THE NUMISMATIC SOCIETY OF IRELAND

Occasional Papers
39 – 44

Edited by
Ronan Fitzpatrick

Dedicated to passed members who have enriched our knowledge through their commitment to the study of numismatics and their engagement with The Numismatic Society of Ireland.

Front cover: The pin of the Society. Actual size 15.5mm

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P R E F A C E

Editing this volume of Occasional Papers for The Numismatic Society of Ireland has been a welcome challenge and highly rewarding labour. The work has spread over a period of twelve months, yet, the ease with which the volume has come together is a tribute to the enthusiasm and cooperation of the paper authors, anonymous reviewers and the support of the NSI committee. Without that, my role would have been so much more difficult and the editing period longer. The papers in this volume relate to coins, tokens and medals and I hope you enjoy reading the content as much as I have enjoyed editing and assembling it.

I have been told that in this context occasional means from 'time to time' and 'now and then'. Well, the Society would hope to be able to use this publication to occasionally distribute amongst the members seminal and significant papers that relate to Irish coins, tokens, medals and currency that have not been published in the mainstream numismatic press. Such a paper, relating to Irish tokens, and originally published in a different context, is included in this volume and is reprinted with the kind permission of the original publishers, as it is believed that it merits the wider numismatic audience of the Society.

Finally, it is only because members have researched and taken the time to record the results of their research that it is possible to publish these Occasional Papers.

Any corrections, additions, critiques or recommendations from readers will be welcome.

Ronan Fitzpatrick,
Dublin,
Autumn 2008

THE COINAGE OF THE CRUSADERS
Christians, Conquerors, Commoners & Criminals

Gearóid Ó Broin

The Eastern Roman Byzantine Empire was in trouble. It suffered a major defeat at Manzikert, at the hands of the Seljuk Turks in 1071. A call to the West for help resulted in a catastrophe for them – the crusaders, called Franks or Latins in their day. The events which enfolded were to have long lasting consequences, felt to this day in the attitude of Muslims and Greeks towards the West.

Pope Urban II called for a crusade at the Council of Clermont in 1095 and in 1097, the First in a series of crusades reached Constantinople. One of the main aims was to keep the pilgrim routes to Jerusalem free. What happened though was an unbridled free for all for land, power and wealth. Antioch was besieged and captured in 1098 and a Principality was founded. Other Frankish lands were set up in the County of Edessa, the County of Tripoli and the Kingdom of Jerusalem.

Among the first crusaders to arrive were Bohemund and his nephew, Tancred, who was born in 1072. They were of Norman stock and were living in the Norman Kingdom of Sicily when they embarked, penniless, to join the crusaders. Tancred captured Tarsus, birthplace of St. Paul and raised his flag over the Rock of the Dome in Jerusalem in 1099. He had no qualms about killing 'infidels' or of robbing them of their gold. Indeed, he, and the other Christians saw such deeds as a sure way to Heaven. He was made Prince of Gallilee and Regent of Antioch after his uncle was captured and imprisoned by the Muslims. He remained as regent for Bohemund II, who was still a child, following Bohemund's death.

The copper coinage was from the start of the same general fabric and design as Byzantine folles, rather than reflecting the western coinages of the countries from where the crusaders came. Greek and Latin were also in use from the start, as with contemporary Byzantine coins. Some early flans are polygonal, reminiscent of the coinage of the Seljuk Turks. Others have the bevelled edges produced by casting.

Copper Issues of the Principality of Antioch

The Principality of Antioch was founded in 1098 and lasted until 1268. A great variety of copper coins were issued.

Figure 1

Tancred

Æ Follis, [1104 - 1112] 22mm, 4.30 g.
+ KE BO [TA] NKRI +, (O Lord, come to the aid of your servant Tancred) facing bust of Tancred, holding sword.
Reverse: IC/ [X]C/ NI/ KA, (Jesus Chris, victor) in quarters of cross.

Weights varied considerably, starting at around 4.5g and ending as low as 2.0g. This is probably an indication that they were regarded as a token coinage.

Figure 2

Tancred

Æ Follis [1104 - 1112] 18mm, 2.08 g.
[+ KE BO TA]N KRI +, facing bust of Tancred, holding sword.
Reverse: IC/ X[C]/ NI/ KA, in quarters of cross.

The following coin (Figure 3) is very similar to the Byzantine anonymous folles, which were produced for around 100 years until the recoinage of 1092.

Figure 3

Tancred

AE Follis, [1104 - 1112] 24mm, 4.31g.
IC XC across fields, nimbate bust of Christ facing.
Reverse: TA NK P H in quarters of cross.

Overstriking of earlier issues was common and helps numismatists to arrange the coins in chronological order. It would appear that each issue lasted for around 3 years. This may have been a useful source of revenue. Saint Peter was the patron saint of Antioch and is sometimes featured on the coins.

Figure 4

Tancred

AE Follis, [1104 - 1112] 22mm, 4.35g, overstruck on a Type V coin. O P St. Peter nimbate standing facing, right hand raised, cross in left hand.
Reverse: D S F T in quarters of cross. (Domine, salvum fac Tancredum).

When Tancred died of fever, Roger of Salerno took over as regent of Antioch for his cousin Bohemund II, who was still a child. Roger was at constant warfare with the Muslims and was killed at a battle known as 'The Field of Blood'. The following coin has one of the earliest numismatic depictions of St. George and the dragon.

Figure 5

Roger of Salerno

AE Follis [1112 – 1119] overstruck on Tancred's 4th Type. 23mm, 3.40g,
O with central pellet Γ/ш [I], St. George
Right on horseback, spearing dragon.
*Reverse:*POT3EP/[П P IGKП/OC ANT/IOx in 4 lines across field; lozenge above.

Bohemund II (1108–1131), was the son of Bohemund who accompanied Tancred on the crusade. He became prince of Antioch on his 18th birthday. He went to war with the Frankish rulers of the County of Edessa over territorial disputes. He of course continued the fight against the Muslims. He joined in an attack on Damascus but was repulsed. He was beheaded after a battle against the Turks in 1130 and his head sent in a silver box to the Caliph of Baghdad, who was reported to be delighted with the gift.

Figure 6

Bohemund II as Prince

Æ Follis, (1126-1130) 18mm, 4.25 g.
O]P E, Nimbate bust of St. Peter facing, holding cross over left shoulder.
Reverse: U D [U], in angles of cross.

Billon Issues of the Principality of Antioch.

Billon deniers, or pennies of 35–40% silver, were plentiful and were the stable coinage of Antioch from around 1148–1268. There were two series, the first had a right profile bust, usually bareheaded. The second had a left profile bust, a helmeted head and cross, chain armour and crescent and star to left and right of the bust. The coins were broadly similar to those of western Europe at the time.

The change between the two series happened in the reign of Bohemund III (1144–1201). He ruled in his own right from 1163 till his death. The reign of Bohemund III was marked by warfare against the infamous Muslim leaders Nur ed-Din and Saladin and against the Christian kingdom of Armenia. He intervened, disastrously, in the affairs of the Kingdom of Jerusalem.

Figure 7

Bohemund III

Billon Denier First Series
"Bare Head" [1149-1163] BOAMVNDVS.
Reverse: Short Cross, pellet in SE corner + ANTIOCHIA

Figure 8

Bohemund III

Billon Denier Second Series
"helmeted Head" [1149-1163] BOAMVNDVS.
Reverse: Short Cross, + ANTIOCHIA

Bohemund IV was ruler of Antioch between 1201 and 1216, and again from 1219 until his death. He was also Count of Tripoli from 1187. The first part of his rule was marked by internal dynastic conflicts.

Figure 9

Bohemund IV

Billon Deniers
First Reign 1201 - 16
Top: Class K 18mm, 0.93g.
Below: Class J 17mm, 0.82g.
Both with helmeted bust left, chin guards, crescents and stars in field.
Reverse: Short Cross, crescent in NE corner
+ AMTIOCHIA.

Kingdom of Jerusalem

Jerusalem was captured in 1099 amid great slaughter and plunder. It was generally ruled as a Kingdom, though some rulers felt that Jesus Christ was King of Jerusalem and therefore contented themselves with the title of 'Comes' or Count. Henry II (1166 – 1197), Count of Champagne left France on the Third Crusade and was king of Jerusalem from 1192 to 1197, although he never used the title of king on his coinage. He was a nephew of both the King of England (Richard I) and of France (Philip II), who went on crusade at the same time out of mistrust of each other. Henry initially fought with Philip but changed to Richard's side. The Kingdom lasted until 1291, when the city of Acre fell.

Figure 10

Henry of Troyes, Count of Champagne

AE Pougeoise [1192-1197]
17mm, 1.09g, +COMES HENRICVS (triple pellet stops) Cross patee, annulet in quarters.
Reverse: +PVGES D ACCOH, fleur de lis.

County of Tripoli

The County of Tripoli (Lebanon) was founded in 1104 and lasted until 1288. Raymond III (1140–1187) was Count of Tripoli from 1152 to 1187 and Prince of Galilee and Tiberias in right of his wife. He narrowly escaped death at the battle of Hattin in 1187 at the hands of Saladin, but died of pleurisy shortly afterwards.

Figure 11

Raymond III

AE Pougeoise 17mm, 1.33g, [1173/4-1187]
+CIVITAS, gateway with 5 courses of masonry, 5 crenellations, large divided doorway (?).
Reverse: +TRIPOLIS, X shaped design with central annulet and pelleted bars, crescent above, pellet in each quarter.

Bohemund VII (1261 –1287) was the Count of Tripoli and nominal prince of Antioch from 1275 to his death. The only part left of the once great Principality of Antioch at this stage was the port of Latakia. He spent much of his reign at war with the Knights Templars and with other Frankish families.

Figure 12

Bohemund VII

AR Gros, 27mm, 4.17g, [1275 - 1287]
+SEPTIMVS BOEMVNDVS COMES
(Triple pellet stops) cross pattée within Twelve-foil.
Reverse: +CIVITAS TRIPOLIS SVRIE (triple Pellet stops), castle with 3 towers within Twelve-foil.

The crusades ended with the fall of Acre in 1291. They proved to be a disaster for all involved and greatly weakened the Byzantine Empire, which tottered on for another 150 years or so before the fall of Constantinople in 1453. The crusades enabled many penniless adventurers such as Tancred, from the West to seek a fortune or an opportunity to dispatch troublesome younger sons of nobles abroad. There were scenes of incredible savagery, such as the execution, on the orders of Richard I of England, of the entire garrison of Acre and their families, numbering some 6,000, who surrendered when the city fell in 1191. There were occasional humorous episodes, such as during a wedding feast at the siege of the castle of Krak des Chevaliers, the revellers ignored Saladin's army and continued with the celebrations, sending Saladin out some dishes. Not to be outdone, Saladin ordered that the part of the Castle occupied by the couple should not be bombarded. Such moments were however rare indeed in this shameful episode of history.

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PLATED BRITISH CELTIC COINS, A REAPPRAISAL

Contemporary Forgeries or Currency?

Gearóid Ó Broin

Background

Celtic coins circulated in Britain from the late second century BC to about the time of the Claudian invasion of 43AD. Initially, coins were imported for use from Gaul and Belgica in northern France, but very soon they were being produced in Britain. The first would appear to be the bronze coins produced in Kent around 100BC, known as the Thurrock Potins. These were closely modelled on coins from Masillia (modern Marseilles) and have an image of Apollo on the obverse and a butting bull on the reverse.

Around the early 1st Century BC the first gold coins were produced in Britain based on coins from Gaul and Belgica. The earlier view that the introduction of coinage to Britain was a result of successive invasions has largely been discounted as there is little or no supporting historical or archaeological evidence. The general view now is that it was a result of payment for mercenaries, especially during the Gallic War period 58BC – 50BC, and as trade with the Continent.

The prototype for the early Gaulish and hence British gold coins is the "Phillipus" stater of Philip II of Macedonia (359 – 336BC) and his successors, Alexander III and Cassander down to 294BC and these undoubtedly were given as pay to mercenaries. These leaders employed large numbers of Celtic mercenaries, and it seems that through their service in Mediterranean armies the Celts were first exposed to significant quantities of coinage. The mercenaries took the coins back to their Continental homelands and perhaps in some cases they were encountered during trade with the Mediterranean world.

Continental & British Celtic Coins

The Celts soon began to copy these staters in their own areas, and so began more than three centuries of coin production in Continental Celtic Europe. While they are copies, they must be viewed as regular local currency and not as forgeries. Celtic coinage was always imitative by nature, but imitating in the context of their own art and imagination. Coinage spread to Gaul and Belgica, modern France and the Benelux around 200BC. At first, the British coins closely resembled the Gaulish prototypes both in style, weight and gold content, but divergences soon appeared. The production of coinage in Britain was confined to an area below a line from the Severn to the Humber and excluding Cornwall.

In all, eight tribal areas are thought to have produced coins in a central area encompassing the area south of the Thames, ie, the Atrebates/Regni in Surrey, Sussex and Hampshire, the Cantii in Kent; north of the Thames, ie, the Catuvellauni in Hertfordshire, the Trinovantes in Essex and Suffolk, and peripheral areas of the Dobunni and Durotriges in the later Wessex, the Iceni in East Anglia and the Corieltauvi in Lincolnshire and Leicestershire. While circulation was generally restricted to these areas, it would appear on the basis of evidence from hoard and single coin find spots, that the coinage of the Corieltauvi circulated widely in Yorkshire, in the territory of the Brigantes in South to North Yorkshire and of the Parisii around the Yorkshire Wolds. Indeed, so many have been found in these areas that a case could well be made for coin production there.

In 1960, Allen [1] distinguished seven different Gallo-Belgic prototypes for the British coins, which he designated GB. A – F and X and eighteen resulting early British types, designated BR. A – R (Lx; Ly and Lz were added later). The early letters are first in time. All are uninscribed and the

British staters are generally known by more common names indicating early find spots. For example, BR. A is also known as the Westerham type, from a find of 12 staters there in 1927, BR. B, Chute, BR. C Yarmouth, etc. This has been continued recently where gold coins in Kent and Norfolk, which are reckoned to pre-date BR. A – R, are known as Kentish A and Ingoldisthorpe types respectively.

Coins were struck in gold, silver, potin (or more correctly, bronze) and copper. The British gold denominations were the stater and quarter stater, other divisions of the stater, which existed on the Continent were never adopted. A gradual decline in weight is a feature of Celtic coinage. The Phillipus typically weighted around 8.5g, while the Gaulish staters and quarter staters were in the region of 7.4g and 1.8g respectively. The early British coins were generally in excess of 6.5g for the staters and 1.5g for the quarter staters and these weights attained down to around the time of the Gallic Wars and Caesar's invasions of Britain in 56 and 55BC. Thereafter, the weights declined typically to below 5.2g and 1.2g respectively. There was also a loss of gold content, with more silver and copper being added over time.

All gold content in the Durotrigan staters was lost as early as about 50 - 40BC. Thereafter, their staters were made of silver, then billon, then struck bronze and finally cast bronze. This decline in precious metal content probably reflects a loss to the Atrebates of trading privileges with the Romans and the fact that their main trading partners in Armorica across the Channel used a silver coinage.

Function of Coinage in Celtic Societies

The exact function of coins in Celtic societies is not known. Allen [2], referring to early coinages generally, says that the likelihood is that coinage was first required for such purposes as tribute, taxes, fines, dowries and offerings rather than for transactions in the market place. Caesar, in his writings in De Bello Gallico, says that the British Celts use bronze or gold coins or iron ingots of fixed weight for money. Metal detector finds in Southern England are uncovering large number of Continental coin imports in all metals from around 150BC onwards and these undoubtedly were in use as a trading currency.

The gold staters may have had a limited circulation as currency, at least among the elite of society. Certainly, they had too high a value for everyday transactions. It has been argued that they may have been high value means of gift or exchange or that they were used in rituals. Van Arsdell [3], quoting discussions with Casey, has suggested that if the staters were used as currency, a slate board system of accounts may have been used, especially among wealthy land-owners. Amounts due would be totted up and settlement of account would take place periodically.

Gold quarter staters may have had a currency function. They are quite small in size, averaging only around 11 – 12mm and it is unlikely that they would have been used as gifts etc. Due to their low intrinsic value, coins of the lower value metals would probably always have had a currency function.

De Jersey [4] plausibly has shown that the silver minims, minted mostly by the Atrebates, were used as votive offerings to the Gods. He has shown that a high proportion of most types of minims have been found at known Celtic temple sites.

It is likely that Celtic coins had different functions, depending on the period, type of coin and area of distribution involved. The currency function most likely became more important as the Claudian invasion of 43AD drew near and issues of silver and bronze became more plentiful. Analysis has shown that some silver British Celtic coins were minted from melted down Roman denaraii. As these were used for currency, the restruck coins would undoubtedly have had the same function.

Coin Counterfeiting in History

Peters [5] says that all the evidence points to the appearance of counterfeit coins in the 50 years following the invention of coins in Lydia, in Asia Minor, in the 7th century BC. There does not appear to have been any significant time when counterfeiting did not take place. In Britain, the greatest epidemics were in the 1st, 3rd and 4th centuries AD and in the reign of George III. Each had the same main reason, an insufficient supply of official coins. In the early Roman period in

Britain, the failure to provide enough bronze coins led to a flood of Claudian copies. Peters sees greed as the main motive, but others are a desire to show off, to have a go at the authorities, to plug official gaps and often just as a means of survival.

In general, and especially in the ancient period, forgeries were of similar metal to the coin being forged and attention was by and large confined to the lower value coins.

Plated Celtic Coins

Peters devotes a chapter of his book to "Celtic Tribal Plating" and says that the gold plated rings may be the first counterfeits. This would seem highly debatable, as it is doubtful, as he himself mentions, that ring-money ever had a currency function. He says that by their comparatively uncirculated condition, many Celtic forgeries were spotted soon after manufacture and discarded, thus supporting the unofficial status viewpoint. This is also debatable as coins can find their way to earth for any number of reasons. In fact, if so many are in uncirculated condition, it could be an indication that they were deposited with care, in other words as hoard coins. See Plate 1, Appendix II for an example.

Plated versions of Celtic coins from the Continent would seem to be much scarcer than those of the British series. Of the Allen types GB. A – F, I have only found examples of type E, Gallic Wars type. One, illustrated at Plate 2 in Appendix II, weighs only 5.0g against an average weight for this issue of around 6.3g. This is despite the fact that it is of excellent style and appears to be on a silver plated core. A specimen listed by Chris Rudd (Liz's List 5, coin 12), is of even lower weight, at 4.3g, with most of the plating intact.

Many, if not most British Celtic gold coins and some silver types are known in plated versions. They are found with varying degrees of plating intact, in some cases all the plating remains, while in others there is just a bronze core, with perhaps the slightest trace of gold in the recesses. Gold plating is sometimes put over silver cores and these tend to give the heavier weights.

A number of different methods were used to produce the plated coins. All involved the use of a core which could be dipped into molten gold, or a tube of gold folded into it. Striking could take place before or after the plating was put on. De Jersey [6] says the dies used to strike the forgeries may have been cast in a mould bearing the impression of a genuine coin or a genuine coin may have been pressed into soft metal which was subsequently hardened to form the die. Less convincing forgeries were made by copying the design of a genuine coin onto a new die giving a reversal of the image. He and others have noted that many plated coins are very close in style to the regular issues and may therefore have been officially sanctioned.

Allen [7] notes that there is never any trace of a join in the plating and this, he feels, explains why the thickness of the plating is so variable. Celtic coins may have been struck hot, so heat applied to plated coins would also result in the joins not showing. Van Arsdell[8] says that the plated coins and cores are generally cruder than the official issues and this he says strengthens the argument that Celtic coins functioned as money.

Haslegrove [9] in an analyses quoted by Peters, [5] found of the known 1,968 British Celtic coins discovered singly or in hoards between 1977 and 1982, that 86 coins, or 4.37% were plated, 43 gold and 43 silver. Only 0.5% of hoarded Celtic coins are plated against 9.5% non-hoarded. This he says strongly suggests the Celts could recognise most of the counterfeited coins and exclude them from savings. It could equally be the case that only high value coins such as staters were hoarded, the plated versions being kept for currency.

Collis [10] quoted by Peters , notes an interesting phenomenon relating to the plated coins of Cunobelin. Based on bar charts constructed from excavation records, around 30% of Cunoblin's gold coins are plated. He found that the ratio of plated to regular issues is almost 50:50 at major markets, but over 90% at minor markets. This is interpreted as showing that the rate of detection was high at major markets and low at minor markets. Another explanation could be that the plated coins had a currency function and more would naturally be found at minor markets due to their lower custom and turnover.

A number of plated coins have been found at or near the site of known mints and this has been taken to be because the mints acted as an exchange where doubtful coins could be brought along for inspection. This indeed was one of the functions of mints in mediaeval times. It has even been

suggested that an element of "moonlighting" was taking place by mint officials, with the official dies being used to produce the plated versions. An alternative explanation could of course be that they were official coins and that this is precisely why they were at the mint.

Deep cuts on some plated versions have been taken as a sign of testing the metal content or indeed frustration on the part of the receiver. It has however also been argued that they may represent ritual defacings prior to votive offerings to the Gods. There is no way of telling if defacings were contemporary and the possibility cannot be precluded that they were defaced at a later date, when their function was long forgotten, and then discarded.

Allowance must of course be made for the fact that some or all of the plating in the surviving examples is now missing and, more especially, that the cores would have been subject to considerable wear and consequent loss of weight since deposition. While the regular coins have been subject to the same wearing process, it is likely that the original ratio of weight between the regular and plated/core types was somewhat less marked 2,000 years ago.

Function of Plated Celtic Coins

Commentators have taken the plated coins as contemporary forgeries, though most have not precluded a currency or other use. Taking them as forgeries more or less implies that the regular issues had a currency function.

Van Arsdell [11] states that they are unlikely to have a currency function since the plating process would have been costly in materials and time. The opposite could equally be argued, they were costly and time consuming to produce and this effort was spent precisely because it was for currency. He says that the most probable explanation is that they are simply forgeries, intended to deceive.

Peters discusses the Celtic coins found at the Hayling Island temple site in Hampshire where 75% of the gold and 46% of the silver coins were plated. This he views as possibly due to selective offerings, i.e., get rid of the dross on the Gods. However, he also acknowledges that they may have been produced specifically for ritual deposition as purely symbolic votive offerings. This is the more likely explanation. If the deity were considered all-powerful, it is unlikely that anyone would even consider trying to deceive them, especially considering the high percentages which are plated.

This explanation for the use of plated coins is all the more interesting given that de Jersey [4] has convincingly shown that the minims also probably had a votive function. In other words, coins were seen as suitable votive material to the Gods. It was perhaps a way for the ordinary person to give votive offerings to the Gods, higher society offerings being by way of gold torc depositions, as at Snettisham and elsewhere. Peters also mentions that a high proportion of Roman coins found at Hayling Island were plated. This would seem to indicate that the practice continued some time into the Roman period.

Information Sources on Plated Celtic Coins

Plated Celtic coins have not been given much attention generally and it is only in disparate areas that we can obtain information on them. Van Arsdell [11] lists contemporary plated coins for 82 different types. While photographs are shown of most of them, unfortunately, the weights are not given, as they are for most of the regular issues. Hobbs [12] makes numerous passing references to the plated coins and full details, including photographs and weights are given for those in the collection of the British Museum. Other important sources of information are the Celtic Coin Index and coin trade publications.

The Celtic Coin Index

The Celtic Coin Index (CCI) was established in 1960 by Derek Allen and Professor Sheppard Frere and attempts to list all known British Celtic coins. Work on the Index was carried on by Barry Cunliffe and more recently by Philip de Jersey. It is mainly for research purposes and photographs and full details of each coin are maintained. It is currently based at the Institute of Archaeology in Oxford and contains in excess of 38,000 coins. The website (http://www.celticcoins.ca/) also

features a Coin of the Week, together with commentary, with listings from May 1997 and plated coins are occasionally featured.

The CCI is now on-line and contains around 33,000 coins listed up to 2001. An on-line search reveals 397 forgeries and cores (only 2 each for copper and silver, the vast majority being bronze) for all eight British coin issuing tribes. These comprise 307 cores of stater, 39 of quarter staters and 51 of silver coins. Plated versions of some coin issues were produced in quite large numbers. Included are 51 cores of BR. F, South Ferriby, issued by the Corieltauvi.

The distribution of the cores is as follows:

Atrebates/ Regni	Corieltauvi	Dobunni	Durotriges
33	150	28	15
8.3	37.8	7.0	3.8

Cantii	Iceni	Catuvelauni/ Trinovantes	Uncertain
3	48	99	21
0.8	12.1	24.9	5.3

Plated Celtic coins would therefore seem quite rare and many illustrated in the CCI and elsewhere are in quite poor condition. It is difficult therefore to assess what the original weights might have been. It is only by using the very best preserved specimens that we can get an idea of the likely original weights.

Plated Coins from Coin Trade Sources

Coin trade lists, either hardcopy or on websites, are another source of information on plated Celtic coins. Outstanding in this regard are Chris Rudd lists, which give meticulous details of all coins listed. The lists also include short articles on Celtic coins and society. Other trade sources consulted for this paper are the websites of Mike Vosper (http://www.vosper4coins.co.uk/) and Andy Gillis (http://gilliscoins.com/). All regularly list plated coins and cores for sale.

Appendix I lists a selection of British Celtic coin types, with the average weight observed in Hobbs and gives the weights of corresponding plated versions and cores from known specimens. An average is given where multiple specimens of the plated coins are known, e.g., the BR. K South Ferriby type. In many cases, just one or two plated coins are known, so the data must be used with caution. Nevertheless, a clear pattern emerges of plated coins being considerably below the weight of the regular issues.

Coins in the Fingallia Collection

Appendix II gives a selection of Celtic coins with, in most cases, matching plated versions from the Fingallia Collection. The plated coins are a reasonably representative sample of the range of such coins being found. Generally, the plated coins are quite close in style and size to the regular coins, but as with the CCI specimens, differ significantly in weight.

Weights of the Plated Coins

It would appear from the evidence that the vast majority of the extant plated coins and cores are well below the weights of the regular issues. I have found only a handful which come anyway close. CCI 000061 is a BR. B Chute type plated stater weighing 6.2g, which is above the average weight found for this issue; the British Museum Chute forgery weighs just 3.6g. Chris Rudd (Liz's List 14, coin 50), lists a Clacton plated quarter stater, said to have a silvery gold appearance, which weighs 1.4g, around the same as the regular issue.

Chris Rudd's list 61, coin 45 and list 71, coin 36 are BR. H and BR. I, North East Coast type staters respectively, with weights of 5.8g each, against weights of around 6.0g for the regular issues. The diameter of the two plated coins is 20mm and 19mm respectively, against 18mm for the regular issues. Both are in near EF condition and 71/36 is described as having a core of silvery alloy. List 68, coin 39 is an even heavier BR. H stater of just over 6.0g, the diameter is 19mm. In this connection, see also Figures 5 and 6, Appendix II, Plate 2, for plated coins of this type, one of them is 20mm in diameter and weighs just 4.2g. While not perhaps of particular significance, the slightly larger diameters on the plated coins do add somewhat to the weight.

Two interesting coins of BR. D, "Cheriton Smiler" type are in Chris Rudd's list 26, coins 27 and 28. Both are 17mm in diameter, the former is the regular issue and weighs 5.2g, while the latter is plated on a bronze core and weighs just 4.4g, or just under 85% of its weight. The plated coin is of the same grade as the regular coin and is stated to be from the same dies. See Figure 3, Appendix II, Plate 1, for more examples of this issue, this time the plated coin weighing just 3.6g.

One of the CCI "Celtic Coins of the Week" for October 1998 has similar examples. Two BR. F, South Ferriby type staters are featured, the stater weighs 5.4g, while the plated version, which is of good quality, weighs just 3.7g. De Jersey in his commentary on the coins says that they raise many interesting questions about the organisation of the mint that struck them – was the plated coin intended to deceive, but struck "unofficially"?

On the basis of the extant coins, it would appear that the plated coins were deliberately struck at a lower weight than the regular coins and this was done chiefly to distinguish between the issues. There would not appear to have been any fixed weight percentage variation between them and this may not have been considered important, so long as there was a noticeable weight variation between regular and plated issues. Variations in weight between regular and plated issues seem to occur not just between the different tribal areas but also within the different issues in each tribal area.

While there are far fewer examples, it would seem that there is a tendency for plated coins other than of staters to be nearer in weight to the regular issues. Plated quarter staters are typically around 80% of the regular issues while silver plated coins are as likely as not of the same weight or above 90% of the weight of the regular issues. Though Figure 4, Appendix II, Plate 1, has a plated quarter of BR. D type of under 55% of the regular issue, despite being of good quality and appearance.

If the plated coins were intended to deceive, it is surprising that few, if any, of the known specimens come anywhere near to having the same weight as the regular coins. Van Arsdell [11] says that the Celts were experts in controlling the weight and alloy of metal to go into their coins down to very precise levels. He notes for example that the later staters of Cunobelin are grouped tightly around 5.40g. He also says they put a high value on the colour of coins and were adept at reducing the gold content of coins while still maintaining the colour by expert addition of other metals. This he says was done to keep the colour constant. It is likely that many of the plated versions were noticeably different in colour to the regular issues (e.g., Figure 2 Appendix II, where there is a marked difference in colour) and this would have been an additional indication at the time that this was not the regular issue.

Analysis and Conclusions

In the circumstances, the plated versions could well have had a different function to the regular coins. One possibility is that they are sub-units of the regular coins. The largest group of plated coins in the CCI is that of the Corieltauvi, BR. K, South Ferriby staters, of which there are 51. It is significant that, apart from the recently discovered Lindsey scyphates, which have been found in small quantities and may perhaps be quarter staters, this tribe issued no quarter staters. While the plated staters are almost identical in style to the regular issue, they differ noticeably in weight. This alone would have been sufficient to distinguish them. The Corieltauvi issued gold staters, together with silver units and half units. Plated staters would have fitted neatly into this currency system.

If coins were used as currency, it is likely that this would have been so only among the elite, at least for the higher value units, the very people least likely to be deceived. The elite would have been quite small in number and word would surely have got around quickly that forgeries were in circulation and hence the benefits of producing forgeries would have diminished.

Gold plated BR. K South Ferriby staters have been found at a number of locations well outside Corieltauvian territory, at Silchester in Hampshire and Colchester in Essex, chief settlements of the Atrebates and Trinovantes respectively. This may indicate acceptance of them as currency, though Allan [7] argues the opposite. He also says that a high percentage of the South Ferriby coins found outside the eponymous main hoard of 1908 are plated. Based on the evidence of recent trade specimens, this is likely still to hold true.

At various times, six different currency units were in use in Celtic Britain, stater; quarter stater; silver unit; silver half unit, double bronze unit and bronze unit. The need was therefore seen for a wide range of currency issues. The likelihood is that the plated gold and silver coins substituted for one of these currency units at some stage or other. Plated gold coins as quarter staters and silver coated issues as the basic currency unit.

The possibility that plated coins were used as an official currency with full value, cannot be entirely discounted either. This might happen for example if they were issued by a separate "pagi" within the territory, in times of shortages of the precious metal or indeed, in times of emergency.

In a largely illiterate society weight and colour would have been sufficient distinguishing marks. The gold staters would have been a great rarity for the vast majority in society and few would have received more than one in a lifetime. If someone was to receive one, it is hardly credible that they would not be able to tell the difference between a regular stater and a plated coin, no matter how close they were. If forgeries were in any way common, people would have been extra vigilant in the unlikely event of a stater passing their hands.

If gold coins were intended as gifts or exchange, the plated versions would have had a function as a lesser form of gift, a sort of second prize. Due to the marked variation in weight, it would have been obvious which were the full and which the plated coins. In a society which valued the gold more for its colour than its intrinsic value, as Van Arsdell has argued, the plated versions would no doubt have been seen as a worthy second prize. Imagery and symbolism too were important to the Celts and the fact that the plated versions are so close to the full coin in appearance would have added to this satisfaction.

In some instances perhaps, plated versions may have been trial pieces of the regular coin, trial pieces in secondary metals are not unknown. Lead trial pieces are known for some Roman and Norman issues for example. They would of course have been struck in very small numbers and this might be the case for some plated Celtic coins. The fact that many of them are well centred and of good quality might indicate that extra care was being taken to have a presentable example. In such a scenario, some of the Celtic bronze cores might never have been plated with gold but were actually trial pieces.

It cannot of course be excluded that these were in fact forgeries. Certainly, the wide variety of plated coins found is an indication that they were worth copying. Forgeries were often of inferior style to the genuine coins, but this cannot be said of many of the British plated coins. It could be argued that the early appearance of forgeries in Roman Britain is an indication that the Celtic forgers were still around and that they put their hands to forging the Roman coins. However, as Peters notes, the main function of forgeries is to provide for a dire need of small change and gold staters cannot be considered small change. Forgeries of precious metals coins are very rare in the Greek and Roman series, the main effort was concentrated on the base metal coins. It would be surprising in this context if the Celts turned their hands to precious metal forgeries.

While a good case can still be made that these are actually forgeries, the fact that they represent something else cannot be entirely excluded, especially given the significant difference in weight between the regular issue and the plated coins. The most likely explanation is that they represent a sub-unit of the regular coin, in other words they were quarter staters and basic currency units in respect of the gold and silver plated coins respectively. Use as votive offerings to the Gods is also a distinct possibility, especially given the evidence from the Hayling Island excavations cited by Peters.

APPENDIX I

The following table lists a number of Celtic coins for which plated versions are known. The average weight of the regular coins is as in Hobbs. For the plated coins, the weights given are either those of known specimens or the average where multiple specimens are known, e.g, BR types H, I and K.

The table is given only to illustrate the typical weights to be found.

Coin Type	Average Weight Regular Coins	Weight of Plated Coins	Av. % Difference
Gallo Belgic E	6.3	5.0+4.3g	73.8
BR. A Westerham	6.3g	3.6+4.9g	67.5
BR. B Chute	6.1g	3.6+6.1g	79.5
BR. D Cheriton “Smiler”	4.9g	3.6g	73.5
BR. G Early Clacton	6.1g	4.6g	75.4
BR. H North East Coast	5.9	4.3g	72.9
BR. I North East Coast	6.0	5.1g	85.0
BR. JB Norfolk Wolf *left*	5.5g	3.7+5.1+4.4g	80.0
BR. K South Ferriby	5.6g	4.2g	75.0
BR. L Whaddon Chase	5.8g	3.1+3.5g	56.9
BR. M Wonersh	5.3g	3.3g	62.3
BR. Q Remic	5.6g	3.5g	62.5
BR. QC Remic Quarter	1.3g	0.7g	53.9
BR. LX Quarter	1.1g	1.0g	90.9
BR. LY Quarter	1.3g	1.1g	84.6
BR. LZ Quarter	1.1g	0.9g	81.8
Tincomaros 1st Issue	5.3g	3.7g	69.8
Tasciovanos RICON	5.4g	3.8g	70.4
Cunobelin (All types)	5.4g	4.1g	75.9
Addedomaros “Spiral”	5.5g	4.2g	76.4
IISVP RASV	5.2g	4.0g	76.9

APPENDIX II – Plate 1

Fingallia Collection

6.0g. c1000 – 100BC
found in Oxfordshire.

Figure 1 - *AV plated Ring Money*

Regular Issue	**Plated/Cores**
	
Bright gold, 6.3g 17mm.	Pale gold on a silver core, 5.0g, 17mm. (79.4%)*.

Figure 2 - *GB. E, Gallic War Uniface Stater, c60–55BC*

The plated coin is of high quality and style and may be from official dies.

4.8g, 17mm, pale gold appearance.

3.6g, 17mm, most plating gone.(75%).

Figure 3 - *BR. D, Cheriton Stater, Atrebates/Belgae, c80–70BC*

The plated coin is of high quality and may be from official dies

1.3g. 12mm. AV.

0.7g. 12mm. All plating intact (53.9%).

Figure 4 - *BR. D, Quarter Stater, Atrebates/Belgae, c80–70BC*

Once attributed to the Cantii, they are more likely the quarter staters of Allen Type D. The plated coin is of high quality and may be from official dies.

* Percentage variation in weight between the regular and plated coins/cores.

APPENDIX II – Plate 2

6.0g. 18mm. Bright AV.

4.2g. 20mm. AV plated, 100% gold intact. Pale gold appearance. (70%).

Figure 5 - *BR. H, N. E. Coast Stater, Right Facing Horse, Corieltauvi, c60–50BC*

The plated coin is of high quality and may be from official dies.

6.1g, 18mm. AV.

AE core, 4.5g, 18mm. (73.8%).

Figure 6 - *Br. I, N.E. Coast Stater, Left Facing Horse, Corieltauvi, c60–50BC*

Most of the gold is gone from the core and the designs are just discernable, typical of the cores that are found.

4.8g, 19mm, debased issue, little gold content.

Bronze core, 4.4g, 19mm. (91.7%).

Figure 7 - *BR. JB, Norfolk Wolf Stater, Left Facing Wolf, Iceni, c60–40BC*

The left facing Norfolk Wolf staters weigh from around 6.0g to under 4.5g. They gradually became lighter in weight and there was a reduction in the gold content. Given the usual disparity in weight between the staters and plated versions, this one must be early in the series.

APPENDIX II – Plate 3

5.7g, 17mm. AV.

3.1g, 17mm, c70% of plating intact. (54.4%).

3.1g, 17mm, most plating intact. (54.4%).

Figure 8 - *BR. K, South Ferriby Stater, Corieltauvi, c40BC–10AD*

Copies are of good style and may be from official dies.

5.6g, 17 mm. AV.

4.4g, 17mm. Core, no plating remains. (78.6%).

Figure 9 - *Domino Type Stater, Corieltauvi, c45–10BC*

As with many British Celtic coins, the obverse dies were used until there were worn out, with often just the faintest traces of the original design remaining. More remains on the plated coin that on the original. If they were forgeries, either a large number was produced or the dies were deliberately smoothed.

4.8g, 18mm. Debased, little gold content

3.8g, 18mm. Core, no plating remains. (79.2%).

Figure 10 - *Late Inscribed Stater, ESIIP RASU, Corieltauvi, c10–61AD*

These coins were late issues and are usually of low gold content.

APPENDIX II – Plate 4

5.5g,17mm. AV. 4.3g, 17mm. No plating remains (78.2%).

Figure 11 - *Late Inscribed Stater, ADDEDOMAROS, Trinovantes, c45-20BC*

5.5g, 20mm. AR. 4.8g, 20mm. ¾ of plating remains. (87.3%).

Figure 12 - *Cranborne Chase Stater Durotriges. 58-45BC*

The basic design of the Durotrigan staters was unchanged over the period of about 60BC to 50AD. However, there was a significant loss of precious metal content over the period. The first coins contained some gold, but gradually even the silver content disappeared and they were finally purely bronze.

1.0g. Early uninscribed type. Regular coins are in the region of 1.1g in weight. AR/AE.

Figure 13 - *Iceni, 15–10BC*

1.3g. Anted plated issue of the Iceni. Of rather crude style, but not dissimilar to many listed in Hobbs. Regular coins are around the same in weight. Billon.

Figure 14 - Iceni 1–30AD

APPENDIX III

Figure 15 –*Distribution of coin issuing Celtic Tribes of England*
Courtesy Mike Vosper Coins at http://www.vosper4coins.co.uk/

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DESCRIPTION OF PREVIOUSLY UNKNOWN IRISH COINS

The Cu-plated steel ÉIRE 1p and 2p coins

Christopher Budesa

Conventional wisdom indicated that the change to copper-plated steel coinage in Ireland occurred in 1990. This assertion was based upon information provided by the Central Bank and Financial Services Authority of Ireland and has been accepted as 'gospel' by collectors of Irish coins. With that in mind I was able to convince the editor at Krause Publications to make changes in the Ireland Republic section of the Standard Catalogue of WORLD COINS.

Not long ago I was looking at the Irish Coin section on eBay© and saw a lot which was described as a 1988 1p on different metal, probably an error. I had been looking for such a coin for many years because it had been listed in Krause but the conventional wisdom said that it did not exist. Needless to say I managed to purchase the copper-colored coin and it is indeed magnetic which indicates that it was manufactured using a Cu-plated steel blank rather than the bronze which had been used on all previously known 1p coins dated between 1971 and 1988.

Since my purchase of the ÉIRE 1p on a Cu-plated steel blank I have managed to contact the gentleman who discovered this coin. He moved to Ireland from Eastern Europe and as a rule he did not accept the conventional wisdom and was in the habit of checking his coins with a magnet. So it was that he found 1p coins which were not supposed to exist. In addition, he found É1RE 1988 Cu-plated 2p coins. Krause will have to be updated once again.

How could such coins exist? After several years of corresponding with the Currency Issue Department of the Central Bank and Financial Services Authority of Ireland I have learned a few things about coin production in Ireland. Coin dies at Sandyford may be used for several years, even after the date on the coin. It is now obvious that most 1988 1p and 2p coins were struck on bronze blanks. Dies for 1988 1p and 2p were stored and eventually used again in either 1989 or 1990 when the Cu-plated blanks were supplied. It is highly likely that the staff of the Currency Production Department of the Central Bank and Financial Services Authority of Ireland used the 1988 dies to run die trials on the new Cu-plated steel blanks. If everything went well, no changes would have been necessary. If fine tuning of minting equipment or blanks were required it would have been done until satisfactory coins were struck, after which it is likely that the remaining 1988 1p and 2p dies would have been used until they were retired in the normal course of use.

How many 1988 É1RE coins were minted using Cu-plated steel blanks? In all likelihood exact numbers will never he known. Estimates could be calculated by multiplying the number of 1988 dies used to strike Cu-plated blanks by the average number of coins which could be struck by a pair of coin dies. Surely somewhere between tens of thousands to several millions for each of the two previously unknown coins were minted in Sandyford. It is unlikely that the Central Bank of Ireland maintained such records and why would they. The function of the Currency Production Department is to make sufficient quantity of high quality coins as are required by the Irish economy. In the end it really did not matter to the Central Bank or the Irish economy whether 1988 1p and 2p coins were struck on bronze or Cu-plated steel as both bronze and Cu-plated steel coins would be circulating side by side.

Discoveries like this make coin collecting a never-ending adventure and challenge.

Acknowledgement

The author would like to thank the Currency Issue Department of the Central Bank and Financial Services Authority of Ireland for providing high quality information.

Figure 1 – *The figure shows a magnet amongst a tray of 1p and 2p coins from the period 1971 to 1988. These are copper coins, and not being magnetic they remain in the tray unattracted by the magnet. Attached to the upperside of the magnet is a copper-plated steel 1p and two 2p coins. In the centre of these three steel coins is a 1988 2p specimen which, by conventional wisdom, should still be in the tray.*

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ERNEST ALTON'S GROUP OF TRINITY COLLEGE DUBLIN GOLD MEDALS

Ronan Fitzpatrick

A lack of gold pieces in the Irish coin series means that collectors who wish to include gold in their Irish collections have to rely on medals. Here too, their efforts can be frustrated since gold pieces are not often offered for sale. Irish gold medals have been struck for agriculture, religion, politics, the services, sport, and significantly for academic achievement and contribution. In his account of Irish medals Dr. A. E. J. Went explains that Trinity College Dublin (TCD) are the leaders of Irish Universities when it comes to the number of medals it has awarded (Went, 1978). Numbered amongst the College's extensive list of prizes and other awards are details of their medals which include accounts of gold medals (Calendar, 2005-06). This paper presents an account of the gold medals awarded to one student at the College. It also provides a brief account of the later career of the recipient.

Ernest Henry Alton was born at Marlinstown, near Mullingar in Ireland on 21 September 1873. He was admitted as a classics student to Trinity College Dublin in 1894, graduated B.A. 1896, M.A. 1899 and Litt.D. in 1928 (Clarke, 2005). Ernest Henry Alton was awarded four gold medals by the University for his academic achievements. The awards were the Vice-Chancellor medal for Latin, the Bishop Berkeley medal for Greek, the Wray medal for Logics and Ethics, and the Vice-Chancellor medal for Classics in Greek or Latin prose (the medal reads Humanities). The first two of these medals are competed for by students in the Senior Freshman or the Junior Sophister years. The third and fourth medals are prizemen awards for achievement in the degree examinations. While the medals are presented in this paper in the order in which Ernest Henry Alton received them, this does not reflect the order in which they were instituted. The Bishop Berkeley medal for Greek is the oldest in his group having been first awarded in 1733. The Wray medal for Logics and Ethics was founded in 1848 and the Vice-Chancellor Greek or Latin Prose medal was first awarded in 1857. The Vice-Chancellor Latin medal dates from 1869.

This group of medals is of interest for a number of reasons. First, at that time, Trinity College awarded academic medals in gold and silver and this group, to the same student, are all gold. Second, many of the gold medals that were awarded by the University were handed in by those who received them to help with the war effort during World War One. So, the fact that this group survive adds to their interest (their survival should not be interpreted as an anti-war expression; Ernest Henry Alton probably contributed in another form). Third, although not a well known public figure, Ernest Henry Alton played an important role in the educational and political life of the new evolving nation (as will be clarified later) and these are important numismatic artefacts associated with him. Finally, in the four hundred year history of Trinity College there aren't too many scholars who received four gold medals for academic achievement. This means that Ernest Henry Alton was probably one of Ireland's greatest classics students.

Vice-Chancellor Latin medal

The College Calendar, Part I (Calendar, 2005-06) explains that this award was founded in 1869 by the Provost and Senior Fellows. Two gold medals (Figure 1) are awarded on the result of an annual examination in Latin, with regulations similar to those of the Bishop Berkeley medals in Greek (see description of next medal).

Figure 1 – *Vice-Chancellor Latin Medal and case of issue*

Obv. Helmeted figure seated left on cuirass with spear and shield; holding Victory in right hand presenting a laurel wreath. Shield decorated with she-wolf suckling Romulus and Remus. Frosted. ROMA in exergue. Artist: J. Woodhouse below shield.

Rev. Arms of the College; rose left; portcullis right; on a cross-hatched field with shamrocks. Legend: within a bounding circle, PROPTER LITTERAS LATINAS FELICITER EXCULTAS; (For excellence in Latin Literature). Engraved: ERNESTUS H. ALTON.

Wt. 30.1 Grams; 35 mm Dia; 23 Kt. Gold.

Awarded: 1894. The examination subject set by the University was 'Valerius Flaccus'.

Uncirculated in case of issue from Edmund Johnson, Art Jeweller and Medallist, 94 Grafton St. Dublin.

The influence of Nike and Victory from Greek and Roman coin design is evident in the design of this medal - Figures 2 and 3.

Figure 2 - *THRACE, Kings of Lysimachos 323-281 B.C.*

Figure 3 – *Nero/Roma copper sestertius 66 A.D.*

Bishop Berkeley's Greek medal

In 1752, the College received the sum of 120 guineas and a die from Dr. George Berkeley, Bishop of Cloyne, sometimes Fellow, for the provision of two gold medals (Figure 4). These were to be awarded annually, for the encouragement of the study of Greek, Luce (1945). The date 1752 is the date of endowment although the award is older than that and an official list of winners confirms its existence since 1733. Luce (1945; p39) explains that "*originally the medals were given to middle bachelors who had attended the lectures of the Regius Professor of Greek with remarkable diligence for two academic years*". In July 1846 an examination was substituted and the Regulations were modified in November 1856.

The College Calendar for 2005, Part I explains that two gold medals are awarded, provided outstanding merit is shown, to candidates answering a special examination in part of the Greek course prescribed for the annual honor examination in either the senior freshman or the junior sophister years. The examination is open to all students under M.A. standing. No one may be a candidate more than twice or obtain a medal more than once. The examination consists of two papers on one of the Greek authors studied in the honor course, and is held at the time of the Trinity honor examinations. Candidates may choose their own author, and a detailed syllabus is prescribed by the Regius Professor of Greek. Notice of intention to take the examination must be given to the Senior Lecturer before the end of the previous Hilary term. No one may be a candidate in the same year for a Berkeley medal in Greek and a Vice-Chancellor medal in Latin.

Figure 4 – *Berkeley Greek Medal and case of issue*

Obv. Galloping race-horse left. Legend: AIEN APIΣTEYEIN. Frosted. G ✯ B 1752 in exergue. Artist: J.S. & A.B. Wyon SC below horse.

Rev. Arms of the College; rose each side; portcullis above; on a cross-hatched field with shamrocks. Legend: within a bounding circle, * TRIN : COLL : DUBLIN * VOS EXEMPLARIA GRAECA (You are the Greek ideal). Engraved on edge of medal: ERNESTUS H. ALTON - Figure 5.

Figure 5 – *Engraving on edge of Berkeley medal*

Wt. 31.2 Grams; 25 mm Dia; 23 Kt. Gold.

Awarded: 1895. The subject of the Berkeley Medal examination was 'Theocritus & Herondas'.

Uncirculated in case of issue from Edmund Johnson, Art Jeweller and Medallist, 94 Grafton St. Dublin.

The letters G ✯ B were added by Dr. Berkeley in 1752 when he wrote "*to cause the letters G.B., being the initial letters of my name, to be engraved on the dye of the gold medal, at the bottom beneath the race-horse; whereby mine will be distingush'd from medals given by others*." Dr. Berkeley wrote this as a result of a mistaken report in Faulkner's Dublin Journal, November 16, 1751, and corrected December 3, 1751, which credited the medals to the late Bishop of Clogher when they should have been credited to him as Bishop of Cloyne (Luce, 1946).

The influence of Roman coin design is evident in the design of this medal - Figures 6.

Figure 6 – *Calpurnius, Roman c80 B.C.*

Moderator medals

For the purpose of acknowledging academic achievement, the Board of Trinity College Dublin resolved on 30 November 1793 to award a gold medal to every student who answered every examination from entrance to bachelor degree and have been judged *bene* or *valde bene*. A new plan of awarding medals was instituted in 1815 and it was further changed in 1833. It was in accordance with these latest regulations that Ernest Henry Alton was awarded his third and fourth medals.

According to the calendar for 1906-07 (p120), at the Trinity College Dublin B.A. degree examination the first class consists of three grades, viz., senior moderator, junior moderator and respondents. Any student who is qualified by having kept the requisite number of terms may offer himself as a candidate at the examination for moderatorships, without appearing at the general degree examinations. At Trinity College Dublin, "*an honors graduate is referred to as a moderator because, prior to reform of the curriculum in 1833, students who performed well were asked to moderate the examinations of other students*" (Oxford English Dictionary, 1989).

The moderators in each department are placed in the order of relative merit; and all who obtain the rank of moderator or respondent are placed at the head of their class and presented to the Vice-Chancellor by the senior lecturer, at the commencements, in the order of their places, and their respective departments. The Oxford English Dictionary also explains that commencement is "*The action of taking the full degree of Master or Doctor; especially at Cambridge, Dublin, and the American universities, the great ceremony when these (also, in some cases other degrees, esp. in U.S., that of Bachelor) are conferred, at the end of the academical year*."

There were eight departments mentioned in the calendar that year and they were ranked:

I. Mathematics and Mathematical Physics
II. Classics
III. Logics and Ethics
IV. Experimental Science
V. Natural Science
VI. History and Political Science
VII. Modern Literature
VIII. Legal and Political Science.

The calendar explains that each senior moderator in each department receives a gold medal and each junior moderator receives a silver medal. Since 1867 the first senior moderator in each

department has been awarded a large gold medal, provided he has been specially recommended by the examiners.

The term 'supplemental medallists' at the degree examination is used to describe those who have dropped a class or classes. Gold and silver medals were also awarded to supplemental medallists. Respondents are entitled to receive honorary testimoniums, which are publicly presented to them by the Chancellor or Vice-Chancellor at the commencements, when they are admitted to their degrees.

Ernest Henry Alton was awarded a senior moderator medal and a First senior moderator medal as follows.

Wray Logics and Ethics medal

This prize was founded in 1848 by a gift from Mrs. Catherine Wray, widow of Henry Wray, Fellow 1800-47, to encourage metaphysical studies. The prize is awarded annually to the student who submits the best thesis at the moderatorship examination in philosophy (Figure 7).

Figure 7 – *Wray Logics and Ethics Medal and case of issue*

Obv. Draped bust of Queen Elizabeth I in high relief, facing three-quarters right; Legend: COLL SS ET INDIVID TRIN REG ELIZABETHÆ JVXTA DVBL 1591. Artist's signature not shown.

Rev. Arms of the College; rose left; portcullis right; on a cross-hatched field with shamrocks. Legend: within a bounding circle, ETHICIS ET LOGICIS FELICITER EXCULTIS; (For excellence in Logics and Ethics). Engraved: ERNESTUS H. ALTON.

Wt. 31.1 Grams; 39 mm Dia; 23 Kt. Gold.

Awarded: 1896. The examination subject set by the University was 'Plato, Parmenides'. Senior moderator.

Uncirculated in case of issue from Edmund Johnson, Art Jeweller and Medallist, 94 Grafton St. Dublin.

Vice-Chancellor Greek or Latin prose medal

In the list of graduates with honors at the B.A. degree examination for 1896, Ernest Henry Alton is listed among the prizemen as a senior moderator and received a large gold medal for classics (Figure 8).

Figure 8 – *Vice-Chancellor Greek or Latin prose medal (Large gold medal awarded to a first senior moderator)*

Obv. Draped bust of Queen Elizabeth I in high relief, facing three-quarters right; Legend: COLL SS ET INDIVID TRIN REG ELIZABETHÆ JVXTA DVBL 1591. Artist's signature not shown.

Rev. Arms of the College; rose left; portcullis right; on a cross-hatched field with shamrocks. Legend: within a bounding circle, LITERIS HUMANIORIBUS FELICITER EXCULTIS; (For excellence in Humanities). Engraved: ERNESTUS H. ALTON.

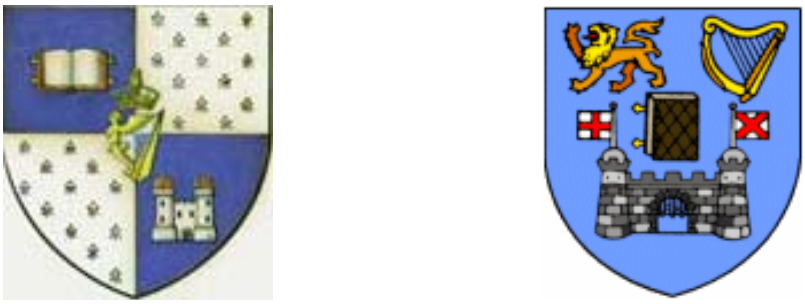
Wt. 63.65 Grams; 49 mm Dia; 23 Kt. Gold.

Awarded: 1896. The examination subject set by the University was 'Japan'. In the calendar (p189) the section headed, "*Graduated in honors at the B.A. degree examination*" indicates that Ernest Henry Alton received a large gold medal for classics. First senior moderator.

Choice proof-like uncirculated in case of issue from Edmund Johnson, Art Jeweller and Medallist, 94 Grafton St. Dublin.

Visitors to Trinity College Dublin might be familiar with the arched panel over the main entrance to the museum building. It has an illustration of the Arms of the College on a hatched field with shamrocks.

Collectors of Trinity College Dublin medals and other artefacts will be interested to know that two Coat of Arms exit, one for the University of Dublin and the other for Trinity College which is the sole constituent college of the University. Both Arms are illustrated in Figure 9.



a - *Arms of the University* **b** - *Arms of the College*

Figure 9 – *Arms of the University of Dublin and Trinity College* (TCD, 2007).

It is curious that authors and numismatic dealers consistently assign the Arms of the College to the reverse of TCD medals. Why this should be is unclear. It is reasonable to expect that the Arms of the College, which have been the consistent part of the College's medal design would be the obverse and that the changing part of the design would be the reverse. It is also curious that these four medals lack the manufacturing goldsmith's hallmarks. Both of these curiosities are left for researching at another time.

Ernest Henry Alton became a Fellow of Trinity College Dublin in 1905. He was Captain of the University Officer Training Corp (OTC) and during the Easter Rising of 1916 he was in command of the Trinity Garrison. The Garrison secured the College during Easter Week 1916 and by their actions the OTC gained the unique distinction of being the only Corp to actually defend its University (Willoughby, 1989). Ernest Henry Alton was elected as representative of the University to the second Dáil Éireann in 1921 and was re-elected on six further occasions, serving continuously from 1921 until 1937. He also served in Seanad Éireann from 1938 to 1943. From 1927 to 1942 he was Professor of Latin and was Vice-Provost of the University from 1941 to 1942. Professor Alton was admitted as Provost of Trinity College Dublin on 13 May 1942. He died at Provost's House in the College on 18 February 1952 in his 79th year.

In October 2004 the four gold medals of Ernestus H. Alton were offered for sale on the Internet by Fort Lauderdale Rare Coins (FLRC) of Florida, USA. The group, which had remained together for over 100 years, unfortunately was divided with the medals being purchased by three different collectors. Fortunately, the collectors are known to each other.

The descriptions of the medals are based on those of FLRC as originally described at their website and on descriptions of similar medals in Spink's Numismatic Circular. Specific details of each medal have been provided by the medal owners and their clarification of those details is acknowledged by these lines. Photographs are courtesy of Fort Lauderdale Rare Coins, Florida, USA. Assistance and advice provided by the Library staff and Patrick Wyse Jackson at Trinity College are also acknowledged.

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Author's Notes

All of the medals in this paper consistently have the Arms of the College on one side and the other side changes to suit the award. To a coin collector, the consistent side, i.e., the Arms of the College would be the obverse and the changing side would be the reverse. For example, in the modern Irish series the side which consistently displays the Harp of Ireland is the obverse or in the English series the side that consistently shows Queen Elizabeth's head is the obverse. In both examples the changing side is the reverse.

In order to resolve the obverse/reverse issue of these medals the mint where the medals are recently struck and the retail company who supply the college were asked how they might interpret obverse and reverse. Both of these refer to the front and back of the medal. In the first instance the mint had no view as to which was which but when asked if the different parts of the die would indicate which side was which they replied that the college arms would be the front and the portrait of Elizabeth I would be the back. The retailers advise that they box the medals showing the portrait of Elizabeth I to view for esthetic purposes (it looks more impressive) and consequently consider it to be the front.

However, Trinity College Dublin seems to disagree with this retailer's interpretation. The Manuscripts Department at Trinity College Dublin keeps a collection of the College's medals within a larger medals collection. The medals are described in the Manuscripts Department's medals catalogue and these descriptions resolve this obverse/reverse debate. The Trinity descriptions of the medals clearly identify the back of the medal as being that which shows the portrait of Elizabeth I. This is clarified in the descriptions of the following medals:

TCD MS medal 178, 180, 181, 182 and 183 (all of which are gold) and TCD MS medals 186, 187, 188 and 190 all of which are silver.

A typical example of a medal description (and all are similar) is:

TCD MS medal 181
TCD
Gold medal awarded to Hugh R. Thompson, 1923 with inscription 'Ethicis et Logicis Feliciter Excultis' around Trinity College Dublin arms. On back the name of the college inscribed around a portrait of Elizabeth I.
4 cm diameter.

So, it would appear that the Arms of the College are the obverse and the portrait of Elizabeth I is the reverse.

In correspondence with the author, Roger Willoughby of Specialist Medals, of Wallingford, Oxfordshire,gives an alternative view:

"I am interested in the obverse/reverse question. My view on this would be that the obverse would be that side with Queen Elizabeth's head displayed (for those that have this), based on the analogy with official British military and civil medals and decorations which would always have the head of the reigning monarch on the obverse. To wear ones medals the other way around would be likely to be a disciplinary offence in the army and be regarded as showing disrespect to the sovereign. Now, of course Elizabeth was not reigning when these medals were either instituted or struck, but I think the analogy holds nonetheless. I am not convinced by the various remarks by the college archives and retailers. None of these appear contemporaneous with the institution of the medals and are not numismatically or heraldically informed; they are simply lay views in my opinion".

This debate will continue.

ENGLISH SHEARED GROATS IN MEDIEVAL IRELAND: A COLLECTOR'S TALE

Alan Dunlop

We all know that when we have waited a very long time for a bus to arrive, three or four will arrive at the same time. Well it appears that this law also manifests itself in the numismatics world.

A few months ago I was browsing though a coin dealer's non-illustrated sales list when my attention was drawn to a coin listed in the 'Ireland' section.

> *'Mid 15th century English groat of Richard II neatly sheared to read only CIVITAS LONDON, wt 44grains.'*- Figure 1.

There was also a short paragraph explaining why this English coin was on the Irish list referring to Michael Dolley's book 'Medieval Anglo–Irish Coins'. I duly read the relevant chapter in the book, which was illustrated, and realised that I had seen a similar coin for sale on the website of another dealer. That coin had been a Henry VI Calais groat Pinecone-Mascle issue, sheared also to the inside reverse legend VILLA CALISIE – Figure 2.

Figure 1 – *Richard II groat*
Spink S1679 Wt 43.90grns

Figure 2 – *Henry VI groat*
Pinecone Mascle issue
Spink S1875

I was intrigued by this coincidence and as the asking price had been modest I tried to purchase it. However, it had been sold, but I did manage to capture an image of it for my 'virtual collection'. I had by this time acquired the Richard II coin which to my delight had a good portrait not common for this series.

The story behind these coins or the theory about their use is, from an Irish numismatic perspective, most interesting and deserving of further study. For almost 160 years from 1302 until 1460 there were virtually no coins minted in Ireland and there was a very limited range of coins circulating. These were the remnants of Edward I Irish issue, some English and continental coins and in Ulster there was an influx of Scottish coins in the mid 1300s. The reign of Edward III was dominated by the war with France and the Irish, both native and Anglo-Irish, were left very much to fend for themselves. The shortage of silver in the late 1300s and early 1400s restricted the

production of coins in England let alone in Ireland. Even Richard II, who visited twice, did not mint coins for Ireland.

During the 14th century the groat had become the silver coin of choice for commercial transactions across Europe and England and by the early 15th century it was becoming apparent that some form of larger denomination coin was needed in Ireland, one that would not be exported to England but would remain in circulation in Ireland. Part of the solution appears to have been the cutting down or shearing of English 72gn and 60gn groats making them so obviously defective that they would be rejected in England. When the heavy 72gn groats of Edward III and Richard II were sheared they weighed approximately 40-45gns or ¾ of the weight of the Henry VI English series groats. The Henry VI sheared groats reduced to between 35-40gns, and appeared similar in size to the Edward III coins. That is, 3d and as such would circulate at 4d in Ireland but not in England thus discouraging their export.

There is some hoard evidence that might suggest that during the period 1440-1460 the standard coin in circulation may well have been the sheared groat. In fact the practice of shearing was not confined to groats but included halfgroats cut to the inner legend and even occasionally groats cut to the cross and pellets only. The hoard evidence referred to by Dolley was a report on a hoard found at Oldcastle, County Meath in 1840 and noted by Dean Butler in which he described the contents of the hoard as being 71 clipped groats of Edward III (Figure 3) and Henry VI (Figures 2 and 4), and 27 'new' groats of the type struck after 1460, that is, we presume, the 'Crown' groat (Figure 5).

The fact that the Anonymous crown groat of 1460-62 has a reverse design with only the inner legend, exactly the same as the sheared groat and with no obverse legend would seem to confirm that the sheared coins were officially tolerated if not officially clipped.

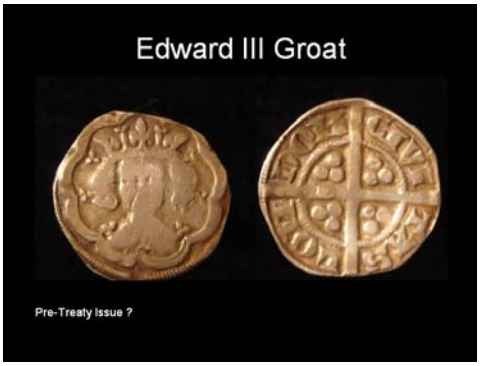

Figure 3 – *Edward III groat type B(?)*
Spink S1563 Wt41.70grns

Figure 4 – *Henry VI groat*
Annulet issue
Spink S1836 Wt34.76 grns

Figure 5 – *Edward IV crown groat*
Spink S6272 Wt 45grns

It could even have been that the reverse design was deliberately made similar to the sheared groat to give it a familiar look and more generally accepted in circulation. This, together with its innovative obverse design and weight of 45grns (NB Figure 1 Richard II groat 43.9grns), would guarantee that it would not be accepted in England at 4d. The lack of an obverse legend, whether through prudence, indecision or guile ensured that the Irish Parliament was not seen to be supporting the either the Yorkist or Lancastrian cause. Whatever the thinking behind the design it is possibly unique, in medieval European coins of this value, in its anonymity.

Another indicator of the widespread use of the sheared coins is that they were even forged! The 'O'Reilly Money'coins, made by placing a coin between two wafers of silver and making impressions of the coin then soldering the wafers together sometimes have sheared groats as their pattern coin. However with the increase in the production of coins by Edward IV throughout Ireland the necessity for the sheared coins diminished as the 45gn crown groat and later the 41gn English type groats were introduced.

This is a brief outline of the story and some theories about the sheared groats but my story does not end there. Having become aware of these coins for the first time in over 50 years of collecting hammered coins and then spotting two within months of each other, I was very surprised when another - an Edward III type – was offered for sale on eBay.

This coin is more worn as would be expected, having been, if my theory is right, in circulation for some 90-100 years. It appears to be a Pre–Treaty type B, minted in the 1350s, although with most of its legend and mint mark missing it is difficult to identify.

It might be believed that after this third coin had appeared that the tale would finally end there. I had discovered coins of the two kings of whom these groats have been recorded in hoards, Edward III and Henry VI, as well as a coin of Richard II for which I have yet to find a record of sheared groats, but it fits into the time scale. I was giving a short talk to the N.S.I. Northern Branch about groats and I used the Richard groat, the only Richard groat I had in my collection, as an illustration. In passing, I mentioned the theory of how sheared groats had been used and bemoaned the fact that I had missed buying the Henry VI coin which would have been of interest to me for two reasons, one it was a Calais coin, a mint whose coins I collect, and two its connection with Irish hammered coinage.

I thought nothing more about it but to my surprise and delight at the next meeting our Chairman Noel Simpson brought a Henry VI Annulet issue of Calais to show me. He had purchased it in Belfast in the 1970s from Leonard Kaitcher's Coin Shop. He very generously offered to part with it - an offer I duly accepted. So there you have 'proof' that the 'Law of multiple buses' applies to coins.

Because of the nature of the 'sheared groat' and as there is no provenance as guidance, there is no absolute proof that these particular coins were sheared in the period of the 15th century as I suggest. Nor is there evidence that they were used in the manner I describe. However, because these pieces are of the rulers and types of coins found in hoards of coins which did circulate, it is appropriate to hypothesise (and even speculate) in the interest of further research that the coins I have described may very well have been contemporary to known hoards and are part of this fascinating period in the history of coins and coinage in Ireland.

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Figure 4 – *Henry VI groat* - Photograph courtesy of York Coins Inc.

Figure 5 – *Edward IV crown groat* - Photograph courtesy of Dix Noonan Webb Ltd.

Spink (2008) Coins of England & the United Kingdom, Standard Catalogue of British Coins, Spink, London, UK

Spink (2003) Coins of Scotland, Ireland and the Islands, Spink, London, UK

Author's note

I have been in communication with Colm Gallagher regarding these pieces and he writes:

> *"When I collected coins between 1958 and 1965 medieval coins didn't reach Dublin dealers often and favoured clients were offered them in an order of seniority as a customer. Few went on general sale. As happened during my schooldays often Kevin O'Kelly threw in with my clutch of coin purchased for 1d, 2d and 6d another piece unlikely to be saleable. On one occasion it was an English groat not only clipped to the portrait but also crudely holed. I had met Michael Dolley at a NSI dinner in 1961 or 1962 and I became a regular contact of his after I referred to numismatic evidence when reading a paper to a student history congress in 1966. He insisted on seeing my coins and got very excited at the clipped piece which he explained didn't often reach public view because museums and collectors discarded them if pierced. It was natural, he said, for people to whom those coins were tendered, because of the suspicion that attached itself to them, to spike any dubious example and what I had acquired was an example of the impact on the Irish public of the ubiquity of the O'Reilly's money"*[1] [2].

So, here is another dimension to the 'sheared groat' that I was unaware of.

It is of course possible that the reverse happened and that the English coins were sheared after the appearance of the crown groats and poor quality heavy coins of Edward III and Richard II were cut down to the approximate weight of the crown groat thus giving silver bullion to the clipper and getting 4d worth of goods in Ireland, providing profit at both ends.

Further research might show if there is hoard or documentary evidence that the sheared groats circulated prior to the introduction of the crown groat or not.

1

As the power of the Norman colony declined [in Ireland], the minting of coins petered out and there were virtually no coins minted during the century and a half 1310 to 1460. During this period coins in circulation included worn Irish, English and Scottish pieces, European imitative coins and, in the 15th Century, poor quality forgeries known as 'O'Reilly's Money' (NMI, Airgead 950-1450).

2

Money which had probably been minted by O'Reilly, Lord of Cavan.

MEDAL MISCELLANY

Ronan Fitzpatrick

A curious medal from the TCD Historical Society

The Historical Society or Hist. at Trinity College Dublin (TCD) is the oldest student debating society in the world and traces its origin to the "Club" founded by Edmund Burke as a debating Society composed of students of Dublin University. The Society later became the "Historical Club", instituted 24th October, 1753. On 21st March, 1770, thirteen students formed themselves into the "Historical Society". In 1794 the Society entered a troubled period in its history when meetings had to be held outside the College. This period ended in April, 1843 when the Society was re-established inside the College.

The year 1770 is the long accepted year that the Historical Society was instituted. The Society awards medals annually in Gold and Silver for Oratory, History and Composition and reference to a collection of the Society medals in the care of the Manuscript Department confirm the 1770 date. Figure 1 illustrates one of the medals awarded by the Society.

Figure 1 –*Historical Society silver medal for Composition 1888-89*

Obv. A group of three figures emblematic of History, Oratory and Poetry; one holding a trumpet and book, another with right hand raised and the third playing a lyre. On the ground to the left a time-glass and scythe with books inscribed Demo and Cicero, and to right an altar inscribed Homer with bust. Behind, a rock from which Pegasus springs. Behind, in the centre is the Rostrum of Rome, decorated with two ship prows. Legend: VOS LENE CONCILIVM ET DATIS ET DATO GAVDETIS ALMAE. In exergue: I WOODHOUSE and INST ·A·D· MDLXX.

Rev. Inside an olive wreath, a collar inscribed DIGNUM LAUDE VIRUM MUSA VETAT MORI, containing the Arms of Trinity College Dublin on an eight-point star. Legend: HISTORICA SOCIETAS COLLEGII DVBLINIENSIS. Engraved: COMPOSITION William J. M'K Hardy.

54 mm Dia; silver.

Condition: Rubbed on high points, otherwise about extremely fine (Millett, 2007).

The curiosity in this medal relates to the exergue legend which reads INST ·A·D· MDLXX. Typically this is translated as 'Instituted AD 1570'. However, the Historical Society was instituted in 1770 not 1570. In fact, the University of Dublin, Trinity College did not come into existence until 1591. So why does the legend read 1570? Did the artist err and should the date read MDCCLXX? Has the medal been assigned to a date two hundred years earlier by omitting the CC?

According to the College Calendar (1906-07), William Johnston M'Knight Hardy was awarded a Supplemental Gold Medal for History and Political Science in 1887 and in 1889 he was a prizeman for Constitutional and Criminal Law. He was an active member of the Historical Society and was a regular speaker and award winner at Society debates (Hardy, 1890). He was the silver medallist for Composition 1888-89 (the medal illustrated here). He was joint gold medallist for Oratory in 1889-90 and the gold medallist for History also in 1889-90. William J Hardy, Sen. Mod. LL.B was Auditor of the Society for Session 1890-91, the 121 Session.

Lismore School Silver medal

According to Grimshaw (1989) a private school existed at Lismore in Waterford, Ireland from 1610 and she reports that there was a half an acre of ground and a school house. From the medal that she illustrates she suggests that "*the schoolhouse is surely that depicted on the obverse of surviving medals, on a hill, among trees and above a river*". Unfortunately, her illustration of a bronze medal shows the magnificent Lismore Castle and the schoolhouse on half an acre was probably a much humbler premises. The artist named on this medal is Mills F.

Philip Attwood (2004) of the Department of Coins and Medals at The British Museum explains that the Museum's collection of school medals contains one silver and two bronze medals of the sort illustrated by Grimshaw. The silver example came from the Bank of England collection in the nineteenth century. One of the bronze examples came from the Watts collection in 1966 and the other from the collection of the numismatist Edward Hawkins in 1860. The medal is by George Mills (1792/3-1824).

A medal of a different design in the Museum's collection is also said to have come from Lismore School. On one side is an assemblage of objects including a temple, globes, books and an owl; on the other is a wreath and space for engraving. It is not inscribed but is signed by the Dublin medallist I C Parkes, who was active in the 1850s and 1860s. It is 43mm in diameter and the British Museum example is bronze (Attwood, 2004).

Figure 2 illustrates a twentieth century medal from Lismore. Grimshaw does not refer to it (too late to be included in her book which refers to medals before 1872) and the British Museum don't have a specimen.

Figure 2 - *Lismore School Silver medal*

Obv. Lismore Castle above Lismore Bridge over River Blackwater. Artist's signature not shown.

Rev. A laurel wreath containing ALUMNO SCHOLAE LISMORIENSIS OB LITERAS FELICITER EXCULTAS VICTOR CHRISTIANUS GULIELMUS DUX DEVONIE D D. Legend: SUNT HIC ETIAM SUA PRAEMIA LAUDI (Even here, virtue hath her rewards, from Virgil and The Aeneid, or, Here too there is just reward for merit). Munsey, Cambrigde (Now Goldsmiths on Market Street).

51mm Dia: silver

Awarded: Year unknown. Recipients name not engraved.

Condition: Neglected, otherwise very fine.

Victor Christian William Cavendish was 9th Duke of Devonshire from 1908-1938 which helps to date the medal. Andrew Peppitt, Archivist of The Devonshire Collection at Chatsworth Estate has no records of the origin or history of this medal. However, he is aware of the medal through a collector's enquiry and he has been informed that the medal was awarded at Dr Wright's College, Lismore, probably c.1911-1913.

The Dix Noonan Webb auction of Historical and Art Medals held 17 December 2007 contained an 1889 example of this award showing the same obverse – lot 1217. This medal was from the James Spencer collection of Irish medals in gold and silver. The reverse text relates to William, the then Duke of Devonshire. William Cavendish was 7th Duke of Devonshire from 1858-1891.

Liam Cosgrave Bicentennial Visit Medal

This hallmarked sterling silver proof medal was minted in limited edition by The Franklin Mint under the authority of Philadelphia '76, the city's official Bicentennial agency. It is identical in size and design to the medal presented by the City of Philadelphia to the Honorable Liam Cosgrave, Prime Minister of Ireland, during his official Bicentennial visit to the city. The medal is one of a series depicting world leaders who visited the city in 1976.

Figure 3 – *Liam Cosgrave 1976 Bicentennial Visit Medal*

Obv. Portrait three-quarters right of Liam Cosgrave with the harp symbol of Ireland to the right. Legend: LIAM COSGRAVE PRIME MINISTER OF IRELAND. Frosted detail.

Rev. The Liberty Bell. Legend: UNITED STATES BICENTENNIAL VISIT * MARCH 1976 *. Frosted detail.

Wt. 1.5oz of .925 silver; 50 mm Dia. containing 750 grains of hallmarked sterling silver. Date and hallmark are stamped on the edge. Artist's signature not shown.

Condition: Mint state proof.

The medal is accompanied by a Certificate of Authenticity signed jointly by Frank L. Rizzo, Mayor of the City of Philadelphia and Charles L. Andes, Chairman of the Franklin Mint.

On Sunday the 4th of July, 1976, the United States celebrated the 200th anniversary of the adoption of the Declaration of Independence. Officially named the Bicentennial, events commenced in 1975 and continued through 1976. During the Bicentennial the United States Mint issued special Bicentennial coinage in 1975 (quarters, half dollars and Eisenhower dollars) dated 1776-1976.

Liam Cosgrave served as Taoiseach (Prime Minister of Ireland) of a National Coalition Government of the Fine Gael and Labour parties from March 1973 to July 1977.

Jonathan Swift Gulliver's Travels 250th Anniversary Medal

This medal commemorates Jonathan Swift and the 250th anniversary of the first publication of Gulliver's Travels in 1726. It was minted by the Franklin Mint, USA in 1976 who struck 1 medal in 18 karat gold, 1621 in solid sterling silver and 980 in bronze. All are proof strikings. This example in Figure 4 is bronze.

Figure 4 – *Jonathan Swift Gulliver's Travels 250th Anniversary Medal*

Obv. Portrait three-quarters right of Jonathan Swift, Dean of Saint Patrick's Cathedral, Dublin. Legend: JONATHAN SWIFT. Frosted detail.

Rev. Gulliver kneeling in sea, facing left addressing host of Lilliputians on quay wall. Lighthouse left and ship tethered right. Legend: 250th ANNIVERSARY PUBLICATION OF GULLIVER'S TRAVELS. Frosted detail.

Wt. 1oz; 38 mm Dia. Date and hallmark are stamped on the edge.

Sculptor: Edward Behm. The Swift Portrait is similar to that by Charles Jervas (c1675-1739) at the National Gallery of Ireland.

Condition: Mint state proof.

The Franklin Mint's promotional sheet explains that Gulliver's Travels was first published in London in 1726 in the name of Lemuel Gulliver under the title 'Travels into several remote nations of the world'. It uses the adventurer travels of Gulliver to poke fun at the English establishment of the day. After being shipwrecked on his first voyage, Gulliver wakes in Lilliput the land of the little people. On a second voyage he is shipwrecked in Brobdingnag the land of giants. On his third voyage he visits a flying island of Laputa where he meets scientific scholars and on his fourth voyage he visits the land of the Houyhnhnms where intelligent horses are served by human-like creatures.

Jonathan Swift is one of Ireland's great authors. While he is best remembered for Gulliver's Travels his works also include many essays, pamphlets, poems, personal writing, sermons and prayers. In addition to Gulliver's travels, Jonathan Swift is also remembered as Dean of St. Patrick's Cathedral. Swift has a place in Irish numismatic history as a consequence of his Drapier's letters which he used to encourage the people of Ireland to reject the coins of William Wood. In addition, the purple ten pound note of the Series B Banknotes of the Republic of Ireland issued between 1976 and 1982 had a portrait of Jonathan Swift.

The Liam Cosgrave and Jonathan Swift medals are part of the American series with a very specific Irish interest. In the same way that American collectors consider the Wood's halfpence and farthings of 1722-1724 and the Voce Populi pieces of 1760 to be part of the American series, it seems appropriate that Irish collectors should consider these Cosgrave and Swift medals to be part of the Irish series.

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THE BATTLE OF THE TOKENS, 1789-1799:
The Hibernian Mining Company –v– The Associated Irish Mine Company

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The paper presents an introductory review of the history and background to the production of copper token coinage by two Irish Mining Companies during the late 18th Century.

BACKGROUND

Today, we take for granted the coinage in our pockets, and it is consequently difficult to imagine that, in past times, commercial activities in Ireland and Britain were frequently afflicted by acute shortages of coins - particularly low value coinage. Petitions to Parliament to supply more coins are documented as long ago as 1380, and again in 1404 and 1444, though shortages became even more severe from the 18th Century onward, especially after the start of the "Industrial Revolution", conventionally taken to be 1760 (Selgin 2002). The industrialisation process marked, at least in Britain, one of the most profound changes in human population occupations, from a largely agricultural economy, in which less than one quarter of the population depended upon money wages in the mid-16th Century, to, by the end of the 18th Century, a largely industrial occupation economy in which more than three quarters of the population depended upon money wages.

Successive Governments failed, however, to respond to the resultant demand for coinage. This particularly applied to low value, primarily copper based coinage as, amongst other reasons, this was considered an improper metal for coinage to bear the regal image, which instead was largely restricted to gold and silver coinage throughout the 17th and 18th Centuries (Doty 1986; Selgin 2002). Official halfpenny and farthing copper coins (but not penny coins which were not issued until 1797), nominally containing their full value of copper metal, were manufactured by the Royal Mint from 1672 onward, but very erratically, and never in sufficient quantities to satisfy demand (Selgin 2002). This not only resulted in widespread and substantial counterfeiting of official copper coinage, but also stimulated the systematic production of commercial copper coinage from 1787 onward – the second instance of such production.

Commercial copper coinage, as distinct from official coinage issued by the Royal Mint, was produced in three distinct periods in Britain and Ireland: between about 1649–1672, 1787–1797, and 1811–1820 (Doty 1986, Selgin 2002). Unlike official coins, the commercial coins bore their issuers identities, and were issued, most commonly, in denominations of a "farthing", (¼d), a "halfpenny", (½d) and, less frequently, as a "penny" (1d) [3]. Each phase of commercial coinage issue was terminated by Royal proclamations declaring them illegal, the first phase by 4 proclamations

[3] 1d = € 0.0053; based upon the conversion of 1 Irish pound, containing 240 pennies = €1.269738, when the Euro was introduced in 2001. Note, however, that in the late 18th Century, a shilling was reckoned to contain 13 Irish pennies, or 12 English pennies.

between 1672-1674, although such coins continued in use in Ireland up to 1679; the second phase by a 1797 proclamation; and the third and final phase by an 1817 Act of Parliament (Doty 1986, Selgin 2002). It is the commercial coinage of the second phase which is most relevant to this paper, and accordingly the primary focus from hereon. However, readers interested in the history of coinage, production details and similar matters, are strongly referred to either of the primary references cited above, and/or the references cited therein, particularly by Selgin (2002).

In contrast with the small, rather crude and locally made, and circulated, merchant tokens[4] issued during the first phase, second phase tokens issued between 1787–1797, were generally of much higher quality, and larger and heavier. They were most commonly issued in the denomination of a halfpenny, with penny coins common early in the period and farthings towards the end. The coins were also generally thicker, which offered the opportunity for incorporating edge inscriptions, most frequently indicating where they might be redeemed, though plain edge coins appeared later in the period. They were commonly produced by steam-powered presses, unlike the first phase coins, which were produced initially by hand stamping, and later by screw press.

Thousands of different tokens were struck during this period, and very widely counterfeited, initially to satisfy the insatiable demands created by the Industrial Revolution, but later for general circulation purposes, for political and social commentary, and, from 1794 onward, for collectors. Indeed the very first token collectors catalogue[5], published in 1798, dates from just after the end of this phase. However, the standard reference volume for 18th Century British and Irish tokens is "The Provincial Token Coinage of the 18th Century", by Dalton and Hamer (1996), first published in 1910, and revised and reprinted in 1918, 1990, and 1996.

While commercial enterprises of many different types issued tokens during this phase, several mining companies were not just prominent coin producers (Table 1) – one in particular, the Parys Mine Company, Anglesey, Wales, initiated the entire process. And as the development of that mine, and its associated token production, is directly connected to subsequent developments in Ireland, it is appropriate to consider first a brief history of mining at Parys Mountain, as well as the operations of one of the mine operators, Roe and Company of Macclesfield, Cheshire.

PARYS MOUNTAIN, ANGLESEY, WALES

The modern era of historic developments on Parys Mountain date from 1761. That year, an Alexander Fraser[6], acting on behalf of the landowner, Sir Nicholas Bayly, discovered remains of presumed ancient (possibly Roman) copper working at the Cerrig y Bleddia farm on the eastern part of Parys Mountain (Selgin 2002). The prospect was obviously considered favourable, as by the following year, three shafts had been sunk on the prospect. Subsequent disappointing results dampened enthusiasm, and by 1764 Bayly agreed to lease the operations to William Roe, of Roe and Company, Macclesfield, Cheshire, at a royalty of 8% of ore produced (an history of this company is provided in a subsequent section, entitled "Roe and Company, Macclesfield").

[4] A *token*, or, more fully, a "*fiduciary token*", is defined as a coin, usually made of base metal, in which the face value is substantially greater than the value of the metal of which it is made (Selgin 2002). This difference made them particularly susceptible to counterfeiting, and contrasts with a "*full-bodied*", or full value coin, generally made of gold or silver.

[5] "*An Arrangement of Provincial Coins, Tokens, and Medalets Issued in Great Britain, Ireland, and the Colonies*", by James Conder, and after whom 18th Century tokens are frequently known as "Conder" tokens, especially in the USA.

[6] Alexander Fraser claimed to be the fugitive Master of Lovat, Beaufort, Scotland (Selgin 2002). He reputedly fled Scotland by sea in 1692, after murdering a bagpipe player. He was shipwrecked on Anglesey, where he settled and lived for the remainder of his life. He died in 1776, age 116.

The PARYS MINE COMPANY
The Associated Irish Mine Company (Cronebane, Ireland)
Hibernian Mine Company (Ballymurtagh, Ireland)
Castlecomer Colliery (County Kilkenny, Ireland)
The Macclesfield Copper Company [Roe and Company]
Cornish Metal Company (Cornwall)
The Priestfield Collieries & Furnaces of Samuel Fereday (Bilston, Staffordshire)
Bewicke Main Colliery (County Durham)
Percy Main Colliery (Northumberland)
Gwennap Copper & Tin Mines (Scorrier, Cornwall)
Dolcoath Copper & Tin Mine (Dolcoath, Cornwall)
West Wheal Fortune Mine (Ludgvan, Cornwall)
The Rose Copper Company (Redruth, Cornwall)
The Birmingham Mining & Copper Company (Redruth, Cornwall)
Devon Mines (Tavistock, Devon)
Alloa Colliery (Clackmannanshire, Scotland)
The Ironstone, coal and lead mines of Iron Master John Wilkinson (Shropshire & North Wales)

Table 1 - *List of mining companies which produced commercial coinage between 1787–1797. Irish mining companies highlighted in bold, including Roe and Company, of Macclesfield, Cheshire, on account of the pivotal role it played in establishing token production in Ireland. Derived from: Mining memorabilia – http://www.mining-memorabilia.co.uk/Tokens.html*

Initial, and costly, efforts by Roe and Company to develop the Cerrig y Bleddia prospect were obviously little more successful than those undertaken by Bayly, and by early 1768, the company was in despair of ever retrieving its investment. One final effort was mounted early that year, and, just when it was about to be abandoned, a major copper ore deposit, of what was to become known subsequently as the *Mona Mine*, was discovered – on March 2nd, 1768. Although that deposit was put into production very rapidly, exploration continued apace, and in 1769 the continuation of the deposit was discovered beside and beyond the northwestern boundary of the leasehold area. Notwithstanding that Bayly owned a 50% undivided moiety of the lands covering the western part of Parys Mountain, Mary Hughes, the heir of the co-owner, a man named Lewis, objected to the encroachment of prospecting beyond the original lease area (Selgin 2002). The dispute entered litigation, and throughout the process, which was finally resolved in 1778, Mary Hughes and her clergyman husband, Edward Hughes, were represented by Thomas Williams, a local solicitor. Williams was a shrewd operator, as, by as early as 1774, he had formed the *Parys Mine Company* in partnership with Edward Hughes and a London banker, John Dawes (to whom Bayly had leased his moiety shares), and by 1778 he had acquired full control of the original Lewis moiety (Selgin 2002). Williams's business interests expanded rapidly, ultimately to encompass copper warehouses in London, Birmingham, and Liverpool, and smelters in south Wales and Lancashire, from which interests he acquired the sobriquet, the "Copper King".

Not so fortunate were Roe and Company. Despite their successful development of the Mona Mine deposit, they were unable to renew the lease when it expired in 1785, which passed, no doubt to their intense chagrin, to Williams, who, from then on, had undisputed control of what was then the worlds largest copper mine (Selgin 2002).

This was an enormous operation, at the time employing over a thousand miners and perhaps as many again in associated businesses owned by Williams. Profitable the enterprises undoubtedly were, but they generated at least one very significant problem – how to pay the workforce.

In 1780, Williams had established extensive steam driven rolling mills and other processing facilities at Greenfield, near Holywell in Flintshire (Selgin 2002), and by 1786, 31 smelting furnaces had been erected at Amlwch Port. He had also established a business partnership with John Westwood, initially to gain access to his patented cold-rolling techniques to apply to manufacturing

copper sheeting and nails for sheathing the wooden hulls of Royal Navy ships. But Westwood also had experience with manufacturing medals, an expertise which presented Williams with the opportunity to combine that knowledge with copper produced in his mines and mills to manufacture coinage to pay his workforce. That process started in 1787 with the production of what are arguably the most aesthetically beautiful token coins ever produced – the "Druid Tokens" (Figure 1).

Figure 1 - *A one penny Druid Token.*
Image from: http://www.conderclub.homestead.com/whatis.html

DRUID TOKENSThe first "Druid" tokens were produced in late February 1787, under the overall supervision of John Westwood, using dies engraved by John Milton (Selgin 2002). They were most likely struck at Greenfield, using "blanks" cut at the same works. All tokens carried a face value of one penny (1d), and contemporaneous reports note that not only were the dies beautifully conceived and executed, the tokens contained virtually their full face value of copper (Selgin 2002). Even though the latter assertion is not correct[7], use of the tokens expanded very rapidly, not least because they bore face and edge inscriptions which provided for their redemption in London and Liverpool, as well as Anglesey. The popularity of the coins was such that greater production capacity was soon required, and, consequently, production was moved to new, larger facilities at 9 Great Charles Street, Birmingham in June 1787 (Selgin 2002). The Birmingham mint was managed by JohnWyatt, while the dies, for both penny and half penny tokens, the latter introduced in 1788, were engraved by John Gregory Hancock. The total production at Birmingham, between mid-1787 until the plant was sold to Matthew Boulton (1728-1809) two years later, in March 1789, is estimated to be about 250 tons of penny tokens, and 50 tons of halfpenny tokens (Selgin 2002), equivalent to about 9 million penny tokens and 3.5 million (½d) halfpennies (Dalton and Hamer 1996). The change of ownership did not, however, mark the end of the production of Druid tokens. The Parys Mine Company placed an order for production of a further 30 tons of tokens with Boulton in July 1789, and Dalton and Hamer (1996) describe and illustrate penny and halfpenny tokens with inscribed dates up to 1791, and farthings up to 1796. Those dated 1790, and which bear the title "Anglesey Mines Penny", were apparently manufactured by Williams in London, using dies engraved by Wilson (Dalton and Hamer 1996). Most of the halfpenny tokens, bearing the dates 1788-1791 inclusive, were struck from dies produced by Hancock (Dalton and Hamer 1996) - possibly in the mint established by Westwood and Hancock in Birmingham in 1789 (Selgin 2002). Sadly, only a fraction of all the tokens ever produced survive, as many were melted down during the 1790s and early 1800s when the value of copper increased dramatically[8].

[7] The tokens, produced at a rate of 16 tokens per pound of copper, contained exactly 1 ounce of copper, although copper was then valued at only 9d per pound. Hence the intrinsic value of the token was just a little more than a halfpenny (0.56d).

[8] Copper metal maintained a fairly constant value of between £68/tonne and £82/tonne throughout the period 1770-1789, but then started to rise significantly, from £84/tonne in 1790 to £127/tonne by 1799, reaching an all time 19th Century high of nearly £190/tonne in 1805 (Schmitz 1979). This dramatic, but temporary, surge

The style and design of this whole group of tokens is typified by the example illustrated in Figure 1: on the obverse side, a Druid's head; and, on the reverse, the cipher of the Parys Mine Company, "PMCo", and the date and the inscription "We promise to pay the bearer on demand One Penny". All, as previously noted, also bear an edge inscription, most commonly, "on demand in London Liverpool or Anglesey".Dalton and Hamer (1996) list, describe and illustrate a total of 217 distinct primary varieties of genuine penny tokens. These are distinguished principally by variations in the number of acorns in the wreath surrounding the Druid's head on the obverse, and, on the reverse, the shape and placement of date numerals relative to letters in the inscription. They also list a total of 40 counterfeit varieties, which bear dates between 1784 and 1791; and 9 undated "mules"[9].

The main series of halfpenny tokens closely resembles the penny in style and design, other than bearing the obverse side inscription "The Anglesey Mines Halfpenny", combined with a wide variety of edge inscriptions. A total of 151 primary varieties are recognised, and distinguished on the same basis as the penny tokens, with date inscriptions from 1787 to 1792 inclusive, and 1794 (Dalton and Hamer 1996). A separate series of 7 primary varieties bears the inscription "The Paris Miners Halfpenny", all dated 1791. Seven varieties of "farthing" or more commonly, "half halfpenny" tokens, identical in all respects to the Anglesey Mines Halfpenny, are also recorded, bearing the dates 1788, 1789, 1791 and 1793.

Amongst the many different halfpenny and farthing token varieties, some bear designs and/or inscriptions with an Irish association. These include 6 "Paris Miners" or "Anglesey Mines" halfpenny and farthing tokens, all dated 1791, which bear the edge inscription "payable at Cronebane or in Dublin"; an undated farthing bearing, on the reverse, the seated, allegorical figure of "Hibernia"; and one token, which lacks any inscribed value, bearing a Druid bust on the obverse, and the arms and inscription of the "Associated Irish Mine Company" (AIMC) with the date 1793, on the reverse. The reference to the AIMC, and payable at Cronebane, is particularly significant as both reflect developments undertaken in Ireland, not by the Parys Mine Company, but by their displaced, erstwhile rivals at Parys Mountain, Roe and Company of Macclesfield.

ROE and COMPANY, MACCLESFIELD.

By the time they acquired their lease on the eastern part of the Parys Mountain in 1764, Roe and Company was a very successful silk and button manufacturing and copper mining company based in Macclesfield, Cheshire (Smith 1998). The company was founded by Charles Roe (1715-1781), who had, by 1743, established his first water powered silk mill in Macclesfield [10]. He followed this with the establishment of the Macclesfield Copper Company (MCC) in 1758, in partnership with others[11], to manufacture a variety of copper products, as well as brassware[12]. In the same year he acquired leases on the Coniston copper mine, which he worked intermittently up to 1795, as well as the Alderley Edge mine, which he operated up to 1768 (Smith 1998). However, even by 1763, there were indications that the ore supply from the latter mine was starting to decline, and this induced a search for an alternative supply, culminating with the initiation of negotiations with Sir Nicholas Bayly for a lease, not on Parys Mountain, but on another mine at Penrhynn-ddu, in Caernarvonshire (Dalton and Hamer 1996). Bayly, however, only agreed to grant that lease on condition that they also took a lease on the Cerrig y Bleddia prospect at Parys Mountain, to which they agreed reluctantly in 1764.

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in values was directly related to the influences and impacts of the Napoleonic Wars (1793-1815), in particular the demand for copper sheeting for Royal Navy warships (Selgin 2002).

[9] A "mule" is a hybrid variety of token which combines an obverse or reverse design struck from a genuine die, with completely different obverse or reverse designs and/or face or edge inscriptions from other genuine dies.

[10] http://www.manchester2002-uk.com/history/victorian/maccsilkmill.html

[11] Dalton and Hamer (1996) list a number of individual partners, including a Brian and Robert Hodgson/Hodson, as well as William Roe, son of Charles Roe. Brian Hodgson (1740-1808) bought into the partnership in 1764, and subsequently transferred his 25% stake in the company to his son, Robert. An Edward Hawkins, a brass and copper merchant, and a brother-in-law of Robert Hodgson, is noted as a major partner in 1781 (http://www.39blythe.freeserve.co.uk/robhodg.html).

[12] The MCC established a completely new, water powered copper mill in 1763 to manufacture copper sheeting, utensils and wire as well as brassware.

As fate would have it, the latter prospered after the major discovery made there in 1768. In the same year, the MCC established two copper smelting facilities in Liverpool, as well as a colliery in Wrexham subsequently (Smith 1998). The Liverpool smelting facilities were eventually closed in 1794, as by about 1790 they had acquired an alternative, and more economic smelting facility at Neath Abbey, in south Wales. This they continued to operate until it was taken over by the Cheadle Copper and Brass Company in 1811 (Smith 1998). In 1787, two years after losing their lease at Parys Mountain, the MCC acquired a lease on the Cronebane copper deposit at Avoca, Co. Wicklow (see below).

MACCLESFIELD TOKENS

Given their established copper and brass manufacturing capacity, it is not surprising that Roe and Company soon took an interest in manufacturing copper tokens as a business opportunity. They did not, however, establish their own minting facilities, instead contracting their coinage production to John Westwood and John Gregory Hancock, who founded a mint in 1798 to service the contract, awarded in March 1798. The contract provided for the production of 42 tons of tokens, at a cost of £36-10-0 per ton, using copper "cake" to be supplied by Roe and Company. The tokens were intended for use at the company's operations in Macclesfield, as well as at Cronebane (Selgin 2002). Priority was given to minting tokens for the latter enterprise (see below), which was undertaken, not by Westwood, but by the Soho mint of Matthew Boulton, under a sub-contract agreement. Boulton commenced minting, but soon suspended it, as Westwood had, by then, fallen into financial difficulties. Though the Westwood and Hancock minting company soon recovered from these problems, Roe and Company had, in the meantime, recovered the Macclesfield token dies (engraved by Hancock) from Boulton, and transferred them to an anonymous London coiner, who produced the first ton of Macclesfield tokens in 1789 (Selgin 2002). The following year, however, Roe and Company reverted production back to Westwood and Hancock, with a commission for 25 tons of halfpenny tokens in March 1790 (Selgin 2002 [13]).

Macclesfield tokens were minted in each of the years 1789–1792 inclusive, with those produced in 1789 differing in design from those minted in subsequent years. All were halfpenny tokens, other than for a single variety of a penny token (1790), and 7 varieties of farthings (1789 only) and half halfpenny tokens (1790-1792 inclusive), all minted by Westwood specifically for collectors.

15. *O*: As No. 18.

Figure 2 - *A Macclesfield halfpenny token. Reproduced from Dalton and Hamer (1996)*

The distinct 1789 series tokens, commonly known as "Beehive" tokens, all bear, on the obverse, a cipher, "R&Co", surmounted by a beehive encircled by bees, and the inscription Macclesfield; and, on the reverse, a seated female figure holding a cogwheel, a turnscrew, the inscription halfpenny, and the date 1789 (Figure 2). The beehive design apparently derives from a coat of arms, a representation of which is depicted on the memorial plaque to Charles Roe's widow, Rachel, in Christ Church, Macclesfield (Dalton and Hamer 1996). In similar vein, the seated female figure and cogwheel on the reverse, replicates the figure which surmounts the top of Charles Roe's

[13] Dalton and Hamer 1996, however, note that only 10 tons were produced that year, and similar amounts in 1791 and 1792.

memorial plaque in the same church. That same plaque also depicts a bust of Roe, which is replicated on the obverse of all tokens, of all values, minted from 1790 onward, surrounded by the inscription "Charles Roe established the Copper Works 1758". The obverse of the 1790-1792 series is identical to the 1789 series, other than for bearing the inscription "Macclesfield Halfpenny", "The Macclesfield Penny" or "Macclesfield half halfpenny", depending upon denomination. Dalton and Hamer (1996) list 52 distinct varieties of genuine halfpenny tokens, distinguished, in the case of the 1789 series by the placement of bees relative to text, and/or the number of spokes in the cogwheel and/or the number of threads on the turnscrew; and, for the 1790-1792 series, the position of buttons on Roe's bust relative to inscription text, and, on the reverse, the position of a lever behind the figure relative to inscription text. There are 14 varieties of counterfeit halfpenny tokens, most dated between 1790-1792, with two dated 1795 and 1796; and 7 varieties of "mules".

An Irish connection is provided by some of the counterfeit varieties, with two 1790 varieties bearing the edge inscriptions "Payable in Dublin or London", or "Payable in London or Dublin". More importantly, while most genuine halfpenny tokens bear an edge inscription "Payable at Macclesfield, Liverpool or Congleton", one 1789 variety instead bears the inscription, "Payable at Cronebane or in Dublin" – a direct reference to the Roe and Company interests at Cronebane, through their company, the "Associated Irish Mine Company".

THE COPPER MINES OF AVOCA, CO. WICKLOW

Before considering briefly the mining history of the two mining companies in Co. Wicklow which issued tokens, it is appropriate to consider first the history of mining developments in that region prior to the token production era.

Cole 1922 (reprinted 1998) cites an historic reference which associates Avoca, or its alternative spelling of Ovoca, with the "Oboka" recorded by Ptolemaeus about 150AD. If this association is valid, and in the absence of any other plausible reason for such an ancient documentary record, then it could indicate that mining, an endeavour of great import to the Roman Empire, was reasonably well known in this part of Ireland by that time. But it is not until nearly 1,600 years later that the next documentary records allude to mining in the district, when Griffith (1828) notes that *Cronebane*, on the east bank of the Avoca River (Figure 3), was discovered and worked more than a century previously – i.e. during the early 1700s. It was certainly a substantial operation by 1752, as Henry (1753) notes that about 500 men were employed at the mine at a wage of 8d per day, in contrast to *Ballymurtagh*, on the west bank of the Avoca river, which he notes to be disused at that time, a result ascribed to differences between Mr. Whaley and the Company. Prior to that, it had, apparently, been very profitable. Fortunes can appear to change rapidly, as by 1755 Ballymurtagh is noted to have been very successfully worked for copper (Holdsworth 1857); and that it was re-opened by Mr. Whaley in 1868 at about the same time that a smelting works was established in the nearby port of Arklow (Fraser 1801). Further changes occurred in 1787, the year when the two mines were divided between two different companies with very different origins, one, the Associated Irish Mine Company (*Cronebane*), primarily English, the other, the Hibernian Mining Company (*Ballymurtagh*) primarily Irish. This division sowed the seeds for bitter rivalry, not least during the period of the 1798 rebellion (see below).

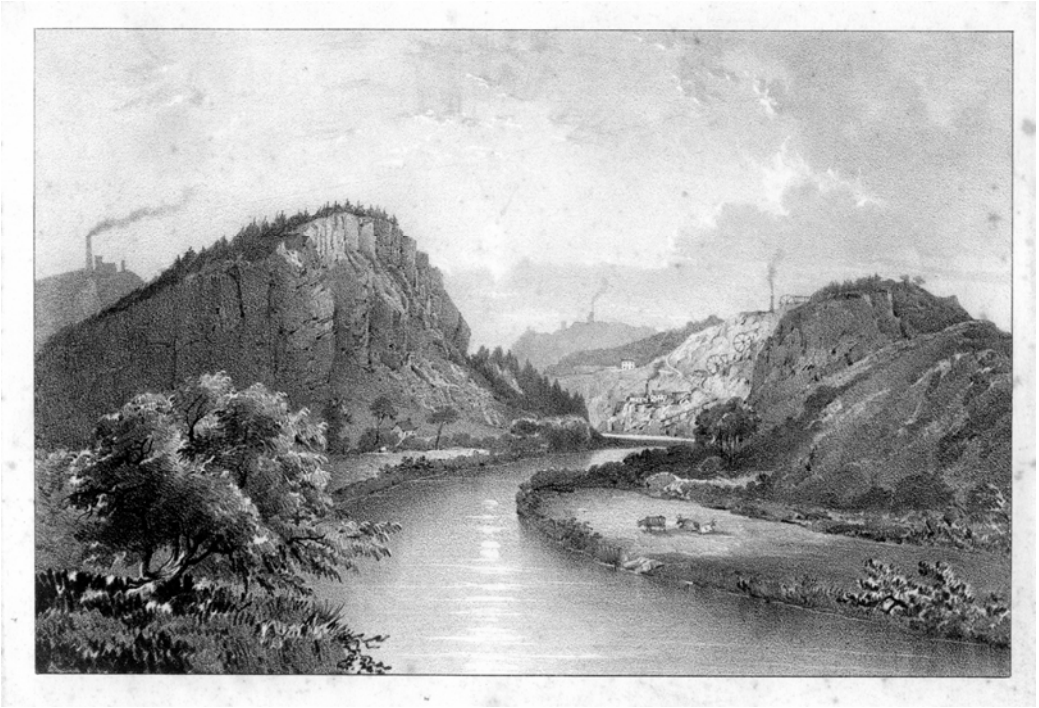

Figure. 3 - *A view of the Avoca River c1820–1830, looking north, showing the Tigroney/Cronebane Mine workings on the right hand side of the valley, with the Ballymurtagh Mines, largely out of sight, on the opposite bank. Reproduced from Coffey and Morris (2002).*

ASSOCIATED IRISH MINE COMPANY: CRONEBANE MINE

The Associated Irish Mine Company [AIMC], with offices at 184, Great Britain Street (now Parnell Street), Dublin (Dalton and Hamer 1996), was established in 1787 by Roe and Company as the operational vehicle for their Cronebane and Tigroney mine leasehold interests, which they acquired from John Kyan that year, two years after losing their lease at Parys Mountain. Kyan had apparently purchased both Cronebane and Ballymurtagh mines (see below) from a Mr. Whaley [Whalley], possibly in the late 1770s or early 1780s, and adopted the name Hibernian Mining Company from the name of a previous mine venture. By 1787, Ballymurtagh appeared to offer the better prospects and consequently, when approached by Roe and Company, Kyan decided to sell Cronebane and retain Ballymurtagh. Dalton and Hamer (1996) note the following directors of AIMC at the time of its formation: Abraham Mills[14] (later Chairman), **William Roe, Robert and Brian Hodgson**, Thomas Weaver the Elder, **Edward Hawkins** [15], Thomas Smith, Charles Caldwell and Brabazon Noble. A nearly contemporaneous reference (Fisher 1795) notes Brabazon Noble as a Director, but also names an I.P. Scot in addition to unnamed English gentlemen, from which distinction we may presume that Noble and Scot were both (Anglo/)Irish.

Kyan's decision was most unfortunate, at least from his perspective, as, early in 1788, AIMC discovered a very rich lode on the Cronebane property, which they proceeded to develop very rapidly (Smith 1998). The first shipment of ore to their Neath Abbey smelter was dispatched in 1794 (Smith 1998), and from that year, until 1812, a George Blood (1760–1840), of Montpelier Hill, Dublin, is recorded as Secretary and Accountant of AIMC (Burkes Irish Family Records 1976, Todd). The Company was incorporated by Act of Parliament in 1798 and operations continued until

[14] Cole 1922/1998, records a Mr. Mills as one of the owners who revived the mine in 1787. This might suggest that he was a partner or associate of Whaley/Whalley during the previous phase of operations, possibly negotiating his interest therein into a stake in the AIMC pursuant to the change of ownership.
[15] Names of individuals highlighted in **bold** have been noted previously as directors of the Macclesfield Copper Company – see footnote 5 above.

closure in 1808 (Smith 1998). Selgin (2002) notes that the AIMC invested £40,000 in developing the Cronebane mine between 1787 and 1797, and were rewarded with outputs averaging 1000 tons of ore annually. However, "Mineral Statistics" (Hunt 1848) notes a total production of only 534 tons of copper ore in 1808, and none for any of the years from 1804, the year records commenced, to 1807.

CRONEBANE TOKENS

"Cronebane" tokens formed a significant volume of all Irish tokens during the 1787–1797 token production phase, an inference which may be drawn from the sheer number of both genuine and counterfeit varieties documented (Dalton and Hamer 1996). They were issued in the denomination of a halfpenny only, and all bear the date 1789 only. All genuine varieties bear, on the obverse, a representation of the head of St. Patrick, with a crozier, and the inscription "Cronebane Halfpenny"; and, on the reverse, the AIMC coat of arms[16] surmounted by a windlass, the date 1789, and the inscription "Associated Irish Mine Company" (AIMC: Figure 4).

Figure 4 - *An Associated Irish Mine Company, Cronebane halfpenny token (DH17). Actual diameter = 29mm. Weight 12.445 grams (0.43934 ounces – Avoirdupois)*

It has been noted previously that Roe and Company gave priority to the minting of Cronebane tokens by Westwood and Hancock in March 1789 (Selgin 2002). That order was, however, sub-contracted to the Soho mint[17] of Matthew Boulton, as Westwood and Hancock were still in the process of acquiring coining presses, and, at the same time, becoming increasingly indebted to their financier, John Hurd, a business partner of Boulton (Selgin 2002). The agreement provided for Boulton to strike the coins on edge-marked blanks provided by Westwood, using dies engraved by Hancock (Doty 1986), in return for just under half the production cost agreed with Roe and Company (£18-0-0 of the total agreed contract cost of £36-10-0/ ton: see above also). It was further agreed that all payments from Roe and Company would go direct to Boulton, for him to retain his portion, and to remit the balance to Hurd. Production of the Cronebane tokens most likely started in mid-1789, in so doing acquiring the unique distinction of not only being the first coins to be struck at the Soho mint, but also the first coins to be struck anywhere using steam powered machinery (Selgin 2002).

By September 1789, Boulton had shipped nearly 20.75 tons of Cronebane tokens, equivalent to 1,674,815 coins[18], to Roe and Company, along with an invoice for £756-8-3 (Selgin 2002). The latter eventually only paid half this amount, for that portion due specifically to Boulton, as the other

[16] The coat of arms was adopted as the logo of the Mining History Society of Ireland when it was established in 1996, and it has been retained on conversion to the Mining Heritage Trust of Ireland (see depiction on front cover of this Journal). Patterson (1903) provides the following heraldic description: "Vert on a chevron argent, between two shovels, in saltire in chief, and a bugle-horn in base, three pickaxes; crest, a windlass; legend "Associated Irish Mine Company". He further notes that there is no record of how the arms originated, perhaps from a company seal, as there is no record of a grant of arms, or who designed them.

[17] Construction of the mint building began in April 1787 and was largely complete by November 1788 (Selgin 2002). It was designed to be equipped with coining machinery driven by a ten-horsepower rotary steam engine. By early 1789, only one coining press was operational (Selgin 2002).

[18] A genuine token in the possession of the author [DH17, in good to fine condition, Figure 4], weighs 0.43934 ounces. Applying this weight to the exact production total cited by Selgin (2002), 20 tons, 14 cwt, 1 qtr, 25 lbs, 2ozs, which is equivalent to 742,738 ounces, yields a slightly higher total production figure of 1,690,577 coins.

portion, due to Hurd, was left to be recovered from the estate of Westwood, who had gone bankrupt by the end of 1789. There is, however, no mention of any further or alternative orders for Cronebane tokens, which could only have been produced between September and December 1789, so the figure cited could well represent the overall total of AIMC coins ever minted. The volume, while substantial, is significantly less than that of the far more prolifically produced Druid penny and halfpenny tokens.

Dalton and Hamer (1996) list a total of 31 known varieties of AIMC Cronebane tokens, distinguished from each other, on the obverse, principally by the position and/or style of ribbons on the crozier, and, on the reverse, the alignment of the windlass handle and date numerals relative to border text (Figure 5). All bear the edge inscription "payable at Cronebane Lodge or in Dublin". There are 3 counterfeit varieties which bear the AIMC inscription, one with the date 1796.

Figure 5 - *AIMC Cronebane token varieties (DH = Dalton and Hamer variety number, here and all subsequent figures): DH5, DH12, DH20 and DH31. All images from Dalton and Hamer (1996)*

There is another very noteworthy series of Cronebane tokens, which are virtually identical in all respects to the AIMC series, other than for bearing the inscription "Associated Irish Miners Arms" (AIMA) in place of "Associated Irish Mine Company", and for bearing a far wider variety of edge inscriptions (Figure 6).

Figure 6 - *An Associated Irish Miners Arms, AIMA, "Cronebane" Halfpenny (DH44a). Actual diameter = 28mm. Weight: 9.138gm (0.32233 ounces – Avoirdupois)*[19]

The quality of many of this series is of a standard comparable to that of any of the AIMC type, though some are more poorly struck, and, on others, the quality of some of the obverse engravings is

[19] A second AIMA token in the possession of the author, DH 46b, in extremely fine condition, weighs 9.553gm (0.33697 ounces – Avoirdupois)

poor. Edge inscriptions are extremely variable. Apart from reference to Cronebane and Dublin, other locations include Cork, Belfast, London, Liverpool, Bristol, Hull, Anglesey, Birmingham, and Lancaster, as well as specific premises such as the "Black Horse Tower Hill", "Thomas Ball, Sleaford" and "I. Simmons, Staplehurst". Dalton and Hamer (1996) note 20 different varieties, 12 dated 1789, 5 undated and 3 dated 1794 or 1795 (Figure 7).

Waters (1954), Seaby (1970) and Dalton and Hamer (1996) all consider that the AIMA series of tokens are forgeries or counterfeits – a view entirely consistent with their much lighter weight than genuine AIMC tokens (see footnotes 17 and 18, and captions Figures 4 and 6). However, there is some evidence to suggest that the tokens might instead be genuine. Patterson (1903), citing the records of the Irish Antiquarian, Dr. William Frazer, MRIA, then stored in the National Library, Dublin, asserts that while the AIMC series were designed by Hancock of Birmingham, "..others were probably by Dröz, and were manufactured by the Soho mint." This is a most interesting statement, as it provides one of the few clues to where and by whom the AIMA series, and or other varieties, might have been produced.

Figure 7 - *A selection of AIMA "Cronebane" halfpenny varieties: DH37 (undated), DH39 (undated), DH43 (1789) and DH52 (1794). All images from Dalton and Hamer (1996)*

Jean-Pierre Droz, was a well known Swiss die engraver and inventor who, in 1786, was working as an engraver in the Paris Mint (Selgin 2002). He had invented a coining press which was able to simultaneously strike both face designs, as well as edge inscriptions, and this capability had been demonstrated to great effect in the production of the "Ècu de Calonne". This achievement was known to Matthew Boulton, and his business partner, James Watt, who, while on a business trip to Paris in December that year, visited Droz at the Mint, saw the press in operation and obtained samples. The following year, 1787, they engaged Droz to produce both die patterns for regal copper coinage, as well as to supply and install the coining presses upon which to produce them. Despite Droz vacillating and dithering, he eventually moved to the Soho mint full time in March 1788, but again largely failed to deliver upon his promises and undertakings for much of the rest of the year (Selgin 2002). The increasingly fractious relationship between Droz and Boulton eventually came to a head in March 1790, culminating with Droz' dismissal in July of that year, although subsequent legal proceedings, relating to transfer of dies and other materials, dragged on until 1791 (Selgin 2002). Droz returned to Paris, to continue what became a very distinguished career, and died in 1823.

Selgin (2002) does not indicate whether or not Droz produced any coins during his sojourn at the Soho Mint between March 1788 and July 1790, even though accounts of the legal proceedings

allude to several dies. His time there spans the 1789 period of production of both AIMC and AIMA Cronebane tokens, and so it is entirely conceivable that he might have produced some Cronebane token dies comparable to, but distinct from those engraved by Hancock – and that these might then have been struck in the mint using the same presses used for the production of the AIMC series under contract. If so, then this might explain the very variable edge inscriptions, as it is conceivable that edge marked blanks being produced for other genuine tokens could have become mixed in with the normal Cronebane/Dublin marked blanks.

Another 18 largely individual style "mules" are also known (DH57 to DH77). These, most commonly, combine the St. Patrick obverse side bust, with a wide variety of reverse side engravings (e.g. DH68, Figure 8), or the AIMA reverse with other obverse designs (e.g. DH72, Figure 8). Two of these include the bust of John of Gaunt, Duke of Lancaster (Figure 8, DH 72,76), a design which is primarily associated with an entirely separate series of tokens, the "Lancaster halfpennies", produced between 1791-1794. Some of the latter are noteworthy as they bear the edge inscription, "payable at Clougher or in Dublin".

Figure 8 - *Obverse and reverse views of two types of "John of Gaunt" counterfeit varieties: DH72 (AIMA obverse) and DH76 (Hibernia obverse), top row; and, bottom, DH68, Cronebane halfpenny obverse with Hibernia, reverse . All images from Dalton and Hamer (1996).*

Waters (1954) states that all these "mule" varieties (DH57 to DH77) were produced, for sale for "general circulation[20]", by either Thomas Prattent, a London based copper engraver and coin dealer, or by William Lutwyche, of Birmingham. He more specifically ascribes varieties DH60-62 and 66-67 to Prattent, from which it may be inferred that other "mules" were produced by Lutwyche. The sole exception is variety DH65, which bears the unique inscription "Cronebane New Mine", which he postulates may have been produced by another manufacturer.

The appearance of AIMA series token obverse and reverse designs on different "mule" varieties (Figure 8, DH 68 and DH 72) might indicate that at least some of the AIMA series tokens were produced by Lutwyche, as the latter obviously had genuine AIMA token dies in stock to use in

[20] Waters (1954) notes that many manufacturers produced irredeemable tokens for bulk sale to any individual or company wishing to purchase and use them for "general circulation". He further notes that such coins were produced at the rate of 46 tokens/pound, 5,152/hundredweight, and 103,040/ton, at a manufacturing cost of £150-0-0/ton compared with a face value of £214-3-4/ton – a very handsome profit margin of £64-13-4/ton for the manufacturer. The weight per token, at 0.34783 ounces – Avoirdupois, is very similar to, but slightly greater than the two examples noted above. A "John of Gaunt" token, DH 76, Figure 8, in very fine condition, in the possession of the author, weighs 9.743gm (0.34367 ounces – Avoirdupois).

the production of the "mules". Waters (1954) advances a similar argument in the case of some HMC "mules" (see below). However, if this interpretation is correct, then this conflicts with Patterson's (1903) assertion that other tokens were produced in the Soho mint (see above), unless there was some sort of manufacturing cooperation and/or sub-contracting arrangements between the two mints.

Waters (1954) notes an overall total of 31 genuine, 24 forgeries and 20 mule varieties of Cronebane token dies.

THE HIBERNIAN MINING COMPANY : BALLYMURTAGH

Ownership of the Ballymurtagh mine was acquired by John Howard Kyan, most likely sometime before 1780, and in 1783, and again in 1785, he sought Parliamentary grants to undertake smelting, both attempts being unsuccessful. When precisely the name "Hibernian Mining Company" was adopted for the Ballymurtagh mine is uncertain, though most likely it originated in the early 1780s, by the adoption of the name of a previous enterprise. Dalton and Hamer (1996) state that the company was formed in 1790, and adopted the name of an old copper mine that had been stopped "since the time of the rebellion".

The principal partners in the enterprise were Turner Camac, Chairman; John Howard Kyan[21], who had sold Cronebane to the AIMC in 1786; and John Camac. John and Turner Camac were brothers, two of eight children of John Camac[22] originally from Lurgan, Co. Armagh (W. Chatterton Dixon, *pers. comm*. 2002). Turner Camac, born about 1750, served as an officer in the Bengal army from 1768 until he resigned in 1779, with the rank of Captain.

The company was incorporated by Act of Parliament in 1792, though operations at Ballymurtagh had ceased by 1800 (Smith 1998), when the company capital was £100,000 (Dalton and Hamer 1996). Another, totally unrelated "Hibernian Mining Company" was established in 1824 with offices in London (Cowman 2001).

HMC TOKENS

The rivalry between the two companies was manifest in many ways (see below), not least in the issue of tokens by both companies, leading Cowman (1994) to remark upon the relatively paltry number of token varieties issued by the AIMC, in comparison with a proliferation of varieties issued by the HMC. The HMC tokens were issued in the denomination of a halfpenny only, except for two undated, and very rare penny tokens (Figure 9). The halfpenny tokens may be divided into two distinct series, with further sub-division in one instance:

- a "**Camac Kyan and Camac**" series, with two sub-series, variously dated between 1792 and 1799.
- and a "**Turner Camac Chairman**" series, bearing the date 1792 only.

Both penny tokens, though undated, but probably 1794, as both bear obverse designs identical to that of the 1794 series of halfpennies, also reflect this primary level distinction, one referable to the Camac Kyan Camac series, the other to the Turner Camac Chairman series (Figure 9).

[21] John Kyan Jr. (1775-1850), son of John Howard Kyan, who died penniless in 1804, is credited with the discovery of the process of "kyanisation" a process for impregnating timber with bichloride of mercury to preserve timber.

[22] A John Camack admitted to the Freedom of the City of Dublin in 1717 might or might not be the same person as John Camac Sr. (W. Chatterton Dixon. *pers. comm*. 2002).

Figure 9 - *HMC penny tokens, DH2, Camac Kyan and Camac type, left; and right, Turner Camac Chairman type, DH3*

Most numerous of the **Camac Kyan and Camac** type is the first sub-series, which bear the dates 1792, 1793 or 1794 (Figure 10). The 1792 suite depict, on the obverse, a seated female figure holding a harp and facing to the left, with the date below, and surrounded by the inscription "Incorporated by Act of Parliament"; and, on the reverse the cipher of the company "HMCo" surmounted by the inscription "Camac Kyan and Camac", with the denomination, halfpenny, below (Figure 10). All bear an edge inscription, most commonly either "payable in Dublin or at Ballymurtagh" or "payable in Dublin or Ballymurtagh". Dalton and Hamer (1996) define a total of 145 varieties, distinguished in the first instance by the number of strings in the harp (which vary between 5 to 14), and thereafter by the position of the head of the figure and the upper loop of the "C" of "Co" relative to the surrounding text inscriptions.

Figure 10 - *HMC Halfpenny tokens: 1792 – DH30 (six string harp) and DH170 (12 string harp); 1793 – DH246; 1794 – DH255. All images from Dalton and Hamer (1996)*

The 1793 suite is distinctly different in design (Figure 10). The obverse depicts a seated, crowned female, facing to the right, and holding a harp on one side, with a still on the other. Some varieties also include a crossed axe and shovel below the figure (e.g. DH246 shown), and all include a surrounding text inscription "payable at Dublin or Ballymurtagh". The reverse resembles the 1792 reverse, except that the text "one halfpenny" is arranged in a convex arch over the date (Figure 10), in a few instances enclosing also the text "Mossop. F" (e.g. DH246 shown). A total of 16 varieties are distinguished, again principally by the number of strings in the harp.

The 1794 suite differs yet again (Figure 10). The obverse depicts a seated, uncrowned female figure, facing to the left and holding a harp on one side and a still on the other. The figure is surrounded by a garland of leaves, with the date set below the figure. The reverse design is essentially the same as that of the 1792 suite. 18 varieties are distinguished, again by variations in the number of strings in the harp, and, as with the 1793 series, other details such as the position of the loop of the "C" of "Co", and the point of the still relative to text or leaf garland position.

The second sub-series is defined by a suite of tokens which contain numerous variations in text inscriptions, spellings and dates (Figure11; DH174 to DH226). The latter generally range between 1792 and 1799, though one variety even bears the date 1972 (sic). Many bear the obverse side inscription "Incorporated by Act of Parliament" but with many different spelling variations (e.g. "inorboratd by Barliament", "Incorporated by an Act", "parlrment", "Parlerment", "Incoporeted", "pncorpirtad by act of Prcliamrnt" etc), others the legend " "Industry has its sure reward". Reverse side inscriptions are equally variable mainly reflecting outlandish misspellings of the names of the founding partners, e.g. "Canac Kran and Canac Palfplnny", "Camak", "Kian", "Kamuk", "Grmac Kran and Grmac", "halfready" etc. Some bear the inscription "for the good of the public(k)" as either an obverse or reverse inscription. As a group of 52 varieties, they are all very poorly executed and crudely produced, and this, taken in conjunction with the numerous spelling mistakes and extremely variable edge inscriptions, where present, leaves little doubt that most, if not all of these are counterfeit pieces, though Dalton and Hamer (1996) do not classify them as such. Waters (1954) suggests that four tokens in this series (DH174-DH176, and DH179, all dated 1792) might be genuine, the remainder all forgeries.

Figure 11 - *HMC halfpenny tokens, examples of name and spelling variations:DH189 - "Canac Rone and Canac"; DH199 – "Incorperted", "Kamac Kian and Kamac Halfready". Both images from Dalton and Hamer (1996)*

The second main series of HMC tokens, **Turner Camac Chairman**, are all now very rare, some even unique, even though the class as a whole is represented by a total of 35 distinct varieties (Figure 12). The tokens, all dated 1792 only, are, apart from bearing the inscription "Turner Camac Chairman", in the place of "Camac Kyan and Camac", otherwise virtually identical to those of the latter series and varieties are distinguished on the same basis. The only principal exception is one variety in which the name "Turner" is misspelled as "Turne" (Figure12).

Figure 12 - *HMC halfpenny tokens: Turner Camac Chairman series: DH269 (six string harp), DH302 (twelve string harp), and DH304 (Turne Camac)*

It is probable that most of the genuine HMC tokens were engraved and produced in Dublin, as Frazer (1893) notes that William Mossop Sr.[23] was engaged by Camac, Kyan and Camac in 1793 to make their dies, and superintend ".. the practical working of their private mint", using copper from their Wicklow mines. Mossop undoubtedly produced some of the 1793 series, certainly the four varieties which bear the inscription "Mossop. F[24]" immediately above the date (Figure 10, DH246; Dalton and Hamer 1996, DH245-247, 249), and probably all the others in the series. Mossop's relationship with HMC may have extended beyond just the 1793 series, as Frazer (1893) notes that Mossop returned to private die-sinking in 1797, after losing his appointment to HMC, and subsequent to the failure of that company. Whatever the exact order of these events, Mossop's association with HMC extended, at most, only over the period 1793-1797. It is therefore conceivable that he may have been involved with the production of the 1794 series of genuine HMC tokens.

The 1793-1797 period is also coincident with the production of most of the second sub-series of very crude Camac Kyan and Camac tokens described above. It is, however, difficult to envisage that a diesinker of the calibre of Mossop was involved with the production of such very crude coins. All appear to be the work of far less skilled, and possibly less well educated diesinkers in light of the grotesque misspellings. It is further conceivable, but entirely conjectural, that they may have been employed, directly or indirectly, by HMC to augment token production in the HMC mint, and perhaps in response to demand for such coins. Frazer (1893) notes that the overall production of HMC tokens was so prolific that they largely displaced the royal coinage and for several years halfpennies were widely known as "Camacs". If, indeed, all the crude tokens were produced in the

[23] William Mossop Sr (1751 – 1804) was a well-known Dublin based medal diesinker and numismatist, who, along with his son William Stephen Mossop Jr. (1788 – 1827), also a noted medal diesinker, had his business premises at 13, Essex Quay (Frazer 1893, Waters 1954, Dalton and Hamer 1996). Mossop Sr. produced many very fine commemorative medals for, amongst others, the Royal Irish Academy (Cunningham Medal, dated 1776), the Armagh Observatory (1789), College Historical Society and Mossop Medals, University of Dublin (1788-1794), Bantry Bay Medal (1797), the Orange Association (1798) and the Dublin Society Medal (1802: Frazer 1893).

[24] Mossop Sr. included the inscription "Mossop" on many of his medals, " Mossop. F" on some (e.g. Dublin Society medal), and "Mossop Fecit" on one (Irish Ordnance Medal). It is clear that "F" in these instances, and in the 1793 HMC tokens, is an abbreviation for "*Fecit*" (Latin, "he (/she/it) made" [it]), as a shorthand inscription for "Mossop fecit", "Mossop (he) made" [it].

HMC mint, and not just the few varieties noted by Waters (1954), then it is easy to imagine the sense of effrontery this must have presented to Mossop in his role as superintendent of the HMC mint – and perhaps contributed to his ultimate departure.

Waters (1954) asserts that at least some of the "mule" varieties of HMC tokens, specifically varieties DH227 to DH232, were struck at the Birmingham mint of William Lutwyche[25], using, in different combinations, genuine obverse and reverse dies from a genuine token variety (DH42). This, he suggests, could indicate that at least some of the genuine 1792 series HMC tokens series were struck at that mint, rather than in Dublin. Waters (1954) estimates a total, very approximately, of 208 genuine, 61 forgeries and 8 mule varieties of HMC token dies.

COMPANY RIVALRIES

Not surprisingly, given their different pedigrees, there was little love lost between the Irish owned and staffed HMC, and the English owned and managed AIMC, each operating on opposite banks of the Avoca river from 1787 through to the early 1800s (Figure 3). Whatever about the ownership and management of AIMC, the composition of its workforce appears to be somewhat more cosmopolitan, with surnames of Welsh, Irish and Cornish origin all well represented in the names of surface and underground workers, though, curiously, there is no mention of obviously English surnames (Cowman 1994). Indeed it is noted that Welsh surnames are common amongst the earliest members of the workforce suggesting that some of these at least might have moved over to Ireland from Anglesey when Roe and Company had to abandon their lease at Parys Mountain. The Methodist chapel at Avoca also attests to either a Cornish and/or Welsh influence.

Cowman (1994) also draws attention to a possible expression of company rivalry, and perhaps sympathies, manifest in their respective token coinage. He notes the patriotic inscription, "industry has its true rewards" (Figure 13), which adorns some of the presumed counterfeit HMC tokens, as already noted above, whereas a later, AIMC counterfeit token, produced in 1794, seems to be directed against the HMC, as it shows a lady holding scales of justice and the message "for change, not fraud" (Dalton and Hamer 1996, Cronebane varieties 63 and 64).

Figure 13 - *HMC Halfpenny token: DH180 – "Industry has its sure reward"*

Use of tokens for such political, social or economic commentary is well documented by Dalton and Hamer (1996), so Cowman's (1994) interpretation has merit. Indeed, the speculation could be carried a stage further. The second sub-series of Camac Kyan and Camac tokens are so crudely produced, and some misspellings so gross, that, apart altogether from the conjectures already advanced above, it is conceivable that they may [have] been produced deliberately to reflect poorly on the company. And if that was, indeed the case, then what better suspect than the AIMC? The contrast between counterfeits of the two companies tokens could not be more obvious, as most of the AIMC counterfeit tokens are remarkably well produced - and obviously designed to appear credible and respectable. One "mule" token in particular, with the date 1794, bears a very obvious political message, the obverse bearing a rather poor imprint of the AIMA design, while the reverse

[25] Waters (1954) lists the names of 16 manufacturers in Birmingham, including Lutwyche, 5 in London and 1 in Sheffield. He also notes the names of 13 diesinkers in Birmingham, 5 in London and 1 in Sheffield. Droz' name is not listed amongst these.

depicts a dove carrying an olive branch, with a face inscription "united for a reform of Parliament" (Dalton and Hamer, 1996, DH69).

The evolution in the design of the genuine HMC tokens from 1792–1794, could equally reflect the evolving sympathy of the company (Figure 10). Inclusion of the inscription "Incorporated by Act of Parliament" undoubtedly reflects a sense of pride in the corporate status granted in 1792, but by 1794, this notation had been dropped in favour of a garland of leaves. Equally curious is the depiction of the seated female figure. This is identical in the 1792 and 1794 series', even to the same rather languorous pose of her right arm, other than for the inclusion of a still in the 1794 versions. Both, however, differ significantly from the 1793 series, not only in the rather stiffer pose of the female's left arm, but, most importantly, by the inclusion of a crown on her head, a feature conspicuously absent in the 1792 and 1794 series'. These changes coincide with a manifest hardening in the republican sympathies of the HMC, as noted by Cowman (1994) and summarised below. In that context, it is easy to understand why the crown and reference to Parliament was quietly dropped, the latter to be replaced by leaves - perhaps as a symbol of peace?

Mossop's role, if any, in these subtle changes, is not documented. His political sympathies are equally unknown, though it is reasonable to conjecture that they were aligned with the establishment, given the nature and subject matter of many of his commissioned medals – not least the Orange Association Medal of 1798. And if that conjecture is indeed correct, then it could add a yet further dimension to help explain the loss of his appointment to the HMC by 1797.

Whatever about such dimensions, the rivalry between the companies reached its climax with the 1798 rebellion, when opposing loyalties and allegiances became very obvious. In the run-up to the uprising that year, both companies had raised, funded and equipped their own militias, both protesting that this was done as an act of loyalty to the Government. However, while there was no doubt that this was indeed the position of the AIMC and its militias, the same could not be said for the HMC, which was strongly suspected of sympathy for the cause of the "United Irishmen" (Smith 1998).

That belief was, in part, based upon the relationship between Kyan and Esmond Kyan[26], of Wexford, a local leader of the United Irishmen, in addition to the suspected republican sympathies of the Camacs (Cowman 1994). Kyan and Camac had apparently provided employment in 1792 to republicans driven out of Co. Louth, and by 1796 they had established two militias, one, the Castlemacadam Cavalry, commanded by Turner Camac, the other by his brother James. Turner's previous experience as an officer in the Bengal Army was no doubt influential in this development, whatever about the military experience of his brother. However, by March 1798 it had become clear that members of both militias were actively involved in the United Irishmen, as HMC workers were reported to have engaged an *agent provocateur*, James McQuillan, alias James Collins, to ascertain the intentions of local Orangemen (Cowman 1994). Both militias were subsequently dissolved.

The AIMC was equally involved in military preparations. They had certainly established their own, Cronebane yeomanry by 1796, as in November that year, they spent £150-2-2, principally on uniform materials, a further £2-10-11 on a drum, and by December, they were importing arms through Wicklow (Cowman 1994). George Blood, Secretary and Accountant of AIMC (1794 – 1812), also served as a Lieutenant in the Cronebane Yeomanry (Burkes Irish Family Records). The initial stimulant for the establishment of the Cronebane Yeomanry was most likely related to military action to control activities arising on foot of the re-discovery[27] of gold nearby in 1795 or 1796, ultimately brought under control by the intervention of the Kildare Militia (Sullivan 1824, Hall and Hall 1853, Reeves 1971). The AIMC was then contracted by the Government to develop the prospecting on behalf of the State (Cowman 1994). The Yeomanry was largely inactive during 1797, though they did impose a mandatory oath of allegiance, which 40 of their own workers refused to sign.

The insurrection eventually erupted in May 1798, resulting in cessation of mining from then until the following September. The total value of lost production at Cronebane is estimated to have

[26] An Irish folk ballad makes reference to "Kyan and the Shelmalieres" (named after an area south of Wexford), and the use of wildfowling guns in the 1798 rebellion (M. Kenny, *pers. comm*. 2003)

[27] Sullivan (1824) states that gold was first discovered "..between fifty or sixty years since..", i.e. about 1764-1774, consistent with a 1770 date noted by Reeves (1971).

been about £60,000, in addition to wages totalling £377-11-2 paid by AIMC to miners while serving in the yeomanry, as well as related material costs (Cowman 1994). Operations must also have been disrupted later in the year, as the mines closed for 3 weeks in December because of lack of blasting powder, presumably due to security precautions. The actions of their Yeomanry obviously pleased the English shareholders of AIMC, as they saw fit to make special awards to some of its officers: a silver plate worth 50 guineas to Captain Mills, and plate worth 30 and 20 guineas to First Lieutenant Weaver and Second Lieutenant Blood respectively (Cowman 1994). The militia continued in existence up to 1808, and even though the mine reached its peak profitability in the early 1800s, production must have been affected, as miners were providing over 100 days service per year.

Given that the AIMC was actively involved in raising and financing armed militias in the 1790s, it is conceivable that the reference to "Miners Arms" on the AIMA series of tokens might be a *double entendre*, and/or a very pointed political comment. The obvious interpretation is that the reference merely relates to the depiction of the coat of arms on the reverse side of the series. But given the increasingly unsettled political times in Ireland in the late 1700s, the allusion to "Miners Arms" might instead or, in addition, refer to the arming of miners to serve in the AIMC yeomanry companies. Militarisation of AIMC miners was certainly established by 1794, coinciding with the dates of at least two varieties of the AIMA tokens, bearing the dates 1794 (Figure 8, DH52) and 1795, and perhaps some of the undated varieties. However, the 1789 date born by most of this series of tokens pre-dates the currently known recorded history of the yeomanry companies. Nonetheless, it is conceivable, that, as the rival HMC was known to have employed Republican sympathisers in 1792 (Cowman 1994), the AIMC may have started to initiate military preparations about the same time, or maybe even earlier.

And was there a literal "Battle of the Tokens"? At some time during 1798, a band of rebels reputedly laid siege to a house occupied by an AIMC Yeomanry officer, who, to defend himself, loaded a blunderbuss and discharged it at, and dispersed those besieging him (N. Coy, *pers. comm*. 2003). His ammunition? – supposedly a load of Cronebane tokens.

FOOTNOTE

Apart from these two companies, the Castlecomer Colliery is the only other Irish mining company known to have issued tokens (in 1804; Seaby 1970). These now extremely rare and very valuable coins, were not minted as tokens, but instead are Spanish 8 *reale* silver coins of 1799, defaced with a countermark for the denomination 5s 5d, and bearing the legend "Castlecomer Colliery Yard". One of these coins sold for IR£2,400 when auctioned in Dublin in 1997.

Figure 14 - *IM Co, Drogheda token: DH2, "Incorporated by Act of Parlerment"*

There is, however, one other curious series of halfpenny tokens, issued in Drogheda and bearing the dates 1792 and 1804 only, which may or may not have a mining connection. All these tokens (Figure 14) bear the cipher IMCo on the obverse, along with the date, and, on the reverse, Hibernia with various text inscriptions such as "Incorporated by Act of Parlerment" (Figure 14), "for the public good", "and "Leinster Halfpenny"(1804). Seaby (1970) includes these in a group of tokens categorised as "Spurious tokens of Fictitious Companies", but Dalton and Hamer (1996), suggest that the cipher may stand for the "Irish Mine Company". The authority for this interpretation is not stated, and no company of that name is, so far, known to have existed at that time. The most similarly named company is that of the "Mining Company of Ireland", MCI,

although this company was not established until 1824, and there is no record of it ever having issued tokens (Cowman 2001). Waters (1954) suggests that they are just copies of HMC tokens.

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The Society actively engages in the publication of scholarly papers and reports which are published as Occasional Papers and welcomes submissions for publication. Simple guidelines apply:

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