

## North York Coin Club

Founded 1960

MONTHLY MEETINGS 4TH Tuesday 7:30 P.M. AT
Edithvale Community Centre, 131 Finch Ave. W., North York M2N 2H8
MAIL ADDRESS: NORTH YORK COIN CLUB,
5261 Naskapi Court, Mississauga, ON L5R 2P4

Web site: www.northyorkcoinclub.com

#### Contact the Club:

E-mail: *info@northyorkcoinclub.com* Phone: 416-897-6684

#### Member:

Ontario Numismatic Association Royal Canadian Numismatic Assocation

President	Bill O'Brien
1st Vice President	Henry Nienhuis
2nd Vice President	
Secretary	Henry Nienhuis
Treasurer	Ben Boelens
Doct Drocidont	Nick Cowan

#### **Executive Committee**

Director	Roger Fox
Director	Paul Johnson
DI I	
Director	Andrew Silver
Junior Director	
Julio Director	
Δ	D: 1 D

Auction Manager	Paul Johnson
Editor	Paul Petch
Receptionist	Franco Farronato
Draw Prizes	Bill O'Brien
Social Convenor	Bill O'Brien

## THE BULLETIN FOR JANUARY 2016

#### PRESIDENT'S MESSAGE

Welcome again to all fellow numismatists and everyone receiving this monthly bulletin. We must also welcome in the year 2016, just one year before Canada's Sesquicentennial year. The planning of events is under way throughout the country to celebrate this event and the numismatic community is no different. It will be like the Centennial all over again.

That brings me around to the Centennial Collectors Club. We will be fortunate enough to have some its members attending our January meeting. In recognition of this, the Club's January meeting will be a show and tell, members' participation night, with an emphasis on items from 1967. So take a look through your collection and pick out a piece or two with a story attached and bring them to the meeting. Only through participation of ALL members are nights like this successful, so bring in a numismatic item to the meeting.

The next subject I would like to bring to the members' attention is that we have finalized our March 2016 meeting plans and we will be holding an auction evening as we did in March 2015.

We are asking club members to consign items ahead of time so that we can include the items in an auction list to be distributed with the March bulletin before the auction. This will assist you in choosing which items you may want to bid on. Please bring your items to the January or February meetings where they will be accepted for the March auction. More to come, so stay tuned.

You are reminded to pay your 2016 dues and to bring material for the March consignment auction!

The club has finalized the North York Coin Club's Annual Coin Show. It's been moved back slightly in the month this year to May 28th, but is still being held in the same place as all previous years in the banquet room at Edithvale Community Centre on Finch Ave. in North York. As with prior years we have 18 tables for sale and the price has been frozen at \$40 for the day. Doors open at 9:00 A.M. and close at 3:00. See the club's treasurer Ben to reserve your table now.

As mentioned above we are holding a show at the next meeting, in case you do not have any items to show there are various local shows where you can find that special something to bring to the meeting. On January 22 we have the UNIPEX show, right in our neighbourhood. The CAND show is in Hamilton January 30-31, Coin-A-Rama is being held in Oshawa on February 20th, and for those of you who want to get out of the GTA there is the SWON show in Paris on February 7th. The 2016 schedule is packed with high quality shows throughout the year so look over your want list and spend your money wisely. See our last page for a complete list of local shows, with places and dates and times.

A quick summary of the club's election, that was recently conducted, was that the incumbents for each position available won by acclamation. Not the way I would like to have seen things materialize, but not unexpected. The low level of member participation, with our club and most others, is always of concern for a club's executive and something I would like to see change. Be ready to participate at club meetings by educating yourself on items in your collection. Bring one along to a

## NEXT MEETING TUESDAY, JANUARY 26

We start gathering in the Banquet Room on the first floor of the Edithvale Community Centre, at 7:00 p.m. with meeting start scheduled for 7:30 p.m.

We are holding a member participation night at this meeting, so it is your chance to bring out a special collectible or two to share with the group. Brian Thomson, the President of the Canadian Centennial Collectors Club will be with us, so 1967 items are especially in order!

Please remember to bring your auction lots so we can have a really fine auction at this meeting. Also, we appreciate all donations to our supply of draw prize material.

meeting and share your knowledge with a little show and tell presentation. It's that easy.

Well that is about all the club news that I have to report this month but I would like to thank all those who came out and supported the club for our annual festive dinner in December. It's nice to get such a large group together for a friendly, holiday season dinner with a laid back atmosphere. Also I would like to thank those members who continuously support the club and its endeavours and are always willing to help out and participate.

Don't let the winter doldrums get you down, hit the Internet and books and get out, enjoy your hobby and prepare for our member participation night January 26<sup>th</sup>.

Until then, happy collecting

## Page 2 - January 2016 - North York Coin Club Bulletin

### **NEWS OF THE NOVEMBER 2015 MEETING**

The 616<sup>th</sup> meeting of the North York Coin Club was held on Tuesday, November 24, 2015 in the 1<sup>st</sup> floor Banquet Room at the Edithvale Community Centre. It was hammered to order at 7:35 P.M. with our President, Bill O'Brien, in the chair and 27 members and 3 guests in attendance.

Member Ben Boelens was present when his name was drawn to receive the on-time attendance draw prize of \$8.00. The draw will reset to \$2.00 for the January 26th meeting.

Bill asked members present if they had noticed any errors or omissions in the minutes of the October meeting as published in the November newsletter. No corrections were identified and so Arie Yark made a motion to accept the minutes, which was seconded Norman G. Gordon. Motion carried.

Ben Boelens, our treasurer, then gave a brief report on the club's financial status.

Bill reminded the members present that this is an election year. He asked our Nomination Committee chair, Dick Dunn, to report on the current status. Dick reported that he had contacted the majority of the current executive members who had agreed to continue serving in their current positions. Paul Johnson has agreed to run as a Director of the club.

Bill took a moment to report on his progress towards our annual Christmas dinner meeting. He confirmed the booking at the Tucker's Marketplace venue for December 8. The cost this year will be \$30 per person, which includes the all-you-can-eat buffet and a beverage of your choice; taxes and gratuities included. He also mentioned that the restaurant was on the TTC #112 (West Mall) route for those members who would like to take public transit. Ben is continuing to accept money for the event. Ben added that he is also collecting club dues for 2016 at the same time.

Finally, Bill showed the postcards that Paul Petch had designed to advertise the May  $28^{\text{th}}$  Coin Show. He asked members who would be visiting coin shows over the next few months to take a bundle to distribute there.

With the business portion complete we then moved on to showand-tell. Hezi Shami was first to talk about an item that he had collected over 65-years ago which he had recently rediscovered that he now considers the corner stone of his collection. Hezi participated in the 1960 epic film *Exudos*, by producer Otto Preminger dealing with the creation of the state of Israel, as an extra. Hezi recalled that the Israeli government considered the movie so important that they sponsored a lottery to choose 10,000 citizens who would be given the opportunity to be in the film. Hezi's prize was a memento of his participation in the filming that he had managed to keep.

Arie Yark passed around a rare £2 stamp from Britain and Jared Stapleton showed an ancient Greek silver tetradrachm struck in the Greek colony of Messina (Sicily) between 425 and 396 BCE.

Our featured speaker for the evening was member Henry Nienhuis. Henry's presentation was a detailed introduction to Canadian decimal coin grading which he had originally written for the Etobicoke-Mississauga club. The PowerPoint presentation included an introduction to the scale that is used and was supported by detailed images of coins representing the various grade levels of circulated coins.

Bill then called for our customary refreshment break from  $8:00-8:15\ \text{P.M.}$ 

The next order of business was the regular club auction and lucky draw. Dick Dunn served as our Auctioneer. Lucky draw numbers were called at various times while the auction took place. Lucky draw winners for the evening were- Franco Farronato (3), Andrew Silver, Vince Chiappino, Phillip Simms, Henry Nienhuis, Arie Yark, Tony Hine (2), David Bawcutt and David Quinlan. The club earned \$25.00 through the sale of the draw tickets! Our acting auction manager, Paul Johnson, reported that receipts from the auction added \$16.85 to the club coffers, which included \$3.50 from donated items.

There being no further business, the meeting adjourned at 9:00 P.M.

The club executive would like to thank members for supporting the club through the purchase of draw tickets and draw prize donations. Please consider supporting your club through a donation of numismatic material or other items. (Don't forget to mention your donations to the club secretary so that your support can be recognized in the minutes and newsletter.)

Our next regular meeting will take place on Tuesday, December 8, 2015, at the Tucker's Marketplace located at 15 Carlson Court, Etobicoke, near Dixon Rd. See the flyer for further details.

#### WANT TO TRADE WORLD COINS?

I am looking to exchange duplicate world coins with other collectors. So far I have had some good experiences trading coins. Please contact me at my e-mail address boelens 40@gmail.com or at 905-890-9484.

**WANTED:** A North York Coin Club formation medal in bronze dated 1960 with Lady Justice and North York coat of arms on the reverse. Please contact Paul Petch at p.petch@rogers.com or phone 416-303-4417.



#### North York Coin Club Bulletin – January 2016 – Page 3

## **News of the December 2015 Meeting**

The 617th meeting of the North York Coin Club was held on Tuesday, December 8, 2015 at Tucker's Marketplace, 15 Carlson Court, Etobicoke, Ontario. It was an informal festive meeting that got underway just after 6:00 p.m. with 41 members and guests joining in the

Highlights of the evening, besides the wonderful Tucker's buffet and attentive, friendly staff, were a great gift exchange, an exceptional lucky draw with \$98 in tickets sold and a 50-50 draw with \$70 won by Marion Argentino.

We would enjoy more frequent meetings such as this at Tucker's, except they only offer their \$30 all-in pricing during the holiday season.





Mark Argentino keeps the gift exchange going







Len Kuenzie chats with Hayden Stapleton



Sylvia and Ben Boelens



and a Santa hat!



Marion Argentino wins the 50-50 draw



Thank you Henry Nienhuis for all the great pictures

## BITCOIN-LIKE MINTCHIP ACQUIRED BY CANADA'S NANOPAY

## by Roger Aitken, Contibutor to Forbes / Investor on the Internet

This is the fourth article on MintChip to appear in *The Bulletin*. The call for MintChip development by the Royal Canadian Mint appeared in April 2012. Then, in November 2012, there was a follow-up story relating the features of MintChip to Bitcoin. Most recently, two years ago in January 2014, we reported on a live demonstration of MintChip in operation and the promise of further internal testing at the Royal Canadian Mint. This time out we learn



that RCM has decided MintChip is not for them and has sold it off to a Toronto company called nanoPay. The Mint confirmed this action in a press release on January 12 and the following article appeared in Forbes on the same day.

Roger Aitken writes about financial markets, exchanges, IT and trading technology. Opinions expressed by Forbes Contributors are their own.

nanoPay Corporation, a loyalty and payment platform tech startup in Toronto, has acquired all the assets related to MintChip, a fledgling digital currency developed by the Royal Canadian Mint (RCM), which has been in the coin making business for over 100 years, and likened to Bitcoin – but backed originally by the Canadian dollar. Plans are now afoot to commercialize the technology during 2016 under the new custodians.

Discussions between the parties are understood to have taken the best part of a year, with the transaction's consideration remaining undisclosed. The divestiture process, which was run by Origin Merchant Partners, an independent investment bank that provides corporate finance, M&A and merchant banking services, included three rounds of interested parties numbering 10 companies. nanoPay eventually won through to the final round where they had a period of exclusivity to negotiate the detailed terms.

As a digital payment technology with many of the attributes of cash, MintChip was initially developed by the RCM in around April 2012 and as a fiat alternative to Bitcoin – then being billed as a digital currency stored on a microSD card. And, the Mint even ran a competition offering coins and gold bars worth \$50,000 for tech boffins to create applications using the MintChip.

nanoPay, which also has a presence in San Francisco is headed up by Laurence Cooke, Chief Executive Officer (CEO), has developed a mobile-payment offering that is similar to the Apple Pay, a mobile payment and digital wallet allowing users to make payment with their iPhone 6, 6 Plus, Apple Watch or iPad.

It's important though to note that the difference between MintChip and Apple Pay, is that the former is a digital currency while the latter is an application that customers can use to buy goods and services in-store and online by using a digital representation of their existing credit, debit and/or gift cards from their Apple device.

The technology behind MintChip, which allows anonymous transactions backed by the Canadian government and is denominated in a variety of currencies, enables consumers and merchants to



"exchange value faster, safer and at a fraction of the cost" of other digital payment alternatives available today.

While currently focused on fiat (government-backed) currencies, in theory, MintChip can support an unlimited number of currencies. Initially they are launching in Canada (CAD) followed by the US (USD) and UK (GBP). But in the fullness of time Cooke indicates that they "hope to be in all currencies."

#### Low Transaction Fees

Per transaction fees using MintChip will be fixed – not a percentage – and a fraction of today's lowest alternative. nanoPay's Cooke commenting on the cost aspect of using nanoPay says: "We will ensure that we are always the cheapest and easiest way to pay for anything. And, we can do this because the marginal cost of a transaction is nearly zero." Retail fixed fees will be less than half the nearest alternative and online payments could be as low as 1/100c for a 1c transaction, he says.

Prior to the MintChip prototype being unveiled back in September 2014, the RCM had contacted payment solutions provider Ingenico in 2013 with a request for them to develop the coding needed to house MintChip inside a wireless point-of-sales (POS) terminal.

The solution, which was presented at the National Retail Federation's Annual Convention in New York back in January 2014, effectively allowed users to utilize the service online at a physical store location or even as part of a 'Peer-to-Peer' (P2P) transaction and via their smartphone device.

But the Mint's experiment appears not to have been without a few issues. By April 2014 it had revealed that it was halting developments around its digital currency for use with small online payment (i.e. \$10 or less) and was examining plans to sell it onto the private sector. And, this came just a few months before it had reached an agreement with SecureKey Technologies to enhance the security aspects around MintChip.



Touted as being "unique" in its field as a 'regulator-friendly' digital cash platform, today it is nevertheless able to support compliance of regulatory standards, including anti-money laundering (AML) and know your customer (KYC) rules. Transactions via MintChip are private, secure and enable frictionless retail, ecommerce and B2B payments.

MintChip uses secure asset stores to move funds, which can be denominated in any recognized national currency, between parties without an intermediary and can process transactions both online and offline.

This is claimed to reduce the cost and risk of financial transactions by enabling real-time settlement with no recourse and non-repudiation. With other payment instruments such as credit cards, consumers could claim they had not agreed to a transaction, that their card was used without their consent or that it was not them that had actually initiated a transaction. This repudiation is not possible with MintChip, because the ecosystem knows who initiates and receives value transfers.

Bob Zintel, Senior Director, Finance at The Royal Canadian Mint in Toronto, commenting in a press communiqué this Tuesday stated: "This transaction, which was conducted through an open, transparent divestiture process, allows MintChip to move to its natural next step of commercialization in the private sector." He added: "Canadians can now look forward to the evolution of MintChip as nanoPay explores the full potential of this digital payment technology in the global marketplace."

## A Digital Cash Future For Consumers

Cooke, who founded nanoPay in 2012 and possesses an MBA from the London Business School, commenting said: "Digital currency is inevitable and our newly-acquired MintChip platform delivers a digital cash future to consumers, businesses and governments today."

The former Chief Operating Officer of Bell Mobility and Bell Distribution Inc., where he was responsible for all wireless operations and all retail for Bell Canada, Cooke added: "Digital cash will transform payments globally, from the unbanked to the largest financial institutions, and MintChip will help easily transition to the reality of cashless payments."

MintChip's platform (1.0 version) was successfully tested by the Mint in a six-month internal trial by the RCM and has been granted five digital currency patents, with another five applications being in process – all of which are in included the acquisition – with the full gamut of 10 patents expected to be approved according to Cooke.

The platform, which is now live and processing transactions as from today, will according to the nanoPay executive be commercially deployed and launched in the next few weeks. Cooke reveals further that the firm intends to offer mobile apps on Android and iPhone devices later this January.

As to the full potential of this digital payment technology, he adds that the platform will initially be used for consumer P2P, retail and online payments. But it also works well for business to business (B2B) payments, loyalty programs, Government or insurance payments and eventually for other assets, which could include stocks or bonds.

#### Recommended by Forbes

Specifically, parties transacting via MintChip can transfer money from a chosen bank account to a nanoPay app and make payment for products and other services by placing their mobile phones by a cash register using so-called near-field communication (NFC). This establishes communication between two electronic devices (one usually a portable device like a smartphone) when they are within 4 inches (10cm) of each other.

## Expanding Partnerships & Beyond Canada

nanoPay is now focused on expanding partnerships with central banks, commercial banks, telcos, acquirers, retailers, as well as developers and POS providers that will further expand the utility and acceptance of MintChip. To begin with the MintChip app will process payments in Canadian dollars, but it is understood that moves are in the pipeline to support payments in more currencies later in 2016. And, plans into other territories outside Canada are on the cards too.

Cooke indicates that they expect to "enter the US and UK" this year. "We will expand into mainland Europe and other countries based on the success in these markets. And, we would like to be the globe's digital cash platform, partnering with central banks, retailers, telecos and banks globally." Indeed, a number of Canadian retailers — as yet undisclosed — will support transactions via MintChip according to the executive.

It will certainly be interesting to see nanoPay's progress going forward in terms of how they utilize and leverage the technology behind MintChip to process cash payments through secure transactions and gain user traction and buy-in.

The platform is significantly more sophisticated than back in the early days of the 'MintChip Challenge', while nanoPay are continuing the development process with MintChip version 2.0 of the platform and making it significantly more scalable.

## How To Do Numismatic Research

## by Dick Johnson in the January 10, 2016 issue of the E-Sylum on the Internet

What does it take to be a numismatic researcher? Time. Money. Drive. Resolve. In time you will have to add Experience and Knowledge. This was brought to mind this week in Harry Waterson's report to the board of the Central States Numismatic Society (CSNS), which had awarded him a \$3.333.33 research grant last year. A condensed version of his 14-page report appeared in the Winter 2015-2016 issue the Society's publication, The Centinel.



Julio Kilenyi

In 2001 Harry found an interest in the medals of the American sculptor Julio Kilenyi (1885-1959) and began building a collection of the artist's medallic work. From a specialized topic the acquisitions led to a compelling desire to learn more about the artist, his life, his other artistic creations, in addition to more details about the medals in his collections.

This should be the goal of every specialized collector! Medals are ideal for this numismatic research as far too little is known about this area of numismatics. Researchers and writers can make the greatest contribution to the numismatic field by the pursuit to learn the background and lore of every medal of prominence in their collection. Every medal has a story to tell!

Harry took his burning collector's desire to an elevated numismatic level. He would write a book on Kilenyi through the story of his medallic creations.

To accomplish this he began gathering details of Kilenyi's life and works. From this he identified where he must dig for more information: museums which held Kilenyi's medals, companies which produced them, institutions which had awarded medals Kilenyi created, libraries with possible archives on the Wright Brothers, 1953, by Kilenyi artist or his medallic subjects, family records.

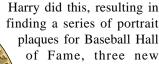
With extensive emails and phone calls to curators, librarians, archivists and organizations' media departments, he compiled a list of where he must visit to carry out his research. Hitting the books was also fruitful; he made liberal use of interlibrary loan.

With his CSNS grant in hand he could plan a trip to visit each of these in one massive circuit. His itinerary took shape with stops in 60 locations in 25 different cities. This was to take place over 33 days, driving 4,050 miles. An astonishing accomplishment, this was indeed the "Great Road Trip" as Gerry Tebben called it.

A researcher must go to where the information is located. Librarians, curators and archivists can help.—Their duty is to serve researchers and the public. — but they cannot do the searching for you. They can guide you to their resources and make suggestions, but researchers must expect to search documents, correspondence, photographs, microfilm,

whatever is contained in those holdings.

The "Drive" mentioned above can be interpreted in two ways. Expect to drive a lot, traveling to locations. It also e a n Determination, stamina for sometimes long hours looking, searching, seeking and the will to do it.



medals he had not known previously, others he had never seen before, new medal varieties, observing medals for two U.S. presidents and lots and lots

of facts.

While Harry Waterson's research trip was exceptional for the

length of time and the number of locations, it exemplifies the extent a researcher must go to gather information.

Time. Money. Drive. Resolve. It requires all four. As might be expected this must be worked into your life schedule. If you are retired this is ideal. If you are an educator with three months free time in a school schedule, this is ideal. If you can do this during your vacation time, this is ideal.

However, you must consider all four requirements to satisfy that burning desire within you to learn more about those objects in your collection.

I want to encourage all serious collectors to do numismatic research. I will help where I can. I cannot tell who collects a special topic, but I often know who is researching a series. Perhaps you could join forces if you chose the same topic, or you can pick a new subject. With experience like he has I am sure Harry could make useful suggestions as well.



World's Fair, 1939, by Kilenyi

# CANADA'S 2016 COLLECTOR SILVER DOLLAR FEATURES 150<sup>th</sup> Anniversary of the transatlantic telegraph cable

We live in an era in which instant global communication is at our fingertips; at any given time, we can monitor news events as they unfold, follow the rise and fall of commodity prices around the world or connect with friends and family across the globe. It's hard to imagine distance as a barrier to the exchange of ideas; but until the mid-19th century, a message sent from New York to London could only be relayed as quickly as the ship it sailed on, and "breaking news" from afar could be several weeks old.

Telegraphy had sped up communication over land, yet oceans still stood as immense, silent barriers — that is, until the successful completion of a permanent transatlantic telegraph cable on July 27, 1866. This watershed moment finally provided an enduring communication link between the Old World and the New, and made Newfoundland a vital gateway to a world that had suddenly become more accessible!

The 2016 collector 99.99% pure silver dollar commemorates the 150th anniversary of that transatlantic telegraph cable, which revolutionized communications while transforming Newfoundland into an international communication hub. This is the 57th issue in the RCMs series of proof fine silver dollar coins with 20,000 specimens struck. The brilliant uncirculated fine silver dollar will not be made this year.

Designed by Canadian marine artist Yves Bérubé, the coin features a starboard side view of S.S. Great Eastern as the iron steamship rests in the harbour of Heart's Content.

Newfoundland. The Great Eastern easily dwarfs a local gaff-rigged fishing boat (known as a Jack Boat) off her bow, while her four funnels and six masts rise up to fill the upper portion of the reverse. In the background, the picturesque fishing village and the rolling hills that surround Trinity Bay are a welcome sight, signalling the

end of one journey for the crew after

spending weeks laying the transatlantic

cable along the North Atlantic seabed. This historic cable linking Heart's Content to Valentia Island, Ireland, is illustrated on the map element that fills reverse's lower portion. Fittingly, the cable itself is represented on the map.

- The transatlantic cable was the result of multiple attempts, from 1857 to 1866. By the early 1850s, a submerged cable was successfully transmitting telegraph messages across the English Channel and had inspired the idea of a possible transatlantic link. Buoyed by oceanographic reports of a flat plateau in the Atlantic Ocean that was perfect for laying a cable, funds and support for the project were sought from investors and governments on both sides of the Atlantic.
- Since Newfoundland presented the ideal location for the transatlantic cable's western terminus, telegraph wires were quickly laid over land

and across Cabot Strait to connect the island to the wires over the mainland. Soon, all was in place — save the transatlantic cable itself. A first attempt came in 1857, but proved unsuccessful when the cable broke. Another attempt in 1858 called for two ships to meet in the mid-Atlantic, where the cable would be spliced together and laid by one ship sailing east and the other sailing west. Despite more failed attempts, a cable link was completed in August 1858, and the first message received seemed to indicate that "Europe and America are united by telegraphy;" however, it proved to be short-lived as the cable failed on September 3 under a high voltage charge.

- In 1865, another attempt was made but with a single ship that would lay the cable in just one trip across the Atlantic. The largest vessel at the time of her launch, the iron steamship S.S. *Great Eastern* was outfitted to hold the giant coils of cable that would cover the distance between Foilhummerum Bay on Valentia Island and Heart's Content, Newfoundland. Sadly, the cable snapped once more and it too was lost to the ocean depths. The following year's attempt would prove to be much more successful and on July 27, 1866, *Great Eastern* triumphantly steamed into Newfoundland's Trinity Bay, where the cable was pulled ashore at Heart's Content.
- History was made as the transatlantic telegraph cable was fully operational, and a second cable was in place shortly after, when the Great Eastern successfully retrieved and completed the 1865 cable. It was all a remarkable lesson in perseverance, but the cable succeeded in establishing a communication link that has remained unbroken.
- The first cables were run between Ireland and Bull Arm, Newfoundland, with the final cable moving to Heart's Content.
- The first transatlantic telegraph was sent in 1858 when Queen Victoria sent a congratulatory message to the President of the United States, James Buchanan; this first attempt had such poor reception that it took over 16 hours to transmit the message!
- Until the cable was in place, some North American newspapers
  would use an unusual method to receive European news faster:
  steamships passing near Cape Race, Newfoundland, would toss
  over a barrel of news and messages into the sea and a boat would
  recover it in order to forward the news over the Cabot Strait telegraph
  wire; news items received this way would be printed with the by-line
  "Via Cape Race."



Newfoundland 8-Cent 1931 definitive stamp "Heart's Content"

# THE PURCHASING POWER OF ANCIENT COINS WHAT WERE THEY WORTH?

## by Mike Markowitz from CoinWeek November 17, 2015 on the Internet

Throughout the history of coinage two contradictory concepts have competed with each other. According to one concept, a coin is a piece of precious metal whose value is essentially equivalent to the value of the bullion from which it was made, and the stamp on its face is merely a guarantee that it has (or had when minted) a particular weight and purity. According to another, a coin is a token whose value depends entirely on people's willingness to accept it in exchange for other items. Its weight and fineness are of no intrinsic interest, except for the fact that if a coin is too valuable people will be tempted to melt it down for bullion.

#### —David Schaps, "What Was Money in Ancient Greece?" 1

One of the most frequently asked questions that classical numismatists encounter is "What was this ancient coin worth back then?"

A meaningful answer must usually begin: "It's complicated." A more complete answer might include "It depends . . . "

In our global economy, where almost everything is instantly convertible into cash, we can state precise exchange rates: one US dollar is worth 0.87 euro or 0.95 Swiss francs, or 0.65 British pounds<sup>2</sup>. But what is today's value of a US dollar in terms of ancient Athenian *drachmai*, or ancient Roman *sestertii?* When an ancient Roman had a silver denarius in his purse<sup>3</sup>, what could he buy with it? Ancient economies did not work like modern ones, and ancient writers, almost all slave-owning aristocrats who belonged to privileged elites, rarely wrote about the vulgar topic of money.

#### **Bullion Equivalent Value**

Ancient coins, like medals in the modern Olympic games, come in gold, silver and bronze. Can't we simply express equivalent ancient and modern values in terms of precious metal? Gold closed this week at US\$1,142 per Troy ounce<sup>4</sup>, so a 7.0-gram ancient Greek gold stater from the time of **Alexander the Great** (died 323 BCE) represents a bullion value of \$262.87. An 8.18-gram Roman gold aureus from the time of **Julius Caesar** (died 44 BCE) would contain gold worth \$307.18.

The spot price of silver is \$15.55 per Troy ounce<sup>5</sup>. At this price, the silver in an Athenian tetradrachm (the most important trade coin in the Mediterranean world of the fifth century BCE) would be worth \$8.60, and a denarius of the Roman Republic from the time of Julius Caesar would be worth about \$2 (these coins were nearly pure silver; modern silver coins are typically alloyed with

But "bullion equivalent value" is a very shaky basis for comparing buying power across the centuries. We are comparing gold that was mined with slave labor and refined in charcoal-fired furnaces to gold that is mined with huge diesel-powered shovels and refined with modern physical and

about 10% copper for improved wear resistance).

chemical methods. In the ancient world, copper alloys (bronze and brass) formed tools, weapons, statues, cooking vessels and countless other non-coinage uses. In our world, copper is a commodity used mainly for electric wiring<sup>6</sup>.

#### **Labor Equivalent Value**

We know from many sources that a silver drachma or denarius was a typical day's minimum wage for a manual worker. Taking today's US\$7.25 minimum hourly wage for comparison, a day's labor would be worth \$587. Keep in mind that when we compare labor equivalent values across the centuries, we are comparing an ancient world where muscle power was a primary energy source, to a modern world largely powered by engines, motors and data networks. In our world a small and diminishing number of farmers can each feed themselves and over 50 others8. In the ancient world, most workers were farmers and they struggled to feed themselves and a few others.

## Soldier's Pay

Another way of thinking about labor equivalent is soldier's pay—one of the most important items in the budget of ancient empires. In the fourth century BCE, Greek *hoplites* (armored infantry) typically received a drachma per day (sometimes supplemented by another drachma to pay for a servant while on campaign)<sup>9</sup>. Computed as an annual salary, this represents about 1,540 grams of silver or, converted into gold at the typical ancient 15:1 rate, 103 g of gold (about three-and-a-third troy ounces).

Roman soldiers were paid 225 denarii per year, beginning in the first century BCE and continuing until the reign of the emperor **Domitian** (ruled 81-96 CE), who raised the rate to 300 denarii. That would represent about 972 grams of silver or 64.8 grams of gold (a bit over two troy ounces).

Now consider a modern soldier's pay. A US Army E-2 with less than two years service earns a base pay of \$20,808¹°. That would buy over 40 kilograms of silver, or about 555 grams (18.2 troy ounces) of gold at current rates. So in terms of the gold standard, Americans value a foot soldier more than five times as highly as ancient Greeks, and more than eight times as much as ancient Romans did.

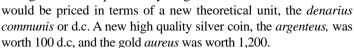


#### North York Coin Club Bulletin - January 2016 - Page 9

#### **Diocletian's Price Edict**

A failed Roman imperial experiment in price controls in the early fourth century CE gives us a remarkably detailed snapshot of what money was worth, at least "officially."

The runaway inflation of the anarchic late third century had ruined the Roman people's trust in their increasingly debased currency. The economy was a mess. **Diocletian**, a tough military commander, thought he could simply issue orders to make wages and prices fall into line throughout the Empire. Everything





On surviving fragments of the "Edict on M a x i m u m Prices"" we have prices for over a t h o u s a n d different services and commodities. Laborers earned 25 d.c. per day. A barber was paid 2 d.c. per haircut. A lawyer could charge 1,000 for

pleading a case. Including various benefits and subsidies, the annual salary for a legionary soldier was 15,400 d.c., and a member of the Praetorian Guard got 19,100.

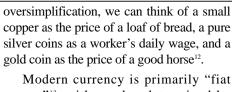
Wheat sold for 100 d.c. per *modius* (a measuring bucket that held about eight liters or two gallons, enough to make 20 one-pound loaves of bread) Meat was sold by the Roman pound or *libra* of 12 ounces (326 grams): pork and lamb for 12 d.c.; beef for 8; high-quality saltwater fish for 25; chicken (a luxury!) for 60.

Clothing was costly. A soldier's tunic cost 75; his boots, 100. A good cloak cost 500. The highest priced item on record is purple silk, reserved for the Imperial household, at 150,000 dc per pound. This was also the price of a lion, if you happened to be in the market for one.

Diocletian decreed the death penalty for sellers *and* buyers who violated his maximums.

It didn't work, of course. Unenforceable, within a few years the edict was ignored, and the engraved stone tablets set up in the markets were recycled as building blocks — which is how the text survived.

Ancient economies were largely "bimetallic." Elites used gold coin, for purchases of luxury goods, property, and slaves. Silver coin typically circulated for the payment of wages, and bronze token coinage circulated for the purchase of daily necessities. At the risk of



Modern currency is primarily "fiat money" with a value determined by government, while ancient money was largely "commodity money," with values determined by the supply and demand of precious metals.

#### **Notes**

- <sup>1</sup> The Monetary Systems of the Greeks and Romans. W.V. Harris, ed. Oxford (2008).
- <sup>2</sup> Posted rates as of 14 October 2015.
- <sup>3</sup> Ancient garments did not have pockets. You typically kept your coins in a leather pouch, tucked into your belt.
- <sup>4</sup> One Troy ounce is 31.103 grams.
- <sup>5</sup> Bullion prices as of the close of business on Friday, 30 October 2015.
- On the London Metal Exchange, the price of copper was \$5,135 per tonne on 30 October 2015.
- Ancient laborers probably worked more than an eight-hour day. The duration of the workday varied seasonally, according to the available daylight.
- 8 Less than two percent of the US population is employed in agriculture.
- A hoplite was expected to provide his own armor and weapons, at a cost of 300 to 500 drachmai, but if he survived these would last for many years. In an era of relatively static technology, military equipment was often passed down from father to son.
- <sup>10</sup> In practice this is usually increased significantly by various allowances such as housing.
- 11 https://en.wikipedia.org/wiki/Edict\_on\_Maximum\_Prices
- Bucephalus, the famous horse tamed and ridden by Alexander the Great, cost 13 *talents*, equivalent to 78,000 silver drachmai. The highest price on record for a modern horse is US\$16 million.
- <sup>13</sup> This has nothing to do with the Italian car: https://en.wikipedia.org/wiki/Fiat\_money.

#### References

- 1. Dalka, Mike. "What Things Cost in Ancient Rome."
  Online at Ancient Coins for Education:
  <a href="http://ancientcoinsforeducation.org/content/view/79/98/">http://ancientcoinsforeducation.org/content/view/79/98/</a>
- 2. Ferguson, Niall. *The Ascent of Money: A Financial History of the World.* Penguin (2008)
- 3. Finley, Moses. The Ancient Economy. California (1973)
- 4. Graser, E.R., "A text and translation of the Edict of Diocletian," *An Economic Survey of Ancient Rome Volume V: Rome and Italy of the Empire (1st ed.)*. T. Frank, ed. Baltimore: (1940)
- 5. Harl, Kenneth. *Coinage in the Roman Economy: 300 BC to AD 700.* Johns Hopkins (1996)
- 6. Hendin, David. Guide to Biblical Coins, 5th ed. Amphora (2010)
- 7. Schaps, David. "What Was Money in Ancient Greece?," *The Monetary Systems of the Greeks and Romans*. W.V. Harris, ed. Oxford (2008).

## COMING EVENTS FOR WINTER & SPRING 2016

Jan. 22 – 24, Downsview, UNIPEX 2016 Stamp & Coin Show, Montecassino Hotel, 3710 Chesswood Drive New location, One grand hall!!! Combining both stamp and coin dealers together, so collectors can come buy and sell their collection or search for more. Everything from stamps, coins, medals, first day covers, catalogues, accessories, and much more. For more information contact Susan Cartini, email unitrade@rogers.com, telephone 416.242.5900. Website: www.unitrade.com

Jan. 30 – 31, Hamilton, CAND Annual Show, Sheraton Hamilton Hotel, 116 King Street West *The Canadian Association of Numismatic Dealers annual show, featuring dealers from across Canada. Show pass \$60 good for Friday dealer set-up, Saturday and Sunday.* For more information contact Tom Kennedy, email *cand@cogeco.ca*, telephone 519-271-8825. Website: cand.org

Feb. 7. Paris. S.W.O.N. (South Western Ontario Numismatics Coin & Collectables show), Paris Fairgrounds, 139 Silver Street. Hours 9 a.m. to 4 p.m. Over 55 tables of coins, paper money, military & more. We have 35 dealers plus a kids' table for the young collectors. Hot & cold food and drinks are available at the show. Buy, sell, & appraise at show. For more information contact Ted Bailey, email tedscollectables@bellnet.ca, telephone 519-442-3474 or 1-866-747-2646. Feb. 20, Oshawa, COIN-A-RAMA, Five Points Mall, 285 Taunton Rd E. COIN-A-RAMA, at Five Points Mall, 285 Taunton Rd E. at Ritson. Hours: 9:30 a.m. to 5 p.m. Free dealer and membership draws, plus new hourly public draws, free admission, featuring paper, coins, tokens, medals, books & supplies and many other items. So come out and look for that special item for your collection or for a gift. I am sure you'll find what you need. For more information contact Sharon, email papman@bell.net, telephone 905-728-1352. Website: www.oshawacoinclub.ca

Feb. 27 – 28, Toronto, TOREX – Canada's National Coin Show, Hyatt Regency Toronto on King, 370 King St. W. Featuring Canada's finest dealers in Canadian, ancient, and foreign coins, paper money, coin and paper money supplies and reference books. TOREX, a great place to buy, sell, trade and evaluate your coins! Official auctioneer: The Canadian Numismatic Company. For more information contact Brian Smith, email brian@torex.net, telephone 416-705-5348. Website: http://www.torex.net

Mar. 5 – 6, Mississauga, Mississauga 13th Annual Coin & Stamp Show, John Paul II Polish Cultural Centre, 4300 Cawthra Rd. Hours: 9 a.m. to 4 p.m. Over 30 dealers & 60 dealer tables. Canadian and world coins, banknotes, stamps and supplies. Buy, sell, trade, appraise. For more information contact Les Plonka, email leszekp@rogers.com, telephone 416-505-7999. Website: www.troyakclub.com

Mar. 11 – 13, Montreal, QC, Nuphilex, Complex EVO, 420 Sherbooke St. West Admission \$3 Friday and Saturday, free Sunday, early bird admission \$25, beginning Friday 8 a.m. (to be donated to Quebec Autism Society and Miriam Home). Hours: Fri. and Sat. 10 a.m. to 5 p.m.; Sun. 10 a.m. to 4 p.m. Auction by Lower Canada Auction. Contact Emmanuel, montrealnuphilex@gmail.com, telephone 514-889-7740. Website: www.nuphilex.com

Mar. 19, Cambridge, 25th Annual Cambridge Coin Show, Cambridge Newfoundland Club, 1500 Dunbar Rd. Hours: 9 a.m. to 4 p.m. Free admission. Buy, sell, trade, evaluate. Coins, paper money, gold, silver, tokens, trade dollars, Canadian Tire money, militaria. A portion of the proceeds will be donated to a local charitable organization. Contact Ben Dettweiler, email coinshow@waterloocoinsociety.com, telephone 519-807-1881. Website: http://waterloocoinsociety.com

Apr. 8 – 10, Kitchener, Ontario Numismatic Association's 54th Annual Coin Show & Convention, Holiday Inn and Conference Centre, 30 Fairway Rd. South. Open to the public Saturday 10 a.m. to 5 p.m. & Sunday 10 a.m. to 4 p.m. Admission \$3, 16 years and under free when accompanied by adult. Special 3-day Bourse Passes only \$15. Over 50 dealer tables, awards banquet, educational symposium, exhibits, R.C.N.A. Coin Kids table, specialty club meetings and much more. Reserve your rooms no later than March 7, 2016 by calling 519-893-1211 or 1-866-375-8240 and ask for the Ontario Numismatic Association block to get the special Convention rate. For more information contact Robb McPherson, email president@the-ona.ca, telephone 519.577-7206. Website: http://www.the-ona.ca/2016.php

Apr. 3, Chatham, Kent Coin Club Spring Coin Show, The Active Lifestyle Center, 20 Merritt Ave Hours: 10 a.m. to 4 p.m. Free admission and parking. Free token or foreign coin to all children entering the show complements of the Kent Coin Club. 25 dealer tables (coins and paper money for all interests). Food available on site for purchase. Hourly draws and a raffle. For more information contact Lou Wagenaer (President Kent Coin Club), telephone 519-352-5477.

Apr. 22 – 23, Toronto, Toronto Coin Expo, Toronto Reference Library, 789 Yonge St., 2nd Floor. Hours: Fri. and Sat. 10 a.m. to 5 p.m. Admission \$6, under 16 free. This is a great venue in Canada to buy, sell & trade. Appraisals with internationally renowned dealers in coins, banknotes, tokens, medals, militaria, gold, silver and jewellery. Partnering with Geoffrey Bell Auctions; auction April 21-22. Contact Jared Stapleton, email torontocoinexpo@gmail.com, telephone 647-403-7334. Website: http://www.torontocoinexpo.ca

Apr. 24, Pickering, Ajax Pickering Stamp Club Stamp & Coin Show, Pickering Recreation Center, 1867 Valley Farm Road 36th annual stamp & coin show. Hours: 9.30 a.m. to 3.30 p.m. Free admission, free parking. Club & youth tables. Food available. For more information contact Bill Bottan, email billandbernice@sympatico.ca, telephone 905-668-6185.

May 28, North York, North York Coin Club Annual Coin Show, Edithvale Community Centre, 131 Finch Ave. W. Hours: 9 a.m. to 3 p.m. Free admission, free parking, all sorts of collectibles and featuring coins, paper money, tokens, etc. For more information contact Paul Petch, email coinshow@northyorkcoinclub.com, telephone 416-303-4417. Website: www.northyorkcoinclub.com

Listings are courtesy of Canadian Coin News Coming Events