

NEWSLETTER

Issue 248 – July – August 2024

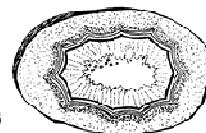
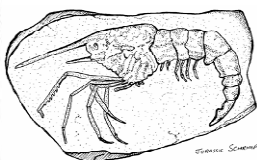
**MEETINGS ARE HELD ON THE FIRST WEDNESDAY EACH MONTH AT
12 NOON - EXCEPT JANUARY AT THE CLUBHOUSE (OLD EGLINTON**

FIRE SHED), PARK STREET, EGLINTON.

63315404 or write P.O. Box 9156, Bathurst 2795

Editor amcrae@lisp.com.au

www.philas.org.au/bathurst



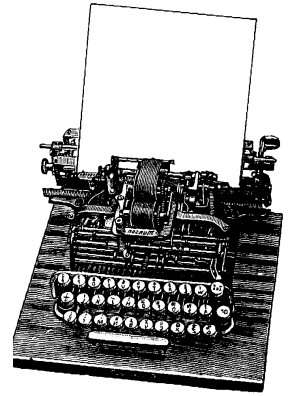
CLUB REPORT



As usual there is plenty going on at the Club with the workshop days and more classes such as enamelling.

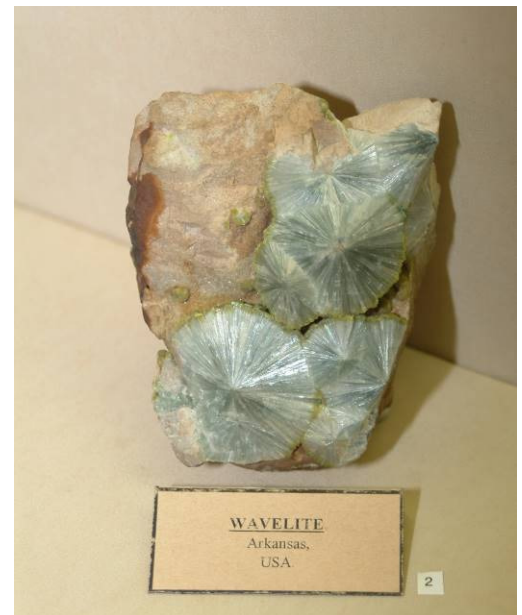
For those who attended the annual Biggest Morning Tea at the Clubhouse on Wednesday 12th June certainly enjoyed a great morning. A pleasurable and delicious morning tea was provided thanks to members. We reached over our \$300 target again this year, thanks to those who took part.

Those who ventured out to Grenfell for the Club's Field Trip didn't come home empty handed with some splendid specimens of tourmaline to add to their collections. I have had some fine reports on a gratifying outing thanks to Robert Porter's organisation. The photos in the report show an industrious mob getting stuck into the quartz to locate samples. Some could have taken their trailer!



If you know any kids who would like to take part in the second School Holiday Beginners Workshop for students who have NOT done a holiday Workshop previously then give Paul a ring on 0427 896 945. The first workshop will take place on the 11th and 12th July which is a Monday and Tuesday. Don't know the dates for the second class. Remember there is a maximum of six to a class.

Put this in your diary! Remember - that the New South Wales State Gem and Mineral Show, GEMKHANA 2024, will be on Saturday 28th September from 9am – 5pm and Sunday 29th September from 9am – 4pm at the Hawkesbury District Agricultural Showground at 40 Racecourse Road, Clarendon. There will be oodles of handmade jewellery, faceted stones, polished stones, cabochons, beautiful carvings, minerals from all over New South Wales, Australia and overseas, meteorites, fossils, crystals, cut stones, lapidary equipment, slabs, beads, opals, metaphysical and healing crystals and lots more. See the competition entries and displays. Professional traders and dealers will be present. The State Gem and Mineral Show formerly known as the GEMKHANA is run by the Gem and Lapidary Council of NSW. Don't miss out on expanding your lapidary collection! Below - Some images from past GEMKHANAS.



A woman with short grey hair and glasses, wearing a bright orange high-visibility vest over a dark blue long-sleeved shirt, is working on a metal mesh component on a workbench. She is using a small orange-handled tool to adjust a small metal piece on the mesh. The workbench is cluttered with various tools, including a large pair of pliers, a hammer, and a piece of paper. The background shows a plain wall and some equipment.

On the 22nd May several club members made their first pieces of enamel on copper. Everyone was happy with their finished pendants, and keen to continue learning their new craft. On further Wednesdays we will be looking at using stencils and different colours, and perhaps some shaping with the jewellery saws to experiment with some new shapes and piercing.

It is thought that enamelling could have commenced around 1230 BC in Ancient Greece. However, it appears that enamelling could have developed in other countries around the world in such nations as ancient Rome, Ancient Egypt as well as in China.

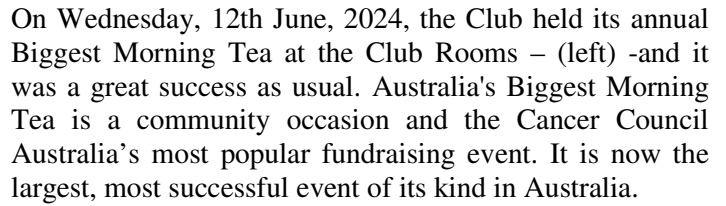


See some of the results from one of the classes that members have produced. It's all good fun and another activity provided at the Bathurst Lapidary and Collectables Club Inc. Remember, if you would like to join in a class then get your name on the list. Contemplate taking a class, you are never too old to learn a new hobby.



A LITTLE BEAUTY OF A MAGNETITE SPECIMEN

Left – A nice pair of double (that look like two pyramids base to base) octahedral crystals of lustrous black magnetite mineral specimen on talc found on Yinnietharra Station in Western Australia. This shape is a commonplace crystal habit of this mineral. Magnetite is often located in igneous and metamorphic rocks, as well as being found in deposits close to the source of the mineral. Magnetic magnetite is the top quality iron ore. It has the chemical formula $\text{Fe}_2\text{Fe}_3\text{O}_4$. Our Australian beach sands can often comprises a considerable volume of magnetite.

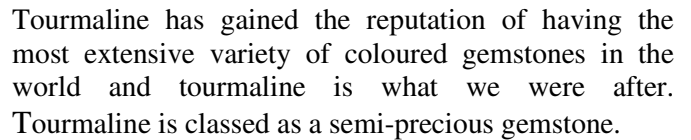


Thanks to all who contributed on the day through the Donation Box at the Club Rooms and also thanks for your online donation using the link which was very handy for those who used it.

and more. There was certainly an enormous amount of variety. There was also plenty of food left over!

We can look forward to a renewed effort for the BMT in 2025 and hope that members will make donations to this worthy cause.

GRENFELL FIELD TRIP



It was pleasant weather for our field trip to Grenfell on the 2nd June, 2024, in search of tourmaline samples - mainly to be found in quartz reefs on this site. Paul Martensz had to drop out with car trouble, so our group consisted of Robert Porter, William Forbes, Jodie Whittle, Niveska Hogg - right - and Colin Hogg.

A woman with dark hair, wearing a red skirt and a white top with orange floral patterns, is crouching in a field. She is using a pickaxe to dig in the ground, which is covered with dry grass and small rocks. In the background, a white SUV is parked on a dirt path, and there are some trees and bushes.

Did you know that Tourmaline wasn't identified as a gemstone in its own right until 1703? Before this point, the gem had often been mistaken for multiple stones including emeralds and topaz. Whilst we found black tourmaline, we didn't realise there are loads of other

A woman with short grey hair, wearing a light blue zip-up shirt, is looking down at the ground in a wooded area. She is surrounded by tall grass and various trees. The image is part of a video sequence, as indicated by the frame numbers 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 16

A photograph showing two people in a natural, wooded setting. A man with grey hair and glasses, wearing a dark grey jacket with a red collar and green trousers, is kneeling on the ground. He is using a small, dark tool to dig into the soil, which is covered with dry leaves and twigs. A blue bag is on the ground next to him. A woman with grey hair, wearing a light blue long-sleeved shirt and dark trousers, stands behind him, looking down at his work. The background consists of trees and dense vegetation.

The black tourmaline was used by jewellers and lapidarists to manufacture elegant mourning jewellery during Queen Victoria's time. The name tourmaline comes from the Sinhalese word "turмали," which applied to different gemstones found in Sri Lanka.

This mineral can be found the world over and it appears that around 2000 BC it was being used in ancient Egypt as a gemstone. The Dutch East India Company located a supply of the vivid gems of tourmaline in Ceylon and delivered them back to Britain and Europe in the latter part of the 1600s.

Thanks to Colin Hogg for this report.

A black and white photograph of a heavily worn, irregularly shaped metal object, possibly a coin or medallion, resting on a textured surface. The object features a faint, embossed profile of a person's head facing right, with a prominent nose and ear. The surface is scratched and discolored.

There are all sorts of unusual money which has been used during the last three centuries. The wire money of Russia ranks amongst the smallest coins in the world. They are tiny Russian coins which used lengths of silver wire as planchets. A planchet is a piece of metal used to strike a coin. The example here has been magnified about eight times. The practice is thought to have commenced in the 1300s and continued until the beginning of the 1700s.

Prior to Peter the Great using the unusual method the miniature silver coinage was used during Czar Michael Fedorovich Romanoff's reign. He ruled between 1613 and 1645. The initial Romanoff Czar of Russia was the notorious Ivan the Terrible from 1533 to 1584.

Left – The obverse of a piece of wire money which was coined under the reign of Peter the Great and minted somewhere between 1689 to 1718. Most coins measure between 6 - 8.5mm.

Peter the Great liked to have a leading hand in what was happening in Russia, not only did he oversee his coinage but guided Russia into becoming an important European nation. He was the one who instituted the city of St. Petersburg and was responsible for the removing of the capital there from Moscow.

A silver coin called a denga was the first coin to be produced using wires of silver. In the 1400s copper wire money called puls or pulos were being made in Russian Mints. A century later silver kopeks were being struck and circulated around Russia. It is not really known if the idea of wire money was a Russian invention or not. Possibly it was from an idea used by the lands around the Persian Gulf, where they

Workers in the Russian Mints would roll the silver metal into wire, after which it was then sliced into the appropriate equal sections of the designated weight. The workmen would then hammer these small pieces into small flat planchets. These tend to be ovalish but may be pointy where the wire had been cut. These pieces would then be sent back to the furnace after flattening so they could be heated. The softened ovals could then be struck between the upper and lower dies. The completed piece would then be despatched into circulation as required.

The detail for the obverse or front of the coin was put on by the lower die and often bore a heraldic subject or a mounted horseman as can be seen here. In some of the versions the horseman is wielding a sword. It is thought to be Saint George on his horse slaying a dragon. The date was usually placed beneath the figure. The Mint sometimes added a mint mark to the coin thus identifying the mint. The upper die applied the detail on the reverse which had the ruler's title. As is common with most wire money its design is never complete, they simply won't fit onto the flan hence some of the detail is lost.

In 1700 Peter the Great ordered that more modern Russian coinage should be introduced. Modern Western technology coining machines which struck the new coinage were a success, however the peasants were suspect of the thick new kopek coins. Because of this Peter allowed the silver wire one kopeks to be made until 1718. He was the final Russian Czar to coin these small coins made from wire.

Peter the Great attained country in the Baltic region from the Swedes and by fighting a number of wars with Turkey to his south, he managed to secure access to the Black Sea. The Czar designed and enlarged a stronger Navy, expanded and reorganised his military based on Western standards as well as controlling the Church.

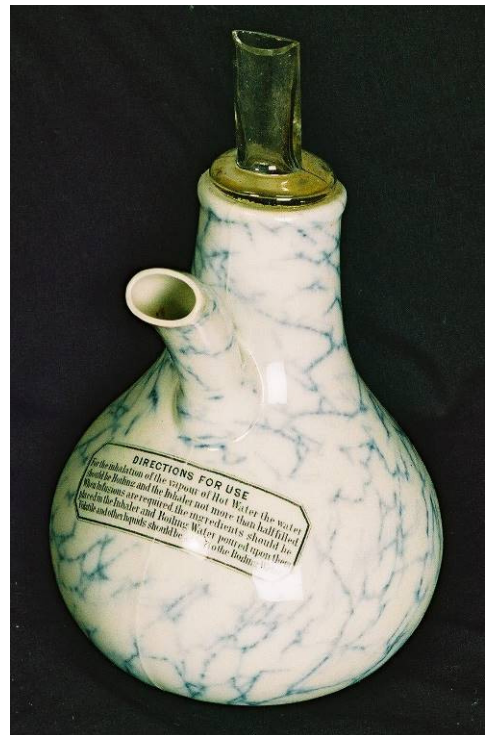
THOSE LITTLE VAPOUR DROPLETS

Today these portable inhalers have been replaced by nebulisers, machines which will convert the liquid medicine into a fine mist which patients then inhale. They are highly collected pieces these days.

Inhalers intrigue many these days, especially as these types are generally no longer used in households but can still be remembered by the elderly. The actual inhalers were invented as a means of delivering medication in the form of a fine vapour.

Inhalation as a means of relieving nasal congestions goes back centuries, possibly as early as 800 AD with early Greek and Roman physicians using their 'vegetative medicines in hot water'. Several small urns have been found in archaeological digs that are believed to have been used to inhale medicated vapour. Leaves were traded from the Mediterranean area which were known to help clear blocked passages in the nose. However, it was not until the 18th century that the first commercial portable inhaler, as we know them, came into existence.

Right – An English made Improved Inhaler manufactured for S. Maw & Son & Thompson of London. It was known as the ‘marbled model’ design.



The first of the then ‘modern inhalers’ was a pewter model invented by a doctor in England known as Dr. Mudge. Though it

appeared on the market it was mainly for the rich patients, some hospitals and the medical profession who could afford them. Known as 'inhalers' or 'halers' these portable units were to improve the quality of life for the many people who were able to pay for them. Despite Dr. Mudge's patent it was not long before several ingenious and unscrupulous conmen copied the idea to sell to the poor, however they often did not work properly.

Left – Later, S. Maw, Son and Son exported from their London warehouse two sizes of this type of infusion inhaler which were also shipped to Gallipoli and the



Western Front in France and Belgium. The larger model seen here on the right is a basic Dr. Nelson's Inhaler.

Dr. Mudge's unit allowed air to be sucked through a 'special' fluid which he also sold to use in his units. Mudge's inhaler looked much like a pewter beer mug or tankard of the time, however it had a special lid. Under the lid was a central hollow projection along with another small lid covering the hole. The giveaway is the hole at the top of the handle, which allowed air into the base of the container. A flexible tube and mouthpiece were attached to the inhaler so the patient could use it. These pewter inhalers were so popular, even after the ceramic models were introduced that they were still being advertised in Britain as late as 1910, selling for around 25 pounds - quite a sum.

The British Army even sent a large number in the medical supplies to Gallipoli in 1915, when it was realised that the soldiers may be there for the cold winter period, which was to start in October and November, in fact quite heavy snowfalls were experienced during this latter month. There is also every possibility that they were left behind when the peninsula was evacuated. The 3rd Brigade, AIF Regimental Medical Detachment received supplies in Mena Camp in Egypt during March 1915. Australian eucalyptus oil was issued for use in the inhalers with this oil in extensive use during this war.

Maw's inhalers were used in most Convalescent Homes in Australia during World War One. Bathurst's Convalescent home was a very elaborate home constructed for Edmund Webb, owner of E. Webb & Company in George Street in Bathurst.

Right - General Birdwood's Visit to Hathrop Convalescent Home at Bathurst on 23rd April, 1920, after the Great War had finished. Hundreds of wounded soldiers were hospitalised here after being returned home from the Middle East, France and Belgium.



Inhalation could also be achieved by heating the medication and allowing the vapour to enter the atmosphere in a small room or cupboard. Wrights' Coal Tar version and Vapo-Cresoline's apparatus are examples of this that used a phenyl type medicant.

Special packets of crystals were sold to be used with all inhalers which could be quite expensive at the time. Whiteish and yellowish menthol crystals for inhalation cost two shillings a bottle. Later, both a powdered menthol was also sold as well as a liquid type. Eucalyptus oil in 1900 sold for one shilling and three pence per bottle in a chemist.

There has certainly been some experimentation over the decades for substances to be used in the inhalers. Some products were found to be too toxic whilst others had little effect. One German doctor experimented with a dust

obtained from a local disused mine, but after several patients died, it was found to contain cyanide. For a time, cow dung was used. Generally, however, linctus (a syrup that was administered to ease coughs and sore throats) was used in conjunction with eucalyptus oils were being consumed in the late 1880s till World War One, especially in Australia.

Sometimes to help advertise their products manufacturers issued miniature versions of their inhalers. Maws, the English chemists, had the "Pocket Inhaler" manufactured. Many of the druggists and chemists made up their own powders or gels to be used in their 'own brand' inhalers. Some inhalers came with the medicinal compound already in it, as a kit so to speak.

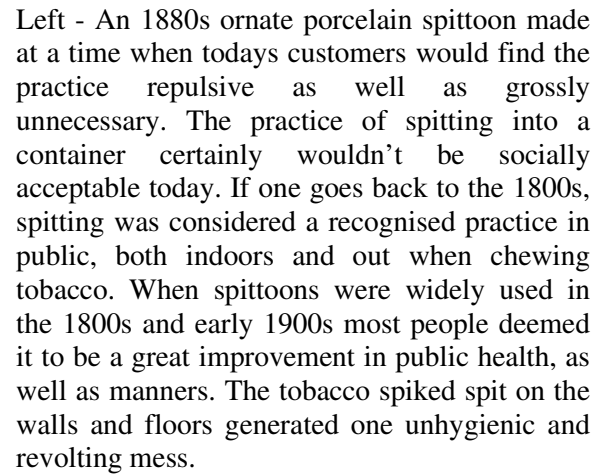
Left - A Velfin Hygienic Inhaler, also made by Maw's chemists which seem to date between 1920 to around the Second World War. Some small advertising pieces were manufactured which were only five centimetres high (and are too small to actually be used.)

Sizes of inhalers varied over the decades, from larger models, mainly for hospital use, which had several outlets allowing a

number of people to benefit from the vapours to smaller 'portable' units which could be transported with the prospective user when away from home. Numerous companies, realising the benefits from an even smaller inhaler, designed various types though many were not a success. Simple cylindrical types did make an appearance and were



SPITTOONS WERE ONCE MASS PRODUCED



entrances to popular businesses and most other institutions, particularly where men and smokers hung out. Back then the spittoons were considered a public convenience, like a public toilet.

Of all the ones I've seen brass was the most commonplace metal used to manufacture spittoons in large quantities. Other materials included, bronze, iron, silver coated, glass, stoneware and fine porcelain, such as Royal Doulton's Haystacks spittoons. Often the spittoons would have a weight in the bottom to decrease the likelihood of them falling over. Ease of cleaning was another wanted feature.

At the end of the 19th century different types of 'lady's spittoons' were catered for. They featured ladylike decorations with many being made of fine porcelain, the objects being painted by hand. Around this time women were enjoying smoking cigars, snorting and chewing on tobacco sticks which became a pervasive habit. These lady spittoons were known as 'spit cups'.

Spittoons required consistent maintenance as well as having to empty the vessels and wash them. Migrants and dark skin workers also ended up with these jobs. This job was usually done by the ‘cleaners’ on a daily basis, or more often if they were starting to smell.

Subsequently, as the conduct became an acceptable activity in American and British society, spitting stimulated business. New spittoon designs were offered with a broad range of artistry and prices. The catalogue from 1893, printed by the Handlan Company, offered cuspidors and spittoons, both developed for the same function – to capture the spits. A larger spittoon model was known as a Handlan ‘custador’, a Portuguese word, with a funnel type top and were made from cast iron, brass, silver coated, nickel plated and self-righting. Another type was made of indurated fibre in various sizes which were sold by the dozen, being disposable.

During World War One, the Red Cross sent out Army food boxes for prisoners of war which included either 4 packs of cigarettes, 4 packs of smoking tobacco, or 1 ounce of chewing tobacco. Tobacco use was simply a part of everyday life back then and the prisoners would make their own spittoon or ashtrays.

So how old are the first spittoons? They have been used in China for a long time with the earliest porcelain spittoon being unearthed in a burial chamber dating to Emperor Xianzong's reign which was in the Tang dynasty. During the Qing dynasty which lasted 1644 to 1912 and later for Emperors in Japan, a spittoon made of gold would be among the abundance of objects revealed in front of the emperors during the foremost of ceremonies.

From 1919 to 1970 the Wood's Reef mine, near Barraba in northern New South Wales, carried out a small-scale asbestos mining operation. Initially, the first open cut mining for asbestos in its natural form took place from 1919 to 1923, but only on a limited scale.

The Wood's Reef mine took up around 400 hectares and boasted a 75 million tonne waste rock dump with a 25 million tonne tailings dump. Like most mines a large amount of water was required. Today, it is still the only asbestos mine site within New South Wales that has not been remediated by the corporation.



During 1983 this hazardous asbestos mine was finally abandoned, however some forty years later it is still posing problems with the 117 acre site still contaminated. Additionally, a dump site containing a 70 meter tall pile of 25 million tonnes of contaminated waste rock also remains. In 2014, the NSW Government provided funding of \$6.3 million to address the most significant health, safety and environmental issues. The mine road is also closed to the public due to the ongoing danger of asbestos.

Despite asbestos being no longer mined since 1983 it is still quarried in large amounts in numerous countries around the globe with white asbestos amounting to 95% of the production.

Many of the miners, engineers and associated workers employed at the Wood's Reef mine have developed asbestos-related diseases, including lung cancer, asbestosis and mesothelioma.

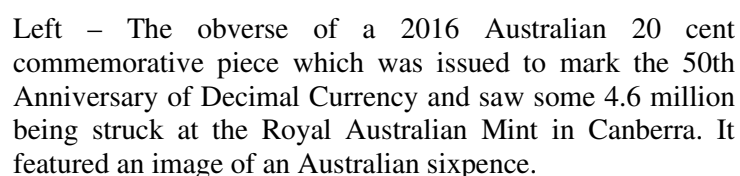
Right - This is a fine example of a Chinese 'packsaddle' sycee with five stamps equalling 5 taels. They are also known as chair money, bench sycee and turtle money. Years back they were very prevalent in Imperial China. These sycee were regular in weight and appearance, being around 60 x 35 x 18 mm in size and around 180 to 210 grams in weight.

A dark, rectangular metal object, possibly a buckle or a small case, with a central raised area featuring a circular emblem or stamp. The object is displayed on a light-colored surface.

Their use began some 2,000 years ago when the Han Emperor Wu Di proclaimed that silver ingots could be used by people as a means of payment. Any sycees, as long as the silver was good, were hoarded in banks and went on to form a significant portion of China's National Bank reserves until 1933.

It seems that there were all different shapes though square and oval shapes were the most common, although flowers, drums, single and double axe shapes, tortoises as well as others have been found. Another interesting shape was the sycee boat money from the Qing Dynasty. They appear to have been used from the 1600s to the 1880s.

The Federal Government's Royal Australian Mint undertook a massive job to change from pounds, shillings and pence on 14th February, 1966. The 50th Anniversary celebrations of the introduction of decimal currency took place in 2016. The Royal Australian Mint undertook to release a distinct series of commemorative coins of the earlier pre-decimal issues.



The front of the copro-nickel coin, comprising 75% copper and 25% nickel has a milled edge. It shows the crowned mature head of the then Queen Elizabeth II facing to the right. This effigy is called the 'Fourth Portrait.' Her Majesty wore a diamond tiara known as the 'Girls of Great Britain and Ireland' which had been a wedding gift in 1947 from Her Majesty's grandmother, Queen Mary. Underneath her small portrait in small letters is the artist's initials 'IRB' standing for Ian Rank-Broadley.

The monarch's legend states, 'ELIZABETH II AUSTRALIA 2016' and at the bottom is 'FIFTY YEARS.'

The reverse, or back of the coin featured the usual design of a swimming platypus. The denomination numeral 20 is

above the head of the mammal. The artist's initials, in small letters, can be seen on the back also with an 'SD' standing for Stuart Devlin and can be located in a swirl of water near the platypus's right forepaw.

The stylised portrayal of the sixpence features the unique Coat of Arms of the Commonwealth of Australia. Inside a circle, is an unassuming shield which encloses a cross of Saint George on which are five six-pointed stars, around the outside of which are six small escutcheons, i.e., small shields. The shield is supported by a kangaroo and an emu standing on a grassy mound. Above the shield a crest, the seven-pointed star of Federation on a wreath and on a ribbon at the base the motto 'ADVANCE AUSTRALIA' is inscribed, the two arrow heads under the Coat of Arms flanked by the date on pre-decimal coins.



The brass United Nations service medal for Operations in the Congo (ONUC) were unnamed as issued. This is a type two.

This United Nations medal was awarded for service with the Organisation des Nations Unies du Congo (ONUC). The United Nations was established in 1960 to oversee the removal of Belgian forces from the newly independent nation of Congo, to provide technical assistance, prevent civil war and maintain law and order. The mission was completed and United Nations troops removed in June 1964.

Left - The obverse of the United Nations service medal for Operations in the Congo (ONUC) shows a top view of the globe enclosed at the sides and bottom by a wreath

Conflict in the Democratic Republic of Congo has been ongoing since the 1990s. Currently the fighting has been between the Congolese security forces, UN troops and complex external interests such as the ethnic Hutu extremists who have killed an estimated one million minority ethnic Tutsis. Methods of warfare have been brutal.

In 2023, as a result of an alarming resurgence of violence generated by armed groups, 5.8 million people were displaced across the provinces of Ituri, North Kivu, South Kivu and Tanganyika, in the east of the Democratic Republic of Congo. Armed clashes resulting in the killing of civilians have triggered massive and repeated forced displacements of hundreds of thousands of people. Many find themselves unable to satisfy their most urgent needs without humanitarian assistance.

BRAZILLIAN 1814 OVERSTRIKE

Usually mints which strike a nation's coins produce their own coin blanks, however, sometimes the lack of engraving tools and dies, suitable metal or time force coiners to reuse other countries coins, especially larger coinage.

In the Portuguese colony of Brazil between the years 1810 to 1822 minting authorities struck an inordinate number of reis with the denomination of nine hundred and sixty (.960) minting them by overstriking them on Spanish colonial 8 reales or pieces of eight (right). These large silver Spanish coins were the most common trade coin in the world in the early 19th century.

The coiners made no effort to erase the previous Spanish design and just used the blanks as they found them. The coin had a diameter of 40.6 mm and was 2.2 mm thick.



Left – Shows the reverse of a silver .960 reis coin which was struck in 1814. These Brazilian coins were issued under the Colonial King John VI the Clement (1799 – 1816) of the huge colonial empire of Portugal during the rule of Joannes as Brazillian Prince Regent. It was considered a standard circulating coin.

which translates “Under This Sign Was Born And Will Remain.”



Left – The obverse shows the crowned arms of Portugal dividing the year it was struck. At the top is the Portuguese crown above the coat of arms, flanked by the date, denomination, and three four petal flowers and the ruler's name and title in Latin around, and close to the edge.

Around the Portuguese crown is the nation's motto which reads 'JOANNES.D.G.PORT.P.REGENS.ET.BRAS.D,' which translates "John, by the Grace of God, Prince Regent of Portugal and Defender of Brazil."

Three different coin designs were used with the initial colonial type seen here at the bottom of the previous page.

Most of these large coins were minted at the Rio de Janeiro and Bahia Mints where the coiners heated the reused coins to make them hot enough to strike them again. These hefty coins are considered one of the most fascinating series in South - American numismatics. Many of the dates were minted in large quantities.

Great Britain also overstruck coins due to a shortage of silver. King George III utilised Spanish silver dollars during the early 19th century where the London and other mints overstruck the King's image and associated legends on them.

HEMATITE CHANGES THE QUARTZ CRYSTAL'S COLOUR

Over the past twenty years or more the nation of China has become the world's foremost producer and consumer of copious mineral commodities which are usually crushed up to use in China's industrial sector. Much of the Chinese mined iron ore is classed as 'crude' with an iron content of around 20% to 30%. Due to its low levels it needs to be more concentrated to enable it to have an iron content which is comparable to iron ore on the global market. It has been estimated that about 60% of China's iron ore is imported by ship from Australia.



Left - An interesting plate of long deep rich orange red quartz crystals sitting on bladed balls of tabular hematite. It came from the Heping Mine in Heping County, in Guangdong Province in the People's Republic of China.

Heping is a county of northeastern Guangdong Province of China, which borders on Jiangxi to the north. It is under the administration of Heyuan City. The Xiniu mining district around Yingde City yields numbers of mineral specimens which are later sold to collectors around the world.

Heping has a population of some 2,837,686, in 2020 and is known as 'Hometown of the Dinosaur in China', owing to the thousands of fossilised dinosaur egg fossils which palaeontologists have unearthed in its neighbourhood. One recent find of ten dinosaur eggs from the Late Cretaceous

was discovered in 2019. They have been dated around 66 million years old.

The orange red colouration we see is due to the iron stone, hematite, iron dioxide, which rusts when it is combined with water. As the water precipitates, the hematite creates a rusty coating inside or on the surface of the clear quartz crystals. The dealer I bought this specimen from said some call it tangerine quartz.

Numbers of the important mines, especially those with rich minerals in the area, are state-owned mining companies.

GOLD DREDGING AT SOFALA ON THE TURON RIVER

On the 17th July, 1907, the Australian Town and Country Journal's special mining reporter wrote about dredging around Sofala. He commented that Sofala was situated on the south bank of the Turon River, a distance of five miles north from Wattle Flat. In this short distance one descends a little over 900ft to the river. The alluvial deposits have been worked since the early eighteen fifties, and with the exception of a few fossickers, little is doing at the present time.

He noted that when a good rain downpour occurs a number of sluicing claims win a fair amount of gold. All the creeks between Wattle Flat and Sofala have produced good gold, the richest being Big Oakey and Spring Creeks, and which have been the means of feeding the Turon River.

From 1899 large scale mechanical gold dredges were brought into the Sofala valley and reassembled, though their success was somewhat limited. The Sofala Gold Dredging Company lasted just two years of operations but in that time, they managed to treat some 18,000 cubic yards of wash which yielded them 84 ounces of gold. Dredging around Sofala only lasted until 1914.

As soon as news got out about dredging people immediately applied for licenses for large sections of the Macquarie River, though initially the Government couldn't allow this to happen as they couldn't licence riverbeds. The law needed to be changed with the Act for the Gold and Mineral Dredging Bill happening in December 1899.



they intend to shortly work her half a mile up stream, where they have some three years' work in hand. These two dredges are well equipped and have a working capacity of 8000 cubic yards a week each. Last week's clean up, the manager informed me, was 53oz of gold, and this, with one dredge working in old ground. The company have a hundred acre lease, starting at the Big Wallaby Rocks above Turondale, where they have already about 70 tons of timber on the ground for the erection of a new pontoon, and when completed the machinery from No. 1 dredge will be dismantled and erected there.

A large, irregular, yellowish-brown mineral specimen, likely a sulfide, resting on a dark, textured surface. The mineral has a rough, crystalline texture with various shades of yellow and brown. It is positioned in the upper left quadrant of the image.

Situated at the head of Spring Creek, two miles south of the town is the old Queenslander Mine, which has been worked on and off for a number of years. It is a big dyke formation, with small quartz veins running through some, and worked on the open cut. A Sydney speculator has had the mine in hand for some few years past and erected a 20 head battery, the whole formation mined being put through the machinery. With no water being near at hand it has had to be pumped from the Turon River, a distance of two miles. At the present time the machinery is being dismantled and removed.

Meanwhile a local syndicate has taken the mine in hand with the intention of erecting a crushing plant at the river and conveying ore by means of No. 1 Turon Dredge. Mr. S. Paganini has a 100 acre sluicing claim on a hill a little west of the town, adjacent to the river, and intends to pump water up and start sluicing operations shortly.

DID YOU KNOW

That one of the most supreme tourmalines, a pink coloured specimen surrounded by a mass of diamonds, belonged to the Empress Dowager during the Qing Dynasty in China. It was her favourite necklace.



Apache tears come from an American Indian legend and were believed to be ‘tears of grief from the warrior’s family.’ They are in fact rounded pebbles of natural black or volcanic glass known as obsidian. They were found in siliceous lava flows and domes in the lava. The legend came about in the 1870s when some seventy five Apache warriors were fighting soldiers of the United States on a mountain in Arizona. Surrounded with little chance of winning the Indian warriors rode their horses flat out over the sheer precipice to their deaths. On hearing about what had happened the Indians’ wives and children burst into tears over the tragedy and when their tears hit the ground they turned into little stones – Apache Tears.

The worst coal mine accident ever in the world took place on the 26th April, 1942, at the Benxihu Colliery in Benxi, Liaoning, in China. When 1,549 miners and workers died. At the time, during World War II, the area was occupied by the Japanese Army and the mine was under control of Japanese managers.

On the 3rd October, 1872, the Bathurst Free Press's correspondent reported on Wattle Flat's Riley's Creek Line of Reef. The line of reef was situated on the eastern side of the Big Oakey Mine, (also called Minis Reef and OK Reef over time) and is a continuation of the Caffaratti line. Lease No. 1 is a seven acre size, the property of Petersen, McCarthy and Company. Operations on this lease were commenced about ten years previously giving various results averaging from 8½ dwt to 22 dwt to the ton. The width of reef is four feet wide and has been traced 300 feet, with a tunnel running along the line of reef. The shaft is at the end of the tunnel sunk down to a depth of 90 feet. This valuable property has lately been purchased by Messrs. Campbell, Kightly, and Company of Sydney, for a magnificent sum. South Nos. 2 and 3 mines were not at work. No. 4 mine was a fifteen acre lease, the property of Benny and Company of Sydney. The stone which was being raised at this lease was equal to any that had ever been raised from the same depth. The shaft is down 20 feet. The remainder of the line has been taken up within the past few days for a distance of three miles. The Big Oakey underground gold mine operated from 1877 to 1937, just before World War Two.

One could say that the Aboriginal people were the nation's first miners after they arrived some 60,000 years ago. They began fossicking for rocks and stones which would be suitable for making their weapons and tools. They also went in search of various coloured ochres to make paint to smear over their bodies.

During the Second World War the Allies used tourmaline to manufacture their pressure sensitive gauges for use in building its sonar for submarines.

Do you know what stones were used in Britain in the early Neolithic period which lasted from around 4300 BC down to 2000 BC. With both flakes and the hammerstones being used to make primitive tools the men looked for hard, brittle stones which were rich in silica, such as quartzite, chert, flint, silcrete and quartz.

Tin was first discovered in Australia during the 1870s. In 1872 the Messrs Fearby discovered tinstone near Inverell, and the present Elesmore mine was opened near the spot. The news of the discovery of tin in the New England district attracted a mild rush, and in March 1872 valuable deposits of stream tin were found at Vegetable Creek. George Renison Bell, the prospector and explorer, in Tasmania staked his claim for the Renison Bell tin mine in the 1880s which is now one of the biggest underground tin mines worldwide. Tin keeps copper pure and is an essential ingredient in lead pencils. Tin has been used in making coins and also used in making car batteries. It is as old as human civilization itself.

Some malachite is a picturesque decorative stone with a rich, ornamental colour in various green shades. It is quite unique amongst the gem family. With its low hardness it is easy to carve and polish. Malachite is a copper ore and is always green. This green rock was once crushed to produce the first green pigment in the world with the colour being found in an early Egyptian tomb. It was also used as an eye makeup around 2,000 BC.



Mining began in the Southern Colony in 1799 when convicts collected bits of coal found in outcrops near Newcastle and shipped it to Sydney for sale to the residents. In 1801 150 tonnes of coal at Newcastle was loaded onto a sailing ship and exported to India.

Lead was the first metal that was mined in Australia in 1841. The mine was located at Glen Osmond near Adelaide and followed by copper from Burra and Kapunda. Within a decade South Australia was exporting its lead and copper which totalled more than its wheat and wool exports. When the copper mines at Kadina and Moonta were discovered their export value passed all expectations.

Australian mining accelerated greatly with the discovery of commercial gold near Bathurst in 1851 after which more than half a million prospectors headed for the gold fields. In the late 1850s our nation was yielding around 40% of the world's supply of gold.

Some early cultures held rubies in high esteem because many felt they held the energy of life. The Ancient Hindus who worshipped the god Krishna believed that they would be given rebirth as an emperor. Chinese records show that red rubies were exchanged along the North Silk Road in China from around 200 BC. The Chinese noblemen ornamented their armour with the bejewelled rubies as they thought the gemstone would grant them protection. The Burmese military became more prominent when miners commenced excavating the red gems around 600 AD. It made the soldiers look fiercer they claimed.