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(Incorporating the Numismatic Society of Victoria, founded 1914,
and the Association of Australian Numismatists (Melb.), 1939)

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NUMISMATIC ASSOCIATION OF VICTORIA
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NUMISMATISTS MEET TOXOPHILITES
ARCHERS ON ANCIENT COINS

by Pat Batchelor, NAV 824 [1]

This paper will look superficially at archers on some coins from ancient south-western Asia. I will present this as simply as possible and not go into some of the more complex issues associated with various aspects and side issues.

INTRODUCTION

Toxophilite may be defined as *"Student or lover of archery"* and is derived from Greek: *Toxon* "bow" and *philos* – "phil + ite".

Archery has, throughout the centuries, left its mark - from prehistoric cave paintings (figure 1), archaeological artefacts, church-stone marks, historical records and, of course, **COINS**.

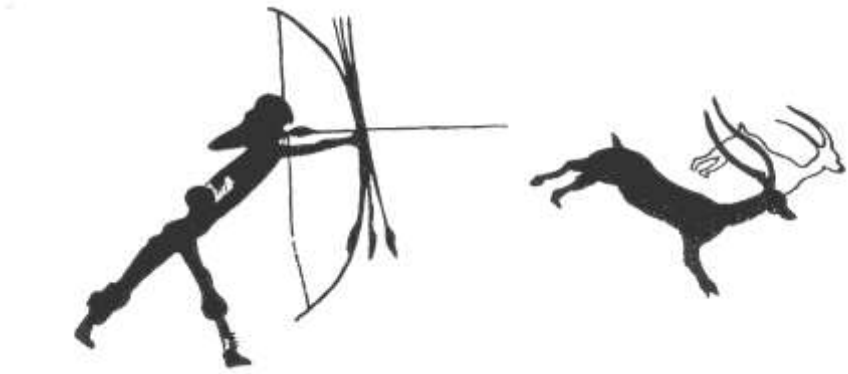

Figure 1 – Prehistoric cave painting in Valltorta Gorge, Spain

When I started work on this paper, I couldn't find many coins depicting "archers" or "archery", and the only one I had was the Australian 1982 50 cent piece issued for the XII Commonwealth Games in Brisbane.

[1] Pat delivered this paper to the NAV meeting on 15 March 2002

An archer is shown on the reverse along with other sports held at the games. I also had several *Archery Victoria* prize medals but these all looked very similar with not much potential for a story. Another medal I had, that of the *National Rifle Association* dated 1860, shows an archer and a rifleman - maybe the subject of a paper at another time.

However, looking through the book *Money of the World*, I came across photos of some ancient coins from the Persian Empire showing "archers". So I thought that these could form the basis for an interesting paper for the NAV.

Before discussing the coins and the archers, we will consider the area of ancient Persia and its modern equivalent.

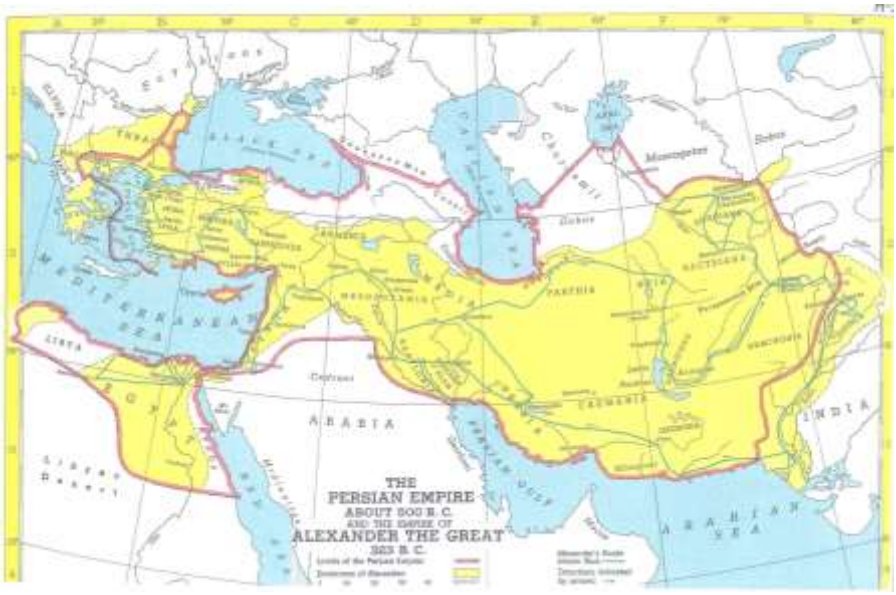

Figure 2 - Persian Empire about 500 BC

Figure 2 is a map of the Persian Empire about 500 BC (heavy line); the shaded area is the land conquered by Alexander the Great about 323 BC.

Figure 3 shows the modern equivalent of lands - the heavy line is an approximate indication of where the ancient Persian Empire once stood and the shaded area is that occupied by Alexander the Great. The lands of Egypt, Turkey, Syria, Iran, Afghanistan and Pakistan now lie within the ancient civilization of what was once the Persian Empire.

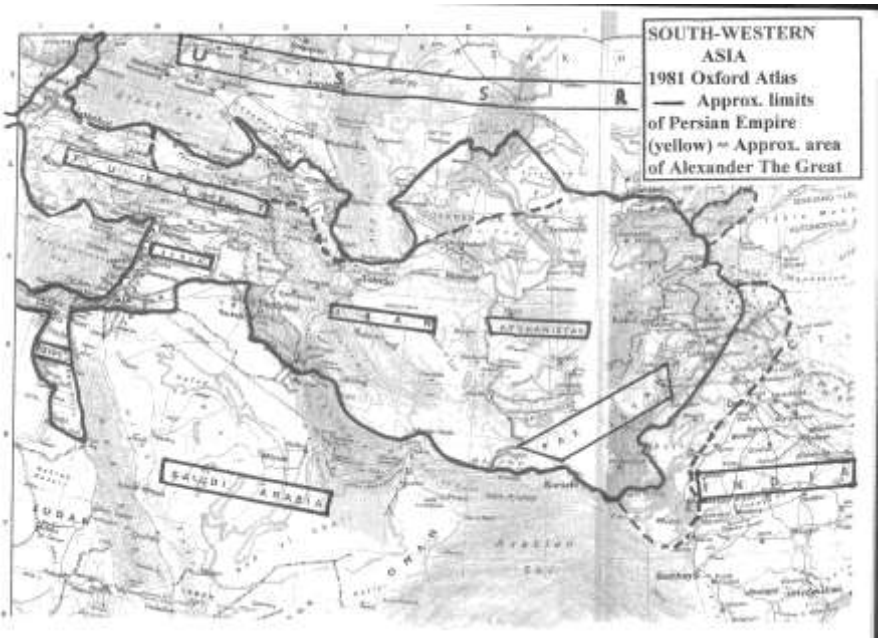

Figure 3 - Modern equivalent of lands

The Persian Empire was founded by King Cyrus and enlarged by King Darius. Then King Xerxes inherited it and allowed it to decay until eventually it was taken by Alexander the Great about 323 BC.

HOW THE FIGURES ON THE COINS WERE CHOSEN

Over the centuries, people, objects and events of importance have been depicted on coins - "archery" is no exception.

From pre-historic times to the present, "archery" has been used for warfare, hunting and/or sport and pleasure. In the ancient world, warfare was an everyday event in the lives of its people.

Archers were considered to be of great importance in battle. One example of the archers' superiority was demonstrated in a battle in Mesopotamia in 53 BC when a Parthian army (under King Orodes) of 9000 mounted archers easily defeated a Roman army of 42 000 men.

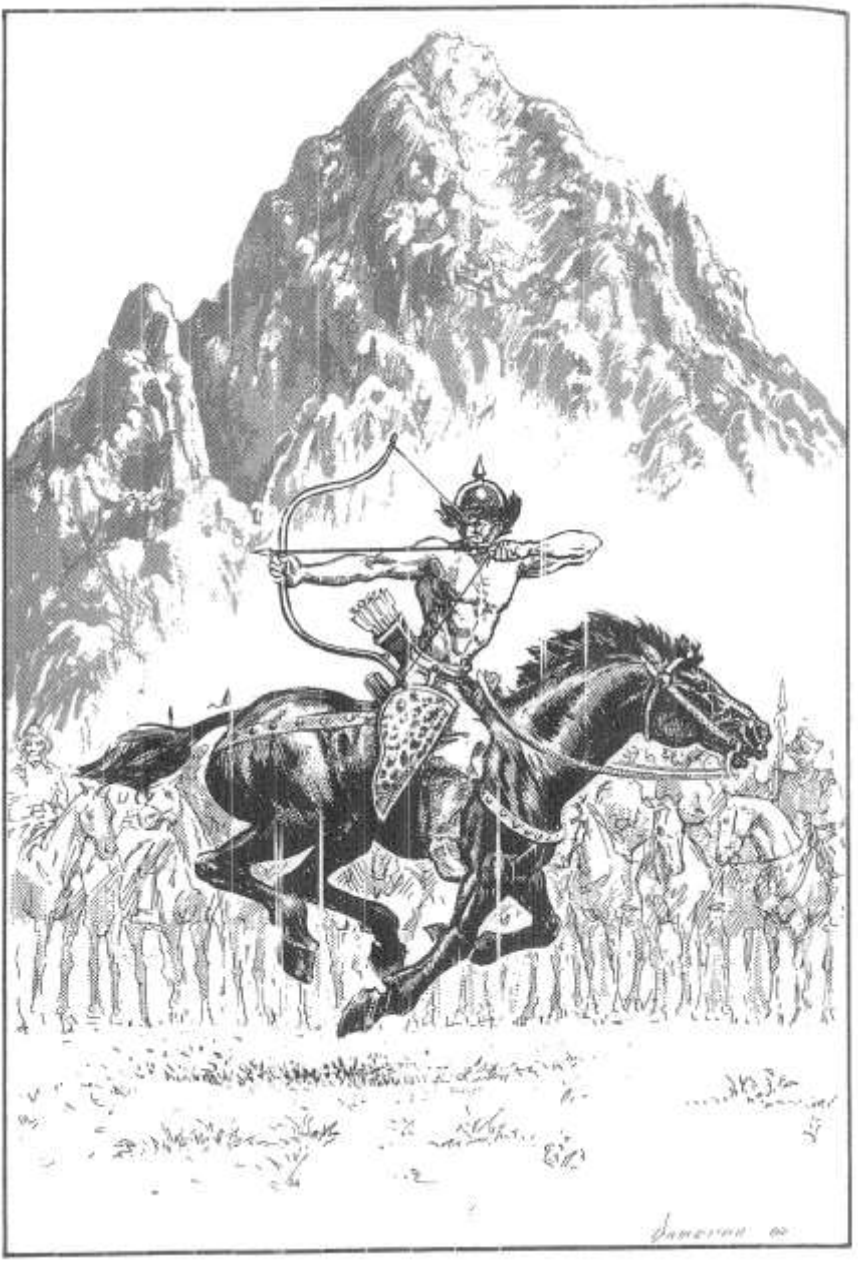

Figure 4 - A Parthian Shot

The Parthian army used short, composite bows[2], wore light tunics and rode specially-bred horses. And even though there were 4000 foot archers in the Roman Army, the battle was decisively won by the Parthians' superior skill with the bow, tactics and agile horses.

From this battle, the Romans learnt their lesson and later enlisted mercenary archers from other nations to strengthen their armies.

> *[Just as a side note, another battle, a bit more famous, where English archers with long bows proved their superiority, was at Agincourt on 25 October 1415, where they defeated the French Army. Like the Parthian army, the English were also outnumbered but won the battle with their archers. The English had 5000 archers and 1000 men-at-arms, while the French had 25 000, mainly men-at-arms.]*

Founded in 284 BC, Parthia was successively part of the Assyrian, Persian, Alexandrian and Seleucid Empires.

A Parthian Shot (figure 4) was an acrobatic method of shooting from horseback, while at full gallop, with the upper body twisted so that the archer can shoot backwards at enemies.

Xerxes I (486-465 BC) was a Persian King who once boasted: "I will conquer Greece with my archers".

With the military importance of archery, it is not too difficult to understand why archers and/or their weapons were depicted on some ancient coins.

THE COINS THEMSELVES:

PERSIA - SILVER COIN, DATE UNKNOWN

In the paper entitled *"The Early Achaemenid Persian Army",* this coin is shown and described as a silver coin depicting *"the King in the stylised 'archer' pose, with spear and bow"* (figure 5). The obverse certainly shows a kneeling figure (facing right) holding a bow; he is probably a king as he seems to be wearing a crown on his head. He is holding a stringed bow as if about to draw back. However, it is difficult to see the "spear" in this copy as the quality of reproduction is not good. The bow shown is a short bow, probably "composite", with a slight "recurve" at the tips.

2 Composite bows were short, recurve bows made of several different kinds of material.

Figure 5 - Persian daric

The figure is holding the bow in his left hand, at about a 90° angle - he would therefore draw the string and arrow back with his right hand - he is "right-handed". The figure has a long beard and hair and an out-of-proportion large nose. It is not known which "King" is being referred to, or the denomination of this coin.

The reverse shows a decorated QUIVER (large size), with a tassel hanging down from near the top of the quiver. No arrows can be seen in the quiver.

PERSIA - SILVER SIGLOS, 5TH CENTURY BC

The obverse of this coin (figure 6) clearly shows a man (full-length), almost running, carrying a short recurve stringed bow in his left hand and a spear or club in his right hand. He is most likely a king or an army soldier as he is wearing some sort of helmet and a loose fitting tunic. On his back is a quiver with three arrows sticking out of the top.

Figure 6 - Persia - Silver Siglos, 5th Century BC

The figure is shown with a long beard and nose, rather like on the previous coin. The figure is also facing to the right.[3]

3 Money of the World

PERSIA - SILVER SIGLOS, 336 - 330 BC

In figure 7 we have another figure shown with a short, recurve bow (with string attached). He also has a sort of helmet, and a loose fitting tunic. He is holding the bow in his left hand and in his right hand he is holding some sort of "club". He has a quiver on his back with 3-4 arrows shown. The figure is half-length. Again, like the previous coins, he has a beard and large nose. He is facing to the right.[4]

Figure 7 - Persia - Silver Siglos, 336 - 330 Bc

PARTHIA - SILVER SIGLOS, 171-138 BC

The obverse of this coin (figure 8) shows the head of a king (?) facing left. He is wearing a head band around his hair and has a thin wavy beard and moustache. There is a border of 'beads' partly around the circumference of the coin.

Figure 8 - Parthian drachma

On the reverse is a seated figure, possibly a king on a decorated throne. The figure is holding a short, recurve bow, which is strung. The bow is resting on his knee and is turned so that the string is facing uppermost - maybe he is depicted trying to unstring the bow? Again the nose seems

4 *ibid*

rather large and out of proportion. He is facing to the right. He has long braids or hair, and no beard. There is a Greek inscription on the coin surrounding the seated figure (not known).[5]

Parthian coins usually came from the royal mints.

NOTE: Generally, the reverse of the above coins consisted of a rough, irregular incuse marking caused in the striking.

These roughly oval pieces were uninscribed and remained in issue, unaltered in type for 200 years until the fall of the Empire.[6]

CRETE - SILVER STATER

Figure 9 - Cydonia - silver stater

This silver stater (figure 9) from Cydonia, Crete, shows the hero Cydon bracing a bow. The full-length figure is naked (except for what looks like a helmet) and he could be bracing a bow (putting the string on or off). He is holding the bow and taking up the tension with his left leg; pulling the bow back with his left hand and stringing the bow with his right hand. [This technique is used by present-day archers.] It is difficult to determine whether it is a simple wooden bow or a recurve bow as the definition on the coin is not clear. There are a series of beads around the top half of the coin and the Greek name "KYΔΩN" (Kudon or Cydonia) is behind the figure.

It is interesting to note that the island of Crete was not part of the Persian Empire or Alexander the Great's Empire. It seems however, that the composite bow was well established in Crete by 1500 BC.[7]

5 *ibid*
6 Encyclopaedia Britannica
7 The Grey Goose Wing

SOME FACTS AND FIGURES[8]

- Darius I (522 – 486 BC) was the first Persian ruler to strike coins.
- Daric - gold coin of very pure quality
- Siglos – silver coin
- 20 siglos (shekels) made a daric
- a daric weighed 8.4 grams
- First Olympiad 776 BC

THE ARCHERS AND THEIR EQUIPMENT

THE ARCHERS

Archery has been recorded from most parts of the old world. The archers of Persia were an important part of the military army and Kingdom.

The archers would have been supported by bowyers, fletchers, bow string makers and quiver-makers.

49. Detail from the painting on a wooden chest found in Tutankhamen's tomb, Thebes, of *c.* 1350 B.C. The curious position of the bow and the string is due to the artist following the tradition that the face of the subject must not be obscured or marred.

Figure 10 – Egyptian archer

8 The Grey Goose Wing and Encyclopaedia Britannica

The Persians trained their sons from 5 to 25 years in riding, archery and truth-telling.

> *[As a side note, Henry VIII of England (in the 1500's) decreed that every man and man-child between 7 and 60 years should have bow and arrows and practise the long bow - similar to the Persians!]*

The archers, together with their special horses, were a powerful unit. Because they wore a loose tunic, they were very agile and lethal. They had a hide-covered shield as protection, and they relied on the shear volume and accuracy of their thousands of arrows to prevent the enemy from reaching its flanks.

Persia also had cavalry units.[9]

50. Scythian archer. A painting by EPIKTETOS on a plate (*pinax*) found at Vulci. Attic, *c.* 520 B.C. (British Museum).

Figure 11 – Scythian archer

9 History of Archery - Burke

THE BOWS

"Composite bows" (recurve), as mentioned and shown on the coins in this paper, were used mainly in Asia and were usually short-limbed. Their advantage was the range of their arrows.

The bows were made from a combination of several different materials -

- horn (water buffalo)
- sinew
- wood / bamboo

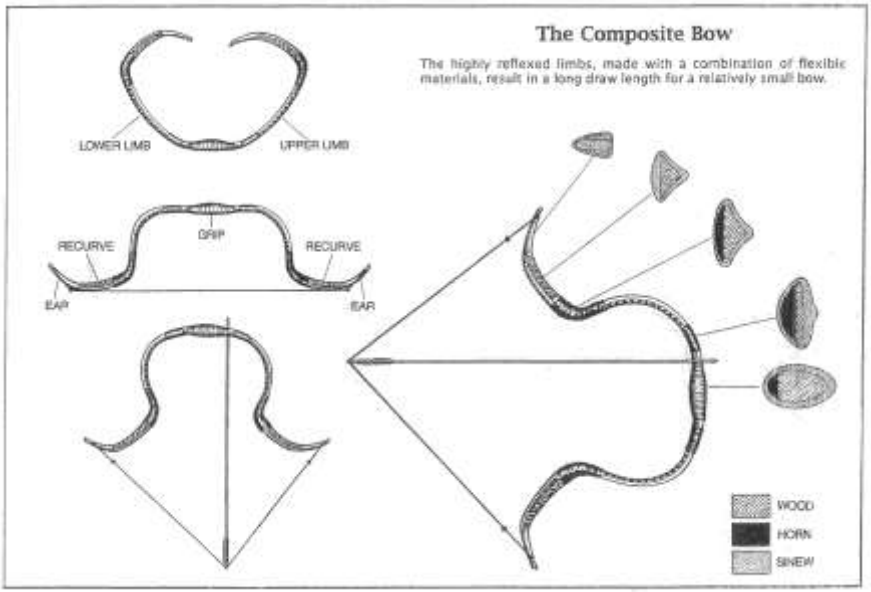

Figure 12 – Composite bow

The composite bows were adapted mainly for use on horse back, ie Persian Archers. It was designed so that its short limbs could easily be used while riding a horse. A 'long bow' would get in the way of the rider's legs and the horse.

The 'composite bow' was invented about the 3rd millennium BC by independent cultures.

Draw weight of a bow is the amount of weight required to draw the string and arrow back to the point ready for release. Draw length of a bow is the distance measured from the back of the bow to the bottom of the slot in the

arrow nock when at full draw. (The nock is the grooved unit[10] at the end of the arrow into which the bow string is placed.)

Some facts and figures:

- English long bows 75-100 lbs +
- Mongolian composite bows 80-100 lbs
- Today's target bows 30-50 lbs

ARROWS & QUIVER

Equally important and essential parts of the archer's equipment were the arrows and quiver.

One type of arrow, that used by the Persians, were made of cane or reed, with three-feathered flights and triangular sectioned bronze tips.

However, we know that hundreds of thousands would have been made for their battles. The armies were accompanied by munitions camels carrying the arrow (and other items) supplies. The arrows were most likely made of wood, reed or bamboo and would be uniform in size. They were fletched (with feathers) and probably had metal arrow heads.

The archers in battle would have carried 24 to 36 arrows in a quiver. Quivers were most likely made of leather and usually decorated, as shown on the reverse of the coin in figure 13. Quivers for battle use would have been plainer and made in large quantities for the archers.

Figure 13 - Persia - Silver Siglos, date unknown

BOW STRINGS

Oriental bow strings were mostly made of silk. The archers probably kept a spare string in case one broke - hence the saying "having two strings to

[10] modern arrows have a plastic nock.

your bow". The English long bow archers kept a spare string in a special pouch on their belt and were particular to keep it dry.

Other materials used for making bow strings were :

- horse's hair,
- hemp,
- sinew.

Today, kevlar strings are widely used on bows.

OTHER ACCESSORIES

Two other accessories of the archers' equipment were the **arm or wrist brace** to stop the string from burning the skin and to help the string make a smooth pass through when released.

The second item was the archers' **thumb ring**. The archer wore this on his thumb, bent his thumb over the string and then, when ready, released the tension. The ring was of course used to stop the string from cutting into his skin. You can see this in figure 4 showing the archer on horseback. There were many designs and different materials used (jade, ivory, gold, silver, copper etc).

'Release aides' are still used in archery today.

Different bow styles as used by Egyptians and Scythians are shown in figures 10 and 11. The Scythian archer (c. 520 BC) used a composite, recurve bow whereas a painting on Tutankhamen's tomb in Thebes (1350 BC) shows a one-piece wooden bow.

SUMMARY AND ENDING

We have seen how the simple bow and arrow has left its mark - from prehistory cave paintings, on coins and through history. Archery has changed many events of history and is still practised today, mainly for sport and recreation.

I will leave you with this cartoon to ponder (figure 14).

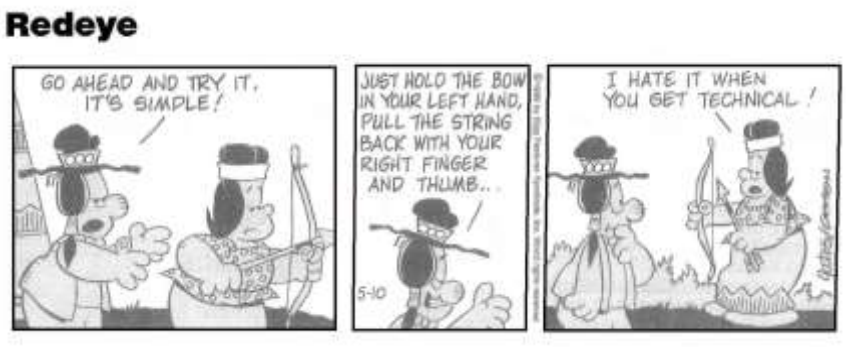

Figure 14 – Redeye and Mawsquaw

EARLY BOW DESIGN & CONSTRUCTION

The oldest known surviving bow is the Holme Gaard Bow which was found in south Zealand (in Netherlands) and is dated to 7000 – 8000 BC. It is 1.5 m long and is made from elm wood; the feathers were either eagle or goose.[11]

REFERENCES:

Blackmore, *Hunting Weapons*

Burke, *The History of Archery*, 1958

Doty, *Money of the World*, 1978

Early Bow Design & Construction, Scientific American, 1991

Glover, *The Ancient* World, 1957

Grimley, *The Book of the Bow*, 1958

Hayes, *The Third Invention*, 1990

Heath, *The Grey Goose Wing*, 1971

Historical Atlas of the World, 1984

Oxford Atlas, 1981

The Early Achaemenid Persian Army, Internet paper, 2002

11 Scientific American, June 1991

THE BATTLE OF ISURAVA
26 TO 31 AUGUST 1942

by Ross Wilkinson, NAV 1120 [1]

INTRODUCTION

It is highly likely that many people have never heard of Isurava although very familiar with the name Kokoda Trail [2].

The Prime Minister of Australia went to Papua New Guinea as part of the 60th Anniversary celebrations for the Kokoda Trail battles. He unveiled a monument and memorial at Isurava to commemorate the site of the battle that as commonly been referred to as the "battle that saved Australia."

As I explain the various actions as a background to the principal battle in the Papuan Theatre, it will become apparent as to why this battle became so important.

This presentation will provide a brief background to the Japanese build up, the opening of action in the Pacific theatre at large, and the concerted push to defeat the allied forces and capture Port Moresby.

I will briefly look at the strategic moves made by High Command and the politics within the various forces at that time. I will detail some of the blunders made on both sides and the dreadful consequences that arose during and after the battle. Some of this is not a pretty picture of formerly respected Australian Generals.

After running through the many stages of this extended battle, I will then detail the many examples of heroism that occurred in one Australian Infantry Battalion in that battle. This will provide examples of deeds that are both tragic and inspiring in the same breath.

I hope that this article will leave you with a better appreciation of what happened here and a sense of bewilderment as to why it is not better known in our history. In order to put it in perspective, it has, in some learned quarters, been referred to as Australia's World War Two "Gallipoli".

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1 Ross delivered this paper to the NAV meeting on 16 August 2002 and with it won the Max Stern Trophy for 2002

2 Kokoda Trail is the official Battle Honour for this campaign

BACKGROUND

Japan is a very small collection of islands supporting a population many times that of Australia. It is bereft of natural resources necessary for its manufacturing industries.

Following the First World War, strategic intelligence had been watching Japan for many years and recognised that it would attempt to expand its borders through aggressive military occupation of adjoining countries. This would provide both the land for its expanding population and natural resources such as oil, rubber and tin for manufacturing.

In the 1920's, Defence analysts and commentators identified that Japan would expand its borders in public pronouncements in the Australian media. In the 1930's, this became a reality with the invasion of the Asian mainland. Still the world watched and did nothing.

In 1939 Germany invaded Poland and the Low Countries and the world expressed outrage and went to war. Still they did nothing about Japan.

Australia initially raised two Divisions, the 6th and 7th and sent them to the Middle East to assist the King and Empire defeat the Axis forces in North Africa. A move by the Germans to use the Vichy forces in the Middle East to capture Palestine and occupy the Suez Canal was defeated by 7th Division forces sent to Syria.

Quietly the Japanese continued their build up and expansion in Asia and had planned the Greater South East Asia Co-Prosperity Sphere incorporating much of Asia and the South West Pacific Area. It later transpired that the southern-most border roughly coincided with the border between Papua and the Trust Territory of New Guinea.

By the time the 8th Division was raised, the Japanese threat had become quite real and it was sent to the Malay Peninsula to strengthen the British garrison in that area.

As the Americans call it, "That Day of Infamy," occurred on the morning of Sunday 7 December 1941 when the carrier based bombers of the Japanese Pacific Fleet carried out a surprise attack. The purpose of this attack was to cripple the American fleet to either prevent it from stopping the escalation of Japanese expansion to the next stage or to discourage America from responding at all.

In what is perhaps one of the ironies of the war, and an idiosyncrasy of our global time system, the Japanese actually carried out a seaborne invasion of

northern Malaya at 1:15 am on 8 December 1942, about 2 hours before the attack on Pearl Harbour.

Map 1 – Japanese expansion to May 1942

The Japanese had reasoned that if they could expand their boundaries to the previously identified limits within 6 months, they could reasonably hold them against any Allied response, if it occurred. Unfortunately, what they did not count on was the sense of outrage felt by the Americans and the speed with which they set about rebuilding and responding.

The Australian High Command had appointed General Blamey to be both commander of the 6th Division and of the 2nd AIF. When the 7th Division was raised, Blamey became solely the Australian Corps commander. When Japan entered the War, the Australian Government asked Churchill to release Australia troops from the Middle East command. He refused reasoning that it was more important to defeat Germany first.

Finally Churchill relented and the entire 7th Division and part of the 6th returned to Australia, but not before Churchill attempted to divert the 7th to Burma.

By this stage, the Americans were being soundly defeated by the Japanese in the Philippines and General Douglas McArthur was ordered by the American Government to leave his command and go to Australia to become Supreme Commander, South West Pacific.

Blamey returned to Australia and was appointed Army commander by McArthur. In a parochial twist, McArthur would not let Blamey command American troops but passed on his commands to the highest USA commander below Blamey. This obviously created serious difficulties for Blamey. These difficulties were to tell significantly a short time later to the point that many ex-servicemen, who survived the Kokoda campaign, hold strong anti-Blamey feelings today.

BACKGROUND TO THE KOKODA BATTLES

Various parts of the New Guinea islands were progressively occupied by the Japanese with their regional headquarters set up at Rabaul. Parts of the mainland along the north coast were occupied until they landed at Buna on 21 July 1942. The Japanese troops belonged to the South Seas Detachment and were considered elite troops.

At that stage, the only Allied troops in the area were militia soldiers from 39 Battalion and a detachment from 1 Papuan Infantry Battalion. In fact the Japanese landed at Buna only days before the Australians were going to occupy and upgrade a nearby airfield on the north coast.

Some minor skirmishes took place between the Japanese and the Papuan Infantry Battalion troops in the coastal area. They were reinforced by some 39 Battalion troops. When a further 2000 Japanese were landed at Gona on 24 July, all Australians were ordered back to Kokoda to concentrate on defence of the Government Station and airfield. Some rear guard ambushes and destruction of bridges on the road to Poppondetta took place to hamper the rapid Japanese movement along the road using bicycles.

By 28 July, most of the forces had gathered at Kokoda for the next stage, that is, the first major action against the advancing Japanese. At this stage there was no more than about 350 Australian part time soldiers against an invading force of at least 13 500 elite Japanese of whom 10 000 were the fighting group.

The fighting ebbed and flowed around Kokoda and surrounding villages with first the Australians and then the Japanese being pushed off the Kokoda plateau in a serious of charges and counter attacks. It was during this fighting that Lt Col Owen, Commanding Officer of the 39 Battalion was fatally wounded. By 14 August, the remaining few Australians of 39 Battalion still at Kokoda decided to withdraw to Isurava where the rest of the Battalion and the fresh 53 Militia Battalion were located.

The 7th Division had by now started landing in Port Moresby and by 15 August, the 21st Brigade was in camp in the foothills of the Owen Stanley Mountains. On 16 August, the 2/14 Infantry Battalion set out to join up with and relieve the 39 Battalion. Each man carried weapons, ammunition and supplies in a load of about 70 lbs.

The fighting component of an Australian infantry battalion numbered about 450 men.

The battalion reached Myola on 21 August and the 2/16 joined them two days later. The third battalion in the Brigade, the 2/27, was held in reserve in Port Moresby.

Brigadier Potts, the commander of 21 Brigade was now in position with two of his three fresh and experienced battalions. He had started planning for the relief of the 39 Battalion and the advance against the Japanese to retake Kokoda as ordered by Blamey. His first response was to arrange for the relief of the 39 Battalion by the 2/14.

THE BATTLE OF ISURAVA

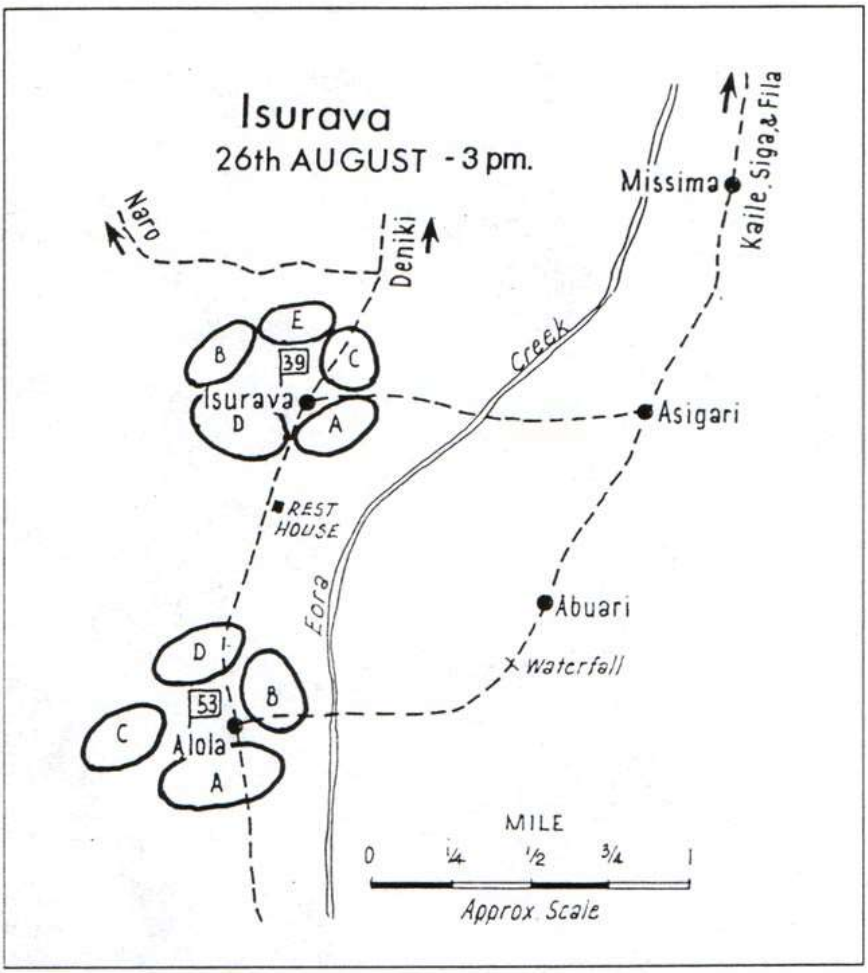
26 August 1942

As C Company of the 2/14 moved forward to relieve C Company of the 39th, elements of the 53 Battalion were patrolling along the Abuari track. The 39th had a platoon sized standing patrol about 50 minutes forward of the main defences.

Early on the 26th, the standing patrol was attacked by the enemy. It was reinforced by another platoon and after about five hours of heavy fighting, the Japanese withdrew.

With an immediate appreciation of the seriousness of the situation, Brigadier Potts requested the immediate reinforcement of the position by the 2/27. Major General Allen in Port Moresby refused as he still feared

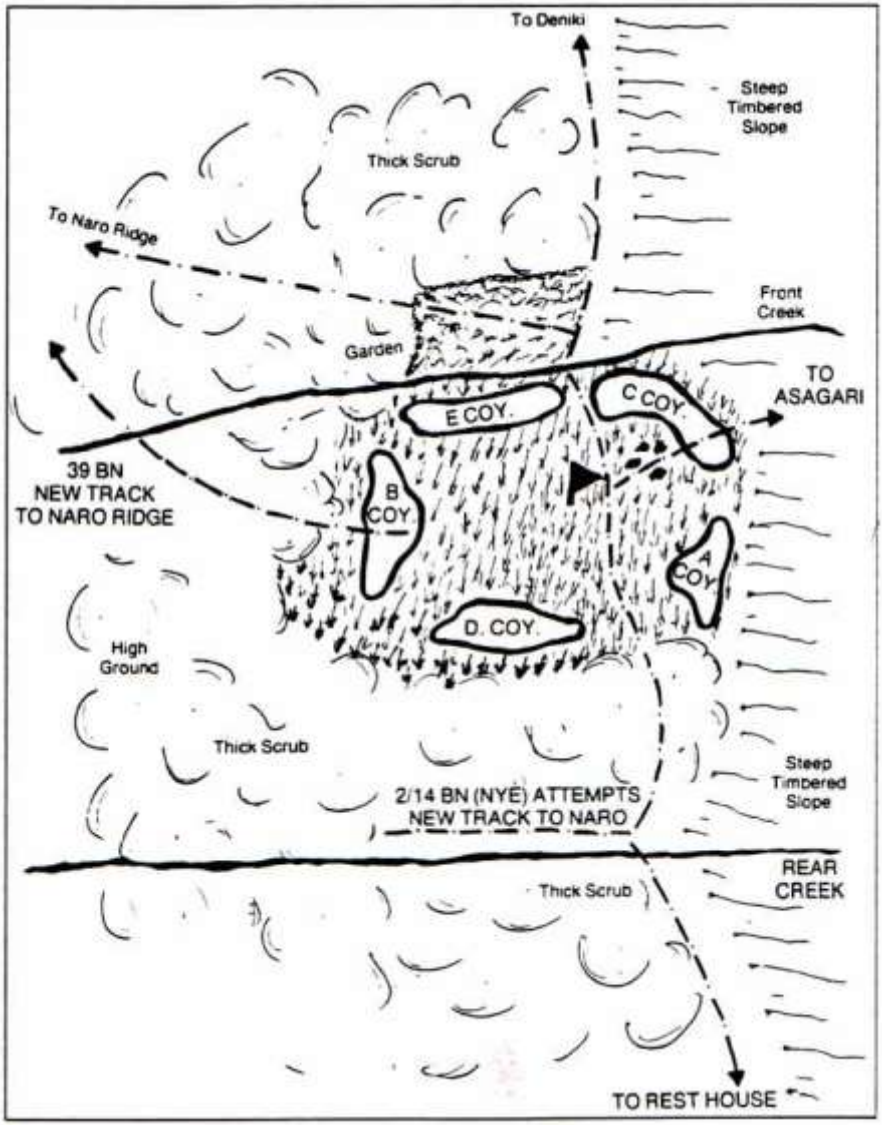
some threat of seaborne landing and this was his only reserve. In fact the landings commenced at Milne Bay that morning.



Map 2 – Isurava 26 August, 3 pm

27 August 1942

As Japanese pressure began to intensify, concern began to be expressed about the fitness of 53 Battalion as it was largely untried and extremely inexperienced. Two companies were ordered to advance up the Abuari track towards Misima to secure the right flank on the eastern side of Eora Creek.



Map 3 – Isurava 27 August

The 53 Battalion commanding officer, Lt Col Ward, and his party commenced following them at about 3:30 pm believing them to be forward of him. At 3:45 pm he was reported as being ambushed and killed by the Japanese advancing along this track.

The 2/16 was immediately ordered forward to hold the track between Abuari and Asigari. The remnants of 53 Battalion were ordered to hold the track until the 2/16 arrived.

By 4 pm a heavy attack developed in front of the 39 Battalion B and E Company positions seriously threatening the position. Heavy fire killed many of the Japanese but the position was still in jeopardy until the remaining companies of the 2/14 moved into the area under fire and occupied the 39 Battalion weapon pits.

28 August 1942

During the night there had been numerous bayonet attacks carried out in heavy rain at the main positions around Isurava village. It was impossible to distinguish friend from foe.

The 2/16 strengthened the position around Abuari and it was a relatively quiet day. Segments of the 53 Battalion had just disappeared from the battlefield and surrounds.

Around Isurava though, it was anything but quiet. Many attacks occurred on the various positions with fierce counter attacks including bayonet charges killing large numbers of the enemy. By lunch time, Lt Col Key of the 2/14 had arrived into the Isurava perimeter and took over command of the position from 39 Battalion commander, Honner.

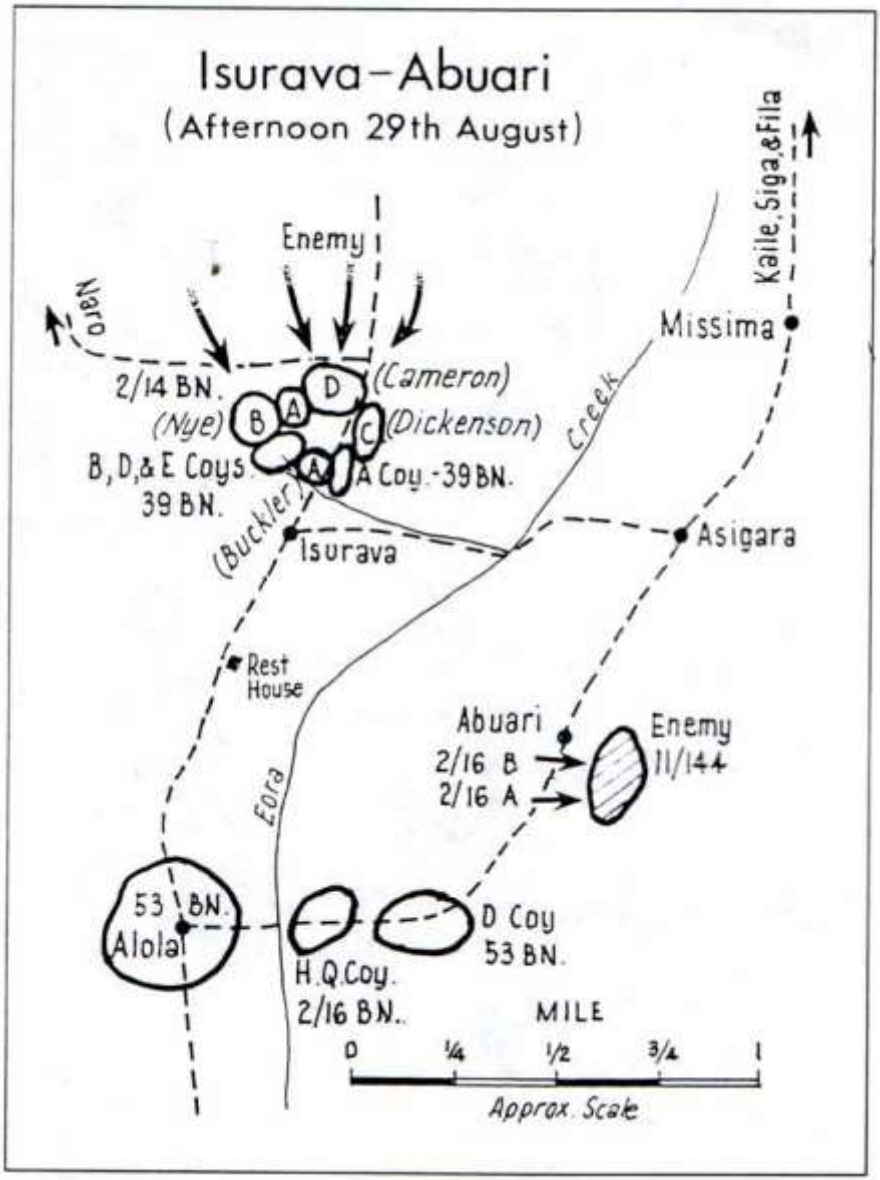
Recognising the seriousness of the position, the exhausted and depleted 39 Battalion stayed in the perimeter under Key's command although they had been ordered to retire to the Brigade HQ. By now, the 39th was down to about 250 men.

During the afternoon further attacks occurred and positions were overrun. These were regained with dogged determination and the bayonet.

29 August 1942

By 9 am, the right flank at Abuari was under threat with the enemy applying pressure. Counter attacks were ordered by 2/16 to attempt to dislodge the enemy and D Company of the 53 was ordered to attempt to encircle the Japanese. The day ended in somewhat of a stalemate with the 53 stating that it would be in position on the following morning to mount an attack.

Over at Isurava, the position became desperate. This was a crucial day in the battle.



Map 4 – Isurava 29 August

Heavy frontal attacks commenced against the C and D Company fronts of the 2/14 positions. These were progressively followed by attacks on all

other positions. Gradually the enemy was making inroads with higher losses of 2/14 men and pushing them out of their positions.

Many members of the battalion distinguished themselves on this day. Not more so than Private Kingsbury who led a counter attack that restored the lost C Company ground.

Unfortunately to the left of C Company, D Company was in serious trouble and was progressively falling back. Again and again counter-attacks tried to restore the position but the damage was done. Corporal McCallum came to the fore during this withdrawal in an action of equal standing to that of Kingsbury [3].

By now the Japanese were on the high ground to the left and despite Potts' decision to counter attack with the 2/16, Key considered the position was lost and at 8:30 pm sought permission to withdraw to the Rest House ridge.

Whilst the number of casualties for the Australians was quite light, there was a large number of missing in the confused environment.

By midnight, General Allen agreed to release the 2/27 Battalion to go urgently to Myola and link up with the force. But by this stage Isurava could be considered to have been lost because the 2/27 would not get there in time to help.

30 August 1942

By 9:30 am on the 30th, the Japanese had the high ground on both sides and was pouring enfilading fire into the various positions. The 53 Battalion attack planned for that morning at Abuari failed to eventuate through ineffective command and lack of fortitude in the ranks.

Several charges and counter-attacks occurred on the right flank until the 2/16 and remnants of the 53rd were ordered back to the main track to Alola.

The position around the rest house began to rapidly deteriorate with the Japanese now beginning to encircle the position. At 3 pm Potts ordered a further withdrawal to the Eora Creek village. As this was being effected, a heavy attack forced Key and several others down the steep sides into Eora Creek valley. Key was not seen again. He was captured by the Japanese and subsequently executed in Rabaul some months later.

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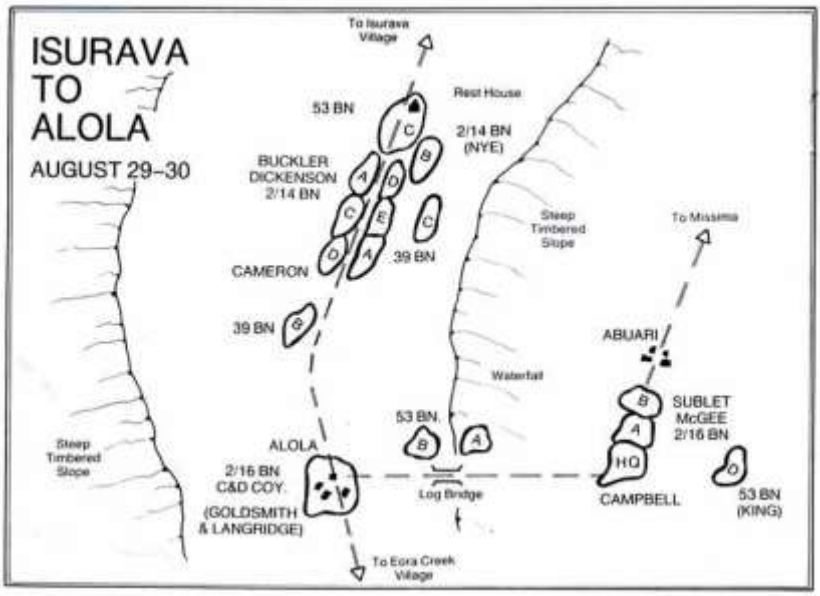
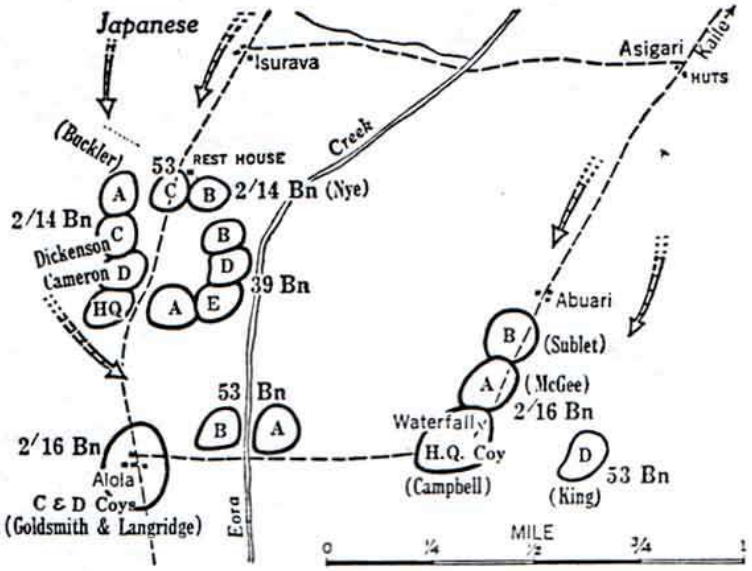
3 McCallum was initially nominated for the Victoria Cross and this was supported at all levels until it reached Blamey's office where it was downgraded.



Map 5 – Isurava to Alola 29-30 August

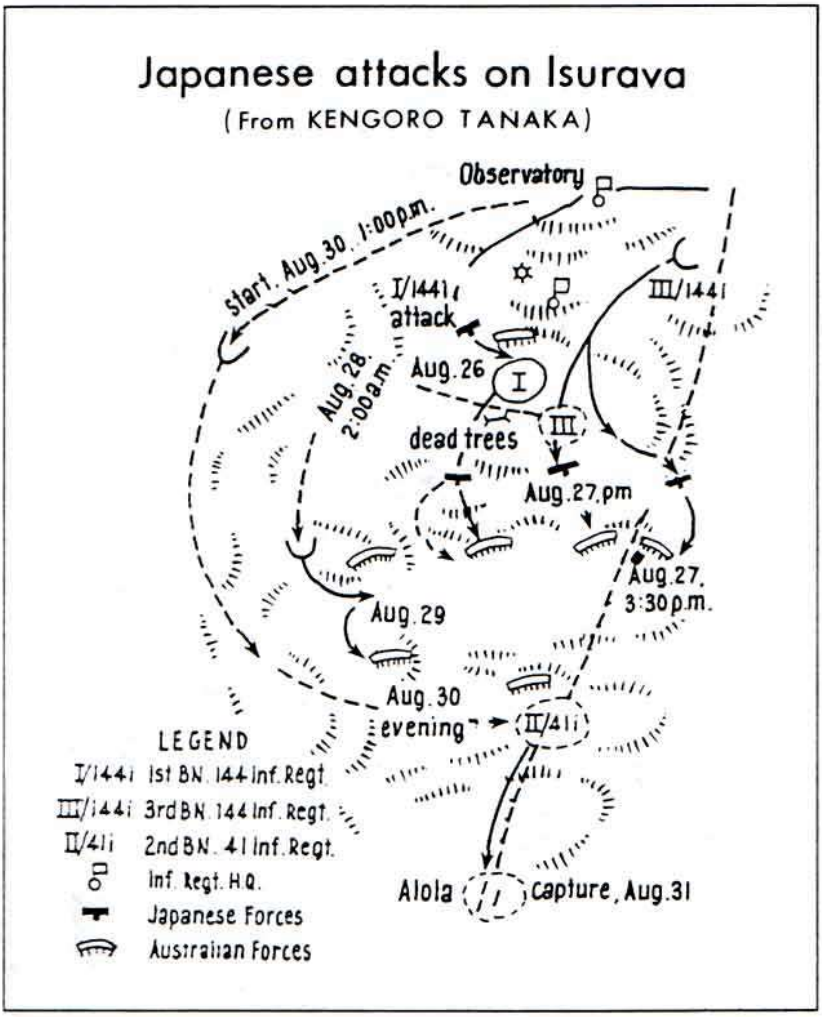


Map 6 – 30 August

This day cost the Australians dearly with the 39th down to 150 men and the 2/14 losing 10 killed and 18 wounded. Unfortunately 172 were missing in action having dispersed into the bush on the last attack.

31 August 1942

The remnant Australians had formed a perimeter south of Alola, the 53 Battalion had been sent out of battle back to Myola and the battle of Isurava was over.



Map 7 – Japanese attacks on Isurava

POST ISURAVA

There was one more significant battle during the withdrawal phase at Mission Ridge or "Brigade Hill" between Efogi and Menari on 8 September. By this stage the 2/27 Battalion had joined he very depleted 2/14 and 2/16 Battalions. A very strong Japanese attack broke through the perimeter and threatened Brigade HQ until beaten off.

The Australians withdrew to Ioribaiwa and then Imita Ridge but by this stage Potts had been removed from his command and posted to an Australian backwater, never to command Australian fighting forces again. Allen followed him having lost high command's confidence. Three of the four Battalion Commanders in the Kokoda and Isurava fighting were killed or captured placing a greater reliance on the training and resourcefulness of younger officers or NCOs of each of the battalions.

There was one more indignity to follow. Blamey ordered the Brigade to parade at Koitaki where they believed they would be praised for their brave but futile efforts. Instead he delivered a stinging address which they took to be a reference to cowardice when Blamey made reference to "running rabbits getting shot." This was to have very dire consequences for the 2/14 Battalion at Gona in November 1942.

To look at what went wrong, the high command had to accept much of the blame. Blamey was under political pressure from McArthur to produce rapid results. The size and experience of the enemy was seriously under-estimated. Supplies were inadequate and a decision made not to send heavy machine guns into action with the brigade. A significant part of the Australian force, one quarter, was totally ineffective and an embarrassment, finally having to be sent out of battle at a crucial stage. The Japanese had heavy machine guns and mountain artillery through the entire campaign and significantly outgunned the Australians.

Finally, it appeared that the Australian and USA commanders, Blamey and MacArthur, were fighting for their political survival. MacArthur was fearful that his ambition to be the Supreme US commander would be overlooked by being in the relative backwater of Australia. Blamey was fearful of his political future as head of the Australian Army and also the threats from below from other Australian generals who felt that they were more highly qualified that Blamey.

WHY WAS THIS BATTLE SO IMPORTANT?

The Japanese strategy depended on speed and surprise. They were sent ashore with 12 days rations per man. They were expected to live off the land and captured rations.

After the early easy advance and lay up at Kokoda, they were fully rationed and expected an easy ride into Port Moresby. The delay at Isurava, the casualties inflicted and the problems of an ever increasing supply line demoralized the Japanese to the point they were out on their feet but did not know it.

It was not a matter of if, but when the knockout blow was delivered.

THE AWARDS

Photo 1 – Private Bruce Kingsbury

The awards shown in the display are not the entire gallantry decorations awarded but represent the total range of medals awarded for this action. All battalions in the action received gallantry medals except the 53 Battalion.

VX 19139 Private Bruce Kingsbury was posthumously awarded the Victoria Cross when on 29 August 1942 he volunteered to form a composite platoon sent forward to stop a developing breakthrough by the Japanese in the C Company area. Without thought for others, he saw a group of the enemy massing for another attack, whereupon he rushed forward firing a Bren light machine gun from the hip killing and scattering them. When he paused to reload the weapon, he was shot dead by a sniper.

His action was critical to the flow of battle at that time and his actions enabled lost ground to be retaken and held for a further half a day.

VX 15241 Corporal Charles McCallum was awarded the Distinguished Conduct Medal for his actions on 29 August 1942 when he provided covering fire to enable his platoon comrades to withdraw and regroup. He backed himself against a tree with a Bren light machine gun in one hand and a Thompson sub-machine gun in the other. He fired each weapon continuously sweeping advancing enemy. As he emptied the magazine of one weapon, he would reload it with one hand whilst keeping the enemy at bay with the other weapon. He was wounded three times but was estimated to have killed 45 of the enemy. At one point the crawled so close that his weapons pouches were torn off.

He was able to disengage and rejoin his comrades later. Unfortunately he was killed in action several days later during a counter-attack at Brigade Hill when B Company attempted to break through the enemy troops to join the Brigade HQ.

As indicated earlier, he was nominated for a Victoria Cross with many observers considering his action to be the equal or better than Kingsbury's. There are no available records to indicate why his nomination was downgrade. Perhaps it was because Blamey was under pressure from McArthur and was disappointed at the apparent defeat of the Australians by a supposedly weaker enemy.

VX 15796 Corporal John Metson was awarded the British Empire Medal for an act of sustained gallantry in the weeks following the dispersal and withdrawal of Australian troops at Isurava. He was one of a party of troops including wounded who had moved into the bush to avoid the enemy with the view to rejoining by moving around the battle area in a wide arc.

Corporal Metson was wounded in both ankles and required to be carried on a stretcher. He told the party that there were not enough to carry him and to just bandage his hands and knees. He crawled behind the party for three weeks, coming in at the nightly encampment well behind the others in darkness.

At the village of Sangai on 21 September, it was decided that the fit ones would push on ahead and leave the wounded in the village with the medical orderly. The party reached safety on 28 September when relief for the wounded was organised. They arrived back at the encampment to find that the Australians had been betrayed to the Japanese and executed.

The full range of gallantry medals available were awarded to troops of the 39, 2/14 and 2/16 Battalions including the Military Cross, Military Medal and Mention in Despatches.

Photo 2 – Victoria Cross, Military Cross, Distinguished Conduct Medal

Left to right:

- Victoria Cross (bronze with burgundy ribbon)
- Military Cross (silver with blue and white ribbon)
- Distinguished Conduct Medal (silver with burgundy and navy ribbon)

Photo 3 – Military Medal, British Empire Medal, Mention in Dispatches

Left to right:

- Military Medal (silver with red, white and blue striped ribbon)
- British Empire Medal (silver with red and grey ribbon)
- Mention in Dispatches (bronze oak leaf cluster on ribbon of War Medal 1939-45)

Note: Only the Victoria Cross or the Mention in Despatches could be awarded posthumously. This means that, potentially, those that were awarded it for actions where they were killed, may have been eligible for a higher bravery award except that they were killed during the action.

BATTLE HONOURS

Official Army records and gazettals after the war accord the following battle honours:

Kokoda	39 Battalion
Isurava	39, 2/14 and 2/16 Battalions
Kokoda Trail	39, 2/14 and 2/16 Battalions [4]

4 Battle Honours for the Kokoda Trail were awarded to other units but for later periods when the Australian Forces were on the offensive.

THANKS

My father served with the 2/14 Battalion in Syria and the Papua and New Guinea campaigns. I am here today because he was one of the lucky ones who returned and I feel it is incumbent on me to tell this story so that it will not be lost on succeeding generations of residents of our "lucky country."

BIBLIOGRAPHY

Bergerand, E, *Touched With Fire*, Penguin, 1996

Brune, P, *Gona's Gone*, Alen & Unwin, 1994

Brune, P, *Those Ragged Bloody Heroes*, Alen & Unwin, 1991

Brune, P, *We Band of Brothers*, Alen & Unwin, 2000

Gailey, H, *McArthur Strikes Back*, Presidio Press, 2000

Hall, T, *New Guinea 1942-44*, Methuen, 1981

Horner, DM, *Blamey, The Commander in Chief*, Allen & Unwin, 1998

Horner, DM, *Crisis of Command*, ANU Press, 1978

Lindsay, P, *The Spirit of Kokoda*, Hardie Grant Books, 2002

Lodge AB, *The Fall of General Gordon Bennett*, Allen & Unwin, 1986

Maitland, GL, *2nd World War and Australian Battle Honours*, Kangaroo Press, 1999

Mallester, JC, *Men of the 2/14 Battalion*, Griffin Press, 1990

McAuley, L, *Blood and Iron*, Arrow Books, 1991

McCarthy, D, *South-West Pacific Area First Year*, AWM 1959 Rept, 1962

Paull, R, *Retreat From Kokoda*, Heinemann, 1958

Purnell's History of the World Wars, *Battle of the Pacific*, Phoebus Publishing, 1968

Reid, R, *For Valour - Australians and the VC*, Australia Post, 2000

Russell, WB, *2/14 Australian Infantry Battalion*, 2/14 Battalion Assn, 1948

Sublet, F, *Kokoda to the Sea*, Slouch Hat Publications, 2000

Toland, J, *But Not In Shame*, Panther, 1965

Williams, RD, *Medals to Australia*, 4th edn, Rowprint Graphics, 2000

THE INTRODUCTION OF THE EURO CURRENCY AND THE DEATH OF TWELVE UNIQUE CURRENCIES

By Frank Robinson, NAV 713, and Bill Xynos, NAV 1112

1 January 2002 was a very important day in world financial and numismatic history. That day saw the physical reality of a single currency for much of Europe. Twelve national currencies became obsolete and were replaced by one single currency.

BACKGROUND

Since the mid 1950s, the main western European countries had the foresight of developing a common European market for marketing their agricultural and industrial products within their borders in an economically more efficient way. The Treaty of Rome in 1957 declared this common European market with the objective of increasing economic prosperity and creating, at the same time, a closer union among the peoples of Europe.

Also, the growing United States economy and its trade with European countries were of a political concern. For many years, European countries were forced to assist their agricultural industries with heavy subsidies in order to counteract similar measures taken by the United States. These subsidies were disastrous to the economies of the members of the European Common Market causing reduced productivity and long-term implications to the strength of their currencies.

With the introduction of the Single European Act in 1986 and the Treaty on European Union in 1992, the introduction of the Economic Monetary Union (EMU) opened the concept of creating a single European currency. Its scope was to establish a common currency that would be as recognizable, strong, and trustworthy as the US dollar, and to be used domestically within the borders of the Union without unnecessary foreign currency restrictions. In a way, this vision resembles the creation of the Latin Monetary Union formed in 1865 by France, Italy, Belgium and Switzerland, which Greece joined the following year.

Figure 1 – 5 Euro 2002 (shown at 60%)

Stage One of EMU started in July 1990 and ended on 31 December 1993. It was mainly characterised by the dismantling of all internal barriers to the free movement of capital within the European Union.

Stage Two began on 1 January 1994. It provided for, *inter alia*, the establishment of the European Monetary Institute (the forerunner of the European Central Bank), and the prohibition of financing of the public sector by the central banks and of privileged access to financial institutions for the public sector, and the avoidance of excessive deficits.

The successful development of the euro is central to the realisation of a Europe in which people, services, capital and goods can move freely.

The European Central Bank (ECB) was established on 1 June 1998. It is based in Frankfurt am Main, Germany, and aims to maintain price stability and to conduct a single monetary policy across the euro area.

This is done through its own activities and through working with the national central banks. Together, the ECB and the euro area national central banks are known as the Eurosystem.

The 12 members of the European Union that adopted this economic revolution are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal and Spain.

Stage Three started on 1 January 1999 with the transfer of monetary competence to the Eurosystem and the introduction of the euro and the irrevocably setting of the exchange rates of the participating national currencies (see Table 1). Euro area Member States began implementing a common monetary policy, the euro was introduced as a legal currency of account and the 11 currencies of the then participating Member States became subdivisions of the euro. Greece joined on 1 January 2001 and so the 12 Member States introduced the new euro banknotes and coins at the beginning of 2002. In parallel, their existing currencies (such as the franc and the mark) were being progressively withdrawn during 2002 and cease to be legal tender currencies.

	One Euro is equivalent to …
Austria	13 Austrian Schilling and 76.03 Groschen
Belgium	40 Belgian Francs and 33.99 Centimes
Finland	5 Finnish Markkaa and 94.573 Pennia
France	6 French Francs and 55.957 Centimes
Germany	1 Deutsche Mark and 95.583 Pfennig
Greece	340 Drachmas and 75 Lepta
Ireland (Republic)	78.7564 Irish Pence
Italy	1,936 Italian Lire and 27 Centesimi
Luxembourg	40 Luxembourg Francs and 33.99 Centimes
Netherlands	2 Dutch Gulden and 20.371 Cents
Portugal	200 Portuguese Escudo and 48.2 Centavos
Spain	166 Spanish Pesetas and 38.6 Centimos

Table 1 – Conversion rates of old national currencies to the euro

Denmark, Sweden and the United Kingdom are members of the European Union but are not currently participating in the single currency. Denmark is a member of the Exchange Rate Mechanism II (ERM II), which means

that the Danish krone is linked to the euro, although the exchange rate is not fixed.

Figure 2 – 10 Euro 2002 (shown at 60%)

THE EUROPEAN SYSTEM OF CENTRAL BANKS

The national central banks (NCBs) of the European Union, along with the European Central Bank (ECB), make up the European System of Central Banks (ESCB).

The NCBs of Member States not participating in the euro area, ie Denmark, Sweden and the United Kingdom, have a special status which allows them to conduct their own national monetary policies, but not to take part in deciding and implementing monetary policy for the euro area.

THE EUROSYSTEM

The national central banks of the euro area together with the ECB are known as the Eurosystem.

The Eurosystem's primary objective is the maintenance of price stability. It meets its objectives through:

- deciding and implementing monetary policy;
- conducting foreign exchange operations; and
- operating payment systems.

The NCBs of the participating Member States played a key role in the smooth transition to the euro. Their responsibilities have included:

- introducing the euro in their respective countries;
- managing the changeover from national currencies to the euro;
- creating the necessary systems to effectively circulate the euro banknotes and coins;
- withdrawing national currencies; and
- providing advice about, and promoting, the use of the euro.

THE SYMBOL OF THE EURO

The name “euro” was adopted by the European Council in December 1995. One of the earlier names suggested was “ecu” which was an abbreviation of European currency unit; however this was rejected due to it having at one time been a French currency unit. Another suggestion was “emu” which was an abbreviation of European monetary unit; I don’t know if they realised that this is an Australian bird. Likewise, “euro” is another name for a “wallaroo” which is an Australian marsupial between a wallaby and a kangaroo in size.

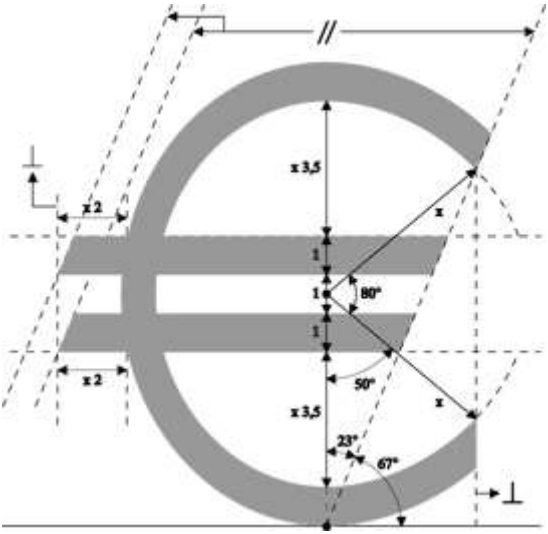


Figure 3 - Design of the monogram symbol for the Euro currency

The graphic symbol for the euro (€) was inspired by the Greek letter 'epsilon' and refers to the first letter of the word "Europe" and, in a way, links it with the cradle of European civilization. It is easy to write by hand and is aesthetically a pleasing design. The parallel lines represent the stability of the euro. The official abbreviation for the euro is EUR, which has been registered with the International Organization for Standardization (ISO) and is used for business, financial and commercial purposes.

The symbol was chosen after 30 internal design drafts and of those, 10 were chosen for public assessment.

FAMILIARISATION CAMPAIGN

Familiarising 300 million Europeans with the look, feel and security features of their new euro banknotes and coins was a huge challenge.

The Euro 2002 Information Campaign was conducted by the Eurosystem to ensure that the general public was familiar with the new banknotes and coins when they were released into circulation. It was designed to complement other information campaigns on the euro, particularly those run by governmental authorities in the individual euro area countries.

The campaign aimed to ensure that the public were informed and aware of the visual appearance, including the colour and dimensions, the security features and the denominations of euro banknotes and coins. In addition, the changeover arrangements in each country needed to be widely and effectively publicised.

THE MASS MEDIA CAMPAIGN

This campaign started in September 2001 and was intended to run until the end of January 2002. It supported the introduction of the banknotes and coins by conveying their appearance and providing information on their security features to the general public. This would have helped people to know what to expect when they came into contact with the new banknotes and coins at the beginning of 2002.

A mass advertising campaign was initiated across Europe on TV and in the print media, supported by further intensive press and PR activities. Furthermore, a public information leaflet was distributed to 300 million people in Europe.

GETTING READY FOR THE EURO

Around 14.89 billion euro banknotes and 51.629 billion euro coins were produced throughout the euro area prior to 1 January 2002 (see Table 2).[1]

The speed of the changeover from existing national currencies to the euro varied from country to country depending on their respective national changeover plans.

The changeover period, during which both the euro and national currencies were being used together – the so-called dual circulation –lasted between four weeks and two months.

For those who still had national banknotes after the changeover period had ended, they would still be able to exchange them at the counters of their national central bank for an indefinite or a very long period of time.

Country	Banknotes	Coins	Total (in order)
Germany	4 342 (29.85%)	17.0 (34.14%)	21 342 (33.17%)
France	2 570 (17.67%)	7.5 (15.06%)	10 070 (15.65%)

[1] In this instance, the term “billion” means 1000 million.

Country	Banknotes	Coins	Total (in order)
Italy	2 380 (16.36%)	7.2 (14.46%)	9 580 (14.89%)
Spain	1 924 (13.23%)	7.1 (14.26%)	9 024 (14.02%)
Netherlands	655 (4.50%)	2.8 (5.62%)	3 455 (5.37%)
Belgium	530 (3.64%)	2.0 (4.02%)	2 530 (3.93%)
Austria	520 (3.58%)	1.5 (3.01%)	2 020 (3.14%)
Greece	581 (3.99%)	1.3 (2.61%)	1 881 (2.92%)
Portugal	535 (3.68%)	1.3 (2.61%)	1 835 (2.85%)
Finland	219 (1.51%)	1.1 (2.21%)	1 319 (2.05%)
Ireland	243 (1.67%)	0.9 (1.81%)	1 143 (1.78%)
Luxembourg	46 (0.32%)	0.1 (0.20%)	146 (0.23%)
Total	**14 545 million**	**49.8 billion**	**64 345 million**

Table 2 – Distribution of the notes and coins by 1 January 2002 (numbers of pieces)

DESIGN FEATURES AND DIMENSIONS OF THE BANKNOTES

CHOOSING THE DESIGNS

The Council of the European Monetary Institute (EMI), which was the forerunner of the ECB, chose the designs in 1996.

The EMI launched a design competition in February 1996. Altogether 44 design proposals were submitted. The designs were sent to a notary, who attributed a number to each series to render them anonymous.

In September 1996 a jury of 14 independent experts in marketing, advertising, design and art appraised the designs. The jury drew up two shortlists: one of five design series on the "Ages and styles of Europe" theme and another of five design series on a "modern/abstract" theme.

Gallup Europe, which has considerable experience of conducting Europe-wide public opinion surveys, was then asked to carry out a survey of public acceptance of the ten short-listed designs. Around 2000 individuals participated throughout Europe. Two groups - professional cash handlers and members of the public at large - were interviewed on the basis of a detailed questionnaire and examined all ten design series.

On the basis of the advice given by the jury and the results of the public consultation, the EMI Council selected the winning design series in December 1996.

DESIGNER

This first series consists of seven notes and are valid throughout all the 12 participating countries. The euro banknotes were designed by the Austrian artist Robert Kalina. His designs were inspired by the theme "Ages and styles of Europe". They depict the architectural styles of seven periods in Europe's cultural history, as shown in Table 3.

Windows and gateways are the main feature on the front of the banknotes, while bridges are the main feature on the reverse. The images are modelled on the typical architectural style of each period, rather than on specific structures. The reverse also features a map of Europe and the blue European flag with the 12 countries represented as yellow 'stars'.

It is envisaged that, in the near future, more European countries will join the EMU. This strengthens the assumption of a second series of banknotes depicting the blue European flag with additional stars representing new members.

BRIDGES ON THE NOTES

The bridges, which appear on the reverse side of the banknotes, are modelled on the architectural style of each period rather than on specific structures. If it were easy to recognise particular bridges, then certain banknotes would inevitably be associated with a specific country. Therefore, the bridges merely represent a period in European history by using a stylised representation. Bridges of a similar appearance can be found in many parts of Europe. The same also applies to the windows and gateways which appear on the banknotes.

Denomination	Size (mm)	Colour	Architectural Period
5 Euro	120 x 62	Grey	Classical
10 Euro	127 x 67	Red	Romanesque
20 Euro	133 x 72	Blue	Gothic
50 Euro	140 x 77	Orange	Renaissance
100 Euro	147 x 82	Green	Baroque and Rococo
200 Euro	153 x 82	Yellow-Brown	Iron and Glass architecture

500 Euro	160 x 82	Purple	Modern 20th century architecture

Table 3 - Key characteristics of the Euro banknotes

HELP FOR THE BLIND

From the very start of the process of designing the euro banknotes, in 1995, there has been successful co-operation with the European Blind Union. The view was that "a good design for the blind and partially sighted is a good design for everybody". As a result, the euro banknotes are very user-friendly.

Each of the seven banknotes is a slightly different size (see Table 3). Some elements of the banknote design are printed in relief, through the use of intaglio printing, eg the large numerals for the values of the banknotes on the front of the notes.

The partially sighted can easily recognise the different banknotes by virtue of the following features:

- each banknote has a different dominant colour;
- sharply contrasting colours have been chosen to distinguish between each pair of banknotes in the sequence;
- the value of each banknote is printed in large, bold figures.

Available information indicates that 14.89 billion euro banknotes were initially produced, of which 10 billion were allocated for the replacement of the national currencies and nearly 5 billion are being held in reserve.

Figure 4 – 20 Euro 2002 (shown at 60%)

SECURITY FEATURES

Obviously, the public acceptance of the notes as genuine has been of paramount importance during their design and production. Applicable to all denominations, the watermark 'picture and note value' (1) and the dark security thread line (2) become visible when is held up to the light.[2]

For the low denominations of 5, 10 and 20 Euros, on the front right-hand side, there is a hologram foil stripe (3) where the Euro symbol and note value appear when the note is tilted. On the reverse, there is an iridescent stripe (4) that shines and changes colour when the note is tilted.

[2] See Figure 5 and 6 for these numbered features.

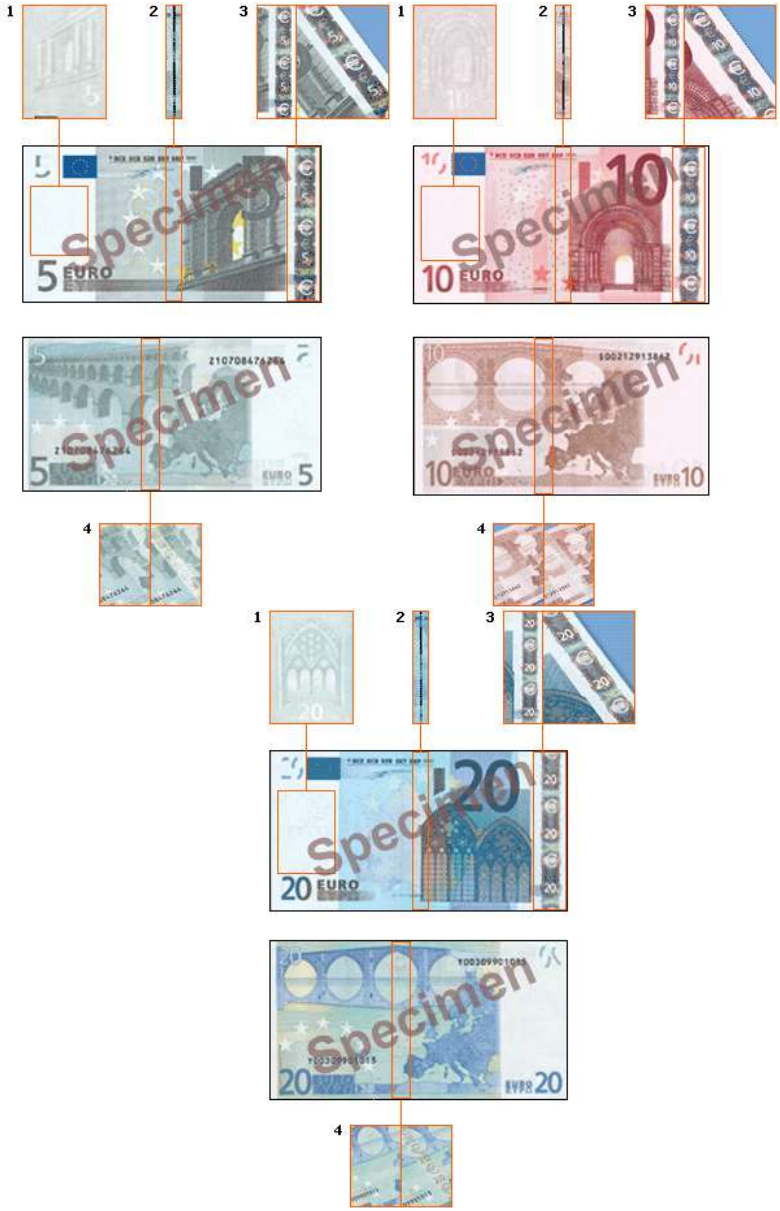


Figure 5 – Designs with numbered security features for the 5, 10 and 20 Euros notes

Figure 6 – Designs with numbered security features for the 50, 100, 200 and 500 Euros notes

For the high denominations of 50, 100, 200 and 500 Euros, on the front (right-hand side) there is a hologram foil patch (3). When the note is tilted, an image of the architectural motif and the note value appear. Also, when

tilted the value numerals (4) change colour from purple to olive-green or brown on the reverse. This is one of the properties of a colour-shifting ink.

Figure 7 – 50 Euro 2002 (shown at 60%)

PRODUCTION OF THE EURO BANKNOTES

The production of euro banknotes started in July 1999 in a number of euro area countries. The notes have been, or will be, produced by 16 banknote printing works in 13 different countries (see Table 4). This number includes four printers in three countries that are members of the European Union, but not yet "euro zone" members. Luxembourg and Portugal have not apparently been printing euro notes (or been allocated a printers code).

Greece joined the euro area on 1 January 2001. The production of euro banknotes started at the Bank of Greece Printing Works in autumn 2000.

SERIAL NUMBERS, CODES AND PRINTERS

The banknotes have the obvious serial number for identification and production control purposes, as well as an additional 'short' code to identify the printing institute and the plate position of the note.

The serial number consists of one letter and eleven numbers. As shown in Table 4, the letter prefix identifies the country of issue.

Code	Country	Code	Country
L	Finland	T	Ireland
M	Portugal	U	France
N	Austria	V	Spain
P	Netherlands	X	Germany
R	Luxembourg	Y	Greece
S	Italy	Z	Belgium
J	United Kingdom		
K	Sweden		
W	Denmark		

Table 4- Serial number prefix letter codes

The additional 'short' code consists of a letter, three digits, a letter, and ending with a single digit. Its first letter identifies the printing authority and the rest of the code identifies the printing machine and plate position; they are listed in Table 5 and are illustrated in Figure 8.

The plates are of six by ten notes each. The location of the short code varies with each denomination:

- €5 : in the far-left of the coloured area, 1cm above the O in EURO
- €10 : in the star, to the top-right of the O in EURO
- €20 : in the leftmost star
- €50 : above the hologram
- €100 : the first word of the text between the window and the stars
- €200 : to the right of the south-western star, written vertically
- €500 : in the leftmost star.

5 Euro

10 Euro

20 Euro

50 Euro

100 Euro

200 Euro

Figure 8 – Printer's 'short codes' on the Euro notes (shown at 200%)

CODE	PRINTER	COUNTRY
A	Bank of England Printing Works	England
C	AB Tumba Bruk	Sweden
D	Setec Oy	Finland
E	F C Oberthur	France
F	Oesterreichische Nationalbank	Austria
G	Johann Enschede Security Printing	Netherlands
H	Thomas De La Rue	England
J	Banca d'Italia	Italy
K	Central Bank of Ireland	Ireland
L	Banque de France	France
M	Fabrica Naciional de Moneda y Timbre	Spain
N	Τραπεζα Της Ελλαδος (Bank of Greece)	Greece
P	Giesecke & Devrient	Germany
R	Bundesdruckerei	Germany
S	Danmarks Nationalbank	Denmark
T	Banque Nationale de Belgique	Belgium

Table 5 - Printer codes

With 12 issuing countries and 16 printers, there is a possibility of 192 varieties for each of the seven denominations; however the actual number will be considerably less. Add into the equation the fact that the year also appears on the notes. This could be a cataloguer's nightmare!

Each national central bank has been responsible for deciding where to print the initial supply of euro banknotes required in the country concerned.

The euro banknotes and coins were put into circulation on 1 January 2002. By 1 January 2002, around 14.5 billion euro banknotes will have been printed for the 12 participating countries (including Greece): 10 billion banknotes to replace national banknotes and 4.5 billion banknotes as logistical stocks. Altogether, these banknotes represent a value of some €600 billion.

Figure 9 – 100 Euro 2002 (shown at 60%)

Production commenced only after several stages of preparation: the approval of the designs and the specifications (1998), the printing of the pilot series (ie printing small quantities of banknotes under normal

production conditions) (1998) and the setting-up of a quality management system (1999).

Denomination	Millions of Notes
5 euro	2415
10 euro	3013
20 euro	3608
50 euro	3674
100 euro	1246
200 euro	229
500 euro	360
Total	**14545**

Table 6 – Quantities of each denomination of note required by 1 January 2002

Figure 10 – 200 Euro 2002 (shown at 60%)

THE EURO COINS

Within the euro coinage, there are eight denominations that vary in size, colour and thickness. These are 1, 2, 5, 10, 20 and 50 cent and 1 and 2 euros. The monetary unit of one euro is divided into 100 eurocents.

DESIGN FEATURES AND DIMENSIONS

The winner of the special European competition for the design of the coinage was Luc Luycx of the Royal Belgian Mint. Some key physical characteristics of the coins are given in Table 7.

Coin Value	Diameter (mm)	Thickness (mm)	Weight (g)
1 cent	16.25	1.67	2.30
2 cent	18.75	1.67	3.06
5 cent	21.25	1.67	3.92
10 cent	19.75	1.93	4.10
20 cent	22.25	2.14	5.74
50 cent	24.25	2.38	7.80
1 euro	23.25	2.33	7.50
2 euro	25.75	2.20	8.50

Table 7 – Some physical characteristics of the coins

The obverse shows the denomination numeral with the map of Europe, with the exception of the 1, 2 and 5 cent with a globe that shows Europe's place in the world (see Figure 11). The reverse side of each coin shows designs and portraits (allegorical and real), unique to the history of each member state; and 12 stars surround the overall design.

Figure 11 – 1, 2, 5 10, 20, & 50 eurocents and 1 & 2 euro common obverses

SECURITY FEATURES

A variety of milled edges and thickness has been introduced for anti-counterfeiting purposes and for assisting the visually impaired people with recognizing different coinage values. The introduction of the bi-metallic technology for the 1 and 2 euros also makes them difficult to counterfeit. Finally, the unique edge patterns are recognizable by vending and similar machines throughout the member states.

Coin Value	Composition	Edge
1 cent	Cu on steel	Smooth
2 cent	Cu on steel	Smooth with groove
5 cent	Cu on steel	Smooth
10 cent	Nordic gold	
20 cent	Nordic gold	
50 cent	Nordic gold	Shaped edge with fine scallops
1 euro	Outer: Ni-brass / Inner: Cu-Ni, Ni, Cu-Ni	Interrupted milled
2 euro	Outer: Cu-Ni / Inner: nickel-brass, nickel, nickel-brass	Edge lettering, fine milled

Table 8 – More physical characteristics of the coins

Figure 12 – Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain 50 eurocent reverses

REVERSE DESIGNS

The 12 member countries have their own designs for the reverses. The reverse designs for the 50 cent coins are shown in Figure 12.

Austria

Each coin has a different design. The 1, 2 and 5 cent coins form a floral series, depicting a gentian, the edelweiss, and alpine primroses respectively. The 10, 20 and 50 cent coins depict buildings: St Stephen's Cathedral in Vienna, Belvedere Palace, and the secession building in Vienna respectively. The 1 euro coin depicts Wolfgang Amadeus Mozart and the 2 euro coin depicts Bertha von Suttner.

Belgium

King Albert II is depicted on each coin.

Finland

1, 2, 5, 10, 20 and 50 cent coins all show a heraldic lion. Two flying swans are shown on the 1 euro coin and cloudberries and cloudberry flowers are shown on the 2 euro coin.

France

The 1, 2 and 5 cent coins each shows a young, feminine Marianne. The 10, 20 and 50 cent coins all depict the sower. The 1 and 2 euro coins show a tree symbolising life, continuity and growth.

Germany

The 1, 2 and 5 cent coins depict an oak twig. The 10, 20 and 50 cent coins show the Brandenburg Gate in Berlin. The 1 and 2 euro coins depict the eagle as the traditional symbol of German sovereignty.

Greece

Each coin has a different design. The 1, 2 and 5 cent coins depict ships - an advanced model of an Athenian trireme, a corvette, and a modern sea-going tanker respectively. People are shown on the 10, 20, and 50 cent coins - Rigas-Fereos (Velestinlis), Ioannis Capodistrias, and Eleftherios Venizelos respectively. The 1 euro shows an owl (from the ancient Athenian tetradrachm) and the 2 euro depicts a scene from a mosaic in Sparta (showing the abduction of Europa by Zeus in the form of a bull).

Ireland

The Celtic harp, a traditional symbol of Ireland is depicted on each coin.

Italy

Each coin has a different design. The Castel del Monte is on the 1 cent coin; the Mole Antonelliana (a tower) is on the 2 cent coin, and the Flavius amphitheatre is on the 5 cent coin. The "Birth of Venus" by Sandro Botticelli is on the 10 cent coin, a sculpture by Umberto Boccioni is on the 20 cent coin, and the statue of Emperor Marcus Aurelius on horseback is on the 50 cent coin. The 1 euro coin shows a drawing by Leonardo da Vinci and the 2 euro coin shows a portrait drawn by Raphaël of Dante Alighieri.

Luxembourg

All coins have the profile of His Royal Highness the Grand Duke Henri.

Netherlands

All coins have the profile of Queen Beatrix.

Portugal

The 1, 2 and 5 cent coins show the first royal seal from 1134. The 10, 20 and 50 cent coins depict the royal seal of 1142. The 1 and 2 euro coins depict, in a stylized form, the country's castles and coats of arms.

Spain

The 1, 2 and 5 euro coins show the cathedral of Santiago de Compostela. The 10, 20 and 50 cent coins depict Miguel de Cervantes. The 1 and 2 euro coins show a portrait of King Carlos I de Bourbon y Bourbon.

BRIEF HISTORY OF THE OLD CURRENCIES

AUSTRIA

Austria introduced the **Schilling** in 1924. From 1892 to 1924, the main unit was the krone which was equal to 100 heller; this had replaced the florin (or gulden), worth 60 kreuzer (before 1857) and 100 kreuzer (from 1857 to 1892). The Schilling is divided into 100 Groschen.

Figure 13 – An Austrian 20 Schilling banknote dated 1 10 1986 [Pick 148]

BELGIUM AND NETHERLANDS

The **Belgian Frank** and **Netherlands Gulden** were established when they became kingdoms. In 1815, the Kingdom of the United Netherlands (which at that time included Belgium) kept its former Gulden currency, but reorganized it as a decimal system divided into 100 cents.

Figure 14 – A Belgian 100 Frank banknote issued from 1995 [Pick 147]

Figure 15 – An earlier Netherlands 5 Gulden banknote dated 28-3-1973 [Pick 95]

When the Belgian kingdom became independent from Netherlands in 1830, it adopted the Frank (or Franc) from France, the country that had ruled both countries during the earlier Napoleonic period. The Frank and Gulden are divided into 100 Centimes and 100 Cents respectively.

FINLAND

Until 1809, Finland used Swedish money as the Swedish crown ruled it. The Swedish money was in a form of heavy and large copper plates that could weight up to 19 kg. In 1809, Sweden lost control of Finland to Russia. The Russians introduced into Finland their own roubles and kopeks. Finland was given its own currency in 1864 when the **Markka**, divided into 100 Pennia, was introduced. In 1963, the new markka was introduced being equal to 100 old markkaa.

Figure 16 – An earlier Finnish 10 Markkaa banknote dated 1980 [Pick 112]

FRANCE

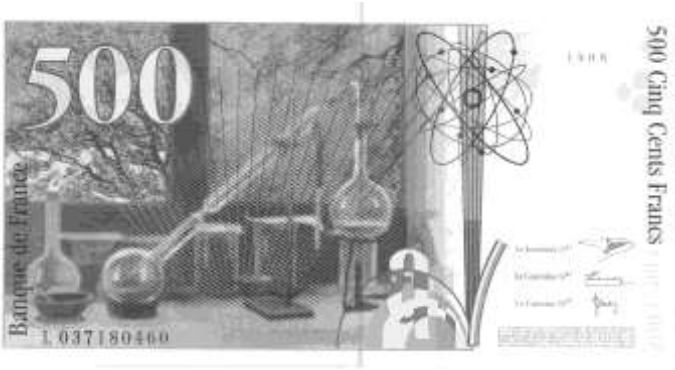


Figure 17 – A French 500 Francs banknote dated 1998 [Pick 160b]

The **Franc** was first issued as a gold coin in 1360, and as a silver coin in 1577. It did not become the main unit of French currency until 1795. It has retained this position ever since but its value has changed many times as the result of revolutions and war. The last major change was in 1960 when a new franc was issued worth 100 of the francs in use until then. The Franc is divided into 100 Centimes.

GERMANY

The **Mark**, divided into 100 Pfennigs, was introduced in 1871 when Wilhelm I, King of Prussia, formed the German Empire. Before it became the main unit of currency, the mark was used as a weight. The pfennig, however, has a long history, and was the name used for German silver coins of the 11th century. After the inflationary period of the early 1920's, the rentenmark was introduced in 1923, and the reichsmark in 1924. After World War II, Germany was split into two separate countries - West Germany used the deutsche mark and East Germany returned to the mark. With reunification in 1990, Germany continued with the deutsche mark. The deutsche mark is divided into 100 Pfennig.

Figure 18 – A German 100 Deutsche Marks banknote dated 2-1-1989 [Pick 41a]

GREECE

In ancient times, the **Drachma** was a silver coin weighting about 4.3 grams. As Alexander the Great conquered vast areas during his expansion, the use of the word drachma can be found on coinage issued across his expanded territories, especially around Persia. Finally, when Greece became independent, the drachma was introduced in 1831, replacing the Phoenix. The Drachma is divided into 100 Lepta.

Figure 19 – The last high-denominated Greek 10 000 Drachmas banknote dated 16-1-1995 [Pick 206]

IRELAND

The Irish **Pound** was introduced as a monetary unit when the Irish Free State was established as a dominion on 6 December 1921. However, being ruled by the British prior to that date, the British pound currency was used. Since 1971, the Pound has been divided into 100 Pence.

Figure 20 – An earlier Irish 1 Pound banknote dated 14-7-1988 [Pick 70d]

ITALY

The **Lira** was established as Italy's national currency from 1861 when Vittorio Emanuele II became King of Italy. The word lira comes from the Latin word libra, the unit of weight used to set the value of early Roman copper money. The Lira is divided into 100 Centesimi.

Figure 21 – An Italian 10 000 Lire banknote dated 3-9-1984 [Pick 112b]

LUXEMBOURG

The Grand Duchy of Luxembourg regained its autonomy in 1815 in union with Netherlands, although still part of the German Confederation. When Belgium separated from Netherlands in 1830, Luxembourg was forced to cede much of its western area to Belgium. Luxembourg became an independent country in 1867 when it left the German Confederation. Its monetary unit is the **Franc** that is divided into 100 Centimes.

Figure 22 – A Luxembourg's 100 Francs banknote dated 14-8-1980 [Pick 57]

PORTUGAL AND SPAIN

Columbus set out from Spain to open up a westward route to the East in 1492 and found the Americas and, six years later, Vasco da Gama from Portugal opened the sea route around Africa to India. These two events dramatically changed the history of money. They led to the issue of European-style coins in the Americas, Africa and eventually Asia, and also brought to Europe vast amounts of gold and silver from those continents.

Spain shipped into Europe and Asia millions of silver 'pieces of eight' from Mexico, Peru and Bolivia. Portugal supplied Europe with gold taken from Africa, India, China and Brazil.

Figure 23 – A Portuguese 500 Escudos banknote dated 17-4-1997 [Pick 187a]

The **Spanish Peseta** was introduced in 1869 and got its name from the popular term for a small silver coin, whereas the **Portuguese Escudo** is a more recent creation, issued in 1915 after the establishment of the Republic in 1910. The Peseta and the Escudo are divided into 100 Centimos and 100 Centavos respectively.

Figure 24 – An earlier Spanish 100 Pesetas banknote dated 17-11-1970 [Pick 152]

So, while the date of 1 January 2002 can be claimed as an extraordinary economic milestone in European and world financial affairs; in terms of numismatics, it signifies the death of 12 unique currencies and their much loved coins and banknotes for many years…

BIBLIOGRAPHY

Cribb, J, *Collins Eyewitness Guides 'Money'*, 1991 reprint

Encyclopaedia Britannica, CD edition, 2001,

European Central Bank Website

International Bank Note Society (USA) Website

Krause & Mishler's Standard Catalog of World Coins, 21st edition, 1994

Krause, *2000 Standard World Paper Money*, Vol 3, 6th Edition, 2000

CANADIAN RATIONING MARKS AN ANNIVERSARY

Harold Don Allen[1]

Canada's complex "home front" of World War II was, of course, far removed from major centres of armed conflict. Great effort was devoted, however, to establishing a sound "war footing", both to serve Canadian and Allied military needs, and to build a home economy free from ravages of wartime inflation and assured of fair distribution of scarce supplies necessary or desirable in civilian living.

Canada was at war from September 1939, and home front efforts and priorities soon affected, in diverse ways, the daily lives of just about every Canadian. Recruiting for the armed services and establishment of munitions and other war-related industries were early priorities. Related efforts extended to wartime financing through Victory Bond campaigns and War Savings investments, to price and rent controls to preclude profiteering, and to formal rationing of a range of foodstuffs and of gasoline. Such measures, in Canada, created little real hardship - some inconvenience, undeniably - and generally were well, or at least stoically, received.

Two aspects of such "home front" intervention generated materials of potential collector interest - the "funds raising" (Victory Bonds, War Savings Certificates, War Savings Stamps, and forms) and the coupon rationing (sugar, tea and coffee, butter, meat, preserves, and - through a priority system - evaporated milk; also gasoline). Many items of such origin still can be found at "paper shows" or in nostalgia stores. They do tend to fall somewhat outside conventional limits of philately and numismatics, and fiscal (revenue) collectors and check collectors (ration banking accounts, for foods and for gasoline) have tended to evidence but little interest.

STAMP, NOTE AND COINAGE CHANGES

Canada's definitive postage stamps "went to war" in July 1942 depicting King George VI in his service uniforms; with the ram tank,

1 Dr Allen, Canadian by birth and a world numismatist by choice, is a long time member of the Numismatic Society of South Australia.

corvette, destroyer, munitions factory, and student flyers on higher denominations. Bank notes also underwent changes, though of a more subtle nature, paper composition being altered more than once in response to wartime priorities. Canada's Princess Patricia $1 note of 1917, flags flanking the portrait, had no counterpart in World War II, however.

Coinage changes extended both to metallic content and to reverse design, at least for one denomination. Tombac replaced strategic nickel in Canada's five cents late in 1942, yielding the "12-sided beaver." Thomas Shingles' imaginative "V" reverse took over in tombac in 1943 and in plated steel in 1944 and 1945.

So Canada had its counterpart of America's 1943 "steel cent", and a bit more; but nothing to correspond to the Hawaii overprint or the yellow-seal dollars.

Canada's War Savings Stamp progressed through three designs or groupings of designs: the basic dark blue 25 cents, the carmine Spitfire, and the carmine set of eight war-related scenes. War Savings Certificates, basically attractive at the outset, underwent a face lifting of sorts. Fiscal collectors now realize that panes of such stamps can be difficult, and paper enthusiasts appreciate that certificates of higher value than the blue $5 are a challenge indeed.

RATIONING OF FOODSTUFFS

This Canadian summer, however, marks the 60th anniversary of Canada's inauguration of coupon rationing of foodstuffs. Specifically, the pasteboard Temporary War Ration Card (Form RB-2) of the Wartime Prices and Trade Board (WPTB) came into use on 1 July 1942, providing five numbered coupons (1 to 5) for the purchase of sugar and five lettered coupons (A to E) which subsequently were identified with the rationing of tea and coffee.

We shall be considering Canada's six-book succession of rationing items, and may usefully cross-reference these to corresponding intervals of commodity rationing.

Sugar:

1 July 1942 to 2 November 1947, coupled with Preserves rationing from 21 February 1946. Coupons: sugar - 75; canning sugar - 46, combined ration - 66. Total: 187.

Tea and Coffee:

3 August 1942 to 18 September 1944. Coupons: 64.

Butter:

21 December 1942 to 9 June 1947. Coupons: 218.

Meat:

27 May 1943 to 29 February 1944 (first interval). Coupons: 80 (40 pairs).
9 September 1945 to 26 May 1947 (second interval). Coupons: 81 (tokens as "change").

Preserves:

2 September 1943 to 9 June 1947 (except for molasses, to 2 November 1947). Coupons: 62.

Evaporated Milk:

Priority distribution, 4 October 1943 to 9 June 1947. No universal coupons.

Thus, as we consider in some detail six WPTB food rationing books used between 1942 and 1947, and the preliminary card, we see 1134 coupons of general issue, with 682 of these having been "validated" for rationing purposes, some 60.1%.

Since coupons had to be available in anticipation of a year or more of possible rationing needs, this figure is quite respectable. Both data include as universal the tea/coffee coupons, though such coupons were removed from books of children under 12.

COLLECTING RATIONING COUPONS

As a youthful enthusiast in a Canadian urban setting, I found most such coupons, when current, tough to collect, those for sugar and butter near impossible. What perhaps is surprising, decades later, is the extent to which old ration books, often with "good" coupons in them, do survive. I do suspect that the disproportionate survival of meat coupons, often as intact sheets, of both rationing intervals, reflects a "fiscal vegetarianism" - meat (particularly the cuts that were rationed) would be a pricey commodity, and a frugal household might have found the prescribed allotment to have more than sufficed.

Having collected, as I now recall, some 83% of validated food coupons, along with numerous press clippings, my next venture in

this intriguing field was to attempt to set down what I knew. My *Canada Rationing: A Numismatic Record* was run off by the college printer, complete with illustrations and sample coupons, and I promptly donated copies to appropriate libraries and societies; this was in 1956. Copies at the American Numismatic Association and the Toronto city library do survive.

CANADA'S FOOD RATION BOOKS

To examine Canada's food ration books, in sequence:

Ration Book 1

Ration Book 1 (Form RB-8) of September 1942, is to be found in some variety, including local ration office designations (inside front cover). Minor differences suggest regional printers. Serial numbers, which are imprinted, may be in black (usual) or in red. Elaborate overall geometric sheet design covers tabs, 13 coupon array. There are seven sheets of coupons, as follows:

- Sugar (pink),
- Spare A (green, tea or coffee),
- Spare B (blue, unvalidated),
- Spare C (brown, 1 to 9 for butter),
- Spare D (black, unvalidated).

Ration Book 2

Ration Book 2 (Form RB-50), green cover, March 1943, introduced individual coupon patterns of intersecting arcs. Eleven sheets, each of 13 coupons, as follows:

- tea or coffee (green),
- sugar (red), butter (two sheets, purple),
- Spare A (four sheets of coupon pairs, brown, for meat),
- Spare B (blue, B1 used for "sugar for rhubarb"),
- Spare C (two sheets, black, unvalidated).

Ration Book 3

Ration Book 3 (Form RB-150), grey cover, September 1943, perpetuated the arcs coupon design, but inaugurated a 16 coupon sheet. Twelve sheets comprised:

- tea or coffee (green), sugar (red),
- butter (two sheets, purple),

- meat (2½ sheets, brown, validated through pair 40),
- Spare C (two sheets, black, half-size coupons, C-27 through C-90, never validated),
- Spare D (black on deep orange, preserves),
- Spare E (yellow, E-1 to E-6 used for tea or coffee,
- Spare F (blue, F-1 to F-10 used for canning sugar).

Ration Book 4

Ration Book 4 (Form RB-300), buff cover, April 1944. Extends arcs-design sequences through eleven 16-coupon pages:

- tea or coffee (green),
- sugar (red),
- preserves (black on deep orange),
- butter (two sheets, purple),
- meat (four sheets, brown, coupon pairs 47 to 78, none of them validated),
- Spare H (black, not validated),
- Spare K (blue on yellow, unvalidated, but used as an application sheet for Ration Book 5).

Ration Book 5

Ration Book 5 (Form RB-250), pink cover, September 1945, introduced a smaller basic coupon with a maple leaf central device. Its eleven 25-coupon sheets were to serve for over a year. These sheets comprised:

- sugar (red),
- preserves (black on orange),
- butter (two sheets, purple),
- meat (two sheets, brown),
- Spare P (yellow, wholly used for sugar-preserves rationing),
- Spare Q (black, to Q-4 for meat),
- Spare R (2 sheets, blue, to R-21 for butter),
- Spare S (green, wholly used for sugar-preserves).

Ration Book 6

Ration Book 6 (Form RB-275), yellow cover, the last, and perhaps most accessible, of such WPTB releases. This book introduces a new, more open coupon design, with commodities unnamed, but typically (for butter) "B / 52" on the front, "52 / B" on the back. Nine 25-coupon sheets, labelled (in order):

- B (blue, butter),
- M (brown, meat),
- S (green, sugar-preserves,
- B (to B-53 for butter),
- M (to M-77 for meat),
- S (to S-66 for sugar-preserves),
- Y (purple, to Y-13 for canning sugar),
- V (black on buff, unvalidated),
- X (red, unvalidated).

Enhancing counterfeiting protection, multicoloured planchettes and fibres are conspicuously embedded in B, S, Y, and X coupons, while M and V sheets are on distinctively watermarked paper.

OTHER COUPONS

The really tough items of consumer food rationing, I've always found, are those that many persons seldom saw - the unnumbered special coupons for such as medical rations or for service personnel on leave. Some do survive! At Toronto "paper" shows of recent years, I've chanced upon an RB-76 Ration Card for a supplementary butter ration, endorsed "medical" (what medical condition, one wonders), an RB-183 Ration Card "for army, navy and air force personnel on subsistence, temporary duty or leave for five days or more" for sugar/preserves; and an RB-173 Evaporated Milk Card, dated 1944 - all not necessarily with the elusive coupons attached. Coupons depicting a beaver derive from the Ration Book 5 era; those with a buffalo, from the interval of Book 6.

Canada's ration coupons, for the record, invariably were referred to, both officially and informally, as just that - coupons, and not "stamps," as was common United States practice. Clearly there was no consumer rationing of canned goods as such, nor of shoes or other items of clothing. There were shortages, yes, but not such as to warrant rationing, it was felt. Distribution of canned goods at bulk user level was controlled, but no one needed points or such to buy a can of soup. Canada's ration token was a larger, centre-holed item in blue pressed wood, very likely inspired by the US blue point. During the second interval of Canadian meat rationing, tokens, worth ⅛ coupon, would routinely be given as "change".

Gasoline

Canada's gasoline rationing was under the authority of the Wartime Industries Control Board (WICB). The signature of G R Cottreille, Oil Controller for Canada, appeared on the cover of every gasoline rationing book, and his name was placed (front and back) on every "gas" coupon of earlier years.

Gasoline rationing memorabilia, distinctive and attractive, derive from four distinct "dual years" of book and coupon issuance. From 1 April 1942, some "1942-43" coupon types stipulated "quarters", three-month intervals of validity. The oft-lamented "AA" basic category was inaugurated in 1943-44, I believe, and I've a book of that year, ticketless, in which the mandatory windshield sticker, an "AA," somehow remains. Since gasoline ended one-third of the way into the 1945-46 ration "year" - on 15 August 1945 - coupon books of this final issue, often with many coupon pages intact, remain quite accessible. Some of the more exotic "categories" constitute a distinct challenge, however, such as the red, double-size WIT coupons, an allusion to Wartime Industrial Transit - the transportation of such "war workers" as munitions plant employees.

Gasoline rationing proceeded with a succession of steps to minimize theft and misuse. Coupon banking was initiated, but deposits couldn't always be on a daily basis. Garages were instructed to "cancel" coupons, using their Oil Controller License Number, precluding subsequent "use" at another seller. Later coupons also had to be endorsed by the motorist with the licence number of the vehicle concerned.

Alcohol

A third, perhaps less known, area subjected to coupon rationing was alcoholic consumption. Under provincial authority, fairly elaborate coupons are known to me from Quebec and Ontario, the latter having extended to beer and wines.

FINAL THOUGHTS

Those who study and collect wartime rationing memorabilia - and internationally there are more than a few - very likely will be struck by the elaborateness and attractiveness of Canada's coupons, both the food and the gasoline. I can see two reasons for the exceptionality.

Firstly, good paper and inks had been readily available. Such might not have been the case with other countries' emergency issues. Secondly, such books and coupons were government material being placed in the hands of 11.5 million Canadian civilians, and for an important purpose. A good product was to be expected, and time and talent sufficed for one to be produced.

REFERENCES

Several of my own writings, including the 1956 monograph (ANA Library) have permitted a fuller development of aspects of Canadian coupon rationing than has been feasible in these pages. See:

Allen, H D, *Canada Rationing: A Numismatic Record, 1942-1947*, Montreal, 1956

"Anniversary of End of Wartime Rationing" in *The Chronicle-Herald*, Halifax, 2 November 1972

"Ration Stamps and Other Rationing Memorabilia" reprinted from *The Cinderella Philatelist* (United Kingdom), *The Ration Board*, 19:2 (June 1984), pp 31-32.

"Canadian Rationing Collecting: Some Distinctive Aspects" *The Ration Board*, 34:1 (March 2001), pp 5-6.

Reference to official sources can prove to be more difficult than might be anticipated. I retain a letter from the Wartime Prices and Trade Board (H MacMillan, Assistant Secretary), informing me, in response to a collector request, that *"When the ration administration was closed, all the documents were destroyed"* (letter of 21 July 1949). All the more significant, therefore, are Ryan's recent efforts to research "coupon banking," using National Archives, *Canada Gazette*, *Canadian War Orders and Regulations*, and like sources.

Ryan, Christopher D, "Ration Administration and the Coupon Banking System," *Newsletter*, Canadian Paper Money Society, 4:2 (July 1996), pp 47-51

FROM HAMMER TO SCREW

HOW THIS CHANGE SLOWLY OVERTOOK THE ROYAL MINT

by Tom May , NAV 803

It was almost exactly a century between the first attempt at updating the old "hammered" method of coin manufacture in England to its complete replacement by the "milled" method we know today - why was this so ?. In order to answer the question it is also necessary to consider the problems affecting coin production and circulation in the expanding economy of 16th/17th century Great Britain. Coins had been produced by hammering a piece of roughly shaped (and weighed) metal between an engraved punch and a fixed lower engraved die - with minimum change since about the 6th century BC. The expanding commercial scene accentuated disadvantages of this method of production by the 17th century.

The main disadvantages were-

1 The finished coin was usually of uneven thickness and shape, the rough edges making it easy for the unscrupulous to "clip" off pieces of precious metal.

2 Although the "hammer" could achieve a surprisingly high production rate, this could not be significantly improved upon without a dramatic deterioration in coin quality.

3 Such a firmly entrenched procedure enshrined the customs of a conservative work force operating in European Mints under the eye of powerful Guilds. Such Trade Guilds were at the height of their power in England by the 17th century. They resisted any changes to production methods which could reduce their power and influence - even to gain improvements.

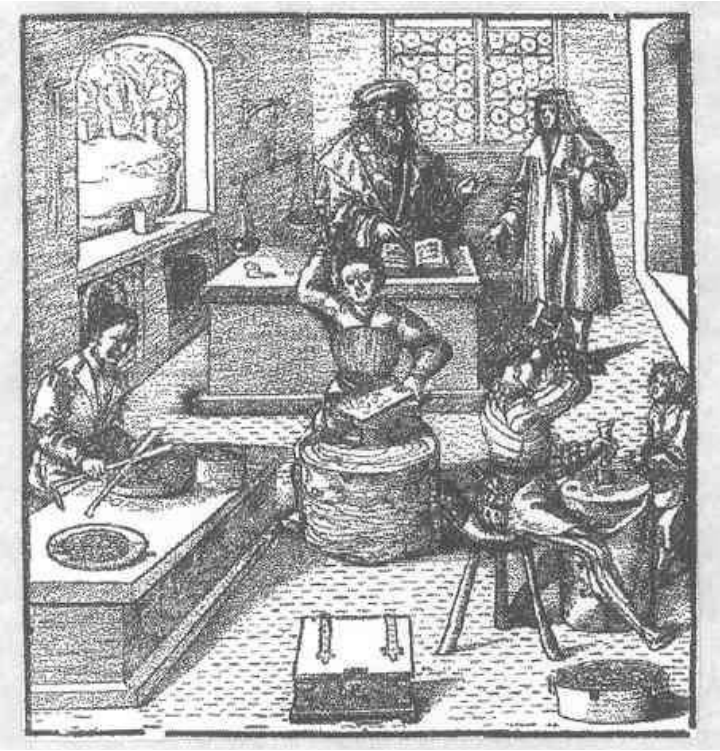


Figure 1 A traditional "hammered" coin workshop showing the various stages of production

NEW IDEAS

Nevertheless new ideas for coin production were developing in various parts of Europe by the 16th century. Utilising the somewhat limited water (or horse) powered "mill", metal could be rolled into strips and cut into more uniform "blanks" than previously possible. A "screw-press" was used successfully to press the dies on to these, producing much more satisfactory coins despite the initial lower rate of production than by the old hammer method. Limited power sources available at the time were among the reasons for this lower production rate.

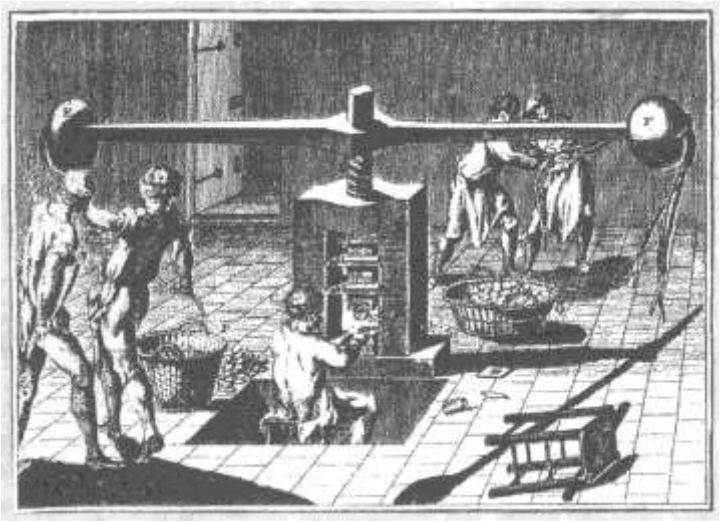


Figure 2 A typical manual "Screw press" which was operated by men pulling the straps attached to the end of counterweights.

Another way of using the "mill" originated from central Germany. The rollers themselves were engraved with the coin design (as a "Die Roller") and coordinated by metal teeth to roll out slightly oval blanks of the required weight into reasonably round coins. The oval shape of the blanks was necessary to compensate for the uneven pressure from the rollers - though this was not always completely successful. This relatively slower process was particularly suitable for the larger "dollar" sized European coins produced from the burgeoning silver supplies from Saxony and the Spanish new world.

The Florentine Goldsmith, Benvenuto Cellini, in the mid 16th century, was one of the first craftsmen to adapt the screw press for coin and medal production. His writings give us a useful account of how this method originated and the problems faced by the pioneers. These included a greater die destruction rate, an initially slower production than by using the traditional method and the ongoing resistance from conservative mint workers' Guilds.

ELOI MESTRELLE (ELIZABETH I)

The first English experience of milled coin production took place in the reign of Elizabeth I. She was determined to replace the low quality coinage largely inherited from the financial troubles of Henry VIII. Part of the

solution to this problem seemed to be the introduction of this new "milled" coinage with its promise of better quality control. The increased centralisation in London by then of mint operation was an advantage for establishing such a production method.

Eloi Mestrelle was brought over from the Paris Mint by Elizabeth I in 1561. Having experienced firm opposition from the Paris mint workers, he was eager to set up his machinery abroad. Included in this was a rolling mill and screw press which could manufacture gold and silver coins of shilling size and below with neat but plain edges.

Figure 3 Elizabeth I Hammered and Milled Shillings - 32 & 30 mm diameters

The staff members of the Royal Mint were persuaded to cooperate with Mestrelle's sporadic production over the next ten years, allowing for the major volume of coin to be still produced by the traditional method. The majority of "milled" coins produced consisted of sixpences which were particularly popular for small change at the time. However the incoming Warden of the Mint in 1572, Sir John Martin, reported that Mestrelle's operation was too slow. The Frenchman was dismissed (and later hung for forgery in 1578) while the Mint returned exclusively to the traditional method of production for over fifty years.

NICHOLAS BRIOT (CHARLES I)

Nicholas Briot, another refugee from the Paris Mint, arrived in 1625 to be employed on the accession of Charles I for another attempt at reforming coin manufacture. Briot was set up at the Royal Mint with his improved machinery in 1626, which included this time both the "Die Roller" and Screw Press for striking large and smaller coins respectively. However the Mint Authorities confined Briot to the production of medals and minor coin

patterns until 1631 when at last he was able to contribute crown-sized pieces and below for general circulation.

Figure 4 Charles I Hammered and Milled Shillings - 31 & 30 mm diameters

However, the following year Charles decided that Briot's efforts could best be directed to the Edinburgh Mint where the separate Scottish coinage was in even more need of reform than the English had been. So in 1632 Briot and his equipment set about the task with a will to achieve more successful coin production than had occurred at the Royal Mint. His daughter married Sir John Faulkner, a Scottish Mint Official, which helped combat resentment from the local mint workers.

In the meantime English coinage again languished entirely in the "hammered" mode until 1638 when Briot was able to leave the Scottish Mint in the capable hands of Sir John to again produce a "milled" coinage from the Royal Mint. However this time Charles' troubles with parliament, culminating in the Civil War, caused suspension of the issue by 1639, although some of Briot's dies were used for subsequent "hammered" productions. He was outstanding as a die-engraver and innovator in coin manufacture, whose work is impressive even when produced by the traditional method. He is credited with influencing the later mechanical and artistic works of Blondeau and Simon - the latter particularly (being a former pupil). Briot managed a precarious neutrality during the Civil War and died at Oxford in 1646.

THOMAS SIMON & PIERRE BLONDEAU (COMMONWEALTH)

After those turbulent times, comparative stability of the Commonwealth provided another chance for improving English coin production. The two before-mentioned men, who were largely responsible for the next attempt, began their association with the Royal Mint prior to the Commonwealth being completely victorious.

Thomas Simon and Pierre Blondeau - the artist/engraver and the engineer who teamed up for the next attempt at introducing "milled" coinage. Simon contributed his engraving skills to some items towards the end of Charles I's reign. While his medal and seal engraving work was attractive, his true talent was not reflected in the coinage because of the unsuitable production methods of the time. This seemed to be rectified in 1649 when Parliament imported Blondeau with the latest "mill" machinery from Paris, but again strong resistance from the mint workers soon neutralised this innovation. Blondeau only managed to produce a few patterns using his machinery from 1651, while this new simple Commonwealth "English legend" design coinage continued to be struck by the hammer.

Figure 5 Commonwealth Hammered and Milled Shillings - 32 & 25 mm diameters

Blondeau, in addition to handling larger coin patterns with his equipment, introduced for the first time a method of "graining" and imprinting the edges of coins. This innovation was accomplished by turning the metal blank between two engraved metal strips containing the required letters (or graining). It would be a major blow to the "clippers" of coins if the new concept could be approved by the Royal Mint Authorities for general production.

In spite of this promising advance, the usual objections from the Guild caused the continuation of Commonwealth coinage in its simple format as a purely "hammered" product. However from 1656 Blondeau was able to strike superb "screw-pressed" patterns for a proposed coinage of Oliver Cromwell as Protector, utilising the artistry of Simon's dies. The hope of a new general issue was dashed however when Cromwell died in 1658. Some of the patterns seem to have had limited circulation, particularly the shilling, but no foray into the new way of striking coins was attempted for the remainder of the Commonwealth after Blondeau returned to Paris in 1658.

Figure 6 Oliver Cromwell Pattern Milled Halfcrown – 32 mm diameter

THOMAS SIMON (CHARLES II)

With the restoration of Charles II in 1660 Simon lost his premier position as Chief Engraver (owing to his Commonwealth connections) and was relegated to a lesser position. However he engraved the dies for Charles's first coinage, which was only to be produced by the old "hammer" method. The contemporary diarist Sam Pepys commented thus on the unsatisfactory method at the time - "At the Mint we met with Mr Slingsby who showed me the stamps of the King's new coyne; which is strange to see how good they are in stamp and bad in money".

Charles nevertheless was determined to introduce the reformed method of coin production to the Royal Mint, and with that aim brought Blondeau back from Paris in 1662. Simon however took no part in this new coin production, being relegated to engrave dies for medals and seals only. His last attempt to regain his former position was the engraving of the outstanding 1663 "Petition Crown" pattern with the petition finely engraved on the edge. This fell on deaf ears however and he subsequently died during the Plague of 1665, thus leaving the field completely to his competition.

THE ROETTIERS FAMILY (CHARLES II)

The Roettiers family provided the principle players at the end of the "milled" versus "hammer" story. With John at their head the Roettiers were well versed with the latest methods, utilising Blondeau with his machinery for the new production. They arrived in England shortly after the Restoration since Charles II had offered them prominent positions at the

Mint in return for much needed support during his exile on the Continent. Thus John Roettiers, instead of Simon, was most likely the favourite to start producing the new "milled" coinage from 1662 - setting the pattern for this type of coin manufacture for the next 150 years.

Figure 7 Charles II Hammered and Milled Shillings - 32 & 25 mm diameters

Considerable credit is due to Charles' stubborn insistence on a permanent improved "milled" coinage - thus overcoming the obstacles that plagued previous false starts. Sufficient to say that the Roettiers provided a steady output of the new coins without further hindrance. However in spite of this welcome improvement, there still remained in circulation a considerable amount of disgracefully worn and underweight "hammered" specimens - some dating back to the Tudor period. A concerted effort by William III to clean up this residual mess when he instituted the Great Recoding of 1696 was only partially successful. With the advance of the 18th century, the soon rapidly changing means of production from small craftsmen to centralised industry saw the rapid decline in the power of the Guilds. This insured the survival of milled coinage - there was no going back this time!

STEAM POWER (GEORGE III)

The next major advance came with the Industrial Revolution (and steam power) by the late 18th century. The new powerful machinery of Boulton and Watt installed in the Royal Mint, aided by the talents of such designer/engravers as Benedetto Pistrucci and the Wyons, set the seal on the mass production of a truly "modern" coinage by 1816. This finally saw the departure of the remaining worn relics of the "hammered" era as well. The political side relating to the frequency and volume of the coin issues is another story that merits a separate study.

Figure 8 George IV "Steam" Milled Crown – 38 mm

LATER HAMMERED PIECES

Although the production of hammered coinage went the way of history at the Royal Mint, vestiges of that archaic method survived in far flung parts. The British East India Co still utilised it until 1794 in Calcutta and the State of Hyderabad continued its use until 1895. Even in Australia a few locally made tokens, for example some of Thornthwaite's Tea Stores pennies and halfpennies, were made by an adaptation of the ancient process.

While these original products from the hammer have produced some outstanding works of historical art which we eagerly collect today, as purely practical items of currency they would be unacceptable in the modern world. In fact when viewing some of the rougher specimens, one can only wonder why any respectable government would tolerate them in spite of vested interests when the ability to produce a superior product was possible!

REFERENCES:

Cooper, DR, *Coinmaking*
Linecar, H, *British Coin Designs and Designers*
North, J, *English Hammered Coinage*, Vol II.
Morley, PJ & North, J, *The J Brooker Collection*.
Pepys, S, *Diary*
Seaby, B, *Coins of England*
Seaby, B, *English Silver Coinage from 1649*
Articles & Correspondence

GEORGE STAVROU

MORE THAN JUST A FACE

by Bill Xynos, NAV 1112

BACKGROUND

George Stavrou was born in Ioannina (Epirus, Greece) in 1785 and died in Athens in 1869. He studied at the Commerce School of Vienna and worked there at his father's commerce house.

Figure 1 – George Stavrou

Before the Greek uprising of 1821, he became a supporter for the cause of the Independence and joined the secret organisation of Filiki Eteria[1]. This included the arrangement of procuring armaments and essential needs for the revolutionary forces.

1 Filiki Eteria (Company of Brotherhood) was a secret organisation established in 1814 by N Skoufas, E Xanthos and A Tsakalof for the sole purpose of organising the liberating forces prior to the 1821-1828 revolution. Its organisational structure adopted some elements from the Freemasons and its membership included key people such as priests, intellectuals and merchants, as well at people from skilled and low social structures.

Later, he had the opportunity to meet Capodistrias[2] at St Petersburg, a man of influence of the times.

In 1825, George Stavrou was assigned as the Cashier-General of the provisional government (committee) under the presidency of George Kountouriotis; and as representative of Epirus, he was its active member at the National Assemblies of Ermionis and Argos.

Three years later, under the reign of Capodistrias, he was assigned as a member of the Economic Committee under which the Ministry of Finance and the National Monetary Bank[3] were controlled.

After King Othon's arrival on 6 February 1833, Stavrou was assigned as a member of the Financial Control Committee. Despite the failure of the National Monetary Bank seven years later, the government did not loose the vision of establishing a new national bank.

Indeed the government started negotiations with two groups. A businessman named Ch. Paramythiotis represented the first group of French and Greek capitalists. A banker named Wright, being represented initially by J Glass and later Drakatos Papanicolas, headed the other group of English capitalists.

The negotiations ended successfully with the English capitalists and on 25 January 1836, the government issued a law concerning the establishment of a national bank for the development of agriculture, commerce and shipping. However, the second group decided to withdraw its proposals due to unsettled political conditions, and for the next two years, the

2 Capodistrias entered the Russian foreign service in 1809, earned a commanding post in 1812, assigned as a diplomat to the army staff in 1813 and a year later, sent by Russian Emperor Alexander I to Switzerland for a special mission. The negligible Russian support for the Greek cause for independence forced him to take a leave of absence from the Russian service and he settled in Geneva devoting to moral and material relief to the cause.

3 In 1828, the failure of obtaining the loan of 60 million francs from the three protecting powers was a turning point for Capodistrias to avoid a complete economic collapse. By decree of 2 February 1828, the National Monetary Bank was established by him and had direct links with the State Treasury. According to many then, also with the Government itself. Its failure was attributed to insufficient funds from wealthy citizens because its 8% interest bonds were not covered. Furthermore, the Bank's prestige and that of the government was damaged as collected funds were used to pay military officers.

following negotiations through their representative K B Valvdin had established a climate of mistrust between both parties.

Figure 2 – Jean-Gabriel Eynard

Just before this deadlock, the Swiss philhellene Jean-Gabriel Eynard[4] has similar plans for the establishment of a bank. Following King Othon's arrival, he forwarded 500 000 drachmae to his friend George Stavrou to commence initial enquiries with the government and find out whether the timing was appropriate for establishing banking operations.

Indeed, this attempt proved fruitful, especially after the withdrawal of the English group from the negotiations that caused delays in enacting the banking law of 1836.

After Stavrou's successful representations to the government, it was decided to establish a bank. The Law of 1836 was cancelled and a new law was promulgated on 30 March 1841, providing for the establishment of the National Bank of Greece with a capital of 5 000 000 drachmae and the sole right of issuing banknotes to the bearer.

4 Eynard, Jean-Gabriel: (Lyon, 1775-1863), defender of Lyon, a wealthy amateur photographer, friend of Capodistrias since 1810, supporter of the Greek cause for independence, provider of funds for the Greek economy since 1827, declared as 'Honorary Citizen of Greece' by the 3rd National Assembly of 1827.

The Royal Decree of 8 April 1841 approved the by-laws of the National Bank. The State subscribed to 1000 shares of 1 000 drachmae each and additional shares were allotted to influential people. Among the founders and first shareholders were Jean-Gabriel Eynard, George Stavrou, C Vranis, King Louis of Bavaria, the Rothchild Brothers and N Zosimas. The original requirement for initial working capital was 2 600 000 drachmae, but was reduced to 1 500 000 drachmae by the enacted law of 19 August 1841.

George Stavrou was appointed the Bank's first Manager with C Vranis as its Deputy Manager.

Figure 3 – The Head Office of the National Bank of Greece on Aeolou Street, Athens

The National Bank of Greece[5] started operations on 22 January 1842, with paid-in capital of 3 402 000 drachmae. Its initial aim was to provide loans in banknotes. The lack of public trust towards the use of banknotes, in favour of golden and silver coinage was expected, given the similar failure of Capodistrias's Phoenix banknotes of 1831. To overcome this, the Bank introduced two 'teller' positions in close proximity: the one where the loans

5 The National Bank of Greece was able to assist the State on a number of occasions. It took part in the military preparations leading to the war of 1897 by lending funds to the government and later, undertook to pay war damages to Turkey. In 1899, the Bank of Epirus and Thessalia was merged with the Bank and at the same time, assisted towards the establishment of the Bank of Crete. The latter was merged with the Bank in 1918 and was followed by the Ionian Bank in 1920. Finally, with the Asia Minor catastrophe, the Bank had difficulties covering its banknotes resulting to issuing emergency notes by cutting existing ones in two.

were issued in banknotes and the other where these would be exchanged with gold and silver coins of equal value.

Records indicate that on the first day of operations, fifty banknotes of 100 Drachmas were issued. On the 28 January, a hundred more of them were issued and on 18 February, thirty banknotes of 500 Drachmas were issued.

The notes of the first issue have the inscription of 'Hellenic Bank' as the Bank's first protocols refer to it as 'National Hellenic Bank'. From the second issue of banknotes and afterwards, the Bank is referred to as the 'National Bank of Greece'.

George Stavrou continued managing the Bank for 27 years, during which he confronted dangerous economic problems on the domestic front as well enormous economic pressures from abroad. For instance :

- The country's balancing of its budget from 1843 until 1860 would not have been achieved without the prudent custodianship and operations of the Bank under its board and Stavrou.
- The social and political disturbances in Europe in 1848 affected public confidence and demand for exported Greek primary produce, such as currants. This caused the payment of debts in foreign exchange to be made of coins and soon, the rushing of banknote holders to have them exchanged to coins.
- The Crimean War period (1853-1856) when King Othon's unsuccessful attempts to resurrect revolutionary elements in the occupied Thessaly and Epirus caused the blockade and occupation of Piraeus by the French as well as the beginning of the political instability.
- The spread of cholera in June 1854, after the arrival of a French transport vessel causing panic and the death of many people.
- The dethronement of Othon on 12 October 1862, following continual violations of the Constitution since 1843 which led to February 1862 violent uprisings of Nafplion and of Athens in October.
- The 1864 cession of the Ionian Islands to the Kingdom of Greece (as a condition of the Royal House of Denmark to Britain upon the arrival of King George I), increased the State's land size from 47 516 to 50 211 sq km., with a new population approaching 1 500 000.
- The failed Cretan Revolution of 1866.

- The country's accession into the Latin Numismatic Union[6] in 1868 after accepting its currency system on 10 April 1867.

In recognition for his services, the General Assembly of the Bank declared him in 1849 as Honorary Life Manager and after his death (1869); it decided to include his portrait on the design of the Bank's issued banknotes and its official documents.

Figure 4 – 10 Drachmas banknote dated 18 August 1878 with Stavrou's portrait [Pick No 30]

His portrait was introduced on design of the National Bank of Greece's 10, 25 and 100 Drachmas banknotes from 1867.

On 14 May 1928 the Bank of Greece took over the operations from the National Bank of Greece and consequently, the remaining banknotes of the latter institution were surcharged with a red curved overprint 'Bank of Greece'.

6 France, Italy, Belgium and Switzerland, joined by Greece on 26 September 1868, initially formed the Latin Monetary Union on 23 December 1865. Its main purpose was to unify the standards of issuing each member's currency in value and precious metal content (silver and gold) and thus, bringing stability to their exchange rates and commercial transactions and acceptance of each members currency. On 31 December 1925, Belgium withdrew from the Union by asserting that the conditions for its existence are not valid any longer. Indeed, after the First World War, lost its strength as many countries were issuing banknotes for replacing the gold and silver coins. The Union was officially dissolved on 31 December 1963.

Figure 5 – 25 Drachmas banknote dated 20 July 1892 with Stavrou's portrait [Pick No 38]

Figure 6 – A Specimen of the 25 Drachmas banknote dated 18 August 1912 with Stavrou's portrait [Pick No 52] (shown at 60%)

The highest-denominated banknote where George Stavrou's portrait was used was the 5000 Drachmas of 5 October 1926, released from 1928 by the Bank of Greece with the red overprint [Pick No 101]. Available records indicate that this note was not issued without the overprint.

The last-dated banknote with his portrait was the 100 Drachmas dated 14 June 1927 [Pick No 91] that was also released by the Bank of Greece from 1928 with the red overprint as a provisional note [Pick No 98].

Figure 7 – The last issue banknote (25 May 1927) of 100 Drachmas with Stavrou's portrait, with the red overprint of 'Bank of Greece' [Pick No 98] (shown at 60%)

Figure 8 – 1000 Drachmas with Stavrou's portrait dated 4 November 1926, with the red overprint of 'Bank of Greece' [Pick No 100] (shown at 60%)

During the period of the National Bank's operations (1841 - 1928), the number of series issued were six for the 5 Drachmas, ten for the 10 Drachmas, one for the 20 Drachmas, 12 for the 25 Drachmas, six for the 50 Drachmas, 14 for the 100 Drachmas, 11 for the 500 Drachmas, five for the 1000 Drachmas, and one for the 5000 Drachmas.

Finally, in his will, George Stavrou relinquished his fortune for the establishment of a house in Ioannina for the needy and homeless children and their support.

BIBLIOGRAPHY

Encyclopaedia Britannica, CD edition Year 2001

Large Soviet Encyclopaedia (Greek Edition), Year 1980

The Greek Banknotes magazine, issued by Kathimerini newspaper, February 1996

Pylarinos, *The Greek Paper Money 1828-1996*, 4th edition

Krause, *Standard Catalog of World Paper Money*, Volume 2, 9th Edition, Year 2000

The Banknotes of Greece – from 1828 until the present day, Credit Bank Centenary issue, Year 1979

NUMISMATIC INSIGHTS FAR FROM HOME

Harold Don Allen[1]

I held in my hand the likeness (a “specimen”) of the British West Indies note of the venerable Colonial Bank, a Barbados domiciled issue overprinted (in 1907) for service at Grenada Branch.

The Royal Bank of Canada, when overprinting its 1909-dated domestic notes for that island, would be assured of continuing competition!

Still, hardly your everyday "find"!

Colonial Bank had been established by charter in 1836. A major restructuring close to a century later culminated in Barclays Bank (Dominion, Colonial and Overseas), the first British West Indies notes in this name dating from 1926. Barclays itself, long a favourite with Commonwealth collectors, traces roots to seventeenth century London.

I also had been privileged to view such classics as a Bank of Montreal King William IV portrait note, one dollar, of 1830, and a Queensland Government one pound note of 1906 – scarce! - with a highly improbable endorsement, "Stolen". And the august Bank of England retaught me some basics as to the origin of paper money in our western world.

Visual education! - to look upon traditional goldsmith's receipts, alongside a Bank of England "odd-sum note" in the amount of 150 pounds 8 shillings 8 pence, the latter dated 24 January 1699. Such early notes had represented promises to repay (the deposited gold!) rather than promises to pay, I had seen.

Only in 1725 had notes for "ready denominations" been introduced. And only in 1928 were notes of especially basic denominations, ten shillings and one pound, released by the Bank of England, substituting for Treasury Notes which had replaced gold coinage (sovereigns) late in World War I.

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1 Dr Allen, Canadian by birth and a world numismatist by choice, is a long time member of the Numismatic Society of South Australia.

All in all, hardly your typical week or two away from home!

So, why am I recalling these insights, you may ask. Essentially, for two reasons. Firstly, we all like to share our good fortune, and new knowledge, new perspectives, can be fully as important and as satisfying as new acquisitions. And, secondly, this and similar hobbies experience far too many early dropouts, new collectors who are fast to cash in their chips, and who may never know what they miss out on. So, I suggest, the sorts of interests and activities that keep numismatics alive after half a century - for me, these sorts of activities - do warrant space and reflection from time to time.

Recently, family matters took me to English for a visit sufficient for the jet-lag to be conquered and for intellectual curiosity fully to assert itself. Of the numismatic potential of such a world-class setting I was well aware. Carrying a letter of introduction from the Canadian Numismatic Association, I descended upon the likes of the British Museum and the Bank of England, and - you should be gratified to hear - was particularly well received.

In addition, two world-class banking institutions made every effort to accommodate me. HSBC, formerly the Hongkong and Shanghai Banking Corporation, a long-time issuer of exceptionally collectible notes, presented me with a lavish corporate history [Endnote 1]. Much of their archival material, I learn, currently remains in the Far East. Barclays Bank, at its traditional Lombard Street, London, location, in effect put me on the early train for Manchester, where the Barclays world archives are situated. Support staff in Manchester placed before me banking histories, including a doctoral thesis pertaining to West Indies operations [Endnote 2], and specimen and issued Barclays notes for Canada (1935 black proofs), the Caribbean, and British Africa. Also, a "Waterlow" specimen book of post-Edwardian Canadian material.

Bookstores, antique shops, coin and stamp outlets - such day-to-day adventures I dispatched from London to *Canadian Coin News* as, I hoped, interesting, sometimes significant, general reading. Such accounts you should be able to consult in those pages. What you have here derives, in the main, from subsequent reflection, and includes items to which one might have cause to refer at leisure.

BRITISH MUSEUM

I shall detail two selections of notes from the extensive holdings at the British Museum - a group of Canadian and, for comparison, a group of Australian. Such notes derive from the Museum collection or from the comparable reference material assembled over the decades by England's Chartered Institute of Bankers and now housed alongside the Museum's own material. Further, Barclays Bank's extensive archival holdings in Manchester are very strong both in English "provincial" banks and in Barclays and forerunner issues for the Caribbean and British Africa. We'll provide an overview of the Western Hemisphere material, and a careful look at that "Canadian specimens" compilation [Endnote 3].

CANADIAN HOLDINGS

So, what "Canadian content" might you encounter in the great albums at the British Museum? You never know, really - which is what can make such browsing so intriguing. Eight notes which, to me, stood out, may be indicative of the range and diversity of these impressive accumulations.

1 Dominion of Canada, $1, July 1, 1870. Allegorical female indicating Canada on globe. Payable at Halifax. Black sheet number 57667, position C. Well worn, but intact.

2 Ryan & Sons, St John's, Newfoundland, one pound, 7 November 1811. Payable in bills of exchange on England at sixty days sight.

3 Bank of Montreal, $1, 1st January 1830. King William IV portrait note. Domiciled Montreal. Two penned signatures.

4 R Lymen, Quebec, scrip, 1837. "Bon pour Deux Sous / Good for One Penny / Payable on demand in Bank Notes / at the store of / R Lymen (signature) / Palace Street". 2nd June, 1837. Serial number (penned) 401.

5 Bank of New Brunswick, 5 shillings, illegible date. Britannia, other figures. New England Bank Note Company printing. Charlton Press *Standard Catalogue* attributes to 1838-1859. Penned entries on actual note are badly faded. Note would seem to be a transitional issue, of the smaller size (173 mm x 71 mm) but lacking the red overprint.

6 Westmorland Bank, Moncton, N.B., $5, Aug 1st 1861. Farm family. Sheet 8874, position A. J McAllister, O Jones signatures.

7 Union Bank of Lower Canada, $1, March 1st 1866. Armorial bearings, supporters. Green tint. Sheet 0060, position B. G Holt pen signature. A perfect, uncirculated note.

8 Bank of Prince Edward Island, $1, 1st Jany 1877. Woman cutting grain. Green tint. Sheet 17842, position A. Red overprint, twice vertically, CANADA CURRENCY. Leslie McNutt, T Heath Haviland signatures.

One remarkable grouping of highly distinctive Canadian notes comprised 22 early issues of the Hudson's Bay Company - a study in themselves - some faded, but all rich in historical associations.

AUSTRALIAN HOLDINGS

Numismatic holdings at the British Museum are, of course, world-wide in scope. My choice for a country comparable to Canada was Australia, principally because I know its notes, and can spot rarity. Collections at the museum included these particularly interesting Australian notes.

1 Queensland Government, 1 pound, Brisbane, 2nd July 1906. Green tint, blue back. Serial D/I 528059. Endorsed in red, "Stolen".

2 Commercial Bank of Sydney, 5 pounds, partially dated, 183_. Upper left, female figure; upper right, male figure bearing trident. Unissued remainder.

3 Bank of Queensland Limited, 3 pounds, Jan 7, 1865. Arms, rustic supporters. Issued note, serial 1725. Unusual denomination.

4 Bank of New South Wales, 5 pounds, Sydney, 1st April 1870. Issued note, serial A/H 169446.

5 The Oriental Bank Corporation, 5 pounds, Melbourne, 16 June 1879. Train passing tower, palms. Issued note, serial 85213.

6 The Provincial and Suburban Bank Limited, 1 pound, penned date (faded), 1879 (?). Woman with grain over shoulder. Pink supporting tint. Issued note, serial 09472.

7 The Bank of Australasia, 5 pounds, Hobart Town, undated and unnumbered. Royal Arms, coastal scenes.

8 Bank of Adelaide, 1 pound, 1st March 1907. Issued and punch cancelled, serial 1382662.

IMPERIAL WAR MUSEUM

Another London location well worth a numismatic visit is the Imperial War Museum. The rationing and war savings memorabilia of two conflicts much interested me. Paper money, from Treasury Notes which had substituted for circulating gold to, say, Japanese invasion dollars for Malaya, underscored that money can be an instrument of war.

BARCLAYS BANK

The Group Archives of Barclays Bank, as might be hoped and expected, well reflect the unique past and present scope of this distinctive world institution. Barclays was founded as an amalgamation of 20 private banks in 1496. These banks, in the main, date from centuries earlier, often having had roots in goldsmith activities. It therefore was not surprising, but certainly was overwhelming, to inspect the Barclays albums of early "country" notes of such banks.

Barclays, through the long-established Colonial Bank, acquired a strong presence in the British Caribbean in the last century. Its splendid albums of world notes also reflect such interests as the National Bank of South Africa and the Anglo-Egyptian Bank. Barclays notes for such diverse nations as Rhodesia, South-West Africa, Jamaica – and, of course, Canada - tend to be attractive. In quantity, they can be a joy to inspect.

The Barclays presence now extends to five continents. Caribbean notes in the Barclays name are familiar to collectors, and we identify two fundamental types. The 1925 first issue superseded nine decades of Colonial Bank currency. From 1937, redesigned notes entered service in such colonies. Both issues identified "Barclays Bank (Dominion, Colonial and Overseas) / formerly / The Colonial Bank". The latest date which I encounter, which can't be common, is 1st October 1949.

Earlier Colonial Bank releases very much established the pattern for the more collectible Barclays note issues. The Pick World Paper Money catalogue (Specialized Issues, 7th edition) recognizes two nineteenth century Colonial Bank series.

Colonial Bank notes of 1907 are strongly represented in current Barclays holding. I find one pound, five pound, and ten pound notes for Jamaica; $5, $20, and $100 notes for British Guiana and for Trinidad, and $5 notes for Barbados, also issued with slanting overprints and identifying letters for service in Antigua (A), Dominica (D), Grenada (G) St Kitts (K), St Lucia (L), and St Vincent (V). Barclays Bank retained such issuing and domiciling conventions, but did release Barbados notes in all three denominations - $5, $20, and $100.

Barclays Bank issued notes in its own name from 1926, and I find notes of this earlier style - Royal Arms centred on the face - dated as late as 1935. Somewhat more accessible to collectors are notes of the second Barclays type - Arms at right - dated between 1937 and 1949. The reddish-purple $5 of this issue, in a fair range of domiciles, dates, and signatures, very probably is the most collectible of Barclays notes. Some overprinting of Trinidad (rather than Barbados) notes for the smaller islands is known to have occurred during the war years.

Discovery of a wholly unrecorded Colonial Bank overprint on British Guiana is the kind of stroke of good fortune that can make a researcher's day. A 1907-style note on Demerara, British Guiana, is domiciled "Issued at Berbice Branch", the archival "specimen" having been hand-endorsed, "For Berbice Minor Branch".

So, how have world cataloguers fared on Barclays (and Colonial Bank) notes of these challenging Caribbean series? Quite well, I hasten to concede. In the archives, in all, I spotted five unlisted dates: 1st January 1935 for the British Guiana $5, 1st March 1939 for the Jamaica one pound, 1st March 1939 for the Barbados $5, and that apparent latest date, 1st October 1949, for Barbados $20 and $100 high values, Also, now identifiable as issued notes rather than solely as specimens are the British Guiana $20 of 1st September 1926, the British Guiana $100 of 1st March 1940, and the St Kitts $5 of 1st March 1940.

The Barclays Archives do provide a lead as to one other possible issue date, a Trinidad $5 of the first Barclays type, dated 1st April 1932. The irony is that the surviving "note" is a primitive counterfeit. Face and back have been meticulously rendered on tracing paper, and then glued with heavier paper in-between. The resulting "sandwich" evidences considerable wear! The counterfeiter having been scrupulous with signatures and other such details, it would seem as likely as not that the model was an unrecorded 1932 note.

Canadian collectors with developed interest in British West Indies issues will see close parallels between Barclays notes and those of Royal Bank of Canada, their principal Caribbean competitor - the colonies, the 5-20-100 denomination sequence, and such. This brings up one further consideration. A Barclays Bank $10 British Guiana note is listed by Pick - "rare", with no illustration, but 1926 and 1932 issue dates. I think not. There's no allusion to it in Manchester, and it falls outside known patterns. In this context and others, it can be tough to prove that something doesn't exist - though we've already disposed of Bank of Canada 1937 $1000 signature varieties and the likes of the Bank of Montreal 1942 $10 bill.

Archives don't normally give samples, at least in my experience. What, then, are likely benefits from time so spent? New knowledge, very likely. But equally, I find, new insights into items that I've had for many years. A well worn, last "type" Barclays $5 for Bridgetown assumes new significance when, to decipher a signature, I consult a card file of former bank offices. I see the penned notation that the ship on which this manager had been travelling had encountered a magnetic mine. Similarly, National Bank of South Africa pound notes that I've had for decades I view in a new perspective on realizing that National was to be one of DCO's founding banks.

Further, a chance "find" in Barclays Canadian holdings may suggest the flavour of what might, on occasion, turn up.

The "Canadian" item was decidedly of London origin, a sampler of splendid early twentieth century bank note art.

The bank note work of Waterlow & Sons, Limited, the London firm of security printers, for Canada's banks of issue will perhaps best be remembered for two outstanding efforts of the Edwardian decade, the "double-size" $50 and $100 values for Bank of Montreal (1903) and

the five-value Royal Family set for Imperial Bank of Canada (1902-1910) - the three highest Imperial Bank denominations ($20, $50, $100) also having been of the distinctive larger size.

Now, notes for five other Canadian banks were prepared by Waterlow in the years that followed, the interval between 1911 and 1914. The banks were Bank of British North America, Banque d'Hochelaga, Molsons Bank, Bank of Ottawa, and Sterling Bank of Canada. I count 14 such notes in this later grouping.

Some such Waterlow notes for Canada remain accessible - though "accessible" is relative [Endnote 4]. Others are seldom seen, particularly as issued notes.

You'll sense my delight, therefore, when I chanced upon, in Barclays archives, a bound collection, notes bound like book pages, the cover of the volume imprinted:

"Waterlow & Sons Limited

Specimens of Bank Notes

London Wall, London"

and

"To be kept under lock and key"

and

the book's serial number, 165,

Inside, bound in rather than mounted, were 13 Canadian bank note "specimens", as follows:

- Bank of British North America, Montreal. Dated on the plate, "July 3rd 1911":
  - $5 King George V.
  - $10 Queen Mary.
  - $20 King Edward VII.
  - $50 Queen Alexandra.
- Banque d'Hochelaga, Montreal. Dated on the plate, "1er Janvier, 1914":
  - $5 Place d'Arms, Montreal.
  - $10 Champlain Monument, Quebec City.
  - $20 Parliament Buildings, Ottawa.

- $50 Horse-drawn combine.
- $100 Morraine Lake.

- Molsons Bank, Montreal. Dated on the plate, "2nd January 1912":
  - $5 Portrait note, William Molson.
  - $10 Portrait note, Sir William Molson Macpherson.
- Bank of Ottawa, Ottawa. Undated specimen. Issued note would be dated "June 1st 1912":
  - $5 Loggers.
- Sterling Bank of Canada, Toronto. Dated on the plate, "1st January 1914":
  - $5 Locomotive.

No profound "new finds", you'll observe. Such specimens have to be fairly well known, but it's instructive to see what form such a discovery may take. A fourteenth such note, a Bank of British North America $100 (Queen Victoria), is attributed to Waterlow in the Charlton Press Standard Catalogue, but was not in the Manchester grouping.

Closer comparison of the Waterlow book with catalogue listings does yield one cluster of minor surprises.

All four Bank of British North America specimens differ in colour from their catalogued counterparts.

The $5 King George V is black with light blue face tint, dark blue reverse, rather than black with green, green reverse. The specimen number is 3325.

The $10 Queen Mary is black with reddish-brown face tint, reddish-brown reverse, rather than black with blue-green, blue reverse. The specimen number is 342.

The $20 King Edward VII is black with green face tint, brown reverse. The specimen number is 6324.

The $50 Queen Alexandra is black with blue-green face tint, blue-green reverse. The specimen number is 335.

Further, the Sterling Bank of Canada $5 in the specimen book has no evident colour tint, but the paper is distinctly off-white. A

significant anti-counterfeiting feature is two vertical bands of multicoloured threads, to left and right of the central "train" vignette. The specimen number is 349.

Thus, museums, archives, reference collections - timeless holdings, in contrast to the buy-and-sell material of auction, bourse, and shop. You meet good people, learn by investigating - and end up, I find, with distinctly greater appreciation for what you have in numismatics and what you seek.

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ENDNOTES

1 The Barclays saga has been well and fully chronicled. See, in particular,

- Sir Julian Crossley and John Blandford, *The DCO Story: A History of Banking in Many Countries, 1925-71*, London, Barclays Bank International Limited, 1975;
- *A Banking Centenary: Barclays Bank (Dominion, Colonial and Overseas), 1836*-1936, London, The Bank, for private circulation, 1948;
- *A Bank in Battledress: Being the Story of Barclays Bank (Dominion, Colonial and Overseas) During the Second World War, 1939-45*, London: The Bank, for private circulation, 1948.

The pertinent doctoral study is Kathleen E. A. Monteith, "*Barclays Bank (DCO) in the West Indies*", PhD thesis, University of Reading, Department of Economics, 1997.

The change in name to Barclays Bank (DCO) was deemed appropriate in the post-colonial period. Note collectors will find the DCO designation only on three denominations issued for South West Africa, now Namibia. (I have it also on a United States Currency Travellers Cheque on Barclays Bank DCO in New York.)

Those bank histories "for private circulation" might be difficult to purchase, but are likely to be available for consultation in archives of major or internationally oriented North American banks.

2 Traditional "Hongkong and Shanghai" folding money includes some of the world's most attractive. Lavish reproductions serve to highlight Joe Cribb's Money in the Bank: An Illustrated Introduction to the Money Collection of the Hongkong and Shanghai Banking Corporation (London: Spink & Son Ltd., for Bank, 1987).

Here again, we may observe a shortened name as a reflection of changing perspectives: For a current and highly relevant promotion of things monetary, see

- "*HSBC Money Gallery: An Introductory Guide*" (Leaflet, The British Museum, 1999).

3 Usual references for such Canadian and world bank currencies, as contrasted with government legal tender, are:

- *The Charlton (Press) Standard Catalogue of Canadian Bank Notes*; and
- Pick, Albert, *Standard Catalogue of World Paper Money*, Volume One (Specialized Issues). The Pick treatment of Canadian bank issues is quite good, but Australian bank coverage is sketchy in the extreme

4 The Canadian Paper Money Newsletter for April 1998 illustrates a 1910-dated Imperial $5 by Waterlow, featuring the future King Edward VIII as a child, and a companion S10 note with the future Queen Mary; and lists by number some 20 such fives and 16 such tens then known to collectors. These Canadian "Waterlows" appear to have been numbered as individual notes rather than by sheets. Individual numbering would have been the usual practice outside of Canada at that time.

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