		3							24		22	1	307
Brabant – Antwerp			1							1				3						5
– Maastricht											1									1
– illegible														1						1
Flanders											2			2						4
Holland														1						1
<b>Guelders stuivers</b>		6																		
Province of Guelders		4																		4
Province of Friesland		1																		1
<b>Groningen stuivers</b>					4							1					1/4			
Groningen					8							8					3			19
Pieces	1	5	1	1	8	108	148	2	3	1	3	8	1	7	1	25	3	22	2	350

**6** = Value in stuivers (local currency)

**1** = Number of pieces



## Die-identical East Frisian Coins

---

Each table comprises only those coins for which die-identities were discovered, of obverse, reverse or both sides. The numbers in the far left-hand column and the horizontal line across the top correspond to the numbering of the coins in the catalogue. "V" indicates die-identical obverses, "R" die-identical reverses. "VR" indicates obverse and reverse identities, i. e. both sides struck with a single pair of dies. In arranging the flindrichs of 1583 to 1585, pieces with the same pictorial features proved to have a multiplicity of legend variants: these therefore served as a criterion for their classification. The groups of similar coins which were established were given letters, which were used in the tables in the same way as in the catalogue. Group IIG, for example, consists of six coins with the same legends, of which only four appear in the table because of their die-characteristics: nos. 187–190 share a common obverse die and nos. 188 and

190 are identical in both obverse and reverse dies; reverse identities alone do not occur. There are no die-links for the remaining two coins in the group, which are not shown in the table. In the tables for the other types studied (undated flindrichs, oortje and ciffert) there is only one group in each case, whose number of pieces is indicated in the upper left corner of each table.

A classification of this type for the 2/15 talers of 1579, which like the dated flindrichs could be placed in groups, was dispensed with in the table. This denomination was analysed for identities not only within individual groups but also overlapping between groups. This showed that specimens from different groups had either a common obverse or a common reverse die; die-identical obverse *and* reverse sides, however, can only be found within a group.



# Flindrich, undated, 1583, 1584 and 1585: Die-Links

undated

10 spec.	32
28	V

1583

	2 spec. II A	3 spec. III B	2 spec. III C	3 spec. IV B	4 spec. IV C			
	145	152	154	163	164	166	167	168
144	VR							
151		VR						
153			VR					
162				V	VR			
163					V			
165						R	R	V
166							VR	

1584

	6 spec. II G			15 spec. II H							3 spec. III A	5 spec. III B				4 spec. III C	10 spec. III C 3			5 spec. III C 4	4 spec. III E 2			
	188	189	190	197	198	200	203	204	205	206	207	212	216	217	218	223	232	233	234	235	238	240	247	248
187	V	V	V																					
188		V	VR																					
189			V																					
194				R	R			R		VR	R													
196							VR			VR														
197					VR			VR		VR	R													
198								VR		VR	R													
199							R																	
200									VR															
204										VR	R													
206											VR													
211												VR												
214													R											
215														VR	VR									
217															VR									
222																R								
226																					V			
228																	VR	R	R					
232																		R	R					
233																			VR					
236																					VR	VR		
238																						VR		
246																							VR	VR
247																								VR

1585

	2 spec. I A	5 spec. II A			3 spec. II B	5 spec. II C	
	258	262	263	265	268	271	273
257	VR						
261		VR	VR	VR			
262			VR	VR			
263				VR			
265							
267					V		
270						V	VR
271							VR



# Ciffert, 1572 and Oortje, 1568 and 1572: Die-Links

---

Ciffert

1572 I

7 spec.	301	302
298	R	R
301		R

1572 II

2 spec.	306
305	V

Oortje

1568

6 spec.	309	311	313
308	V	V	
309		V	
312			R

1572

10 spec.	321	322
320	V	V
321		V



# Analysis of Material

## The Chemical Composition of the Flindrichs of 1583, 1584 and 1585

Six flindrichs from the site at Walle, East Friesland were examined in detail in the analytical laboratories of Hoechst AG. Two of the coins were minted in 1583, two in 1584 and two in 1585.

We know of no written decrees by the Counts of East Friesland ordering these issues. According to the monetary situation, minted coins with a silver content of approximately 75% were expected.

This more detailed examination was carried out because earlier analyses using the non-destructive method of X-ray fluorescence spectroscopy on the one hand and traditional, quantitative methods after taking a sample on the other hand had led to widely varying results for the metal composition of the minted coins.

This current determination of the metal composition was first carried out once more by the method of X-ray fluorescence spectroscopy (Philips X-ray spectrometer, PW1410. I should like to take this opportunity to thank Dr.E.Bankmann for his assistance) and gave the following metal composition for the surface:

Cat.-no.	Composition		
	% Ag	% Cu	% Zn
142	90.40	9.40	0.25
143	88.30	11.60	0.10
181	89.00	11.00	<0.05
182	81.50	18.50	<0.05
264	82.90	16.60	0.50
267	87.60	12.30	0.10

The intensity of the spectra was quantified using a control disc having a known composition (Ag 76.5% ± 0.2) from the Research Institute for Noble Metals of the State Academy of Fine Art in Stuttgart (*Forschungsinstitut für Edelmetalle der Staatlichen Akademie der bildenden Künste*).

All the samples very clearly contained lead (almost 1%) which was not included in the above figures. In addition, mercury was detected clearly or measurably on all the samples. Following this finding it was immediately assumed that a subsequent upgrading coating had been applied to the surface of the minted coins.

The subsequent quantitative analysis using traditional destructive methods, to obtain a comparison, confirmed this assumption. The amounts of silver and copper, as the major components of the alloy, are:

Cat.-no.	Composition	
	% Ag	% Cu
142	54	40
143	53	42
181	28	67
182	35	58
264	39	53
267	16	83

The basic alloy for this mint series was an inferior quality silver/copper alloy of which the copper content increased during the minting period.

The minted coins of inferior quality were "verquickt" (amalgamated) to obtain a silver shine on the surface, that is to say, they were coated with an easy-to-spread paste of silver amalgam which

was rubbed in and they were subsequently treated thermally at a temperature of 300–500°C. At these temperatures the mercury evaporates thus giving a more or less homogenous silver surface.

From investigations by D. M. Metcalf (*The Survival of Mercury Coating on Byzantine Miliaria*, Applied Science Center for Archaeology, The University Museum, University of Pennsylvania, Journal 1, 1979, 42–43) into the stock of the Ashmolean Museum, we already have certain analytical indications of similar practices in other areas. Until now there are no reports of this type of finding in the German-speaking region. It should be noted that no investigations have been carried out on fairly large minted series from the German-speaking region from the middle ages and modern times since the introduction of X-ray fluorescence spectroscopy in the fifties. Extensive screening of corresponding silver mintage could lead to interesting results.

### The Results of the Chemical Analysis from the Point of View of Minting Policy

The foregoing analysis, kindly carried out at Hoechst AG by Dr. E. Bankmann and evaluated by Dr. E. Pászthory, sheds light on the obscurity surrounding the coining of flindrichs in the years from 1583 to 1585. In the copious and well-published available sources for the coinage and monetary history of East Friesland there is no reference at all to the standards laid down for this coin type. However, the prescribed fineness may be deduced from the instructions for the coinage of single, double and quadruple stuivers. According to the last regulation, that of May 1579, the three specified coin types were to be struck as follows:

	Stuiver	Double stuiver	Quadruple stuiver
Gross weight	3.077 g	3.077 g	4.608 g
Fineness	250/1000	500/1000	667/1000
Fine weight	0.769 g	1.538 g	3.074 g

The average weight determined for the flindrichs present in the hoard was about 2.80 g for each of the three years. But it is noticeable that the number of pieces lying above this average value is greater than the number of those weighing less than 2.80g. Since as a rule coins were issued lower in weight rather than too high, it may be assumed that the prescribed weight of the flindrichs, by analogy with the stuiver and double stuiver, likewise lay around 3 g; loss of weight through long circulation is excluded by the circumstances of the find. At the same weight the flindrich, as a three-stuiver piece, would consequently require a fineness of about

750/1000 (= 3 x 250/1000); it would thus have fitted seamlessly into the pattern of the stuiver-denominations.

present in the hoard, it is very likely that such pieces were nailed to the counters or doorposts of grocers' shops as a warning and a deterrent.

However, as the newly carried out metal analyses have shown, a different course was followed to give the flindricks the appearance of high-value silver coins. The motive for this manipulation is perhaps to be sought in a shortage of silver, which would have made it impossible to strike a total of just under 700,000 specimens in three years with the correct fineness. If this had been done at the required silver fineness of 750/1000, 2.307 g of precious metal would have been needed for each piece. An output of 700,000 coins would thus have required 1614.9 kg of pure silver. Comparison with the values determined by analysis reveals the following picture:

At this point, one could hardly help suspecting that no official stipulation of the coinage standard was ever made for the flindricks of 1583 to 1585. The lack of this document is thus not an accident, but intentional. It seems that Count Edzard II may, for the second time, have been involved in an illicit, reprehensible financial manipulation, which was naturally not recorded in writing. Whether the initiative for this attempted deception came from the mintmaster of the day, Joest Janssen (Dietrich Iden's successor) or from the Count can no longer be determined in this case.

Fineness	Fine weight	Amount of fine silver for 700,000 coins	Saving
540/1000	1.66 g	1162 kg	452.9 kg
530/1000	1.63 g	1141 kg	473.9 kg
390/1000	1.20 g	840 kg	774.9 kg
350/1000	1.08 g	756 kg	858.9 kg
280/1000	0.86 g	602 kg	1012.9 kg
160/1000	0.49 g	343 kg	1271.9 kg

We may assume that the fraud was carried out with the knowledge and approval of Count Edzard II, who a decade earlier had already participated financially in the debased reissue of the 1564 taler by the then mintmaster Dietrich Iden.

The deception, intended to be carried out using these coins treated with silver amalgam, apparently did not remain a secret. From the pierced examples

## Source of Illustrations

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Aurich, Niedersächsisches Staatsarchiv: p. 26, 27, 72

Brussels, Musées des Beaux-Arts de Belgique: p. 49

Emden, Ostfriesisches Landesmuseum: p. 58, 65–67

Frankfort on the Main, Galerie Brumme  
Frankfurt GmbH: p. 63, 64

Glashütten im Taunus, Buch- und Kunst-  
antiquariat Reiss & Auvermann: p. 24, 28, 29

London, The British Library: p. 9

Oldenburg, Landesmuseum  
(Photographer H. R. Wacker): p. 23

Salzburg, Museum Carolino Augusteum: p. 38

Stuttgart, Württembergisches  
Landesmuseum: p. 13

All other illustrations:

Deutsche Bundesbank, Frankfort on the Main  
Photographs: Manfred Czastka and Ernst Balke

Drawing of the jug:

Gerhard Lanz, Frankfort on the Main

# Select Bibliography

- Alföldi, Maria R.: Antike Numismatik. Parts 1 and 2. – Mainz 1978. – (Kulturgeschichte der antiken Welt. Vol. 2. 3)
- Arnold, Paul: Die sächsische Talerwährung von 1500 bis 1763. – Schweizerische Numismatische Rundschau. Vol. 59, 1980, pp. 50–94
- Bahrfeldt, Max von: Niedersächsisches Münzarchiv. Verhandlungen auf den Kreis- und Münzprobationstagen des Niedersächsischen Kreises 1551–1625. Vol. 1–4. – Halle/Saale 1927–1930
- Behrens, Heinrich: Münzen und Medaillen der Stadt und des Bistums Lübeck. – Berlin 1905. Reprinted 1972
- Beninga, Eggerik: Cronica der Fresen. – Aurich 1961. – (Quellen zur Geschichte Ostfrieslands. Vol. 4)
- Berghaus, Peter: Die ostfriesischen Münzfunde. – Friesisches Jahrbuch. 1958, pp. 9–20
- Berghaus, Peter: Zwei alte ostfriesische Münzschatzfunde. – Berliner Numismatische Zeitschrift. Vol. 2, 1953–1958, pp. 43–48
- Blanchet, Jules Adrien: Les rapports entre les dépôts monétaires et les événements militaires, politiques et économiques. – Revue numismatique. Ser. 4, vol. 39, 1936, pp. 1–70 and 205–270
- Caspar, Helmut: "In meiner Müntz schlag ich gericht..."; Münztechnik auf historischen Bilddokumenten. – Berlin 1974. – (Numismatische Beiträge. Special issue. 1)
- Chestret de Haneffe, Jules de: Numismatique de la Principauté de Liège et ses dépendances (Bouillon, Looz) depuis leurs annexions. – Ed. 1887. Reprint Liège 1972
- Chestret de Haneffe, Jules de: Numismatique de la Principauté de Stavelot et de Malmédy. – Revue belge de numismatique. Vol. 48, 1892, pp. 176–203
- Chijs, Pieter Otto van der: De munten der voormalige Graafschappen Holland en Zeeland, alsmede der Heerlijkheden Vianen, Asperen en Heukelom, van de vroegste tijden tot aan de pacificatie van Gend. – Haarlem 1858
- Chijs, Pieter Otto van der: De munten der voormalige Heeren en Steden van Gelderland, van de vroegste tijden tot aan de pacificatie van Gend. – Haarlem 1853
- Chijs, Pieter Otto van der: De munten der voormalige Heeren en Steden van Overijssel, van de vroegste tijden tot aan de pacificatie van Gend. – Haarlem 1854
- Chijs, Pieter Otto van der: De munten der voormalige Hertogdommen Brabant en Limburg, van de vroegste tijden tot aan de pacificatie van Gend. – Haarlem 1851
- Chijs, Pieter Otto van der: De munten van Friesland, Groningen en Drenthe (der Heeren van Koevorden) van de vroegste tijden tot aan de pacificatie van Gend. – Haarlem 1855
- Corpus Nummorum Italicorum. Vol. 5: Lombardia (Milano). – Rome 1914
- Delmonte, A.: Le Benelux d'argent, de zilveren Benelux, the silver Benelux. – Amsterdam 1967
- Demmler, Th., Friedrich von Schrötter: Das Glasgemälde der Schaffhausener Münzstätte von 1565. – Jahrbuch der Preussischen Kunstsammlungen. Vol. 54, 1933. No. 4, pp. 255–261
- Deutsche Taler, von den Anfängen der Talerprägung bis zum Dreißigjährigen Krieg. – Deutsche Bundesbank Frankfurt on the Main 1966
- Die deutschen Münzfunde der Zeit von 750 bis 1815. Der Fundkatalog Mittelalter/Neuzeit der Numismatischen Kommission der Länder in der Bundesrepublik Deutschland. – 2nd ed. – Hamburg 1986
- Duplessy, Jean: Le snaphaen de Charles d'Egmont, duc de Gueldre (1492–1538). – Bulletin/Club français de la médaille, 3<sup>e</sup> trimestre, 1979, pp. 120–125
- Emmius, Ubbo: Friesische Geschichte. – Vol. 1–7. – Frankfurt on the Main 1982
- Festschrift, 450-Jahr-Feier in Walle/Ostfriesland, Mai 1984. – Walle 1984
- Frede, Lothar: Thüringische Sagen von Münzschatzen. – Berliner Münzblätter. Vol. 52, 1932. No. 349/350, pp. 383–388
- Gebhart, Hans (et al.): Bemerkungen zur kritischen Neuaufnahme der Fundmünzen der römischen Zeit in Deutschland. – Jahrbuch für Numismatik und Geldgeschichte. Vol. 7, 1956, pp. 9–76

- Gehalts-, Löhnungs- und andere Preisverhältnisse um 1550. – Jahrbuch der Gesellschaft für bildende Kunst und vaterländische Altertümer zu Emden. Vol. 2, 1877, pp. 160–164
- Gelder, H. Enno van: De klopp van 1573/4. – Jaarboek voor Munt- en Penningkunde. 67, 1980, pp. 101–106 (Reprinted from: De Geuzenpenning. 4, 1951, pp. 25–28)
- Gelder, H. Enno van: Laat-middeleeuwse munten van Groningen. – Jaarboek voor Munt- en Penningkunde. 69, 1982, pp. 21–46
- Gelder, H. Enno van: De munt als middel tot oorlogsfinanciering. – Jaarboek voor Munt- en Penningkunde. 67, 1980, pp. 219–220 (Reprinted from: De Geuzenpenning. 5, 1955, pp. 45–47)
- Gelder, H. Enno van: Muntmeesters en stempelsnijders. – Jaarboek voor Munt- en Penningkunde. 67, 1980, pp. 231–234 (Reprinted from: De Geuzenpenning. 17, 1967, pp. 29–32)
- Gelder, H. Enno van: De nederlandse munten. – Utrecht, Antwerp 1970
- Gelder, H. Enno van: De z.g. Uniemunten van 1579. – Jaarboek voor Munt- en Penningkunde. 70, 1983, pp. 15–30
- Gelder, H. Enno van, Joh. S. Boersma: Munten in muntvondsten. – Bussum 1967
- Gelder, H. Enno van, Marcel Hoc: Les monnaies des Pays-Bas Bourguignons et Espagnols 1434–1713. – Amsterdam 1960
- Grierson, Philip: The interpretation of coin finds. 1. 2. – Numismatic Chronicle. 7th series, vol. 5, 1965, pp. I–XIII; vol. 6, 1966, pp. I–XXI
- Hagedorn, Bernhard: Ostfrieslands Handel und Schiffahrt im 16. Jahrhundert. – Berlin 1910. – (Abhandlungen zur Verkehrs- und Seegeschichte. Vol. 3)
- Hagedorn, Bernhard: Ostfrieslands Handel und Schiffahrt vom Ausgang des 16. Jahrhunderts bis zum Westfälischen Frieden (1580–1648). – Berlin 1912. – (Abhandlungen zur Verkehrs- und Seegeschichte. Vol. 4)
- Hagen, Wilhelmine: Neue rheinische Münzschatzfunde des 17. Jahrhunderts. – Bonner Jahrbücher. No. 147, 1942, pp. 383–461
- Handwörterbuch des deutschen Aberglaubens. Vol. 1–10. – Berlin, Leipzig 1927–1942. Reprinted Berlin, New York 1987
- Haupt, Walther: Sächsische Münzkunde. – Berlin 1974. – (Arbeits- und Forschungsberichte zur sächsischen Bodendenkmalpflege. Suppl. 10)
- Herbel, Wilhelm: Der Schatzfund (juristisch). – Schriftenreihe der Numismatischen Gesellschaft Speyer. No. 19, 1978, pp. 45–48
- Hill, George Francis: Treasure trove in law and practice. – Oxford 1936
- Hirsch, Johann Christoph: Des Teutschen Reichs Münz-Archiv ... Parts 1–8. – Nuremberg 1756–1766
- Holzmai, Eduard: Münzfunde und Denkmalpflege. – Numismatische Zeitschrift (Vienna). Vol. 86, 1971, pp. 79–82
- Jesse, Wilhelm: Probleme und Aufgaben der Münzmeisterforschung. – Hamburger Beiträge zur Numismatik. No. 9/10, 1955/56, pp. 31–60
- Jungwirth, Helmut, Bernhard Koch: Der Münzfund von Werfen. – Salzburger Museum Carolino Augusteum, Jahresschrift. Vol. 20, 1974, pp. 7–41
- Kappelhoff, Anton: Die Münzen Ostfrieslands, vom frühen 14. Jahrhundert bis 1628. – Aurich 1982. – (Abhandlungen und Vorträge zur Geschichte Ostfrieslands. Vol. 60)
- Kennepohl, Karl: Der Emdener Münzmeisterstein. – Ostfriesland, Zeitschrift für Kultur, Wirtschaft und Verkehr. 1956/3, pp. 1–5
- Kennepohl, Karl: Der ostfriesische Münzmeister Dietrich Iden. – Centennial publication of The American Numismatic Society. New York 1958, pp. 381–399
- Klüssendorf, Niklot: Die Münzfundpflege im Lande Hessen. – Marburg, Wiesbaden 1982. – (Archäologische Denkmäler in Hessen. 26)
- Klüssendorf, Niklot: Münzschatzfunde des 18. Jahrhunderts aus der Grafschaft Hanau. – Geldgeschichtliche Nachrichten. Vol. 17, 1982. No. 91, pp. 221–229
- König, Josef: Verwaltungsgeschichte Ostfrieslands bis zum Aussterben seines Fürstenhauses. – Göttingen 1955. – (Veröffentlichung der Niedersächsischen Archivverwaltung. No. 2)
- Krusy, Hans: Ein gräflich-ostfriesischer Gegenstempel. – Berliner Numismatische Zeitschrift. Vol. 2, 1953–1958, pp. 42–43



- Lafaurie, Jean, et Pierre Prieur: Les monnaies des rois de France, François I<sup>er</sup> à Henri IV. – Paris, Basle 1956
- Lang, Arend: Die Erstausgabe der Ostfriesland-Karte des Ubbo Emmius (1595). – Jahrbuch der Gesellschaft für bildende Kunst und vaterländische Altertümer zu Emden. Vol. 42, 1962, pp. 93–125
- Luschin von Ebengreuth, Arnold: Allgemeine Münzkunde und Geldgeschichte des Mittelalters und der neueren Zeit. – 2nd ed. – Munich, Berlin 1926. – (Handbuch der mittelalterlichen und neueren Geschichte. Sect. 4)
- MacDonald, George: Coin finds and how to interpret them. – Proceedings of the Royal Philosophical Society of Glasgow. Vol. 34, 1903, pp. 282–300
- Markl, Moritz: Die Münzen, Medaillen und Prägungen mit Namen und Titel Ferdinand I. Parts 1 – 2. – Prague 1896
- Martin, Colin: De la propriété des trésors monétaires. – Revue belge de numismatique. Vol. 116, 1970, pp. 23–29
- Menadier, Julius: Die Aachener Münzen. – Berlin 1913
- Metcalf, D. Michael: Statistische Analyse bei der Auswertung von Münzfundmaterialien. – Jahrbuch für Numismatik und Geldgeschichte. Vol. 9, 1958, pp. 187–196
- Miller zu Aichholz, Viktor von, A. Loehr, E. Holzmair: Österreichische Münzprägungen 1519–1938. – 2nd ed. – Vienna 1948
- Möhlmann, Günther: Unter der Herrschaft der Cirksena, 1464 bis 1744. – Deutsche Landschaft. Vol. 10: Ostfriesland. Essen 1961, pp. 87–97
- Moser, Heinz, Heinz Tursky: Die Münzstätte Hall in Tirol, 1477–1665. – Innsbruck 1977
- Münzen in Brauch und Aberglauben. – Germanisches Nationalmuseum Nuremberg (Exhibition Catalogue). 1982
- Naster, Paul: Les trouvailles des monnaies: Importance historique et aspects juridiques. – Annales du XXXIV<sup>e</sup> Congrès de la Fédération Archéologique et Historique de Belgique. 1951, pp. 207–214
- Noss, Alfred: Die Münzen der Städte Köln und Neuss, 1474–1794. – Cologne 1924. – (Die Münzen und Medaillen von Köln. Vol. 4)
- Pflaum, Hans-Georg: L'importance des trésors pour la numismatique et l'histoire. – Cercle d'études numismatiques Bulletin. Vol. 14, 1977. No. 1, pp. 1–10
- Pinchart, Alexandre M.: Biographies des graveurs belges: Pierre Noirot, Claude Noirot, Jean Noirot, Pierre van Abeele, Mathieu Knebel. – Revue de la Numismatique Belge. 2nd series. Vol. III, 1853, pp. 172–192
- Polak, Ernst: Enkele nadere gegevens omtrent »Tstempelen van den Gelde« in Holland en Zeeland in en na 1573. – Jaarboek van het Koninklijk Nederlandsch Genootschap voor Munt- en Penningkunde. – 21, 1934, pp. 2–47
- Probszt, Günther: Österreichische Münz- und Geldgeschichte von den Anfängen bis 1918. – Vienna, Cologne, Graz 1973
- Rittmann, Herbert: Deutsche Geldgeschichte 1484–1914. – Munich 1975
- Sammlung Otto Merseburger, umfassend Münzen und Medaillen von Sachsen, Albertinische und Ernestinische Linie. – Leipzig 1894
- Sarvas, Pekka: Schätze und Schatzfunde. – Lagom. Festschrift für Peter Berghaus zum 60. Geburtstag am 20. Nov. 1979. – Münster 1981, pp. 3–10
- Schilling, Heinz: Niederländische Exulanten im 16. Jahrhundert. – Gütersloh 1972. – (Schriften des Vereins für Reformationsgeschichte. No. 187, 78/79)
- Schmidt, Heinrich: Politische Geschichte Ostfrieslands. – Leer 1975. – (Ostfriesland im Schutze des Deiches. Vol. 5)
- Schmidt-Degener, F.: Das Bildnis des Grafen Edzard. – Jahrbuch der Gesellschaft für bildende Kunst und vaterländische Altertümer zu Emden. Vol. 28, 1942, pp. 1–6
- Schnee, Gernot: Sächsische Taler 1500–1800 und Abschlüge von Talerstempeln in Gold und Silber. – Frankfurt on the Main 1982
- Schöningh, Wolfgang: Emden, ein stadsgeschichtlicher Rückblick. – Deutsche Landschaft. Vol. 10: Ostfriesland. Essen 1961, pp. 108–119
- Schrötter, Friedrich von: Das Münzwesen des Deutschen Reichs von 1500 bis 1566. – Schmollers Jahrbuch. Vol. 35, 1911, pp. 1697ff

- Schulthess-Rechberg, Karl Gustav von: Thaler-Cabinet, Beschreibung aller bekannt gewordenen Thaler...  
Vol. 2,1. Päpste und Erzbischöfe. – Vienna 1845  
2,2. Bischöfe, Ordensmeister, Aebte, Pröbste und Aebtissinnen. – Vienna 1846
- Siebels, Gerhard: Zur Kulturgeographie der Wallhecke. – Leer 1954
- Stadt im Wandel, Kunst und Kultur des Bürgertums in Norddeutschland 1150–1650. Landesausstellung Niedersachsen 1985.  
Vol. 1–4. – Stuttgart-Bad Cannstatt 1985
- Steinger, Hermann: Die münzdatierte Keramik in Österreich, 12. bis 18. Jahrhundert. Fundkatalog. – Vienna 1985
- Swart, F.: Zur friesischen Agrargeschichte. – Leipzig 1910. – (Staats- und sozialwissenschaftliche Forschungen. No. 145)
- Thordeman, Bengt: Coin-finds in Sweden: legislation and organization. – Transactions of the International Numismatic Congress. – London 1936, pp. 320–323
- Verkade, Pieter: Muntboek, bevattende de namen en afbeeldingen van munten, geslagen in de Zeven voormalig Vereenigde Nederlandsche Provinciën, sedert den vrede van Gent tot op onzen tijd. – Schiedam 1848
- Vidal Quadras y Ramón, Manuel: Catálogo de la colección de monedas y medallas. Vol. 2. – Barcelona 1892. Reprinted 1975
- Vom Taler zum Dollar, 1486–1986. – Staatliche Münzsammlung Munich (Exhibition). 1986
- Walther, Rolf: Die Entwicklung der europäischen Münzprägtechnik von den Karolingern bis zur Gegenwart. – Deutsches Jahrbuch für Numismatik. Vol. 2, 1939, pp. 139–158
- Werner, Joachim: Münzschatze als Quellen historischer Erkenntnis. – Jahrbuch für Numismatik und Geldgeschichte. Vol. 2, 1950/51, pp. 137–138
- Wiemann, Harm: Rechnungen des Klosters Barthe um 1600. – Jahrbuch der Gesellschaft für bildende Kunst und vaterländische Altertümer zu Emden. Vol. 39, 1959, pp. 37–96
- Wiemann, Harm: Rechnungen des Klosters Meerhusen um 1600. – Jahrbuch der Gesellschaft für bildende Kunst und vaterländische Altertümer zu Emden. Vol. 43, 1963, pp. 125–155
- Wiemann, Harm: Studien zur Entstehung der Häuptlingsherrschaft. – Jahrbuch der Gesellschaft für bildende Kunst und vaterländische Altertümer zu Emden. Vol. 42, 1962, pp. 16–74
- Wiemann, Harm, Johannes Engelmann: Alte Wege und Straßen in Ostfriesland. – Pewsum, Leer 1972. – (Ostfriesland im Schutze des Deiches. Vol. 8)
- Witte, Alphonse de: Histoire monétaire des comtes de Louvain, ducs de Brabant et marquis du Saint Empire Romain. Vols. 1–2. – Antwerp 1894. 1896

# Map of the Mints

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# The Mints

- 1 Prague
- 2 Joachimstal
- 3 Dresden
- 4 Freiberg
- 5 Halberstadt
- 6 Hasselt
- 7 Liège
- 8 Poulseur
- 9 Thorn
- 10 Weert
- 11 Groningen
- 12 Emden
- 13 Aachen
- 14 Cologne
- 15 Lübeck
- 16 Nijmegen
- 17 Deventer
- 18 Antwerp
- 19 Maastricht
- 20 Brussels
- 21 Bruges
- 22 Dordrecht
- 23 Utrecht
- 24 Zutphen
- 25 Leeuwarden
- 26 Bayonne
- 27 Cuenca
- 28 Granada
- 29 Segovia
- 30 Seville
- 31 Mexico
- 32 Milan









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