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PROCEEDINGS OF THE ROYAL NUMISMATIC SOCIETY OF NEW ZEALAND INC.

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EDITOR: B. DELAHUNT ONZM KStJ FRSNZ FRNSNZ

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RNSNZ PROGRAMME OF EVENTS 2026 - 27

Date and Time	Venue	Speaker/Organiser and Topic
Wednesday, 29 July 2026 7.30pm	Wellington Club	Brett Delahunt - Would you like to buy a knighthood?
Wednesday 26 August 2026 7.30pm	Wellington Club	Jim Howell – The History of the Penny – from its ancient origin to the Present. Jim is a Wellington Diplomat with a long interest in the Penny. (Note: topic change since January)
Friday 18 September 2026 5.30 pm	West Plaza Hotel	Function – all members welcome
Wednesday, 30 September 2026 7.30pm	Wellington Club	Vaughn Humberstone –Aequitas: from Ancient Rome to Colonial New Zealand
Wednesday 28 October 2026	Wellington Club	Joshua Lee – topic to be confirmed.
Wednesday, 25 November 2026 7pm	To be confirmed	End of Year Dinner
27 January 2027, 7.30pm	Wellington Club	Ken Matthews: New Zealand Prime Ministers with military service and military medals

RNSNZ Monthly Meetings

Most monthly meetings are held at The Wellington Club, normally in the McCarthy and Featherston Rooms, Level 4, 88 The Terrace, Wellington. Call 022 0321143 or 021 02891831 if the door is locked. Those unable to attend in person are welcome to attend by Zoom. Visitors are always welcome. Members are invited to bring “show and tell” items to all meetings.

Please note The Wellington Club dress code: smart casual or better; not collarless shirts, distressed denim, hoodies, sweatshirts, jandals, trainers, tracksuits or shorts.

Joining the RNSNZ

New members are warmly encouraged to join. They can apply via our web site www.RNSNZ.org.nz or write with full contact details (email, postal address, phone

number), age, any decorations, occupation and numismatic interests to our PO Box Number 323, Wellington, New Zealand. Note that this has changed since April 2026.

Annual Subscriptions for 2026/27 and 2027/28

Subs remain NZ\$35; \$A35 Australia; \$US35 rest of world; with half price for new members joining after 30 September. For electronic communications only: \$NZ25, \$A25 or \$US25 rest of world with half price for new members as above. Rates are free for members under 21 with electronic publications, members with 50 years continuous membership, or members attaining 80 years with 10 years continuous membership at that date.

Society Office Holders 2026 – 2027

President: David Galt FRNSNZ

Vice-Presidents: Brett Delahunt FRNSNZ, Tony Grant FRNSNZ, Clint Libby FRNSNZ, Hamish MacMaster FRNSNZ, Graeme Hancock, Andrew Christie, Lois Ion, John Eccles
Secretary: Hamish MacMaster FRNSNZ. Clint Libby FRNSNZ will take minutes.

Treasurer: Kenneth Matthews (Selwyn Lowe continues to look after membership)

Librarian: Paul Bicknell FRNSNZ

Keeper of the Collection: Clint Libby FRNSNZ

Editor (NZ Numismatic Journal:) Brett Delahunt FRNSNZ

Editor (Society Newsletters): David Galt FRNSNZ

Member of Council: David Russell, Rodney Hall, Wayne Newman FRNSNZ, Alison Griffith, Liam Jennings. John O'Reilly (as Chairperson of our OMRS Branch.

Web Site Manager: Rodney Hall

Auditor: Nick Economu

RNSNZ Numismatic Library

The Society's library is held at the Karori RSA. The locked building and collections for borrowing are accessible through Librarian Paul Bicknell, Clint Libby (04-4768576) or David Galt (022 0321143). See the extensive catalogue on our website.

Society and Council News

- The Society's Council includes most officers except the Auditor. It manages most Society day to day business, meeting twice a year.
- The Society supports a medal Symposium each year in October arranged by our Orders and Medals Branch, including on 10 October in 2026 and plans

an Ancient Coins Symposium in Dunedin in November 2027 in conjunction with University Classics Departments. Associate Professor Gwynnaeth MacIntyre is organising our first Dunedin event for many years.

- In October 2028, we plan a major conference in Auckland in conjunction with the Numismatic Society of Auckland.
- Early thinking is underway as we approach our centenary in 2031 about how it should be celebrated, with a committee of developing plans.
- We are continuing to communicate to the Reserve Bank the strong view of members that New Zealand should continue to issue commemorative coins, especially with events such as the centenary of coinage to come in 2033.
- The entire twenty specially numbered medals produced for sale to members of the Service medal portraying former president Geoff Staggs have been sold to members, helping to defray their costs.

Recognition by the Order of St John

We are delighted to report that the RNSNZ has been recognised by the Order of St John in New Zealand with a Priory Vote of Thanks – a high honour. The Vote of Thanks was presented to us by Chancellor John Whitehead at our AGM on 24 June 2026.



The Society has provided a forum for St John history to be discussed and showcased as part of our regular medals symposiums, particularly with Todd Skilton's service to

both organisations and valued a collection of coins for the Order. The Vote of thanks was approved by the Prior of the Order, Dame Cindy Krio, GNZM, QSO, DStJ, Governor General of New Zealand and of course, also our own patron.

Other Numismatic Societies

Our members enjoy good relations with other New Zealand numismatic societies and are typically welcome to join their meetings from time to time. Contact these organisations directly if interested.

Numismatic Association of Australia: The RNSNZ is a sponsoring society of the Numismatic Association of Australia (NAA). which supports high quality research. Full details are at: www.numismatics.org.au

Tauranga Numismatic Society: Meets on the first Wednesday monthly at 7.30 pm, at the Wesley Church Centre, 100 13th Avenue. Contact taurang anumis@gmail.com

Numismatic Society of Auckland: Monthly meetings are now held, except in January, on the second Monday of the month at 7.30pm at the Ranfurly Room, 202 Gillies Avenue, Epsom, Auckland. Please contact Andrew Clifford (President) at Andrew@andrewclifford.com. Meetings usually include Zoom participation. All welcome.

Wanganui Numismatic Society: Meets in the afternoon on the last Wednesday of every month except December - phone 022 4961306

Orders and Medals Research Society Branch

Contact: John O'Reilly john_o_reilly@hotmail.com

The Wellington based New Zealand branch has an active programme with meetings typically on Sunday afternoons at 2 pm in members' homes and accessible by Zoom link. Officers re-elected at the June 2026 AGM were John O'Reilly (Chairperson), Mark Brewer (Committee Member) and David Dickens (Secretary).

The Branch has experienced another successful year organising and hosting meetings on a two monthly basis in the Wellington region. The themes for the meetings ranged from a talk on Bronze Royal Humane Medals (John O'Reilly), the medal or medal group that sparked an interest in collecting, favourite World War Two medal group, the NZ Maori War Medal (including rare and unusual examples) and the Annual Quiz that tested members' knowledge of the hobby and related history.

The Branch held its annual Medal Symposium and Dinner at the Wellington Club, generously supported by The Nikau Foundation and Noonans of Mayfair on 4 October. Presentations included Lord Roberts Sidekick (Prof. Brett Delahunt ONZM, KStJ), The Imperial Service Order and Medal and New Zealand (Gregor Macaulay), The Reverse of the Medal (David Dickens), Medals to the NZ Fire Police and Operational Support Personnel (Todd Skilton), A talk with a Difference (Christopher Mellor-Hill (Noonans), The Royal Signals North China Signals Section taken prisoner in Peking, December 1941 (Mark Brewer), Medals to Wireless Operators (John O'Reilly), Fire Side - Christopher Mellor-Hill (Noonans) and David Galt (Mowbrays).

On behalf of all members of the OMRS NZ Branch we would like to extend to our society friends across the globe our best wishes for 2026.

Royal Numismatic Society of NZ Accounts - Year to 31 March 2026

The Society's annual accounts, approved at the AGM on 24 June 2026 are now available in detail at the Companies Office web site, as are those for previous years. The full accounts approved at the annual meeting can be seen for the year to 31 March 2026 at this link: <https://is-register.companiesoffice.govt.nz/> Search for Royal Numismatic Society of New Zealand and click Filings when the Society's details appear.

Important highlights included that the Society had total income in 2025-26 of \$37830.77 with a much smaller surplus of \$2207.39 including tax refunds expected for resident withholding tax on interest received.

Although a not-for-profit entity, the Society is subject to income tax, but is not taxed on grants, donations and subscriptions received and so for tax purposes typically has a refund of all tax paid on interest received.

The Society had members' funds of \$261,577.38 and assets of the same amount at year end, mostly held in term deposits and current accounts with the BNZ and ASB banks.

Fellowships

Paul Bicknell FRNSNZ

Paul joined the Society in 2007 and has been a very active member ever since.

Paul has provided meritorious service to the Society continuously since 2014 both in the research projects and articles he has written about New Zealand coins and as Librarian.



The title of Paul's role as Librarian understates the work he has done. Paul has constantly updated the Society's catalogue of books and reference works, adding many significant holdings in the collections to it, such as those donated by John Cresswell, Doug Carrian and others. He has also added many resources beyond the books and scanned many other magazines and other resources. The collection has become an irreplaceable resource for New Zealand numismatics, with many scans available as back-ups, as well as a repository for World numismatic reference works available for research by members.

Paul knows the resources held and can help members find relevant material for m research.

Paul has been a Council member since 2015. He has contributed to the success of many Society events, including organising catering for events at Levin and elsewhere and helping organise conferences.

Paul is one of few people currently undertaking original research on New Zealand coins. He has made a major contribution to understanding of what really happened

with the production of the New Zealand Bahamas mule and its aftermath, and some other varieties and patterns in New Zealand's minor denominations. His research continues in these areas. Naturally, much of his research has been published in the New Zealand Numismatic Journal and been the subject of Society talks.

Now retired, Paul in working life was a cook, particularly at Victoria University of Wellington's Victoria House.

Todd Skilton FRNSNZ

Todd was elected a member of the RNSNZ in October 2015, having been a member of the Orders and Medals Research Society since March 2000. Within the Branch, he has been Convener (2015 to 2024), Secretary 2016 - 2019, and Chair 2019 - 2025, as well as International Society Facebook Page Administrator.

Todd has organised successful OMRS symposiums and presented many papers himself, covering a wide range of topics including the Conspicuous Gallantry Medal, Orders of St John and St Lazarus, Coronation Medals, New Zealand GSM, New Zealand Royal Honours, The DSO and other topics

He has organised the medals stream at our major conferences and made major organisational contributions, encompassing Council membership, use of Wellington Club facilities for conferences and monthly meetings, setting up IT systems that we use and developing conference registration facilities for us.

His contribution to numismatics goes beyond the Society. With the Order of St John in New Zealand he has written a major 344-page publication in 2023, "For Faith and Service - The Most Venerable Order of the Hospital of Saint John of Jerusalem Priory in New Zealand", with extensive online coverage of major St John Awards. And he has built a relationship with the Order for the RNSNZ with St John contributions from other people to symposiums over time.

In life outside the Society, Todd has been an army officer and senior manager with IT responsibilities.



The current list of Fellows of the Society is:

2003: A.W. (Tony) Grant
2003: C.R. (Clint) Libby
2003: Martin Lewis Purdy
2005: Brett Delahunt
2007: Scott de Young
2010: Hamish Craig MacMaster
2011: David Alexander Galt
2011: Flemming E. Sorensen
2021: Mark Stocker
2021: R. (Rob) Pepping
2022: Andrew Clifford
2022: Wayne Newman
2026: Paul Bicknell
2026: Todd Malcolm Skilton

From the Genius of Satire to the Depths of Dictatorship - German Historical and Propaganda Medals 1914-1945

Hamish MacMaster FRNSNZ

The World War I satirical or propaganda medals of Germany have long been recognised as a unique and significant epoch in the evolution of the historical medal. Yet until quite recently I remained reluctant to have any in my collection, given how many family members had died during that war.

Paradoxically what ended up drawing me in was a family link with the early Zeppelin flights, my grandfather reputedly being the first British citizen to fly on the Graf Zeppelin on the route from Pernambuco to Frankensheim in 1932. That led on to the rich variety of Zeppelin medals and in turn to a growing curiosity over the individuality – if not in some cases, a grudging recognition of the genius - of the German medallists both during and immediately after World War I. What, I wondered, propelled the belief system of these people supporting the Kaiser and how was this expressed in medallic form?

This article will look at the development of these medals not only in their numismatic context, but also at how they reflect the seismic changes in German history throughout the first half of the twentieth century. To end the story in 1918 as I had originally planned to do, might well have captured the German medal at its zenith, but it would be, as I soon came to realise, a very limited and incomplete narrative.

For at the heart of all of this, lies the very individual stories of the medal makers themselves - Goetz, Gies and others - as they sought to adapt from the heights of their art during the First World War, to the despair of defeat, to the disappointment of the Weimar Republic and finally to the depths and depravity of Nazi dictatorship. [Appendix 1]

German Satirical and Propaganda Medals in World War One

To begin that journey then, German medals of the First World War era are of immense interest for their propagandist or satirical character. They were produced in far greater numbers than Allied art medals - some estimate that about 80% of all historical / propaganda medals from World War I were produced in Germany or Austro-Hungary (Appendix 2). This was also in the days before mass communication, television or social media.

Indeed, what is striking when comparing the medals of each belligerent is the paucity in both quantity and quality of commemorative medals produced in Britain by comparison with the extraordinary profusion of medallic artistry demonstrated in Germany. Stylistically also, the German medals were very different as we shall see, often foregoing formal commemoration in favour of graphic depictions of the horrors of war and the suffering of humankind.

Recognition as to just how unique these German medals were and their significance as objects of historical importance, led Sir George Hill, Keeper of Coins and Medals at the British Museum to start collecting these medals from Germany before the fighting was even over. Sir George was appointed Keeper of Coins and Medals in 1912 until he became Director of the Museum in 1931, a post he held until 1936. 100 years later with the centenary commemoration of WWI in 2014, the British Museum hosted an exhibition of these medals entitled *The Other Side of the Medal, How Germany saw the First World War* (Hockenhull, pg 37-40).

The exhibition told the story of the difficulties Hill faced in acquiring these German medals while the war was still being fought. The Museum's acquisitions budget had been cut, the collections were in underground storage, and many staff members were away fighting the war. Furthermore, the allied blockade of Germany had severed postal communications, while the Postal Censor confiscated parcels from neighbouring countries.

However, the British Museum is persistent in its acquisition of other countries treasures and more than two hundred confiscated German medals found their way into the Museum's collection for little or no cost, while dozens more were purchased through dealers and collectors from the Netherlands.

By the end of the war Hill had managed to acquire almost four hundred German medals for the nation, and more were to follow in the years ahead. The British Museum may have been closed and its galleries sandbagged, but the resourceful Sir George still managed to organise an exhibition of plaster casts at the Victoria and Albert in 1918. Such was the store the Museum placed on this new collection.

The Rise of German Expressionism

Taking a step back to the origins of these medals, German expressionism in many ways can be seen as a reaction to the revival of the medallic art in neighbouring France and of the art deco style it popularised. The rise of German nationalism and the traditional enmity between the countries hastened this breach. The growing

militarist ethos of the new German nation, reaching fever pitch towards the outbreak of the First World War, saw a complete rejection of what was considered a decadent French style. Instead within Germany a heroic realism became popular to glorify the young German soldier.

Under the influence of nationalist critics who regarded foreign art as alien to the proper tradition of the Aryan peoples, and following the example of expressionist painting and sculpture, German medallists tended increasingly to react, not just against the imposed French style of the early 1900s, but against the whole classical tradition.

Instead, they tapped into the expressive and spiritual elements of Gothic sculpture and “*to the recurrent German penchant for brutal satire, for the fantastic, the bizarre, the macabre*” (Jones, pg 145-147). The dark legacy of paintings by artists like Brueghel and Holbein impacted on the development of German medals. At the beginning of the 19th century new art movements such as expressionism were adapting to the form of the medal, at the same time as medallists were increasingly reaching into Germany’s past, blending medieval and Renaissance art forms.

This heady mixture of influences makes the body of German medals in WWI exceptionally diverse and unique. Alienated from official patronage which continued to favour muscular classicism, many medallists felt free to experiment with new techniques. The development and reinterpretation of the tradition of the satirical medal was one of their most important innovations. They used their work not only to express inner feelings, but also to convey precise and particular political and satirical messages.

The Commemorative Medal in the Service of Germany

In 1917, while putting together the British Museum’s collection, Sir George Hill published a pamphlet entitled *The Commemorative Medal in the Service of Germany*. He concluded “ *...never has this instrument [the medal] been employed with so much zest, or with so frank an appeal to the lower passions to which war must always give rein, as it has in Germany during the present conflict*” (Hill, pg 9).

This German ‘appeal to the lower passions’ tended to evolve as the First World War progressed. Unsurprisingly, the extensive enthusiasm at the outbreak of war was mirrored in the production and composition of medals. Many German medallists were immediately willing to dedicate themselves unreservedly to patriotic tasks. The

propaganda element and the desire to defame the enemy often outweighed any artistic intentions.

The requisition of bronze for military purposes meant that iron became a suitable medium for many of these medals, viewed as a patriotic material well suited to the times. 'Victory' medals in iron were sold to the general public in aid of war charities. Many were mounted with a small loop for suspension and were intended to serve as a morale-booster for the civil population. Iron jewellery became the fashion of all patriots that used it to demonstrate their contribution to supporting the war effort (see Appendix 3). From 1916, the Reichsbank awarded medals to those who gave jewellery or exchanged gold for paper money. Precious metals, such as gold and silver, were important raw materials for war and currency. Medals made of blackened iron designed by Hermann Hosaeus (1875-1958) were published in many variants [Fig. 1].

In the early years of conflict, images of victory were central to medal production. The euphoria of 1914, fuelled by early successes, were reflected in the medals. A number of medallists found inspiration from the popular press reports of Zeppelin airships bombing Britain. Fritz Eue's commemoration of Count Zeppelin depicts the raid of 17-18th August 1915 [Fig. 2]. An airship hovers over Tower Bridge whilst London burns below, an event that never happened – in reality Zeppelin L.10 dropped its bombs on the water reservoirs of Lea Valley rather than the Thames River. The airship itself was destroyed by lightening a few weeks later.

At this time many German medals were devoted to hero-worship. Successful field commanders, the chiefs of the Army and Navy, the leaders of allied countries were all heaped with medallic adulation. Another of Eue's medals, that of Hindenburg is one such example. [Fig. 3].

Others were aimed at neutral countries to convince them either of the strength of Germany's forces or the justness of her cause. Arthur Loewental whom Hill considered to be "*skilful, if academic in composition*" (Hill, pg 29), created a medal that appealed to Irish sentiment at the time of the Easter Uprising in 1916 attacking Prime Minister Asquith for failing to fulfil British pledges on home rule to Ireland (Attwood, pg 72).

The Munich-based medallist Karl Goetz (1875-1950), created one of the most well-known medals of World War I, the Lusitania medal, about the sinking of the Cunard passenger liner by a German U-boat in May 1915 [Fig. 4]. Many US citizens were



Fig. 1 Hermann Hosaeus (1875-1958), *I had a Comrade*



Fig. 2 Fritz Eue's *Bombing of London, 1915*



Fig. 3 Fritz Eue, *Hindenburg*



Fig. 4 Karl Goetz, *Lusitania, 1915*

aboard the Lusitania and were killed, resulting in growing pressure within the United States for Washington to enter the war. Goetz put forward the German argument justifying the sinking, that the ship was carrying munitions for the British and Goetz work depicts the stricken vessel with its deck laden with armaments.

His effort, however, was to some extent counter-productive as the British cited Goetz's mistake of the date – two days earlier than the actual attack - as evidence of a German premeditated attack against the ship and callous German disregard for the deaths of women and children. In Britain copies were made and sold in an attempt to incite popular opinion against Germany.

It did not take long before the stark incompatibility of the heroic ideal and the reality of modern war became apparent. As the war progressed, medals by some German medallists like Hosaeus began to dwell on topics such as war graves and memorials to soldiers - subjects that had been unthinkable during the first years of the war, when it was believed that victory was assured.

A number of German medallists found themselves increasingly unable or unwilling to react to the war with the uncomplicated patriotic enthusiasm of Eue and others. Many of the artists were active participants in the conflict and their traumatic experiences directly informed their work. Feelings of resignation and the macabre soon came to the fore in medal design, resulting from the horrors of war in eastern France and the great losses sustained.

The figure of Death selling tickets on the Lusitania medal echoed a popular German revival of the medieval Dance of Death motif, in which skeletal figures return to the land of the living. In WWI Walter Eberbach (1866-1944) produced an entire series of war medals based on the Dance of Death theme. His Verdun: the World Blood Pump shows Death pumping blood from the ruined landscape whilst turning to confront the viewer [Fig. 5].

The artist Arnold Zadikow's (1884-1943) version of Death [Fig. 6] is an altogether more playful figure, casually straddling a field gun and smoking a long cigarette whilst a city burns in the distance. Zadikow was an active participant in the war, having been conscripted in 1917. Shortly after, however, he was severely wounded, captured by the British and interned in a prisoner of war camp.

Similarly, Karl May created a whole series of such medals, the idea of death as the



Fig. 5 Walter Eberbach, *World Blood Pump*



Fig. 6 (left) Arnold Zadikow's, *Death on a Cannon* Fig. 7 (right) Karl May *After the Battle 1915, Nach der Schlacht*



Fig. 8 (left) Ludwig Gies (1877-1966) *German Auxiliary Service, 1917* and Fig. 9 (right) Ludwig Gies *Refugees*



Fig. 10 Ersebert von Esseo, *Bolshevism*

main feature of war. Exhausted Death sits in contemplation upon a devastating, modern weapon of war. [Fig. 7].

Some medallists began to focus on this mechanisation and industrialisation of Death. Ludwig Gies (1877-1966) produced a number of innovative cast-iron expressionist medals. His *German Auxiliary Service* 1917 medal [Fig. 8], depicts nameless, faceless employees filing into a German armament factory, as evidenced by the stack of cannon balls to the left of the entrance. Gies worked in one of these factories during the war as he was physically unfit for active duty and was conscripted into a munitions factory. He deployed the same device in a number of his works, dehumanising his subjects by rendering them as mere stick figures against the backdrop of giant machinery. Gies depicts humans reduced to insignificance and in juxtaposition to the monumental size, and importance, of the factory to the war effort.

He was also one of the few medallists to consider the hardships suffered by civilians during the war and his poignant *Refugees* sees a family fleeing the Russian invasion of East Prussia in September 1914 [Fig. 9]. The central figure clutches a kettle, perhaps their sole remaining possession.

Towards the end of the First World War, Gies working in Munich, produced medals with even darker themes, medals entitled *Hell Let Loose* and the evocative *Christ and the Ruined Church*. The later medal in Hebrew asking *My God, My God, why hast Thou forsaken me?* A question many Germans were asking themselves in 1918.

His pupil Erzsebert von Esseo shared his concern for the individual and belief in the power of the medal as a medium through which to convey feelings about moral issues. In one graphic medal, she shows Bolshevism as a winged and horned devil of gigantic proportions grotesquely grinning as it erupts from the earth and prepares to destroy the helpless masses that cringe before it [Fig. 10].

The Medals of Karl Goetz

Undoubtedly though, one of the greatest of the medallic artists produced by the war was Karl Goetz, also in Munich [Fig. 11]. Fig 12 commemorates his marriage to Margarete Stangl in 1912. He had a positive genius for cramming as much detail as possible into the confines of the medal, with the aim of amusing or shocking the public. See for example [Fig 13], his 1909 medal commemorating the centennial of the birth of Charles Darwin.

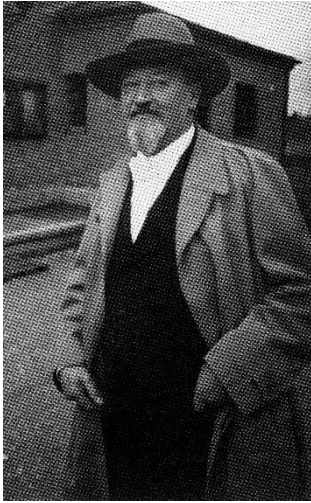


Fig. 11 (left) Karl Goetz and Fig. 12 (above) Goetz marriage to Margarete Stangl in 1912

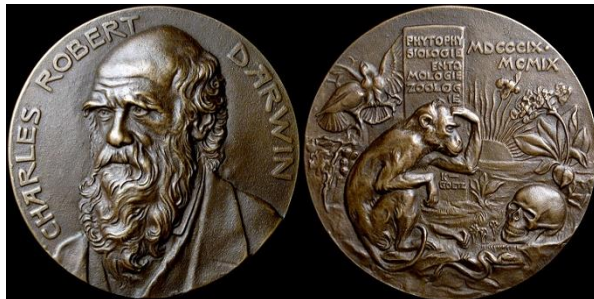


Fig. 13 The centennial of the birth of Darwin, 1909.



Fig. 14 Crown Price Rupprecht of Bavaria's Victory at Diueze, 1914

In 1967 Gunter Kienast published a significant list of all Goetz' works. His book was hugely informed by the recollections of Goetz' son Guido, a medallist in his own right. The full work was updated during the 1980s and US publisher Henry Scott Goodman reprinted the volumes in 2013, for which collectors around the world are thoroughly indebted.

At the beginning of the war Goetz tried to conform to the requirement for medals showing the heroism of Germany's leaders. [Fig. 14] was one such medal; Crown Prince Rupprecht of Bavaria's Victory at Diueze in 1914. It did not take long before Goetz resorted to caricature and it was in this field he showed an unusual talent for visually expressing his emotions against Germany's enemies [Fig 15] *Sower of Revenge* 1914, on the occasion of the first use of dum dum bullets by French troops, asks "*Hate, did you sow beforehand*", while the reverse claims sarcastically "*All respect for the Grande Nation*".

Cynical and sarcastic satire was employed to brilliant effect in his cast medals, - see [Fig. 16] "*The Russian Ambassador receives the Serbian Assassins*" Germany's opponents were often discredited and lampooned. [Fig 17] depicts the Entente powers soliciting Pope Benedict's support in 1914. The obverse reads "*My Empire is not of this world*", the reverse "*Trying to get chummy, 1914.*" [Fig. 18] captures one of the most dramatic incidents of WWI when Zeppelin L19 was disabled and fell into the sea. A British trawler *King Stephen* was in the near vicinity but refused to help, which saw the zeppelin crew perish. Reads the inscription "*Cursed be the British at sea and cursed be your bad conscience – help-seeking shipwrecked people had to drown*".

Goetz's 1916 Gallipoli medal [Fig. 19] gives a very German view of the campaign, entitled "*the lunatics in Gallipoli*". On one side of the medal a British soldier is advancing and holding a ship, with a French soldier who is kneeling and taking aim with rifle. On the other side the same two men, now lifeless and reduced to skeletons, lying upon an empty battlefield. Goetz graphically depicts the futility of the failed campaign, while utilizing the crescent moon iconography of the Ottoman Empire to full effect.

During the First World War Goetz created medals incessantly - their number accounting for around half of his career total of around 750. He always chose subjects that were topical, he had a good feel for the commercial possibilities of his medals, and he knew how to market them. See [Fig. 20] "*Death of Captain Baron von Richthofen, 1918*" – the Red Baron.



Fig. 15 1914 Sower of Revenge



Fig. 16 1914 Sarajevo Pay-off



Fig. 17 Pope Benedict's Support



Fig. 18 Loss of Zeppelin L19



Fig. 19 *The Lunatics in Gallipoli, 1916*



Fig. 20 *1918 Tribute to Captain Baron von Richthofen*



Fig. 21 *America's Peace Objectives, 1917*



Fig. 22 *America's Neutral Trade*

His satires were characterised by a narrative style, that tended to overload his eighty millimetre diameter design metals with a mass of detail. Many of his designs are characterised by scorn and derision. In “*America’s peace objectives 1917*” Wilson submits a bill to Congress arming merchant ships, the obverse reading “*Peace Objectives*”, the reverse “*Englishman reaching for a life buoy “America”*” [Fig. 21].

The subjects over which he ranged were truly diverse. American pleas of neutrality are ridiculed by his medal showing Uncle Sam, handing over a ship in exchange for a bag marked \$1,000,000 with the German caption *America’s Neutral Trade* [Fig. 2]. In Fig. 23, Italy’s withdrawal from the Triple Alliance was satirised by a medal in which Goetz shows an Italian soldier labelled Tripolis, held by an Austrian while a German prods him with a bayonet. The inscription, *Parasite of the Triple Alliance – Defiler of the Loyal Alliance*, leaves no doubt as to German feelings towards Italy after her abandonment of her former allies.

Toward the end of the war Goetz aimed his scorn at Germany’s leaders. In Fig. 24, Wilhelm II gets his report card from Germania in 1918. The inscription on the obverse reads “*Dismissed on account of incompetence*”. On the reverse Wilhelm hides on the top of a wall marked “*Amerongen*”, his domicile in Holland. Clemenceau has a stick behind his back calling him to come down “*Wilhelm you’re supposed to come down here.*”

Goetz was not without his critics. Some considered his designs carried too much detail. Following the release of the British version of his Lusitania medal in 1916, George Hill wrote “*it corresponds to the satirical print, and makes no attempt at composition, but simply crowds into the space available all the details that it is thought will amuse the public.*” [Hill, pg 26].

For others, Goetz’ message is too bitter and twisted. Howard Linecar in his book *The Commemorative Medal* wrote “*[Goetz medals] were so satirical as to be almost frightening – so twisted by his interpretation of Germany’s hatred. His work was no less bitter on the subject of the conditions in Germany after its defeat. As a loyal German, Goetz naturally felt that his country’s cause was worthy of his support. In the event the way in which he interpreted this support twisted one who might have been a great medallist into the designer of medallist nightmares*” [Linecar, pg 84].

Kienast's verdict on Goetz's medals is more sympathetic and to the point: "*Some are very bitter, if not too bitter, yet they always illustrated the true feeling in Germany.*" [Kienast, pg 19]

The Weimar Republic

Defeat in World War I produced widespread national despair amongst the German population. This was reflected in medal making with expressionism no longer the dominant popular style. Some medallists turned to the kind of muscular, clean-limbed classicism which was to be popular under National Socialism, while others, like Ludwig Gies, turned to sentimental and religious themes.

The monarchy had disappeared and a bitter fight over who was responsible for the outcome of the war led to the revolutionary situation of 1918. In Fig. 25, Goetz's *Twenty Years on from Bismarck's Death* medal expresses his personal unhappiness with Germany's state of affairs. The obverse reads "*Twenty years after my death I shall rise out of my casket and find out whether Germany passed muster before the world, Bismarck 1898*". The reverse shows Germany clearly did not - a Social Democrat is getting into the saddle with the Crown lying in the dust.

The national trauma of those times is reflected in the medals. That relatively few were produced during the years 1918 and 1919 was a sign of the widespread mourning. The care of war graves and memorials to soldiers, the construction of veterans' homes and the fate of war widows were the subjects that preoccupied Hermann Hosaeus and others at this time.

The private portrait medal generally declined during the Weimar Republic. This was perhaps partly due to the high costs of casting metal or creating dies when compared to the much less expensive photographs and prints that were now more readily available, but it was also the fact that the private portrait medal was simply not as desirable as it had been in earlier times. The notion of emphasising the individual had entered into disrepute, as is reflected by the Weimar Republic's ban on awarding decorations and medals to its citizens.

The medals produced by Goetz in the period following the war were marked by conflicting feelings of national disgrace and bitterness directed primarily at Germany's former enemies. Fig. 26, is one such example on the occasion of England delaying the lifting of the naval blockade on German ports until 1919, thereby contributing to the widespread starvation post war of German civilians. The obverse reads "*The Good Samaritan, 1919*", the reverse "*England's Deed of Shame*".



Fig. 23 *Italy's Withdrawal from the Triple Alliance*



Fig. 24 *Wilhelm II Report Card from Germania, 1918.*



Fig. 25 *1918 Twenty Years on from Bismarck's Death*



Fig. 26 *1919 The Good Samaritan*

The conditions of the Treaty of Versailles were reflected in many of these medals, along with scepticism concerning the new state and satire on its perceived weakness. Goetz became even more scornful and derisive with President Wilson proclaiming him the “*saviour of mankind*” with his fourteen points only to be referring to them as the “*system bastard*” [just two months later] for the perceived American betrayal over the Armistice terms and the final peace treaty.

Similarly in his medals at this time, for example the series entitled *The Black Shame* the passions of war give way to those aroused by the humiliation of Versailles and the French occupation of the Rhineland. In [Fig. 27] 1923 *Bloodsucker on the Rhine* lampoons the harsh conditions of the reparation terms. The reverse reads “*Germans squeezed dry, 1923*”. In [Fig. 28], the 1925 medal on the Locarno pact shows what he thinks of Germany agreeing to its new shrunken borders with France and Belgium. Foreign Minister Stresemann is portrayed as a dog. The obverse reads “*Germany where is your honour?*” - Bismarck points to the spot.

Premonitions of the dissolution of the young democratic state were apparent throughout the period of the Weimar Republic. These were shared by Goetz who had by now established himself as one of the most skilled and famous German satirical medallists. His biting satire is exemplified by his *the Weimar Gossipers* [Fig. 29] which satirises the deliberations of the new German National Assembly as being akin to the gossip of washerwomen. Also, his *The Day of Reckoning* [Fig. 30] 1919 medal denounces the Versailles conference and the severity of the terms of peace offered Germany. On the tenth anniversary of the Treaty’s signing in 1929, Goetz issued an updated version [Fig. 31] on “*the disgrace and treaty of Versailles*”. As Wolfgang Steguweit observed, “*Goetz was not the only satirist amongst medallists, but no-one else equalled him in acuteness.*” (Steguweit, pg 42).

Directly after the end of the First World War medallists began also to portray the worker as a harbinger of a new social approach. One such medal was Ludwig Gies’s medal of the early 1920s depicting a man carrying a hammer symbolising the passive resistance of the German people in the crisis year of 1923, as the Rhineland was occupied by France and Belgium as part of war reparations. Hill wrote of Gies at the time, “*Gies, whose medals are very difficult to obtain, owing to the fact that they are produced in limited numbers, is the most original and powerful of the German medallists now working.*”



Fig. 27 1923 *Bloodsucker on the Rhine*



Fig. 28 *The Locarno Pact, 1925*



Fig. 29 1919 *The Weimar Gossipers*



Fig. 30 1919 *The Day of Reckoning*

National Socialism and the Third Reich

The seizure of power by the Nazis under the leadership of Hitler on 30 January 1933 put an end to the pluralism of the Weimar Republic and its liberal and democratic ideals. It also heralded cultural ruin. An authoritarian leadership was presented as the only salvation from anarchy and Bolshevism, and a dictatorial approach to art considered essential for the preservation of the nation.

The law establishing the National Cultural Chamber in September gave Joseph Goebbels the power to remove unwanted artists from the cultural scene. A new system of registration was essential for an artist to be allowed to work. That this dependence could be used at any time as a means of repression, provided sufficient pressure to ensure most artists would conform.

The popularity of Hitler and his party affected each medallist in a different way. Of the artists who had been popular and been given important medal commissions during the Weimar Republic, one of the most affected was Ludwig Gies. After the takeover of the Nazis, he came under pressure for his loyalty to dissident and Jewish students: in 1937 he was forced out of the Prussian Academy of Arts, and in 1938, dismissed from his teaching position.

The medal was now used specifically as an ideological medium. Through its prominent use of Nazi symbols, the medal articulated the totalitarian demands placed on the fine arts during the period.

Some medallists chose to leave Germany and indeed changed sides. In the 1930s Arthur Loewental moved to Britain, settling in Lincoln. There his medallic subjects included Sir George Hill, Director of the British Museum, and Winston Churchill, in a victory medal of 1945.

The new rules in Germany had the greatest effect on Jewish artists, and also artists with Jewish spouses. After World War I Zadikow, a Jew, once released from his prisoner of war camp, moved back to Germany and then to Czechoslovakia. During the holocaust he narrowly missed out on gaining sponsorship to move to America and died in a concentration camp in 1943.

Other medallists tried to earn a living within the system. Karl Goetz was one of these. His 1936 *Olympic Games in Berlin* medal [Fig. 32] sought to cash in on a significant commercial opportunity, while his [Fig. 33] celebrates German

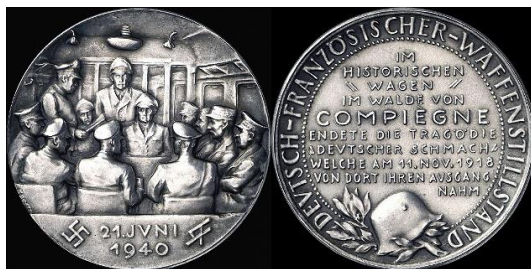


Fig. 31 *Treaty of Versailles, the Tenth Anniversary of its Signing, 1929*



Fig. 32 *Karl Goetz 1936 Olympic Games*



Fig. 33 *Karl Goetz 1940 The German Troops entering Paris*

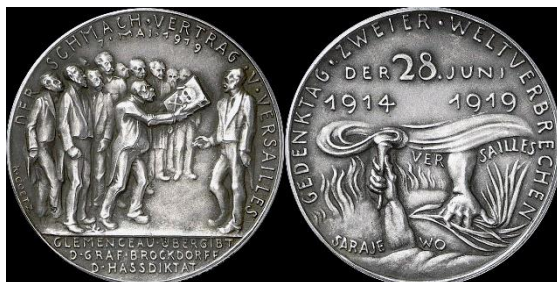


Fig. 34 *Karl Goetz 1940 The German French Armistice*

troops entering Paris in 1940 as did [Fig. 34, K576] celebrate the German French Armistice, where Goetz again made a mistake over the date.

These Second World War medals do raise questions about his political leanings. Kienast's book contains a letter written by Karl Goetz himself as to the medals he made during his time under the Third Reich. He wrote *"I could not close my eyes forever to all the coming events, and I had to see my future in medals" - "I created the following medals without observing the Nazi rule of presenting every design for approval."*

On more than one occasion Goetz does appear to have run afoul of the authorities. While there was an ongoing deep concern with the fate of Germany evident in his work, there is no compelling evidence he was a committed National Socialist.

Indeed, he seems to have struggled to get work from the regime and that which he did seemed fraught with difficulties. For instance, there is little celebration of National Socialist ideology or iconography on his Olympic medal, explaining why it received only lukewarm acceptance from the authorities. Goetz wrote later, *"...even the foreign powers paid homage to Hitler during the Olympic games in Berlin and strengthened the German people in their belief that they were on the right track. On the medal no mention is made of this belief"* (Quoted in Kienast pg 39).

Goetz seems to have problems with the swastika design used by the Nazis. On the *Hitler-Putsch in Munich 1923* medal [Fig. 35, K302], he depicts the swastika in the wrong fashion for the Nazi Party symbol. He also misspells the name of one of the main actors in the scene, *"HITTLER"*. Not something suggestive of a party loyalist. The picture of Hitler on this medal is one of the first known to have appeared on a medal or coin. It is not particularly flattering to Hitler's image. There is a story in Kienast that Goetz desperately travelled around Germany trying to buy back those medals of this event that he had already sold.

With the German surrender on 9 May 1945 twelve years of Nationalist Socialism came to an end. Having been used for political purposes, medals were largely discredited as an art form. They were no longer seen as having a social function, nor were they much desired as vehicles of individual artistic expression.



Fig. 35 Karl Goetz *The Hitler-Putsch in Munich*, 1923

One who did produce work at this time was Ludwig Gies. Now considered one of the most famous German sculptor-medallists of the twentieth century, he made several medals between 1945 and 1947. The almost sixty-year-old artist reflected on the horrors of war with a mature creativity and great humanity.

For other German medallists though the world had seemingly come to an end and from then on they were silent. This was largely the case with Karl Goetz. A talented medallist, who may be seen as also politically opportunistic, Goetz had created satirical medals from the time of the First World War, responding to almost every political event with a blunt unrestrained sarcasm and cynicism. None of his medals during the Second World War approached anything like the level of skill and impact that had brought him earlier fame.

By the 1940s, Goetz struggled to continue working as he dealt with increasing paralysis in his right hand caused by a stroke. His *German suffering* [Fig. 36, K633] is the title of Goetz's last medal in 1946, which can also be seen as a kind of personal testament. A screaming man runs in panic through a burning inferno, while the opposite side shows Christ on the Cross with a citation taken from the Lord's Prayer: '*Forgive us our debts, as we forgive our debtors. Lead us not into temptation but deliver us from evil.*' By the time of his death in 1950 at the age of seventy-five his entire right side was paralysed.

When one looks at the medals of Goetz during WWI, one gets an insight into what Germans were thinking and reacting to events at the time. Compare this to his later work under the Nazi regime and one gets an indication of how the life and art had been sucked out of the artist. Such is the curse of authoritarian governments – as much a lesson for today as it was last century.



Fig. 36 Karl Goetz 1914 Germany Suffering

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Appendix

1. Acknowledgement, Individual Images Caldera Collection ©2026, Photographer Henry Scott Goodman ©2026. I am indebted to the generosity and expert knowledge of Henry in making available to me his work and images of both Geis and Goetz that inform this article.

2. Everest-Philips, Max, *“My Grandfather’s Sword. World War I depicted on commemorative medals”*, Coin News, May 2016 *“During the war, the Dutch coin dealer Maurice Frankenhuis had the good sense to exploit his position in neutral Holland to collect almost all the medals produced by both sides. The Catalogue of his collection shows that about 80 per cent of all the medals from World War I were produced in Germany or Austro-Hungary.”* Pg 64

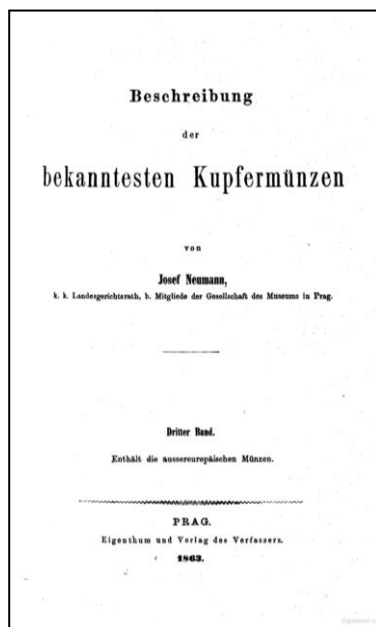
3. I am indebted to Wayne Newman for the following point: *“Striking a medal in iron had a particular cultural significance in Germany in 1914. In the previous year the German Empire had commemorated the centennial of the start of the “War of Liberation” in March 1813 to end French imperial occupation of German lands. Prussia and Saxony each issued 3-mark commemorative coins. The Prussian coin commemorated the call by Frederick William III and the Prussian royal family for the Prussian nobility and merchant classes to contribute their gold and jewellery to help fund the rebellion. In return, the donors were given iron jewellery as gifts for their loyalty, and many of these were inscribed with the phrase “Gold gab ich für Eisen” (I gave gold for iron). The outbreak of war against the old enemy, France, in 1914 quickly saw a revival of public donations of gold to the state Treasury and the wearing of iron rings and jewellery as a very public display of loyalty and sacrifice, and of Prussian nationalism. Striking a medal in iron would have carried these connotations for the German public at that time, irrespective of the medal’s design.”*

Josef Neumann: the First Cataloguer of New Zealand Tradesmen's Tokens

Vaughn Humberstone

Most numismatists with even a passing interest in New Zealand tradesmen's tokens would be aware that this series was comprehensively catalogued for the first time by Dr Arthur Andrews in 1921 (*Australasian Tokens and Coins*). They may even know that it was Christopher W. Stainsfield, a London-based numismatic dealer, who in 1883 was the first to catalogue the New Zealand tokens in English (*Descriptive Catalogue of Australian Tradesmen's Tokens*). Less well known is the fact that the first to catalogue New Zealand tokens at all was Josef Neumann. Neumann is mentioned in the introductions of Stainsfield, 1883, and Atkins, 1889 (*Coins and Tokens of the Possessions and Colonies of the British Empire*). While Andrews references both Stainsfield and Atkins, he makes no mention of Neumann and nor does any subsequent cataloguer. Josef Neumann, though, deserves to be recognised not just as the first cataloguer of New Zealand tokens, but as the first cataloguer of *any* form of New Zealand currency.

Josef Neumann (1815-1878) was a lawyer who secured the post of examining magistrate in the criminal court at Prague, Bohemia (today Prague is the capital city of the Czech Republic). Neumann played an active part in the foundation in 1849 of the first Bohemian numismatic society (Verein für Numismatik zu Prag). He served as the inaugural secretary, and for twenty years he organized the society's activities. Neumann began compiling and publishing, at his own expense, the *Beschreibung der bekanntesten Kupfermünzen*. This mammoth work in German was published in six volumes from 1858 to 1872, and it describes 40,100 modern copper coins and tokens from throughout the world. Fig. 1 shows the title page of Volume III, which was published in 1863, and Fig. 2 shows the English translation. Volume III lists six New Zealand token issues. The towns of 'Neu Seeland' were listed alphabetically amongst the Australian towns, under the heading of 'Australien'. This article, for the first time, translates Neumann's 1863 listings of New Zealand tradesmen's tokens into English, and analyzes their significance.



|
Descriptions
 of
well known copper coins

by
Josef Neumann,
 Council Member of the Society of the Museum in Prague.

Third Part.
 Contains the non-European Coins.

PRAGUE.
 Property of the Publisher and Author.
 1863.

Fig. 1.(left)The title page of Vol. III of the *Beschreibung der bekanntesten Kupfermünzen*.Fig. 2 (right) . The English translation of the title page

Shown below are the listings of six New Zealand tradesmen's tokens from pages 206, 207 and 214 of the *Beschreibung der bekanntesten Kupfermünzen*, Vol. III, 1863:

22556—58.

Auckland (Neu-Seeland).
Av. WHOLESALE | GROCER | AUCKLAND Obere Umschrift **CHARLES C. BARLEY** untere nach aussen **NEW ZEALAND** Rev. wie Nr. 22548 mit der Ueberschrift: **GOD SAVE THE QUEEN** Gl. Gr.
Av. Im Perlenkreise SHORTLAND, bogig | **STREET** darunter im Halbhogen und grösser **AUCKLAND** Obere Umschrift: **ARCHIBALD CLARK**, unten am Rande **DRAPER** Rev. wie Nr. 22548 vom Jahre 1857 mit der Ueberschrift: **NEW ZEALAND** Gl. Gr.
Av. M. SOMERVILLE (bogig) | WHOLESALE (bogig) | FAMILY GROCER | CITY MART | AUCKLAND, bogig. Rev. Eine gestielte Rose mit Blättern zwischen einer zweiblättrigen Distel und einem Stempel mit vier Kleeblättern; das Ganze unten mit einem flatternden Bande zusammengehunden. Obere Umschrift: **NEW ZEALAND**, unten am Rande 1857 und zu den Seiten je ein Punkt. Gl. Gr. Alle drei Penny. (Mitgetheilt von Hrn. Dr. Freudenthal.)

22563.

Christchurch (Neu-Seeland).

Av. WHOLESALE | AND RETAIL | BUILDERS | AND FURNISHING |
IRONMONGER | BIRMINGHAM | AND SHEFFIELD | WAREHOUSE | CHRIS
TCHURCH | CANTERBURY | N. Z. (New Zealand). Rev. Auf einem Grashoden
sitzt rechtshin ein Mann mit rundem Hute, welcher ein Schaf auf dem Schoosse
hält; vor ihm steht eine Korngarbe. Ueberschrift: ADVANCE CANTERBURY;
unten am Rande bogig NEW ZEALAND Gr. über 13.

22565.

Dunedin (Neu-Seeland).

Av. DAY & MIEVILLE, bogig, | MERCHANTS bogig, | DUNEDIN | OTA
GO Rev. wie Nr. 22557. Gl. Gr. Desgleichen.

22646.

Wellington (Neu-Seeland).

Av. Im Felde ein Sattel, darüber SADDLER Obere Umschrift J. W. MEARS,
untere kleinere nach aussen LAMBTON QUAY WELLINGTON. Rev. PAYABLE
(bogig) | AT | J. W. MEARS | COLLAR & | HARNESS | MAKER Obere Um-
schrift ONE HALFPENNY TOKEN, untere kleinere nach aussen NEW ZEALAND.
Gr. über 13. (Samml. des Hrn. Dr. Freudenthal.)

Shown below is an English translation of these listings:

22556-58.

Auckland (New Zealand).

Obv. WHOLESALE | GROCER | AUCKLAND Above inscription
CHARLES C. BARLEY lower NEW ZEALAND Rev. like Nr. 22548 with the
Heading: GOD SAVE THE QUEEN. One penny.

Obv. In dotted circle SHORTLAND, arching | STREET below in half-
semicircle and larger AUCKLAND Above inscription: ARCHIBALD CLARK,
under the brink DRAPER Rev. like Nr. 22548 from the year 1857 with the
heading:

NEW ZEALAND. One penny.

Obv. M. SOMERVILLE (arching) | WHOLESALE (arching) | FAMILY
GROCER | CITY MART | AUCKLAND, arching. Rev. Frames Rose with leaves
between a double-leaf thistle and four shamrocks; this whole thing is tied
together below with a fluttering band. Above inscription: NEW ZEALAND,

under the brink 1857 and to each side is a dot. One penny. (Notified from Dr. Freudenthal.

22563.

Christchurch (New Zealand).

Obv. WHOLESALE | AND RETAIL | BUILDERS | AND FURNISHING |
IRONMONGER | BIRMINGHAM | AND SHEFFIELD | WAREHOUSE | CHRIS
TCHURCH | CANTERBURY | N.Z. (New Zealand). Rev. On a grassy surface
sits forward a man with a round hat, a sheep in the lap;
in front of him is a sheaf of wheat. Heading: ADVANCE CANTERBURY;
under the brink arched NEW ZEALAND. Halfpenny.

22565.

Dunedin (New Zealand).

Obv. DAY & MIEVILLE, arching, | MERCHANTS arching, | DUNEDIN | OTA
GO Rev. like Nr. 22557. One penny. Similarly.

22646.

Wellington (New Zealand).

Obv. In the field is a Saddle, about SADDLER Above inscription
J.W. MEARS, below in smaller ·LAMBTON QUAY WELLINGTON. Rev.
PAYABLE (arching) | AT | J.W. MEARS | COLLAR & | HARNESS | MAKER
Above In-scription ONE HALFPENNY TOKEN, below in smaller ·NEW
ZEALAND· Halfpenny. (Collection of Dr. Freudenthal)

Number 22548 refers to the tokens of Harrold Brothers of Adelaide, which are dated 1858 and depict a seated female in allegorical form on their reverse with the heading AUSTRALIA. For these tokens, Neumann gives the following description on page 205 of this figure:

Auf einem

Waarenballen sitzt von der Linken die vorwärts gewandte Gerechtigkeit mit verbundenen Augen und hält in der ausgestreckten Rechten eine gleiche Wage, in der Linken gegen den Boden ein Füllhorn mit Früchten; hinter ihr am Boden ein liegendes Fass, und rechts im Hintergrunde ein Dreimaster im Meere.

This translates to:

On a barrel sits to the left forward facing Justice with bandaged eyes holding in the outstretched right hand an equal scale, at the left against the ground is a

cornucopia with fruits; behind her on the ground is lying a cask, and on the right background is a three-masted ship at sea.

It was Neumann with his background in law who first attributed this allegorical figure to Justice. Undoubtedly this was done due to the scales and blindfold. This attribution was repeated by Whellams, 1916 (*Australian Coins and Tokens. Spink & Son's Numismatic Circular*), and has been carried forward by almost all cataloguers since. However, Justice is never depicted with a cornucopia. She always has a sceptre, which never appears on the tokens.

Unfortunately, Neumann does not illustrate any of the New Zealand tokens. Josef Neumann obtained a number of his New Zealand tokens from Dr W. Freudenthal, who is known to have sourced many specimens direct from manufacturers in Birmingham and London (Freudenthal himself amassed a collection of 19,000 pieces). While most of the Australasian tokens listed by Neumann were of British origin, he did list some that were struck by Australian manufacturers (such as Stokes and Thornthwaite).

With the undated tokens of J.W. Mears and E. Reece (shown in Fig. 3), no evidence has ever been found to determine periods of issue, other than the period in which the issuing firm traded. J.W. Mears was already trading when tokens were first issued in New Zealand in 1857, whereas E. Reece began trading from the Birmingham and Sheffield Warehouse stated on the obverse of his tokens on 19 November 1857. The listings of the Mears and Reece tokens by Neumann in 1863 allow the Mears tokens to be dated to 1857-1863 and the Reece tokens to 1858-1863. This also refutes the claim made in the obituary notice of Henry J. Hall (*Lyttelton Times*, 11 May 1897) that Hall was the first to issue tokens in Canterbury; H.J. Hall could not have issued tokens before 1864 as he went into business in June 1863. With Hall's first lot of tokens being struck by W.J. Taylor of London, they would not have reached New Zealand any earlier than early 1864.

Andrews, 1921, attributes the tokens of E. Reece to Thomas Stokes of Melbourne. This attribution has been repeated by virtually all cataloguers since. However, there is no evidence supporting this attribution, and T. Stokes is not known to have struck any New Zealand tokens before 1864.



Fig. 3. A halfpenny token of Edward Reece of Christchurch, listed by Neumann with a catalogue number of #22563. Neumann failed to describe the sickle binding the wheat sheaf on the reverse, as well as omitting the uppermost arching inscription on the obverse: EDWARD REECE. Also, in his listings, Neumann does not always state whether an inscription is arching. Cataloguing 40,100 pieces over 14 years averages out to just under eight pieces per day. Given the enormity of this task, mistakes were inevitable. (Image courtesy of Noble Numismatics, Sale 114, Lot 797).

Volume VI of the *Beschreibung der bekanntesten Kupfermünzen* was published in 1872 and in the 'Nachtrag' (Appendium), a further seven New Zealand token issues are listed on pages 188, 189 and 222 (H. Ashton 1863 1d, E. De Carle & Co, B. Gittos, H.J. Hall small-letter 1d, Jones & Williamson, Morrin & Co and S. Hague Smith). Without doubt, both Neumann and Freudenthal can both be regarded as amongst the great numismatists of their era. As a testament to the continued value of the *Beschreibung der bekanntesten Kupfer-münzen*, it was reprinted in 1966 with the addition of a seventh index volume by Löre Boruer.

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Physical Science Prize Medals of the Royal Society of New Zealand

Ken Matthews

History of the Society

An Act of the New Zealand Parliament in 1867 established the New Zealand Institute (“the Institute”). The role of the Institute was to be an umbrella organization for science societies in New Zealand, and the Colonial Museum. James Hector was the driving force behind the creation of the Institute and became the first Manager of the Institute. He was the principal advisor to the Government on science, medicine, and commerce, and Director of the Colonial Museum. The Institute promoted and advocated for scientific research and published scientific research papers.

The structure and management of the Institute was reorganized in 1903. A further Act of Parliament and a Royal Charter resulted in a name change in 1933 to the Royal Society of New Zealand (“the Society”). In 2010 the scope of the Society was expanded to include the social science and humanities.

The Medals

The Society established its first medal, the Hutton Medal, in 1911, and its second, the Hector Medal, in 1912. The Sidey Medal followed in 1933. These three medals were originally issued in the name of the Institute until restructured in the name of the Society, with all medals awarded after 1936 carrying the Society’s name. Between 1958 and 2011, seven more medals were created in respect of physical sciences. The premier medal of the Society is the Rutherford Medal created in 1991.

The Society, on its website, provides information about who the medal was named after, what it is awarded for, a list of each medal’s recipient, and the citation for more recent recipients. No design changes appear to have been made to any of the medals since they were first awarded. All the medals (except the Jones Medal) have an obverse portrait of the person the medal is named after. All the medals are designed to be engraved on their edge or reverse with the recipient’s name and year of award.

In more recent years several medals for social science research were created, but these are outside the scope of this article.

The physical science medals are listed below in the order in which they were first issued.

Hutton Medal 1911

This medal is awarded to a researcher working in New Zealand who has significantly advanced understanding through work of outstanding scientific or technological merit, in the fields of animal sciences, earth sciences or plant sciences. The medal is named after Frederick Hutton, who was the first President of the Institute following its reorganization in 1903. After a military career Hutton became engaged in scientific study when he arrived in New Zealand in 1866. He applied the theory of natural selection to explain the origins and nature of the natural history of New Zealand. He died in 1909 and the medal is a memorial to him. The reverse features the New Zealand natural environment with a kiwi and a tuatara. The medal was designed by Alan Wyon the last of the Wyon family to work as a medalist, and struck by Pinches in London.



Fig. 1 The Hutton Medal

Named after Frederick Hutton, who was the first President of the Institute following its reorganisation in 1903. After a military career Hutton became engaged in scientific study when he arrived in New Zealand in 1866. He applied the theory of natural selection to explain the origins and nature of the natural history of New Zealand. He died in 1909 and the medal is a memorial to him. The reverse features the New Zealand natural environment with a kiwi and a tuatara. The medal was designed by Alan Wyon, the last of the Wyon family to work as a medalist, and struck by Pinches in London.

The first recipient (and the first recipient of any Institute/Society medal) was William Benham. He was an eminent zoologist, who was professor of biology at the University of Otago from 1898 until 1937. He was also the head of the Board of Governors of the Institute from 1905 until 1911 and was a recipient of the Hector Medal in 1935. The second recipient, in 1914, was Leonard Cockayne, who according to Wikipedia, is regarded as the greatest botanist and founder of Western science in New Zealand. Both Benham and Cockayne were members of the 1907 Sub-Antarctic Islands Scientific Expedition, that also rescued the castaways of the wreck of the Dundonald on the Auckland Islands.

Hector Medal 1912

This medal is awarded to a New Zealand researcher for work involving chemical, physical, mathematical and information sciences, of great scientific or technological value. Originally it was also awarded for work in botany, ethnology, geology and zoology. Until 1991 it was the highest award of the Society. The medal is named after James Hector, the founder of the Institute and its manager for 35 years. Hutton was a geologist, a naturalist, and a surgeon. After arriving in New Zealand in 1862 he undertook a geological survey of Otago following the discovery of gold there.



Fig. 2 The Hector Medal

Hector was appointed the Chief Government Scientist in 1865 and dominated New Zealand's scientific institutions in a way that no single person has since.

The medal was designed by Alan Wyon. His name is faintly on the obverse. The kneeling Maori warrior hunting a huia on the reverse inspired the design of the New Zealand shilling. The first recipient was Leonard Cockayne. Other prominent recipients have included Ernest Rutherford, Elsdon Best, and Peter Buck (Te Rangi Hiroa).

Sidey Medal 1933 (Discontinued 2016)

This medal was awarded for outstanding scientific research on radiation as bearing on human welfare. It was named after Thomas Sidey, who is the only non-scientist after whom a Society's physical science medal was named. Sidey was a New Zealand politician who was responsible for getting Daylight Saving Time established in law in 1927.

This medal was also designed by Alan Wyon. It features Greek classical imagery on the reverse, and the well-known phrase "Carpe Diem" in reference to daylight saving time. The medal's establishment coincided with scientific research going on at the time into atomic structure and radioactivity.

Indeed, the first recipient of the medal was Ernest Rutherford for his work on radiation and radioactivity. The last award in 2016 was for work in x-ray diffraction imaging, diffraction theory, and optical diffusion imaging, and their application in biology and medicine.



Fig. 3 The Sidey Medal

Cooper Medal 1958 (Discontinued 2016)

The Cooper Medal was awarded for research of particular merit in the fields of physics and engineering or addressing a specific need in New Zealand in these fields. It was named after Edmund Cooper the first Director of the Dominion Physical Laboratory from 1939 to 1950. The last award of the medal in 2016 was for the development of a method for tuning concert hall acoustics. From 2016 the medal was replaced by a certificate. Images of the medal and information on who the designer was do not appear to be available.

Thomson Medal 1985

This medal is awarded for outstanding contributions to the organisation, support and application of science and/or technology and/or (from 2017) the humanities in New Zealand. The medal is named after George Thomson and his son James Thomson. Both are former Presidents of the Society (George 1907-09 and James 1928). George's scientific interests were in marine biology. He was also a Member of Parliament. James was a geologist and became director of the Dominion Museum in 1914. The medal has been awarded for a wide variety of scientific endeavours. No information is available on who designed the medal and it has no maker's mark.



Fig. 4 The Thomson Medal

Rutherford Medal 1991

This medal is awarded for preeminent research, scholarship or innovation by a person, or team, in any field, or fields, of engineering, humanities, mathematics, sciences, social science, or technology. Until 2000 it was known as the Society's Gold Medal, when it was renamed the Rutherford Medal. It is gilded on a probable bronze base. Prior to 2010 it was only awarded for physical science research. Since 2010 it

has sometimes been awarded for social science research. Since its inception it has been regarded as the top award of the Society. It carries a \$100,000 cash prize. It is, of course, named after Ernest Rutherford the New Zealand experimental physicist and Nobel Laureate, who pioneered the orbital theory of the atom.

The obverse was designed by John Wills although the portrait of Rutherford was originally designed by James Berry for use in the Rutherford Centennial Medal of 1971 struck at the Franklin Mint. The reverse design is based on the badge of the Society the centre of which was originally designed by Anton Teutenberg for the Institute's badge. The most recent recipient was Cliff Abraham for his research into neural mechanisms.



Fig. 5 The Rutherford Medal

Scott Medal 1997

The medal is awarded to researchers who, working within New Zealand, have undertaken work of great merit and have made an outstanding contribution in any branch of engineering or in technologies associated with biological, agricultural and medical practices. The medal is named after Robert Scott who was the first Professor of Engineering at New Zealand's first School of Engineering which was founded at Canterbury College in 1888, a position he held until his retirement in 1923. The medal was designed by Phillip O'Shea, whose initials are on the obverse of this and the other Society medals he designed, and features the prow of a waka on the reverse. The first medal was awarded in 1997 to Robert Park for his leadership and

meritorious contributions in the field of seismic design and performance of concrete structures.



Fig. 6 The Scott Medal

Hercus Medal 1997

This medal is awarded for excellence in research in the molecular and cellular sciences and technologies, biomedical sciences and technologies, or clinical sciences and technologies and public health. The medal is named after Charles Hercus who was Dean of the Faculty of Medicine, University of Otago between 1937 and 1959 and was Professor of Bacteriology and Preventive Medicine between 1922 and 1959. The medal was designed by Phillip O'Shea. The design contrasts a traditional obverse with a quirky reverse. The reverse shows a naked family next to a tree fern about which the medical serpent is entwined. The chemical formula for Sodium Iodide is also prominently included. Sodium Iodide is mainly used to prevent and treat iodine deficiency. The meaning of the imagery is not explained on the Society's website.

Prominent recipients include Peter Gluckman, David Skegg, Bruce Baguley, and Brett Delahunt (Fellow and Vice-President of the RNSNZ) for his internationally recognised contributions as a pathologist, especially in relation to kidney and prostate cancer.



Fig. 7 The Hercus Medal

Pickering Medal 2004

The medal is awarded for design, development, or inventive technological work, the results of which have been significant in their influence and recognition both nationally and internationally, or which have led to significant commercial success. The medal is named after William Pickering who was a New Zealand born aerospace engineer who headed NASA's Jet Propulsion Laboratory in California for 22 years. He was a leading researcher on NASA's unmanned space flight programme, including missions to the moon and flybys of Venus and Mars.



Fig. 8 The Pickering Medal

The medal seems to be the only Society physical science medal that is silver (or silvered). It was designed by John Wills and reflects the design of the Rutherford Medal.

Recipients have included Rocket Lab's research and development team for becoming the world's leading launch provider for small satellites, and AgResearch's Sheep Breeding Team for breeding low methane emitting sheep.

Jones Medal 2010

The medal is awarded for lifetime achievement in pure or applied mathematics or statistics by a person with substantial connections to New Zealand. The medal was named after Vaughan Jones who was principal founder and director of the New Zealand Mathematics Research Institute. Jones won the 1990 Fields Medal, which is often described as the 'Nobel Prize of mathematics' because of the prestige it carries. He was awarded the Society's Rutherford Medal in 1991.



Fig. 9 The Jones Medal

The design and composition of this medal are a departure from the previous norm for Society medals. It is the only physical science medal not to have an obverse portrait of the person after whom it was named. The obverse features clasped hands and a knot design that reflects the work on knot polynomials by Jones with the discovery of what is now called the Jones polynomial. The obverse features a nautilus shell, and three strings of zeros and ones that are the binary expansions of the three mathematically fundamental numbers: 'e', 'pi' and the 'golden ratio'. The circles in the design represent hyperbolic geometry.

The medal was designed by Marian Fountain a prominent New Zealand medallic artist. Her other works include the design of the medals for the 1990 Commonwealth Games in Auckland.

The composition of the medal seems to be oxidized bronze that has been coloured by an artificially induced chemical reaction.

MacDairmid Medal 2011

This medal is awarded to a person or team who, while in New Zealand, has undertaken outstanding scientific research that demonstrates the potential for application to human benefit, such as in the areas of health, environment and technology. It is named after Alan MacDairmid who was a New Zealand-born American chemist, and one of three recipients of the Nobel Prize for Chemistry in 2000. MacDiarmid spent the greater part of his career on the chemistry faculty of the University of Pennsylvania, where he worked for 45 years. He won the Nobel prize for the discovery and development of plastic materials that conduct electricity.

The medal was designed by Phillip O'Shea. According to the Society's website, the sunburst on the reverse design represents the universe and MacDiarmid's universal standing. The four stars symbolise wisdom and human aspiration and the stars on the New Zealand flag.

The latest award of the medal was for discovering low-cost nanocatalysts critical to global decarbonisation efforts and creating energy infrastructures based around renewables.



Fig. 10 The MacDairmid Medal

Acknowledgement

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Nine Million Mistakes and their Consequences

Scott de Young FRNSNZ

Numismatists interested in the Reserve Bank of New Zealand (RBNZ) pre-decimal banknote series (1934-1967) will be aware that a wide variety of prefix styles were used over that period for all denominations, some being quite logical and others seemingly less so.

These prefix styles created some hiccups, the most well-known being the 'OK' pound, but more of that later.

Around the time of the 'OK' pound hiccup was another seemingly innocuous mistake at the printers which created quite a problem for the Reserve Bank, seen in the five-pound Wilson signature series in the mid to late 1950's. This article explains the profound consequences of the mistake for subsequent serial numbering of New Zealand's pre-decimal notes.

Firstly, some background information regarding banknote orders and prefixing styles. In the period under discussion, the late 1950's, the Reserve Bank would generally place a new banknote order with Thomas de La Rue (TDLR) on an annual basis and generally in June or July. These print orders were recorded in the Minutes book of the Reserve Bank Board monthly meetings. Some quoted the order date which correlates with the dates seen handwritten on the relevant proof banknotes thus confirming the order date specifically.

Not every denomination was ordered every year, depending on the currency needs of the bank. It could take from six months to over a year for the banknotes to be printed and delivered by ship to Wellington. They would be shipped over a period of months to alleviate any problems if a shipment was somehow lost. The only recorded example of a shipment being lost occurred in the decimal series when 50,000 Wilks signature one-dollar notes numbered 7Y 500001 to 7Y 550000 disappeared in transit. As a result, the other 950,000 7Y notes were not issued and destroyed.

Once a shipment had arrived in Wellington they would be recorded in ledgers and stored in multiple safes inside the bank's vaults. It could be another year before

these notes were then issued out to other Reserve Bank branches and thence to banks for issue to the public or over the counter at the RBNZ in Wellington.

At this time the notes were issued in strict prefix/serial number order and their issuance recorded once again, keeping in mind that they were issued out in blocks of numbers depending on need. As an example, the Auckland Reserve Bank branch may want 750,000 five-pound notes. They would receive, say, 4/V 000001 to 4/V 750000 and Christchurch may have ordered 500,000 and they would get 4/V 750001 to 1000000 and 5/V 000001 to 5/V 250000.

These orders were meticulously recorded in ledgers and at end of life they were marked off as returned to the Reserve Bank and destroyed. This is relevant to this article.

The 1940 – 1967 five-pound issues commenced with the Hanna signature and a fractional style prefix of 0/X (Zero over X) followed by 1/X and so forth to 9/X and then changed to 0/W to 9/W, thence 'R', 'S' and 'V'. This is the order they arrived in and the order in which they were issued out.

0/X	1/X	2/X	3/X	4/X	5/X	6/X	7/X	8/X	9/X
0/W	1/W	2/W	3/W	4/W	5/W	6/W	7/W	8/W	9/W
0/R	1/R	2/R	3/R	4/R	5/R	6/R	7/R	8/R	9/R
0/S	1/S	2/S	3/S	4/S	5/S	6/S	7/S	8/S	9/S
0/V	1/V	2/V	3/V	4/V	5/V	6/V	7/V	8/V	
									to 921,000

The original order was for just 600,000 forms, 0/X 000001 to 0/X 600000, and by the mid 1950's the orders were for multimillion quantities.

The choice of these prefix letters in this order is the most illogical of any prefix style for the entire sterling issues. Someone at the Reserve Bank must have signed off on this being an acceptable prefix progression of letters although this was decided in

1939/40 and they may have only nominated the first few letters based on the initial small quantities ordered. This worked well up until the last of the Hanna signature notes were ordered in 1952.

This 18th order of the five-pound denomination was for 7 million forms (Banknotes) and was ordered 2 July 1952 along with other denominations. The numbering range was from 1/V 726001 through to 8/V 726000 which were received between 19 June 1953 and 6 October 1953. A further 195,000 'Good Overs' (An overrun of forms printed to meet the 7 million quantity) was accepted and received by the Reserve Bank arriving 2 December 1953. Inclusion of these good overs and those delivered with some earlier orders is why the Hanna issue ends at serial 8/V 921,000.

All was going well for all involved. The notes were ordered, printed, received, recorded and issued and eventually worn out, returned to the Reserve Bank and recorded as destroyed. Then things went awry!

The 1953 order, the 19th one, now 8 million forms with a new signatory, Wilson, was ordered on 22 June 1953, just three days after the first of the 1952 order were received. These commenced at 8/V 921001 through to 8/V 1000000 as would be expected. Note that this is the smallest print run of a specific prefix and signatory in the whole series.

The next million were 9/V 000001 to 9/V 1000000 also as expected but then the printing staff had to change the letter in the prefix. Did they have a specific instruction on what that new letter should be or was there no instruction or was any instruction just overlooked?

In the event the machines were set up with the letter 'W' which is logically the letter that follows 'V' and was probably how numerous other prefix styles for the myriad of countries TDLR printed banknotes for progressed. This order was fulfilled at 6/W 921000 with all notes being received at Wellington between 3 June 1954 and 14 December 1954..

The 20th order for 5 million forms was placed 29 June 1954 just after the arrival of the first notes of the 19th order including those with 'W' prefix. It seems that whilst this order was being printed in England the Reserve Bank had noticed that the banknotes just received duplicated prefixes and serial numbers already used in the Hanna series. These new 'W' notes would create a problem when at end of use they were returned to the bank for destruction many years later as they would have to

differentiate between signatories when crossing them off from the registers, which would be hugely time consuming and thus expensive. Not the done thing at an institution like the Reserve Bank!

By the time the bank had noticed the problem TDLR had already started printing the 20th order and of course continuing from 6/W 921001. We can conclude this as we know that the serial range of the order ceased at 8/W 1000000 and that prefix 9/W was never printed and then continued from 0/Y 000001 to 2/Y 921000 giving us the five million notes ordered. Another 50,000 were accepted as good overs so the range ended at 2/Y 971000.

'Y' would have been used as 'X' had also already been used in Hanna series. You wouldn't want to make the same mistake twice! These notes were delivered to Wellington between 18 July 1955 and 30 November 1955.

So now the Reserve Bank was in receipt of nine million mistakes! So, what to do? Two options existed, burn the notes and solve the return registration issue and lose the costs of the whole process or issue them out in due course, but how and when? To complicate matters the 29 June 1954 order also included the ten-shillings, one-pound and ten-pounds. The one-pound order of 6 million notes duly arrived with the last delivery of one million notes received in Wellington on 13 September 1955 numbered J/9 160001 to J/9 1000000 and O/K 000001 to O/K 160000. On 13 November 1955 another 160000 good overs arrived numbered O/K 160001 to O/K 320000. Did that prefix ring a bell?

Now the Reserve Bank had nine million three hundred and twenty thousand mistakes to deal with. O/K should have been K/O. The infamous 'OK' pound.

There would have been some interesting correspondence passing between the Reserve Bank and TDLR, the printers, at this time. How was all this resolved and what were the consequences thereafter for our banknote numbering systems? The nine million mistakes remained in the vaults for the time being and the 'Y' series notes were issued. Meanwhile the 4 July 1955 orders (21st order) had been placed, and these were already in production, and this is where we see one of the consequences of the mistakes.

This order started at 2/Y 971001 and went to 5/Y 1000000 then the prefix style changed to 'Letter next to Number' A0 and was followed by A1, A2, A3, A4 and A5 ending at A5 471000 giving the 8.5 million notes ordered, arriving in Wellington

between 5 January 1956 and 24 May 1956. We now had a simple logical prefix style for that denomination going forward. The 1956 order commenced thereafter with Fleming as signatory.

There remained nine million mistakes, and we can understand how that problem was eventually resolved as some of the dates of issue of some of the relevant prefixes are known and In the minutes of the Board of 9 July 1959 there is a clue. This was written below the 15 July 1959 Banknote order summary:

“Registration of £5 notes. Resolved that with reference to the minute of the board dated 13 November 1958 (Ref 5/210) the Chief cashier be authorised to abandon the detailed registration of the ‘R’ series of £5 forthwith”.

My understanding is that ‘R’ refers to the 0/R to 9/R issue and the marking off of five-pound notes was getting too time consuming due to the increased amount of notes being issued out. And of course, those nine million mistakes were sitting quietly in the vaults. I suspect this resolution was confirmed in November 1958 as the ‘W’ notes were already being issued and 8/W 1000000 is recorded as being the last issued to an Auckland BNZ on 12 August 1959, six years after the order was placed.

Known specific Information on Five-Pound Orders and Issuance:

Wilson Signature

£5 19th order

8,000,000 Forms. Order Date: 22 June 1953

(Per Letter & Proof 6/W)

Order Reference: 49/B

8/V 921001	to	8/V 1000000
9/V 000001	to	9/V 1000000
0/W 000001	to	0/W 1000000
1/W 000001	to	1/W 1000000
2/W 000001	to	2/W 1000000
3/W 000001	to	3/W 1000000
4/W 000001	to	4/W 1000000
5/W 000001	to	5/W 1000000
6/W 000001	to	6/W 921000

Received from printers by 14/12/1954

8/V 921001	07/10/1955	First note issued from Wellington RBNZ
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£5 20th order**5,000,000 Forms. Order Date: 29 June 1954****(Per Letter & Proof 2/Y)****Order Reference: 49/B1**

6/W 921001	to	6/W 1000000
7/W 000001	to	7/W 1000000
8/W 000001	to	8/W 1000000
9/W	NOT PRINTED	
0/Y 000001	to	0/Y 1000000
1/Y 000001	to	1/Y 1000000
2/Y 000001	to	2/Y 921000

Received from printers by 20/10/1955

50,000 Good Overs.

2/Y 921001	to	2/Y 971000
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Received from printers by 30/11/1955

7/W 834000	19/08/1959	Last note issued to Dunedin BNZ
8/W 698000	03/06/1959	Last note issued to Wellington RBNZ
8/W 624000	11/08/1959	Last note issued to Christchurch BNZ
8/W 1000000	12/08/1959	Last note issued to Auckland BNZ

£5 21st order**8,500,000 Forms.****Order Date: 4 July 1955****(Per Letter & Proof A5)****Order Reference: 49/B2****(First Part)**

2/Y 971001	to	2/Y 1000000
3/Y 000001	to	3/Y 1000000
4/Y 000001	to	4/Y 1000000
5/Y 000001	to	5/Y 1000000

Received from printers by 29/02/1956

(Second Part)

A0 000001	to	A0 1000000
A1 000001	to	A1 1000000
A2 000001	to	A2 1000000
A3 000001	to	A3 1000000
A4 000001	to	A4 1000000
A5 000001	to	A5 471000

Received from printers by 24/05/1956

5/Y 1000000	11/12/1956	Last note issued to Auckland ANZ
A0 000001	11/12/1956	First note issued to Auckland ANZ
A5 471001	26/06/1957	Last note issued from Wellington RBNZ

Now Fleming Signature.

£5 22nd order

8,000,000 Forms. Order Date: 13 July 1956

(Per Letter & Proof B3)

Order Reference: 49/B3

A5 471001	to	A5 1000000
A6 000001	to	A6 1000000
A7 000001	to	A7 1000000
A8 000001	to	A8 1000000
A9 000001	to	A9 1000000
B0 000001	to	B0 1000000
B1 000001	to	B1 1000000
B2 000001	to	B2 1000000
B3 000001	to	B3 471000

Received from printers by 20/05/1957

The first Fleming £5 was also issued prior to the Wilson 'W' Series notes.

A5 471001	26/06/1957	First note issued from Wellington RBNZ
A5 504001	14/08/1957	First note issued to Christchurch ANZ
A5 752001	18/09/1957	First note issued to Dunedin BNZ
A6 032001	11/09/1957	First note issued to Auckland BNZ

Our other 320,000 mistakes were less of a problem as O/K did not duplicate a previous prefix so did not cause any problem and were duly issued out with the last being issued from the Wellington RBNZ on 20 February 1957.

The Consequences!

The chaos created by the 1953 and 1954 banknote orders brought some sensible consequences with the 4 July 1955 orders being of all denominations:

10/-	7 million forms
£1	19 million forms
£5	8.5 million forms
£10	500,000 forms

£50 100,000 forms

The production of the five pounds was unfortunately already underway and prefixes 2/Y 971001 to 5/Y 1000000 were already produced. The remaining were then serial numbered A0 000001 to A5 471000, giving us the 8.5 million notes required.

The other four denominations all started with fresh new logical prefix styles to avoid those costly mistakes. For that 1955 order the serial numbers were:

10/- Number next to Letter, OA 000001 to OK 1000000 (Letter I and O not used)

£1 Three Numbers, 001 000001 to 019 1000000 plus 250,0000 good overs numbered 020 000001 to 020 250000.
Note that the next order with Fleming signature started at 021 000001.

£5 Letter next to Number, A0 000001 to A5 471000

£10 Number next to Letter, 6F 000001 to 6F 500000

£50 Number next to Letter, 1U 000001 to 1U 100000

Conclusion

The 'OK' pound was not our currency's biggest hiccup. The nine million mistakes were the reason all the prefix styles were simplified from the 1955 order onwards. The simplification lasted at least until the first one-dollar and two-dollar prefixes appeared in 1967 which on the face of it were even more confusing until you could see the sequences in their entirety. It then all made sense but that is another story!

The cessation of recording the destruction of five-pound banknotes in 1958 after the 'R' series meant the nine million mistakes could be safely issued, as once worn out they would just be returned to the Reserve Bank and destroyed as per normal.

The Wilson signature 8/V and 9/V banknotes were issued around October 1955, two years after they were ordered. The 0/W to 8/W series were issued during 1959, the last on 12 August 1959, six years after the original order was placed.

The 0/Y to 5/Y series were issued during 1955 and 1956, two years after their order. The A0 to A5 471000 Wilson signatures were issued between December 1956 and June 1957.

The Fleming A5 471001 and thereafter were issued from June 1957, a year after order. This still two years prior to the Wilson 'W' prefixes being issued during 1959.



Fig. 1 Hanna signature with higher serial number than a Wilson signature

The Attrition Rate of New Zealand One and Two Dollar Coins 1990-2024

Paul Bicknell FRNSNZ, Andrew Christie and Eric J Frazer

New Zealand introduced smaller 10c, 20c & 50c coins in 2006, replacing the original coins minted since 1967 and the withdrawing of the 5c coin. However, the \$1 and \$2 coins have remained unchanged since their introduction in 1990. This comparatively long run provided the opportunity to assess their annual Attrition Rate (AR).

Methodology

Several studies of the AR and lifetime of coins in circulation have been published over the past decades (Cole, 1976; Kenny, 1995; Griffiths, 2002; Frazer & van der Touw, 2016). The methodology involves sampling an appropriate number of coins of the denomination of interest from the circulating coin pool. The numbers found for each mintage are recorded and compared against the expected numbers derived from official mintage data. The AR can then be estimated iteratively by gradually matching the sample data to the original mintage data subjected to various rates of attrition. This procedure also results in an estimate of the total number of coins remaining in circulation.

A total of 2,000 \$1 and 1,500 \$2 coins were sampled in batches of 250 or 500 coins from a major bank branch in Wellington over the period March-May 2005. Care was taken that the returned coins were not resampled.

Attrition Rate results

Tables 1 and 2 show the data and analyses for the 2,000 \$1 and 1,500 \$2 coins sampled, respectively. Figs. 1 and 2 show the data fitted with annual Attrition Rates of 3.1% for the \$1 and 1.8% for the \$2.

Table 1 \$1: The bank data, mintage, and estimate of coins remaining in circulation at end 2024 at an Attrition Rate of 3.1%.

Year	Age	Bank	Bank	Mintage	Mintage	In Circ.	In Circ.
	Years	Sample	per 1000	RBNZ	per 1000	2024	per 1000
1990	34	328	164.0	40,028,000	297.5	13,720,575	183.5
1991	33	103	51.5	10,035,000	74.6	3,549,785	47.5
1992	32	0	0.0	0	0.0	0	0.0
1993	31	0	0.0	0	0.0	0	0.0
1994	30	0	0.0	0	0.0	0	0.0
1995	29	0	0.0	0	0.0	0	0.0
1996	28	0	0.0	0	0.0	0	0.0
1997	27	0	0.0	0	0.0	0	0.0
1998	26	0	0.0	0	0.0	0	0.0
1999	25	0	0.0	0	0.0	0	0.0
2000	24	62	31.0	5,000,000	37.2	2,348,230	31.4
2001	23	0	0.0	0	0.0	0	0.0
2002	22	119	59.5	8,000,000	59.5	4,001,410	53.5
2003	21	59	29.5	4,000,000	29.7	2,064,711	27.6
2004	20	34	17.0	2,700,000	20.1	1,438,266	19.2
2005	19	24	12.0	2,000,000	14.9	1,099,466	14.7
2006	18	0	0.0	0	0.0	0	0.0
2007	17	0	0.0	0	0.0	0	0.0
2008	16	196	98.0	11,000,000	81.7	6,646,196	88.9
2009	15	0	0.0	0	0.0	0	0.0
2010	14	186	93.0	10,000,000	74.3	6,434,768	86.1
2011	13	0	0.0	0	0.0	0	0.0
2012	12	0	0.0	0	0.0	0	0.0
2013	11	218	109.0	10,080,000	74.9	7,128,893	95.4
2014	10	0	0.0	0	0.0	0	0.0
2015	9	274	137.0	10,000,000	74.3	7,532,064	100.8
2016	8	0	0.0	0	0.0	0	0.0
2017	7	0	0.0	0	0.0	0	0.0
2018	6	0	0.0	0	0.0	0	0.0
2019	5	209	104.5	12,960,000	96.3	11,071,944	148.1
2020	4	188	94.0	8,760,000	65.1	7,723,234	103.3
2021	3	0	0.0	0	0.0	0	0.0
2022	2	0	0.0	0	0.0	0	0.0
2023	1	0	0.0	0	0.0	0	0.0
2024	0	0	0.0	0	0.0	0	0.0
Sum		2000	1000	134,563,000	1000	74,759,542	1000

Table 2 \$2: The bank data, mintage, and estimate of coins remaining in circulation at end 2024 at an Attrition Rate of 1.8%.

Year	Age	Bank	Bank	Mintage	Mintage	In Circ.	In Circ.
	Years	Sample	per 1000	RBNZ	per 1000	2024	per 1000
1990	34	275	183.3	30,028,000	261.7	16,192,615	203.8
1991	33	94	62.7	10,035,000	87.5	5,510,569	69.3
1992	32	0	0.0	0	0.0	0	0.0
1993	31	0	0.0	0	0.0	0	0.0
1994	30	0	0.0	0	0.0	0	0.0
1995	29	0	0.0	0	0.0	0	0.0
1996	28	0	0.0	0	0.0	0	0.0
1997	27	6	4.0	500,000	4.4	306,182	3.9
1998	26	70	46.7	6,006,000	52.4	3,745,278	47.1
1999	25	50	33.3	5,057,000	44.1	3,211,295	40.4
2000	24	0	0.0	0	0.0	0	0.0
2001	23	31	20.7	3,000,000	26.1	1,975,538	24.9
2002	22	60	40.0	6,000,000	52.3	4,023,500	50.6
2003	21	81	54.0	6,000,000	52.3	4,097,250	51.6
2004	20	0	0.0	0	0.0	0	0.0
2005	19	83	55.3	5,000,000	43.6	3,540,693	44.6
2006	18	0	0.0	0	0.0	0	0.0
2007	17	0	0.0	0	0.0	0	0.0
2008	16	70	46.7	4,000,000	34.9	2,991,189	37.6
2009	15	0	0.0	0	0.0	0	0.0
2010	14	0	0.0	0	0.0	0	0.0
2011	13	139	92.7	8,000,000	69.7	6,317,414	79.5
2012	12	0	0.0	0	0.0	0	0.0
2013	11	0	0.0	0	0.0	0	0.0
2014	10	112	74.7	7,000,000	61.0	5,837,312	73.5
2015	9	116	77.3	6,000,000	52.3	5,095,123	64.1
2016	8	0	0.0	0	0.0	0	0.0
2017	7	0	0.0	0	0.0	0	0.0
2018	6	0	0.0	0	0.0	0	0.0
2019	5	137	91.3	12,200,000	106.3	11,140,823	140.2
2020	4	176	117.3	5,900,000	51.4	5,486,533	69.0
2021	3	0	0.0	0	0.0	0	0.0
2022	2	0	0.0	0	0.0	0	0.0
2023	1	0	0.0	0	0.0	0	0.0
2024	0	0	0.0	0	0.0	0	0.0
Sum		1500	1000	114,726,000	1000	79,471,313	1000

Note: The 1997 \$2 coins were out of specification and withdrawn (RBNZ, 1998). However, an unknown percentage entered circulation; an arbitrary figure of ~50% was used here. Choosing an arbitrary figure of ~25% made no difference to the estimated AR, essentially because the 1997 mintage represents less than 1% of the total mintage.

The columns **Year**, **Age** (2024 = 0 years), **Bank Sample**, **Bank per 1,000** coins, **Mintage RBNZ**, and **Mintage per 1,000** coins are self-explanatory. The **In Circ. 2024** column is an estimate of the number of each mintage remaining in circulation at end 2024 at a specified AR (expressed as a decimal). Each entry is calculated as follows:

$$\text{In Circ. 2024} = \text{Mintage RBNZ} \times (1 - \text{AR})^{\text{Age}}$$

The AR is iterated (e.g., over the range 0.01–0.04) until the R² coefficient of the (straight line) plot of “In circ. 2024 per 1,000” versus “Bank Sample per 1,000” is maximised (see Figs. 1 & 2).

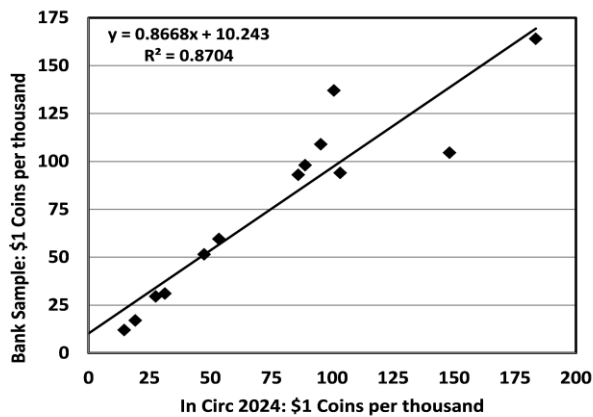


Fig. 1 Plot of the “Bank Sample per 1,000 coins” versus the calculated “In circ. 2024 per 1,000 coins” for the \$1 coin at an AR of 3.1%.

The lower AR of the \$2 coin (1.8%) versus the \$1 coin (3.1%) could be considered unsurprising given its larger size and higher value. The \$1 coin is more likely to be dropped/misplaced and not recovered because of its smaller size and lower value versus the \$2 coin. The above might be considered common sense assumptions, but they are consistent with early work by Furnham (1985) on the perceived value of small coins and thinking in the archaeological community on the importance of both coin size and value (Newton, 2006).

Table 3 shows a comparison of the estimated ARs of the New Zealand \$1 and \$2 coins with the corresponding non-commemorative Australian coins estimated at the end of 2018 (Frazer, 2019). The ARs of each denomination are similar which is consistent with both countries having almost the same coin–note currency sets

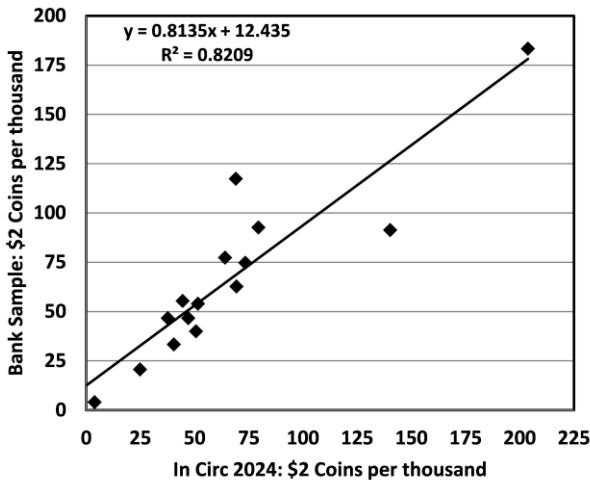


Fig. 2 Plot of the “Bank Sample per 1,000 coins” versus the calculated “In circ. 2024 per 1,000 coins” for the \$2 coin at an AR of 1.8%.

(five/six coins: 5c/10c–\$2 and five notes: \$5–\$100). The Australian \$1 coin was introduced in 1984 and is larger than the \$2 coin, which was introduced in 1988 (see Fig. 3). Given the size/value interchange of the two currencies, these results might suggest that the more dominant factor in determining AR is the denomination.

Table 3: Comparison of the estimated ARs and diameters of the New Zealand and Australian \$1 & \$2 coins

Denomin- ation	NZ AR% (2024)	Diam. NZ (mm)	AUS AR% (2018)	Diam. AUS (mm)
\$1	3.1	23.0	2.7	25.00
\$2	1.8	26.5	2.2	20.62

An earlier study by Frazer & van der Touw (2010) showed that the number of coins of each denomination found (i.e., having been lost) in an urban environment had a high correlation with (i): the number of coins of that denomination in circulation and (ii): the product of value (V) and diameter (D).



Fig. 3 Comparison of New Zealand and Australian \$1 and \$2 coins (measurements shown are diameters in mm).

The latter was illustrated by a linear relationship between denomination and the inverse of “ $(V \times D)$ ”, i.e., “ $1/(V \times D)$ ”. The results of the present study are consistent with the value/size relationship.

The difference in AR between the \$1 and \$2 coins is more marked in New Zealand (1.3%) than in Australia (0.5%). It is tempting to suggest that some part of that difference is due to greater usage of the \$1 coin versus the \$2 coin in New Zealand. This, however, is not the case in Australia where the Usage Ratio is higher for the \$2 coin. The “Usage Ratio” gives an indication of the relative use of each denomination. It is defined as the ratio of the percentage processed in a currency centre over say, three months, to the percentage in circulation for each denomination (Frazer, 2023a).

Lifetime estimates and mintage planning

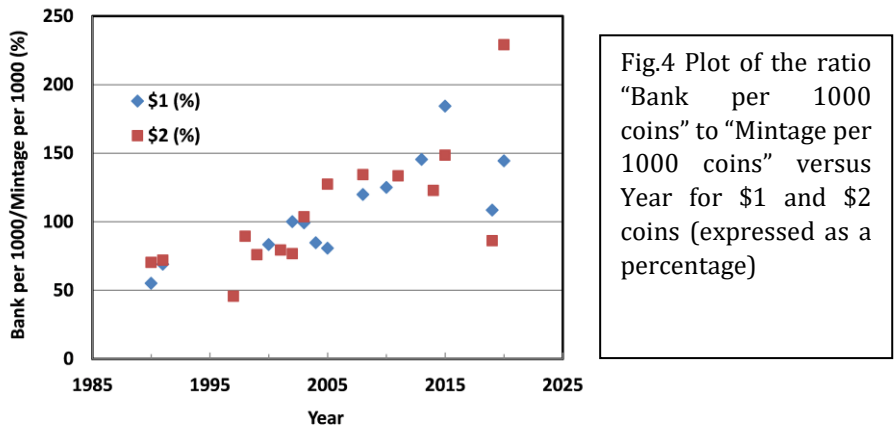
The average age of the \$1 and \$2 coins in the bank samples was 16.7 and 18.3 years, respectively. These figures are merely the product of the number of coins of each mintage year in the sample by their age (where 2024 = 0 years) divided by the number of coins in the sample. However, a general indication of coin lifetime can be given by the “half-life”, defined here as the number of years from mintage until 50% of the original are left in circulation. At 3.1%, that is approximately 22 years for the \$1 and , 1.8% approximately 38 years for the \$2 coin. The estimates in Tables 1 & 2 show that, at the end of 2024, the number of \$1 coins remaining in circulation was 74,759,542 coins or 55.6% of the total mintage to 2020. For the \$2 coin, the figure was 79,471,313 coins or 69.2%, reflecting its significantly lower AR.

Simple annual replacement of lost coins would require about 2.25M \$1 coins (at say, 3% AR) and 1.6M \$2 coins (at say, 2% AR). That is about 9.0M \$1 and 6.4M \$2 coins required if minting occurs every four years. Any gradual decrease in coin usage could be at least partially offset by the increase in population. (The number of coins in circulation *per person* in Australia declined by 18% over the period 2009–2021 (Frazer, 2023a)).

Some general observations on the \$1 & \$2 coin behaviour

Fig. 4 presents a plot of the ratio of “Bank per 1000 coins” to “Mintage per 1000 coins” versus Year using the data from Tables 1 and 2. While both the \$1 and \$2 coins show a generally increasing ratio with year, the relationships themselves are not smooth and the year-to-year patterns are somewhat erratic. Although the fitted linear relationships in Figures 1 and 2 display moderately high R^2 values, they obviously hide the variability revealed in Fig. 4.

Some of the variability could be due to regional variations in coin distribution



and subsequent mixing making it difficult to obtain a sample representative of the whole country. It is known that, over the period 1933 to 1967 (predecimal), provincial variations existed in the coins in circulation and those differences were persistent (Galt, 2026). A similar situation could partially explain some of the unusual behaviour exhibited here.

Even a cursory viewing of Figure 4 reveals apparent discontinuities and perhaps a plateau in the \$2 data over the period 2005-2015. This variability suggests that a number of potentially interacting factors could be at play in determining coin usage and behaviour; these could include the increasing use of electronic transactions and the inevitable effect of inflation on value. If the AR is not constant but varies with time, this will be masked by the single estimates produced here which cover the *whole* period (1990-2004).

The introduction of new, smaller 10c, 20c & 50c coins (and the withdrawal of the 5c) in 2006 could well have caused a step change in coin usage by the public consequently impacting the distribution of denominations in daily use. Prior to

2006, it was known that New Zealanders stored substantial quantities of silver coins (ACNielsen, 2006). Of the total 185.18 coins per household, 82.58 coins were 5c coins representing 18% of *all* 5c coins produced during the 1967-2005 period! Increasing acceptance and usage of the new, smaller coins might have well have had some effect on attitudes to coin storage and the demand for “gold” coins. Indeed, no \$1 and \$2 coins were produced by the RBNZ in 2006 and 2007.

Finally, the behaviour of the 2019 and 2020 coins deserves special mention here. They are the sources of the three out of the four “outliers” shown in Figures 1 and 2; the fourth is due to the 2015 \$1. It is not possible to justify their exclusion from the analyses without adequate reason, especially since there are only 13 (\$1) and 15 (\$2) available data points in the 35 year period from 1990 to 2024. However, one can still assess their influence on the apparent AR. In the case \$1 coin, the estimated AR moved from 3.1% to 3.5%. In the case \$2 coin, the estimated AR moved from 1.8% to 2.8%. Of course, due to the data exclusion, these figures cannot offer any greater reliability than the original estimates.

Comparison with samples of New Zealand coins collected in Australia

Due to the free movement and tourism between New Zealand and Australian citizens, New Zealand coins make up almost 25% of the foreign coins circulating with Australian Decimal Currency. In 2021, New Zealand coins occurred at the rate of 43.4 coins per-million (CPM) processed at a major Victorian currency processing centre; the rates for the \$1 and \$2 New Zealand coins were 17.8 and 13.2 CPM, respectively (Frazer, 2023b).

The above relatively high numbers allowed 4,000–5,000 New Zealand \$1 and \$2 coins to be recorded during the period mid-2024 to mid-2025. Although the distribution of dates in the Australian sample was similar to the New Zealand sample, the relative frequency per thousand coins increased with age. Figs. 5 and 6 show the ratio of the Australian to the New Zealand sample (per thousand coins) against age. Perhaps surprisingly, that ratio increases approximately linearly from about 0.2 for the 2020 coin to about 1.5-1.8 for the 1990 coin.

If not repatriated, New Zealand coins transported to Australia will be stored for varying times before eventually being surrendered to banks (or charities). Unfortunately, the average residence time for a New Zealand \$1 or \$2 coin in Australia is unknown. Importantly, however, once a coin has left New Zealand, it is no longer subject to normal circulation and attrition. The amount of “shielding” from attrition for each coin will depend on when it is removed from circulation in New Zealand.

Using the lines of best fit shown in Figures 5 and 6, it is possible to estimate the Age when the ratio of the Australian to New Zealand sample equals one. For both the \$1 and \$2 coins, that Age is approx. 16 years (i.e., 2008) which is about midway between 1990 and 2024. Presumably, this reflects some balance between the average *mintage date* when removed from circulation in New Zealand and the average number of years before a coin is removed. Of course, the average mintage date will change with time as new coins are introduced into circulation and attrition continues. All-in-all an extremely complex situation!

Concluding comments

The methodology used here assumes perfect mixing of the coin pool and that a random sample obtained at a large bank in a major city will be representative of the whole country. Reservations regarding regional variations in coin distribution and mixing have been discussed in a previous section. The methodology also assumes that there is no hoarding of the denomination under study; this phenomenon tends to involve the smaller denomination coins as inflation decreases their value and usefulness.

The New Zealand situation is different to many other countries where coins are minted and introduced each year. In fact, the present analysis relies on the only 13 (\$1) and 15 (\$2) data points available in the 35 year period from 1990 to 2024. Also, “Coins typically enter circulation about two years after production. These anticipated timings are based on typical demand and stock levels, which are kept sufficient to deal with any demand spikes or supply chain issues.” (RBNZ, 2024). Consistent with that, the official RBNZ statistics show that 8,000,000 \$2 coins were produced in 2022 (RBNZ, 2025) and these did not appear in the 2025 sample. The non-uniform release of coins into circulation and the lack of year-to-year data will potentially have an impact on the reliability of any estimates produced.

Thus, it is difficult to assign confidence limits to the estimates of the AR and numbers of coins remaining in circulation. Although the data analysis produced models with acceptable goodness of fit (i.e., $R^2 > 0.8$), the estimates of AR were very sensitive to the removal of apparent outliers. An Australian study based on large samples of pooled data had confidence limits (assigned by a bootstrapping technique) in the $\pm 10\%$ range (Frazer & van der Touw, 2016). In the light of the limitations discussed above, a figure of $\pm 20\%$ for the present estimates might seem reasonable.

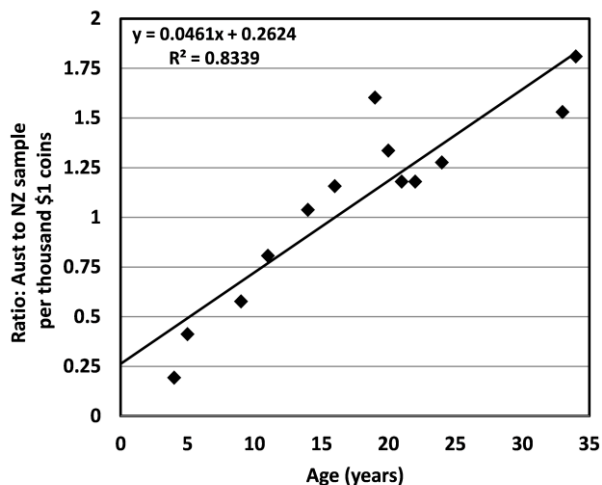


Fig. 5 Plot of the ratio of the Australian to New Zealand sample per thousand \$1 coins versus Age.

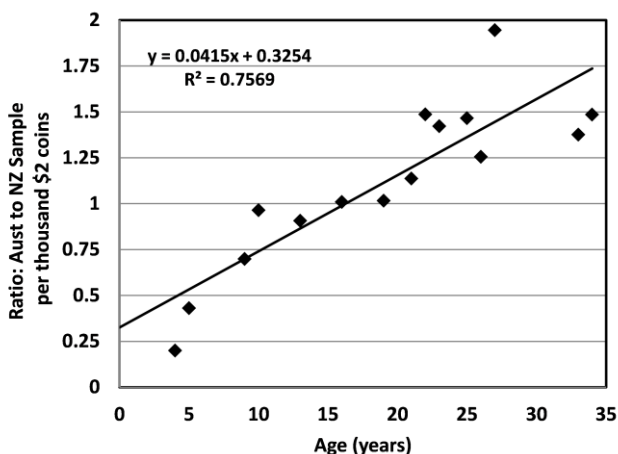


Fig. 6 Plot of the ratio of the Australian to New Zealand sample per thousand \$2 coins versus Age.

Given the low frequency of minting of the smaller 10 cent (12 times), 20 cent (7 times), and 50 cent (8 times) coins in New Zealand since 2006, estimates of ARs using the current methodology would probably be limited by the same lack of

year-to-year data, perhaps with the exception of the 10 cent coin. Importantly, there is a case for repeating the sampling and analysis of the \$1 and \$2 coins in another larger urban centre, e.g., Auckland, to assess regional variability and the reliability of any single estimate of AR.

Finally, the data for New Zealand \$1 and \$2 coins in circulation with Australia Decimal Coinage highlighted the significant effect of attrition on the appearance rate in the sample but was otherwise not particularly illuminating. A series of assumptions would need to be made to enable modelling to potentially extract more from the data.

Acknowledgments

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Anthony Wilding – New Zealand’s First Sporting Superstar

Ken Matthews

Anthony Frederick Wilding was a New Zealand born tennis legend (Fig. 1) and World War I soldier. He won many tennis titles including New Zealand, European and Wimbledon championships, and an Olympic Medal. He has been called the first New Zealand sporting superstar and was tragically killed in action early in World War I. Fortunately his legacy is preserved in the Canterbury Museum which holds some of his tennis and military medals

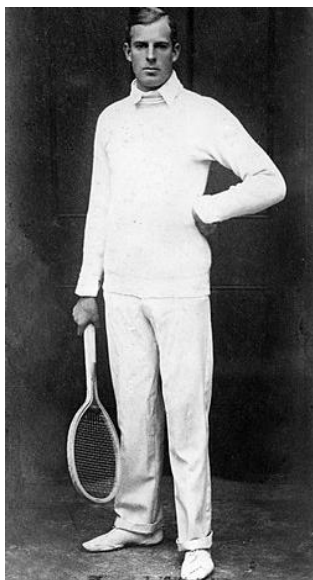


Fig. 1 (Left) Iconic image of Wilding 1912. *Source: Wikipedia.* Fig. 2 (Right) Wilding aged 4 years. *Source Wikipedia.*

Childhood

Anthony Wilding was born on the family farm in Opawa, Christchurch on 31 October 1883, the son of wealthy English parents (Fig. 2). The farm had two tennis courts (asphalt for winter and grass for summer), and Wilding started playing tennis when aged 6 years when he was gifted a racquet by manufacturer Ralph Slazenger. During Wilding’s childhood, the family home, known as ‘Fownhope’, frequently hosted

prominent members of society, visiting international sportsmen, and was a hub for tennis enthusiasts.

Earning a living

Upon completion of his schooling in Christchurch Wilding left New Zealand at the age of 19 in 1902 to study law at Cambridge University (Fig. 3). He graduated in 1905 and returned to New Zealand with the intention of joining his father's law practice. He soon changed his mind and returned to England in 1906 where he was admitted to the Bar. In 1909 he again returned to Christchurch and completed his qualifications to allow him to be registered as a barrister and solicitor in New Zealand. Despite his early professional success, the call of tennis was too strong, and Wilding was not inclined to become a full-time lawyer, so he travelled back to England in 1910, devoting his energies to tennis.

At this time tennis was an amateur sport, so Wilding had to find a way of funding his sporting career. In 1911 he was employed by a British wood pulp firm and in 1913 went to work for a tyre manufacturer. Clearly these jobs were only a necessary means to fund his tennis and he must have had tolerant employers who permitted him to take the time off he needed for tennis.



Fig. 3 (left) Wilding in 1902 aged 19, just before leaving Christchurch. *Source: Wikimedia Commons.* Fig. 4 (right) Wilding in the 1908 Land's End to John O'Groats Reliability Trial. *Source: Wikipedia. Public Domain.*

Motorcycling

The other passion in Wilding's life was motorcycling. Wilding has this to say about motorcycling: "Motorcycling was more than a hobby to me; it was my method of locomotion, my superior substitute for the railway train....there is only one joy better than flying along a clean sound French road at 40 miles per hour, and that is the joy of flying at 60 miles per hour.... As a means of getting from one tournament to another, and that often a thousand miles away, I have found the motorcycle invaluable."

In 1908 Wilding took part in the Land's End to John O'Groats reliability trial (Fig. 4), in which 60 motorcycles competed. Wilding averaged 180 miles a day and won a Gold Medal for the event (not in the Canterbury Museum collection). In 1909, after winning a tennis tournament at Nelson, Wilding rode home to Christchurch over two days, a journey over bad roads and river crossings. In 1910 he took his motorcycle from Christchurch to Auckland, riding over the Port Hills to catch a ship to Wellington, then riding 570 miles to Auckland over some of the worst roads he had ever attempted. In Europe that same year he rode from London to Lake Geneva and back, a distance of 3000 miles, and then to Constantinople, a 2000 mile trip. Other trips were undertaken in South Africa and America.

Wilding was also an aviation pioneer having learned to fly prior to 1914.

Tennis career

Wilding began his successful career in tennis competitions in Christchurch in 1901 when at the age of 17 years he won the Canterbury Championship. His first national title was the New Zealand University singles title in 1902 which was the inaugural inter-university sports championship (Fig. 5).

Wilding's first major title was the Scottish National Championship in 1904. In 1906 he won the Australian championship as well as the New Zealand championship (Fig. 6). The Museum's collection contains six NZLTA championship medals.

In 1906, while establishing himself on the European circuit, Wilding was accompanied by his father Frederick. They played together in several doubles competitions in Europe and England, and won the doubles title in the Sheffield and Hallamshire tournaments.

Wilding's appearances at Wimbledon lasted from 1904 to 1914. He won the Wimbledon singles championship for four consecutive years from 1910 to 1913.



Fig. 5 Obverse and reverse 1902 NZ Universities Men's Singles Championship medal.
Source: Canterbury Museum (2006.3.2)



Fig. 6 Obverse and reverse 1906 New Zealand Lawn Tennis Association Men's Singles Championship medal. *Source: Canterbury Museum (2006.3.4)*



Fig. 7 Obverse and reverse Wimbledon Men's Singles Championship medal 1911.
Source: Canterbury Museum (2006.3.17).



Fig. 8 Obverse and reverse Wimbledon Men's Doubles Championship medal 1907.
Source: Canterbury Museum (2006.3.8).

He also won the Wimbledon doubles titles in 1907, 1908, 1910, and 1914. Examples of Wilding's Wimbledon Championship medals are shown in Figs. 7 and 8. In total The Canterbury Museum's collection contains seven of Wilding's Wimbledon championship medals

Wilding represented Australasia in the Davis Cup in 1907, 1908, 1909 and 1914 (Fig. 10). The Australasian team won the Davis Cup in each of these years, with the tournaments played in Australia, England and the United States. The 1914 Davis Cup tournament was his final tournament. He was ranked number 1 in the world in 1911.

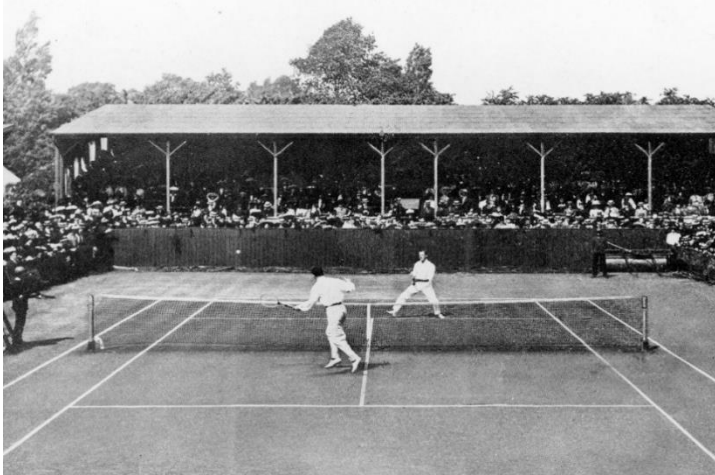


Fig. 10 Wilding playing in the Wimbledon final of 1910. *Source: Wimbledon.com*



Fig. 11 Norman Brookes. *Source: Wikipedia*

The Australian player Norman Brookes was Wilding's teammate in all of these Davis Cup matches (Fig. 11). Brookes was both Wilding's opponent and partner at Wimbledon. Brookes beat Wilding in the 1914 singles, and won with Wilding in the 1907 and 1914 doubles. Brookes won his last major title, the Franch Open in 1928 aged 51. He was knighted in 1939 and died in 1968. The trophy for Australian Open Men's Singles is known as the Norman Brookes Challenge Cup.



Fig. 12 Obverse and reverse World Championship on Grass Men's Singles London winners medal 1913. *Source: Canterbury Museum (2006.3.23).*



Fig. 13 Obverse and Reverse World Championship Covered Courts Men's Singles Stockholm winner's medal 1913. *Source: Canterbury Museum (2006.3.24).*

Other major titles won by Wilding included the World Hard Court Championship in Paris, the World Grass Court Championship in London (Fig. 12), and the World Covered Court Championship in Stockholm (Fig. 13), all in 1913, as well as the World Grass Court Doubles Championship in London in 1914 (Fig. 14).



Fig. 14 World Championship on Grass Men's Doubles London. *Source Canterbury Museum (2006.3.26)*



Fig. 15 Suzzane Lenglen. *Source Wikipedia*

Wilding was also active in the European tennis circuit from 1906 which brought him into contact with the European aristocracy who attended these tournaments. He was a friend of the Swedish King Gustav V, with whom he played tennis and called "Gussie". He was invited to a ball by the German Emperor Wilhelm II. He played mixed doubles with French teenager Suzanne Lenglen who went on to win Wimbledon six times and the women's singles Gold Medal at the 1920 Olympics (Fig.15).

Wilding played in France, Spain, Germany, Austria, Belgium Sweden and Hungary, including the French Riviera circuit which was a series of tournaments held in the French Riviera. The medals won in Europe are of the art nouveau style in fashion in the early 20th century (Figs. 16 – 18).



Fig. 16 Obverse and reverse Le Touquet Casino de la Forêt Lawn Tennis Championship medal 1905. *Source Canterbury Museum (2006.3.3).*



Fig. 17 Obverse and reverse IX Internationales Lawn Tennis Tournoi, Marienbad, Austria winners medal 1908. *Source: Canterbury Museum (2006.3.11).*



Fig. 18 (left) Obverse (gold medal) and (right) obverse (silver medal) of the 1910 Royaume de Belgique Exposition Universelle de Bruxelles Lawn Tennis Championnat de Nations. Source: *Canterbury Museum*(2006.3.16).

Wilding was not selected to attend the 1908 Olympic Games held in London because of an administrative error when the Australasian Olympic Committee neglected to nominate any tennis players. However, as part of the Australasian team at the 1912 Olympic Games in Stockholm, Wilding won the Bronze Medal in the indoor singles competition (Fig. 19). These medals were much smaller than their modern counterparts and typical of Olympic medals at the time Wilding's medal contains neither the recipient's name nor the event for which it was awarded.



Fig. 19 Obverse and reverse Olympic Bronze Medal Men's Indoor Singles Stockholm 1912. Source: *Canterbury Museum* (2006.3.20).

Over his tennis career Wilding won 11 “Grand Slam” tournament titles, six singles and five doubles. In the sport of tennis he is the only New Zealander to have ever won a singles Grand Slam title, a singles Olympic medal, and to have been ranked world number 1. Throughout his career Wilding won 123 tennis titles.

Military service and death

Wilding was acquainted with Winston Churchill who, when war broke out in 1914, was First Lord of the Admiralty. Churchill advised Wilding to join the Royal Marines, which he duly did, being gazetted a Second Lieutenant in early October 1914. After just a few days he was attached to the Intelligence Corp because of his knowledge of Europe obtained through his tennis playing and his skill in motoring. By the end of October 1914 he had joined the Royal Naval Armoured Car Division and was in action in Northern France.



Fig. 20 Wilding in Paris January 1915. *Source: Wikipedia.*

After leave in London in February 1915, he returned to France in March 1915 as a Lieutenant to a new squadron of Rolls Royce armoured cars (Fig. 20), under the command of the Duke of Westminster (who later was noted for his support of the Nazi ideology). On 2 May 1915 Wilding was promoted to Captain.

Wilding was killed in action on 9 May 1915 at Neuve-Chapelle during the battle of Aubers Ridge. The circumstances leading up to his death were described in a letter written by a comrade as follows; “The Regiment had no guns mobile enough to place in position and destroy some observation posts that were giving them a lot of

trouble, so Tony volunteered to do it, and went with two cars up this road which was raked with shell fire. He put his men in position and succeeded in completely destroying the posts – a brilliant and daring feat brilliantly accomplished. He then started to return on the road, which was at once subjected to a heavier and more withering fire. He and the two English officers with him took refuge in a dugout which was hit by a large shell. They were all killed instantly.” He was buried in the Rue-des-Berceaux Military Cemetery, Richebourg-l'Avoue, Pas-de-Calais, France (Fig.21).

At the time he was killed in France he was engaged to the Broadway star Maxine Elliott, 15 years his senior. She was rumoured to have been a former mistress of King Edward VII. Upon hearing the news of Wilding's death she took up voluntary relief work in Belgium for which she later received the Order of the Belgium Crown. A newspaper of the time reported: “That Wilding was devoted to Maxine Elliott all London knew; his infatuation was as frank as it was ardent. Peers had offered her their titles, financiers offered her wealth and position, but Maxine Elliott remained indifferent until the young tennis star laid siege to her heart.”



Fig. 21 Rue-des-Berceaux Military Cemetery. Source: *Auckland Cenotaph*.

For his service in France in October-November 1914, Wilding would have qualified for the 1914 Star; however, this does not appear to be in the collection of the Canterbury Museum. The Museum holds Wilding's British War Medal and his Victory Medal which were issued to his parents. Both are inscribed "CAPT. A. F. WILDING. R.M.". The Museum also holds Wilding's Memorial Plaque, inscribed "Anthony Frederick Wilding" (Fig. 22).



Fig. 22 Memorial Plaque. *Source: Canterbury Museum (2006.3.30).*

Lasting Legacy

Anthony Wilding was an extraordinary man who had an extraordinary life. Wilding was one of the stars of tennis in the decade before the First World War. He was described as the "dashing New Zealander who had female spectators swooning at his manly brand of tennis", and as "the first matinee idol of tennis" who captured the public's imagination with his good looks. He was described by the *New Statesman* newspaper as the first genuine sporting superstar. His image was well known to the public. He appeared on cigarette cards (Fig. 23) although ironically, he was never a smoker.

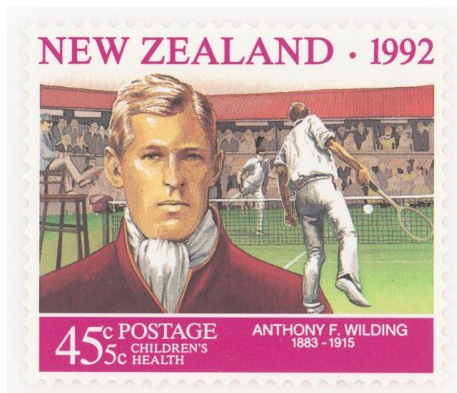


Fig. 23 (left) Wilding on a cigarette card of 1928). *Source: collectREA.com* Fig. 24 (right) Wilding on a 1992 New Zealand Health Stamp. *Source: Te Papa*

Wilding's great-niece, Anna Wilding, said this about him: "He was like a movie star, but on the tennis court. Tennis had never had anyone like that, with that combination of charm, decorum and adventure. Imagine the Great Gatsby era, but he was the real deal, the toast of society. He stayed with kings, queens and prime ministers."

The Wilding Foundation, set up in memory of Anthony Wilding, provides educational and/or advancement opportunities through scholarships. Also, Wilding Park has been the hub of tennis in Christchurch for a century.

Wilding is commemorated at the Witch Hill War Memorial, the Waltham Park Memorial Gates and the Anthony Wilding Retirement Village all in Christchurch, the New Zealand Sports Hall of Fame, and the International Tennis Hall of Fame in the USA. The premier New Zealand men's inter-association tennis trophy since 1921 has been the Wilding Shield. More recently Wilding was commemorated on the 45c stamp from the Health Stamp series of 1992 (Fig.24).

Given the number of tournaments Wilding won over his playing career the medals held by the Canterbury Museum are only a part of his total awards. Nevertheless, the museum's holdings of his early 20th century Wimbledon medals, his New Zealand Lawn Tennis Association medals, as well as his World Championship and Olympic medals, and a selection of his European medals make the collection a remarkable accumulation. The collection is an important part of New Zealand's numismatic heritage.

Acknowledgement

All the numismatic images in this article have been generously provided by the Canterbury Museum with the kind permission of the Wilding Foundation.

They Made Their Own Money: 75 years in retrospect

Vaughn Humberstone

The Canterbury branch of the Royal Numismatic Society of New Zealand was founded by L.J. Dale, with the inaugural meeting taking place on 1 December 1947. The upcoming centennial of the Canterbury province spurred on the members to undertake research into the issuers of Canterbury's tradesmen's tokens. At their third meeting on 22 April 1948 at the Canterbury Museum, a total of ten members of this fledgling branch society split up amongst themselves the task of researching the fifteen issues of Canterbury tokens. The resulting book, *They Made Their Own Money*, was 94 pages in length with 500 numbered copies printed by the Caxton Press, retailing at 12/6 (copies actually cost 8/- each to produce). It was intended that the book would be issued in the latter part of Canterbury's centennial year of 1950, but publication was delayed until early 1951. The front dust jacket of this book is shown in Fig. 1.

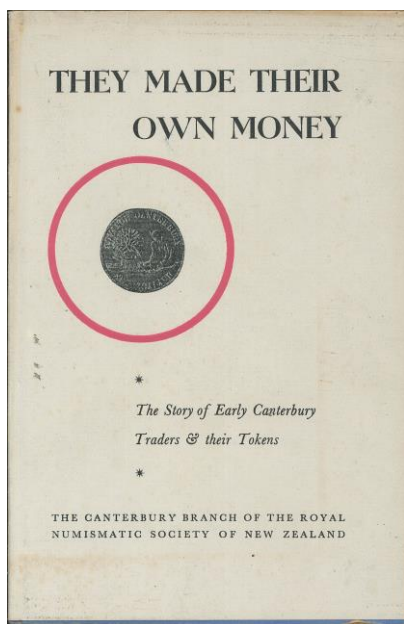


Fig. 1. The front of the dust jacket of *They Made Their Own Money*, with an illustration of the tokens of Edward Reece. Coincidentally, subsequent research has shown that Edward Reece was the first to issue tokens in Canterbury.

The first 150 copies were sold through the Canterbury branch, with the remaining 350 copies taken up by Whitcombe & Tombs booksellers (Fig. 2).

NEW BOOKS.

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THEY MADE THEIR OWN MONEY.

This is not a history of counterfeiters, but the story of Early Canterbury Traders and their Tokens. This emergency private coinage was issued in the 'sixties and seventies of the last century. Much of the material has never been published before, and adds a further chapter to the story of courage and resourcefulness of the early businessmen of the province. Fully illustrated and limited to 500 numbered copies, 350 of which are for sale.

THEY MADE THEIR OWN MONEY.

Price 12/6.

TWO OTHER IMPORTANT BOOKS.

C. E. Carrington—JOHN ROBERT GODLEY OF CANTERBURY. 17/6.

Charlotte Godley — LETTERS FROM EARLY NEW ZEALAND.

For all interested in the early history of the Province and of life in the early days, these two books are of the utmost importance. Readers of the "letters" are fortunate that permission to republish the privately printed volume was given, as originally they were for the Godley family only.

WHITCOMBE and TOMBS, LIMITED,
CASHEL STREET,
CHRISTCHURCH.
 And at
TIMARU.
AND ALL BOOKSELLERS.

Fig. 2. The advertisement from Whitcombe and Tombs appeared on the front page of *The Press*, 11 May 1951. The description provided of *They Made Their Own Money* was taken from the inside front flap of the dust jacket.

This article – at a distance of 75 years – analyses the research contained in *They Made Their Own Money*, briefly summarises the other numismatic achievements of its contributors, and places *They Made Their Own Money* into the context of subsequent research.

Rather fortuitously, when research was being compiled for *They Made Their Own Money*, eight of the fifteen token-issuing firms were either still trading, or their successors were still trading, and these firms all provided assistance. A newspaper article by branch secretary Shirley A. Lange (Trade Tokens Were Common in Old Days) appeared in the *Christchurch Star-Sun*, 7 May 1948, appealing to the public for information, and this resulted in further leads. E.R. Thomas and L.J. Dale were the editors of *They Made Their Own Money*. Information in the introduction was taken

from *New Zealand Memories* by B. Guthrie and *Numismatic History of New Zealand* by A. Sutherland. The Southern Provinces Almanac, trade and postal directories, and *The Press* newspaper were also used throughout the book.

As indicated in the Foreword, very little information was found on the UNION BAKERY COMPANY (research assigned to R.G. Bell), the ALLIANCE TEA COMPANY and Robert Thompson (L. Osborne), T.W. GOURLAY & CO (A.G. Barker) and GAISFORD & EDMONDS (H.T. Allen). No information was found on the firm of HOBDAY & JOBBERNS or either of the two partners, Henry S. Hobday or Daniel Jobberns (research assigned to S.A. Lange). Newspaper records show that all these firms except for Gourlay had a fairly brief period of existence, and none of them were taken over by a successor. No information was found on the firm of J. CARO & CO or the proprietor, Jacob Caro (research assigned to L.R. Denny). The successors to this firm, S. & H. Nashelski and Ashby, Berg & Co (still trading in 1950) were covered. A lot of this information was taken from *Industries of New Zealand 1898, Descriptive and Biographical*. Research on CLARKSON & TURNBULL was originally assigned to S.A. Lange but was later taken up by P. Watts Rule. P. Watts Rule was in partnership as architects with James Turnbull, son of Richard Turnbull. The firm and both partners, David Clarkson and Richard Turnbull, were covered. However, in a newspaper article that appeared in the *Christchurch Press*, 29 September 1956 (Three Pioneer Clarkson Families, Impact on Canterbury History), G.R. Macdonald points out that some of the biographical information on David Clarkson in *They Made Their Own Money* is factually incorrect. H.J. HALL and S. CLARKSON (research on both assigned to L.J. Dale) were both covered. MASON, STRUTHERS & CO and G.L. BEATH & CO were also covered (both assigned to E.R. Thomas). Both of these firms were still trading in 1950. Some of the information on G.L. Beath and his company was taken from *Who's Who in New Zealand*, 2nd edition, 1925, by G.H. Scholefield. Very little was found on Frederick Mason. This was possibly because Frederick Mason left for Australia in 1886, thus leaving behind fewer records. E. REECE (assigned to L.R. Denny) and PETERSEN'S JEWELLERS were two other firms still trading in 1950. Information on Edward Reece was obtained from the *Cyclopedia of New Zealand*. Research on Petersen's was undertaken by C.M. Robb, who was a managing director of this business. The biographical information on B.M. Petersen came from a letter written by his only child, Walter Lind Petersen, dated 28 February 1931 to E.E. Wiltshire, managing director of Petersen's Ltd. This letter was reproduced by Winsome Shepherd in 1995 (*Gold & Silversmithing in Nineteenth & Twentieth Century New Zealand*). Two firms whose successors were still trading in 1950 were WILLIAM PRATT'S DUNSTABLE HOUSE (now Ballantynes) and MILNER & THOMPSON (sold out to Chas Begg). Research on William Pratt was assigned to S.A. Lange. Pratt's book,

Colonial Experiences in New Zealand, is mentioned but not much information from it was used. The firm of Milner & Thompson was researched by H.T. Allen, but scant information on the issuers was given.

Fig. 3 shows the members of the Canterbury branch of the Royal Numismatic Society of New Zealand at the first annual meeting on 24 November 1948.



PLATE 1.

Members of the Canterbury Branch of the Royal Numismatic Society of New Zealand at the First Annual Meeting, 24th November, 1948.

Back Row: Messrs. C. Hitching, R. W. Bell, E. F. Harvey, L. Osborne and A. Barker.

Sitting: Miss E. R. Thomas, Mr. W. Salter, Miss S. A. Lange (Sec.-Treas.), Messrs. L. J. Dale (Chairman), F. D. Straw and N. Thomas.

Fig. 3. The photograph above appeared in the *New Zealand Numismatic Journal*, Vol. 5, No. 1, October-December 1948.

LEONARD J. DALE (1910-1975) served as president (1962-1963) and vice-president (1945-1962 & 1964-1966) of the RNSNZ. He founded the Canterbury branch of the RNSNZ and served as inaugural chairman (1947-1955), later serving as treasurer and trustee. In 1948 he was awarded a Fellowship by the Royal Numismatic Society in London. In 1949 he was a recipient of the Heath Literary Award for an article, *Biblical Numismatics*, published in the September 1948 edition of an American Numismatic Association magazine. L.J. Dale was awarded a Fellowship by the RNSNZ in 1951 and was appointed honorary numismatist to the Canterbury Museum. From at least 1947-1972 he was manager of the Christchurch Coin Company. Fig. 4 shows an advertisement from the Christchurch Coin Company advertising copies of *They Made Their Own Money*. Published articles included *Borneo – an outpost of civilization*

(NZNS, Vol. III, 1946), *The East India Company and its Coinage* (NZNJ, Vol. 4, No. 3, Jan-May 1948) and *Early Currencies in New Zealand* (NZNJ, Vol. 10, No. 4, July 1961).

RICHARD G. BELL served as chairman of the Canterbury branch of the RNSNZ (1959-1961), was a Council member of the RNSNZ (1961-1963) and vice-president (1963-1964). He was awarded a Fellowship in 1966. Published articles included *18th Century Masonic Tokens* (NZNJ, Vol. 9, No.4, Jan-June 1958), *Beauty Hidden – Information Concealed* (NZNJ, Vol. 9, No. 5, July-Dec 1958), *New Zealand Tradesmen's Tokens* (NZNJ, Vol. 10, No. 3, Feb 1961) and *They Knew J.W. Mears and T.S. Forsaith* (NZNJ, Vol. 11, No. 1, March 1963). The information on J.W. Mears was obtained from Mears' grandson, H.G. Redding, following a newspaper article that appeared in the *Evening Post*, 26 May 1961. However, this information was very brief and contained a number of errors. This information was used by A.F. Robb in his article on the Wellington token issuers (*Mintmark*, No. 121, May 1970). R.G. Bell was acknowledged by Dion H. Skinner for providing advice and assistance in the compilation of *Renniks New Zealand Coinage Guide 1965-1966*. He was also similarly acknowledged by Leon G. Morel in *Medallic Commemoratives of New Zealand 1865-1940*.

PERCY WATTS RULE (1889-1953) served as vice-president of the NZNS (1933-1948) and was awarded a Fellowship in 1948. He was on the committee responsible for the Royal Visit crown piece of 1949, as well as designing medals for the Timaru Fire Board and the NZ Brass Band Association. His collection of agricultural medals contained a number of specimens that were previously unrecorded. Published articles included *The designing of coins* (NZNS, Vol. II, 1936), *On designing a medal* (NZNS, Vol. III, 1941), *Of medals* (NZNJ, Vol. 6, No. 3, Sept 1951-Apr 1952) and *The beginnings of currency* (NZNJ, Vol. 6, No. 4, May-Sept 1952).

ALAN G. BARKER (1931-2025) served as chairman of the Canterbury branch of the RNSNZ (1962), vice-chairman (1956-1957) and secretary & treasurer (1958-1959). He was on the Council of the RNSNZ (1964-1965) and was awarded a Fellowship in 1967. For a number of years he was assistant numismatist to the Canterbury Museum. Published articles included *Lundy Island and its Coinage* (NZNJ, Vol. 5, No. 1, Oct-Dec 1948).

E.R. THOMAS served as vice-chairman of the Canterbury branch of the RNSNZ in 1950. Published articles included *Treasure Trove* (NZNJ, Vol. 4, No. 4, June-Aug 1948), *Strange Transactions* (NZNJ, Vol. 5, No. 2, Jan-June 1949) and *Coinage of the Isle of Man* (NZNJ, Vol. 6, No. 1, Mar-Aug 1950).

Christchurch Coin Company
(Incorporating the New Zealand Coin Exchange)
L. J. DALE (Manager)
487 Papanui Road, Christchurch
(Correspondence to P.O. Box 3, Papanui, New Zealand.)

INTERESTING NEW ZEALAND ITEMS:

CANTERBURY CENTENNIAL MEDALS, 1850-1950

Large 2-inch silver	£3 3 0
Large 2-inch bronze	12 6
Small 1½-inch gilt bronze	2 6

OTAGO CENTENNIAL MEDALS, 1848-1948

Large 2-inch bronze	12 6
Small gilt bronze	2 6
Otago Jubilee Medals, 1844-1908 white metal	1 6

BOOKS

Numismatic History of N.Z. (Allan Sutherland, 1940). Blue cloth bound volume of six parts dealing with barter and early coinages of N.Z., Medals, Tokens, Paper Money and all true N.Z. coinages. £4/12/6 (post paid).

They Made Their Own Money. New book published by Canterbury Branch of the R.N.S.N.Z., dealing with the Canterbury merchants who issued trade tokens (1857-1881). Full story of great interest to all New Zealand Token Collectors. Well produced and fully illustrated, issue limited to 500 numbered copies. 12/6 per copy. (Posted 12/10.)

**Free Monthly Numismatic Notes and Lists of Coins for
Sale on request.**

Fig. 4. This advertisement appeared on the back cover of the *New Zealand Numismatic Journal*, Vol. 6, No. 2, September 1950-August 1951.

SHIRLEY A. LANGE served as inaugural secretary & treasurer (1947-1950) of the Canterbury branch of the RNSNZ, and was vice-chairman in 1954.

H.T. ALLEN had published *The Hudson Bay Trading Company* (NZNJ, Vol. 4, No. 4, June-Aug 1948).

Although *They Made Their Own Money* has glaring omissions and some factually incorrect information, it represents a tremendous ambition and foresight by the Canterbury branch members. It is as good as can be expected given the research tools available at that time and set the benchmark for research in this field. Unfortunately, though, numismatists in other parts of New Zealand did not undertake equivalent research on the token issuers in their own towns. An update of *They Made Their Own Money* was planned. In *The Press*, 1 November 1969 (Traders'

Tokens, Information Sought), H.R. Sampson, president of the Canterbury branch, appealed to the public for information on the Alliance Tea Company, Gaisford & Edmonds and the Union Bakery. However, nothing came of this. In 1985 the Canterbury branch of the RNSNZ went into recess and was formally wound up in 2004. It wasn't until the completion of the 2022 edition of *Merchants Making Money* that anything approaching a full record of the Canterbury (and in fact New Zealand) token issuers was made. Condensed information from this manuscript appeared in the NZNJ, No. 102, December 2022 & No. 103, June 2023. However, information on George Edmonds of Gaisford & Edmonds still remains elusive.

Appendix

R.G. Bell gave the following account of his research associated with *They Made Their Own Money*:

"My mind goes back about ten years to a meeting of the Canterbury Branch, N.Z. Numismatic Society. The members were co-operating in the compilation of their book "They Made Their Own Money." The chairman invited those present to select one of the Christchurch issuers of tokens and endeavour to trace his history for publication. Ignorance is bliss. I selected "Union Bakery". What a task I had. Many hours were spent in fruitless search. The bakery undoubtedly existed, yet not a clue to its existence could be found." (NZNJ, Vol. 10, No. 3, Feb 1961, p. 79)

Abbreviations

NZNJ New Zealand Numismatic Journal, NZNS New Zealand Numismatic Society (before the 'Royal' designation was added in 1947), RNSNZ Royal Numismatic Society of New Zealand

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17, No. 1 (64), November 1985; No. 82, December 2004; No. 102, December 2022; No. 103, June 2023; No. 107, December 2025.

The Press, 1 November 1969, Traders' Tokens, Information Sought.

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Eccles Coins & Banknotes	Rotorua Stamps & Coins
Eccles Stamps, Coins & Postcards	Shades Stamp Shop
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Goldco International Ltd (Goldco Antique Buyers)	Spink New Zealand Representative c/o Aventine Numismatics
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