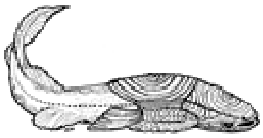
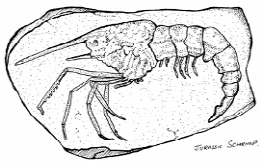
# GEMBOREE 2017

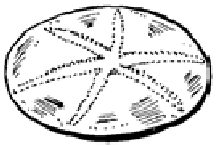
# INFORMATION E-NEWSLETTER

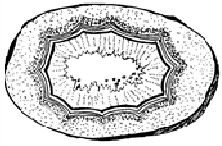
***October 2016 – Edition 7***

**Tony Luchetti Showground, Lithgow – Easter – 14th – 17th April, 2017**









## FROM THE E-NEWSLETTER EDITOR

This is my seventh edition of the GEMBOREE 2017 Information e-newsletter and we have been receiving many complimentary remarks about it. They are a considerable amount of work to get it out every four weeks. Also there have been some very noteworthy discoveries of interesting information that will be included in forthcoming issues.

Lithgow and surrounding districts are very rich in minerals as evidenced by reports in the various early newspapers. From the 1840s copper, lead, silver, zinc, molybdum, bismuth, diamonds, sapphires, garnets, talc, asbestos and more have been mentioned.

Copper was noticed first with mines operating in the late 1840s, however these were later over-shadowed by the copper discovered at Burraga. This latter mine was called Thompson's Creek at first but later changed to the Lloyd Copper Mine which also yielded gold and silver. It was commenced in 1878 and went on to be worked intermittently, depending on the price of copper, for many years and yielding some 19,440 tons of copper ingots. Another drawback that hampered the mine was inadequate management as well as the lack of capital. Lewis Lloyd established his smelting works at Lithgow to become known as the "Copper King".

The district can claim the first official discovery of gold by a European when Assistant Surveyor James McBrien on 15th February, 1823, discovered a number of gold particles in the sand and in the hills near to the Fish River. The find was somewhere between O'Connell Plains and Diamond Swamp. An unfortunate convict discovered a small nugget near Bathurst earlier the same year only to be accused of melting down stolen jewellery and flogged. The discoveries remained unannounced as the Governor feared that any discovery may cause unrest and chaos.

In the same year a pea-sized gold nugget was found at Sidmouth Valley on Cox's Road. It was found by James Lowe, his father Robert Lowe and Lieutenant William Lawson on what we call Diamond Hill, which wasn't very far, maybe 3 or 4 miles from Assistant Surveyor James McBrien's find.

Plans for the GEMBOREE 2017, the 53rd National Gem & Mineral Show, to be held from Friday 14th to Monday 17th April, 2017, at Tony Luchetti Showground, George Coates Avenue, Lithgow, New South Wales are still moving along smoothly to be ready for next year.

With more registrations being posted in, be sure not to leave your decision until too late. Remember it's time to plan what you would like to do so you must consider your accommodation needs. You can either stay on-site or off-site and with the latter local accommodation will become a premium with other tourists also heading to Lithgow for the 2017 Easter long weekend. If you need off-site accommodation or need other local information you can contact the distinguished staff at the Lithgow Visitor Information Centre, 1137 Great Western Hwy, Lithgow. NSW 2790 or telephone 1300760276 or email tourism@lithgow.com or www.tourism.lithgow.com

I must take the opportunity to thank the dedicated staff at the Local History Section at the Lithgow Library Learning Centre of the Lithgow City Council, for their continuing assistance and support with photos and my questions about Lithgow and district.

***Alan McRae, FAIHA – GEMBOREE 2017***
***e-newsletter Editor and Publicity Officer***

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**ANDREW BROWN**

Mr. Andrew Brown, (above – photo courtesy Lithgow Library), was born in Tibbermoor, Perthshire, Scotland, on the 5th November, 1797. He was educated at Methven, close to the place of his birth and would go on to influence Lithgow's history.

Andrew Brown had also been inspired by tales sent back from the Southern Colonies. He also had an offer from James Walker to overseer and manage his proposed land grant which was later granted near Lithgow and named 'Wallerawang'. Brown also saw an opportunity to obtain some land for himself, the first of which he settled on in 1824 or 1825. Andrew selected 200 acres of ground at Bowenfels which was situated west of the current Lithgow Park to Cooerwull Brook (it is now called Farmers Creek). The property was named 'Cooerwull', the name being Aboriginal for the small blue-bell like flower that grew on his land.

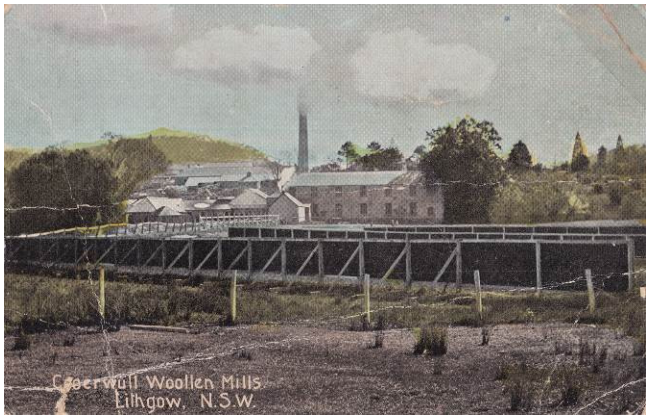
The Scottish lad had travelled from his home in Methven, Perthshire in Scotland. The son of a Perthshire tenant farmer he proved to be very capable and along with his boss also began to accumulate land and livestock. He had 2,700 acres by 1830 and was planting crops such as wheat and maize.

He had a flour mill built by 1837 at Cooerwull to use the wheat being grown on his property and for other local wheat grower's use. Driven by water from Cooerwull Brook the waterwheel drove the two pairs of stone grinding wheels.

He had a small earth dam constructed beside the creek which had a timber sluice-gate that was hand operated to allow water down a long spillway channel to enter the building onto the multi-section waterwheel built on a cast iron axle. The water then returned to the creek via a short stone water-race. Bags of wheat would be hoisted up to the grinding stones using the sack-hoist. The wheat was fed in using a tin funnel where the lower stone grinding wheel remained stationary and the top stone revolving to grind the grain.

Later in the early 1850s Brown purchased a steam engine which was brought to the property by a bullock team this allowed the flour mill to be converted to steam, the boiler fired up with wood from the surrounding land. Around this time he fitted a machine for flour-sifting to improve the flour by varying degrees of fineness. By the early 1860s Brown was using local coal to fire his boiler though he was having coaled mined on his property as early as 1838.

In 1867 the mill was converted to allow for the manufacture of woollen tweeds. The complex, (photo below courtesy Lithgow Library), changed hands over the time however the manufacture of tweed at this site continued until 1973.




In his time Andrew Brown was a philanthropist. He had a church and associated school hall at Cooerwull, this later becoming the La Salle Academy for boys. It was able to house around eighty students each term.

He married Christina Henderson and they had three children. Over his lifetime Andrew Brown amassed a great amount of land and wealth out on the Castlereagh, some of which was overseered by his son until he was killed. In the 1880s Andrew established an ostentatious private graveyard on his Cooerwull estate which features an obelisk of local grey granite standing

4.5 meters high in the centre.

About a fortnight before he died he contracted a cold whilst attending the Presbyterian Assembly in Sydney, pleurisy and congestion of the lungs intervened, and this, together with dropsy, was the cause of his death

The Sydney Morning Herald noted on 5th April, 1894, that the funeral of Mr. Andrew Brown, J.P., took place in Lithgow the previous afternoon. It was largely attended by many representatives of local people and friends from Sydney and other districts. Among those present were Mr. J. T. Walker, Captain Smith, the Rev. Principal Kinross, Mr. Bradley, Dr. Geekie from Bathurst and Revs. McKenzie and Anson Smith. The last named read the burial service.

Principal Kinross delivered a brief address in eulogy of the deceased. The pupils of Cooerwull Academy and children from the neighbouring Public schools formed part of the procession.

Part of an extract from the Lithgow Times gives further information about his life. “Mr. Andrew Brown sailed in company with the late Mr. Jas. Walker (for whom he subsequently acted as manager), for Sydney, where he arrived on 24th September, 1823. In 1824 he obtained from the Government a free grant of 200 acres, which he chose at Cooerwull. None of the grant has since passed out of his hands. In those days the Government gave pastoral licenses or permits to settlers for grazing purposes, and shortly afterwards Mr. Brown went on to the Castlereagh, where, armed with pastoral licenses, he took up Biamble Station for the late Mr. James Walker and Caigan for himself.

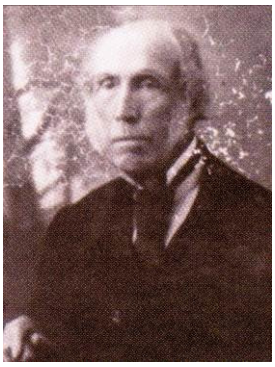
Mr. Brown, it might be mentioned, was the first settler on the Castlereagh and claimed to have been the first to penetrate the back-tracks of that country. Sometime afterwards, he went further down that river, and took up for Mr. Walker the stations known as Yoolundry, Coonamble, and Goorianiwa, the two former of which are now owned by the executors of the late Mr. D. P. Keogh and the latter by Mr. Cuthbert of Featherstonehaugh. For himself Mr. Brown selected Illamurgulia and Tondeburine. The former of these he sold in 1862, the latter is at present held by Mr. J. L. Brown. In company with the late Messrs Thomas and James Walker, Mr. Brown went overland to Melbourne to attend the first sale of town property held in that city in 1884.

He erected a flour mill on Cooerwull and when the quantity of wheat began to fall off, and, not being able to give sufficient employment to the machinery then in use, other machinery, for the manufacture of woollen goods, was erected. In 1862 the machinery of the later description was added to, but hand-looms and ‘willies’ were still employed in the spinning department. Later on, in 1875, the mill buildings were much enlarged, and machinery of the newest description put in, consisting of two carding and condensing engines, and ten power looms. Seven years later (1882) all the grinding gear was thrown out and two more power looms added to the woollen plant, which has remained unaltered to the present day (in 1894). The first lessee of the mills, which at present are leased by Messrs. Thompson Bros., was a Mr. Houston.

On the 17th August, 1839, Mr. Brown had returned to England on the “Ann Gates” under Captain Giles, landing there on the 27th December, same year. After spending 12 months in England, he went to Scotland, where, on the 26th January, 1841, he was married to the now venerable lady-the faithful helpmeet of 58 years who is now widowed, after which he returned again to Australia. The issue of this marriage numbered three children, one of whom (Mr. J. L. Brown, J.P.) is still living. Mr. Brown was the oldest Justice of the Peace in the Hartley district, his appointment dating back almost 50 years. He twice aspired for Parliamentary honours, contesting the Hartley electorate in the sixties, but was on each occasion defeated by Mr. Lucas. His name is closely associated with several institutions in and about Bowenfels – (image Bowenfels Road below.) He erected Bowenfels’ Presbyterian Church, of which several additions have since been made at his expense. Then, sometime afterwards, the manse was built and towards the erection of this he was the principal donor. Later on the Cooerwull Public School was built solely at his expense.

And just here it will not be out of place to mention that Mr. Brown annually gave prizes to encourage the scholars of this school in their studies, besides which they were, each Christmas vacation, entertained at a picnic by the deceased gentleman, so that they have now lost their best friend. In the work of this school Mr. Brown always evinced an especial interest and frequently made visits of inspection in order to satisfy himself of the progress being made. In 1882, in order to provide for the higher education of boys, he erected the Cooerwull Academy, which is at present under the

supervision and direction of Mr. W. S. Page, M.A. Since the erection of this building in 1882, numerous additions and improvements have been made to it and it is now undoubtedly one of the finest institutions of its kind in the country. These buildings will long stand to perpetuate the memory of one who has done much to advance the interest of the district in which he lived, and in which he was justly esteemed for his uniform courtesy and integrity.



During the whole of his long life, Mr. Brown, (left,) was an exceedingly temperate man, rarely, if ever, touching intoxicating drink and never using tobacco. Probably it is to this fact, combined with steady habits and ceaseless activity both of mind and body, that can be traced the length and success of his life.

Physically, the deceased was, until the weight of 50 years was on his back, almost a marvel of strength and of him it is said that, when, as a pioneer on the Castlereagh, he stripped to bathe, the aboriginals were so astonished at his muscular development that they would go into the water to feel his arms and legs. His mental strength might also be said to be marvellous, for right up till a few weeks before his death he managed all his own business affairs, seldom requiring any outside clerical assistance.

From the cradle to the grave, his life was one of unremitting toil and attention to matters likely to promote the welfare of himself and family. Although favoured with opportunities the likes of which none of the present or future Australian generations are likely to have, still he showed that he possessed that shrewdness which knows naught but success the knack of knowing how to seize and use an opportunity when it presented, the lack of which quality is characteristic of the vast majority. The wealth of the subject of this sketch was confined principally to Commercial, A.J.S., and N.S.W. Bank shares and of each of these institutions he was one of the original shareholders. Apropos of the Zigzag deviation scheme which is at present being considered, the fact that Mr. Brown was one of the first to oppose the present railway route at the time of its construction might be of interest. He favoured a scheme to bring the line up the Grose valley and descend the mountains at Lidsdale, the wisdom of which idea must be apparent to all."

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## GEMBOREE 2017

Remember there will be a great range of fossils, rocks, minerals, gemstones, jewellery and lapidary equipment on display and for sale at the GEMBOREE 2017, the 53rd National Gem & Mineral Show, being held from Friday 14th to Monday 17th April, 2017, at Tony Luchetti Showground in Lithgow.

**Buy a GEMBOREE 2017 Badge**

**to remember your trip to Lithgow**

**at Easter 2017 only $6 each.**

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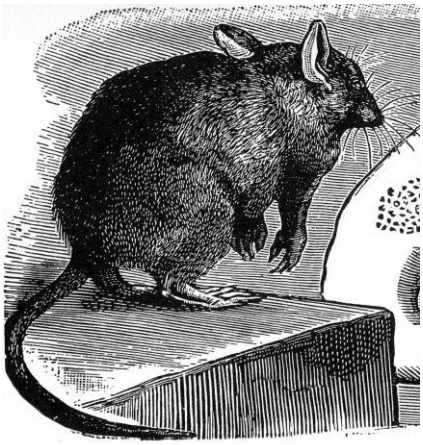
## THE BUBONIC PLAGUE

Whilst many people have some knowledge of the bubonic plague few would realise that in 1900 Australia was reporting new cases of the plague, deaths and rats almost every day in April 1900.

There were regular reports in the Lithgow Mercury newspaper appearing almost daily and mention the number of fresh cases of bubonic plague that had been reported to the New South Wales Board of Health. On Friday 13th April, 1900, seven new cases were reported in Sydney. The patients were Mary Davis (aged 20), Hugo Bogan (17), John Hacket (9), of the city; John Quill (85), of Ultimo; Win. Taylor (22), of Woollahra; Henry Griffiths (17), of the Glebe; and Win. Davis (36), of Darlington. Charles Kennedy died at the quarantine hospital. William Davis died at his residence at Darlington, a post-mortem examination showing that he had suffered from plague.

Two cases were reported to the Board of Health on Saturday, the patients being Mrs. Miller and Mrs. Gateano, both residents of the city. John Hynes, who was discovered to be suffering from the plague, died at the Sydney Hospital on Sunday. Ebenezer Wakeham, who was removed to the quarantine hospital during last week, died also on Sunday. Sixty "contacts" were released from quarantine on Saturday and six persons were discharged from the hospital as cured.



Three cases of bubonic plague were reported to the Board of Health yesterday. The patients were - Edward Bowell, of the city, Wan Hoong, a Chinaman, of North Botany, and Robert A. S. Wilberforce, who was taken ill whilst on a visit to Goulburn. The patient Wilberforce was brought from Goulburn by special train to Darling

Harbour and was taken direct from the train to the quarantine hospital. Dr. Armstrong, states that the attack is a mild one. The house at Goulburn in which Wilberforce was staying, containing eight residents, has been placed under strict quarantine regulations.

Many Lithgowites believed there were no rats to be found in Lithgow until they read that a very large black and grey specimen was killed on Saturday morning in that high smelling lane which runs between Cook Street and the back of the old Lithgow Mercury Office - parallel with Alain and Afort Streets. "To allay suspicion, it may be as well to say that this particular rat is not a traveller from Sydney. It has been identified as an old resident." Locomotive drivers and rail guards had been warned to keep a lookout for any rats on trains as they were a way for the pests to travel out of Sydney. Lithgow residents too were on the lookout for rats – a good rat was a dead and burnt rat.

No cases had yet been reported in Lithgow but people were on the lookout for and to kill any rats or mice.

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## SMOKEY QUARTZ & GARNET CRYSTALS

The specimen that appears on this page comprises long smokey quartz crystals amongst a cluster of small orangey Spessartine garnet crystals on feldspar. These garnets have also been referred to as 'Chinese Garnets' and 'Mandarin Garnets'. Whilst these quartz crystals are quite small other specimens exhibit rich black crystals as thick as your fingers. Some much larger smokey quartz crystals can be found covered in the Spessartine garnet crystals.

It seems that the word 'gernet' is from the 1300s and is a Middle English word implying "dark red". Later the word became 'garnet'. Garnets are classified as gemstones and are one of the silicate minerals with an isometric crystal system.

Whilst most garnet species are commonly red or at least reddish in colour they can be found in numerous colours that include yellow, green, purple, brown, blue, black, pink, colourless and of course orange.

Some thought they looked like burning embers during the Bronze Age and made them into necklaces that would be buried with the owner when they died. Ancient Egyptians considered the garnet as a life symbol so they were sought after. The Greeks were fond of garnets calling their red coloured garnets "pyropos" which meant "fire-eyed" though they had access to greenish, brown and blueish types. Greek jewellers would cut the garnets to be used in rings and brooches. The Anglo-Saxons in the 8th century A.D. used garnets to adorn their swords for decorative purposes as well as on the sword hilt fittings.

The Sumerians had a preference for garnets having them crafted into jewellery which have been found by archaeologists graves and tombs dating back to before 3,000 B.C.

German cabinetmakers were amongst the first to make garnet 'sand paper' for smoothing off their wooden furniture. Many of the garnets that are mined for industrial purposes are crushed up for export to be used in sand blasting, sandpaper, polishing glass, water filtration cartridges or used by lapidarists in flat lapping when polishing other stones.

Whilst most of the garnets found around Bathurst, Oberon and Lithgow are known as 'river garnets' they are especially plentiful in Australia along with those found on beaches. The majority of the river and the beach garnets are found quite rounded off after being tumbled by the river water or the waves over hundreds of thousands of years.

Smokey quartz is a variety of Quartz. It is a silicon dioxide mineral with the crystals ranging in colour from a light greyish brown, brown to yellowish brown and to nearly black. This colour is the result of aluminium impurities and natural irradiation. Occasionally one can see crystals that are an amalgamation which looks like amethyst and smoky quartz.

Smokey quartz can form as crystals, drusy or in a massive form, and in spectacular fashion in some locations. It is almost always transparent to translucent through to nearly opaque.

Gemmologists and gem cutters in Britain and Scotland learnt about the term "Smoky Quartz" in 1837 when Mr. J.S. Dana likened the semi-precious stone with its colour related to smoke within the stone.

The Roman artisans used smokey quartz to fashion their intaglio seals. Cylinder seals, along with ring seals were engraved by the Sumerians. Chinese craftsmen found that the smokey quartz was popular for ornaments and snuff boxes. The Germans carved the material into crucifixes to ward off bad luck.

Certain tribes of Australian aboriginals have medicine men who use smokey quartz and quartz crystals. They

are considered sacred and are used in certain tribal ceremonies. It was also prized by the Indians of North America for their ceremonies as seen by the smokey quartz attached to the top of their ritual wands. The Cherokee Indians even traded the smokey crystals.

The combination garnets and smokey quartz specimen on the previous page was found in the WuShan Mine near a small village in Tongbei, Yunxiao County, in the Zhangzhou Prefecture in the south of Fujian province in the People's Republic of China. Yunxiao County is located on the Zhang River which provides residents with rich market gardens.

A fair percentage of the local male population is involved in mining, the county having a population of just under 400,000 people. These specimens were first found in the mid 1990s but did not appear on the market until 1998.

Yunxiao, where the specimen was mined, has abundant natural resources. The mining of minerals and metals such as zinc, silver, gold as well as aluminum are good income earners. Ironically the rich river flats allow tobacco to be also grown which is illegally turned into cigarettes for the black market (the only legal cigarettes are controlled by the State).

Garnets range from between 6.5 to 7.5 on Mohs scale of hardness. Garnet specimens can be found as transparent gemstone quality varieties to specimens that are opaque, the latter types still valuable for industrial purposes where they are commonly used for making abrasives.

Deposits of garnets are mined in many areas of the world including Brazil, India, Kenya, Italy, Madagascar, Tanzania, Greenland, Burma, Russia, Ukraine, Namibia, China, Kazakhstan, Mexico, Sri Lanka and the USA. Smoky quartz on the other hand is easily located in many locations around the world.

Quartz is one of the most well-known minerals on earth and can be frequently found inside geodes.

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## WAX VESTAS SOLD IN LITHGOW FOR A FARTHING

For many people of my age have been used to using matches when we were growing up. Today, because of changing technology many people hardly ever use a match. We all know what a match is - a small piece of wood or a sliver of cardboard with a coagulated lump of combustible chemicals attached to one end and usually coloured red. When the match was struck on the supplied lumpy surface the chemicals would ignite resulting in a flame.

Matches were first exhibited at the World Exhibition in Paris in 1855 where they aroused great curiosity as well as receiving a first prize medal.

When the first modern, self-igniting match was developed the public was informed in 1805 by Jean Chancel in Paris. Jean was Professor Louis Thenard's assistant and he came up with the combination of using a mixture of potassium chlorate, sugar, sulphur and rubber to make the match head which he attached to small sticks of wood. To ignite it he had to poke the stick into an asbestos container of sulfuric acid (carried around in one's pocket or on a belt), however the process also resulted in the release of some very unwanted and injurious fumes.

**Above – a typical moulded cheap clay pipe sold to miners and others by hotels, shops and tobacconists in Lithgow.**

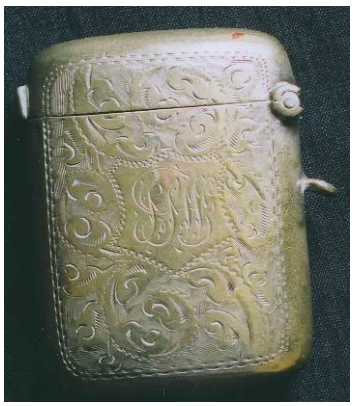
The idea of a 'friction match' was created in 1826 by an Englishman named John Walker, a chemist and druggist who mixed up sulphur, antimony trisulphide, potassium chlorate and starch, as well as sugar to a fine paste. The mixture was moulded onto the end of 36 inches long sticks and allowed to set. To ignite these "sulphuretted peroxide strikeables" one pulled them over sandpaper. They sold for one shilling and two pence a tin full. By this time most matchers were referred to as "Lucifers'.

The 'safety match' wasn't released until 1844 when the inventor Professor Gustaf Erik Pasch confirmed his patent for the invention. The professor had substituted the poisonous yellow phosphorus with non-poisonous red phosphorus. Another change was to remove the phosphorous originally in the match head constituents and put it on the striking panel on the outside of the match box.


Matches labelled as 'Lucifers' or 'Vestas' (above) certainly took off in the London area leading to a great

increase in smoking all sorts of tobacco products. The second English match making factory to commence was in London in 1861 by Bryant & May.

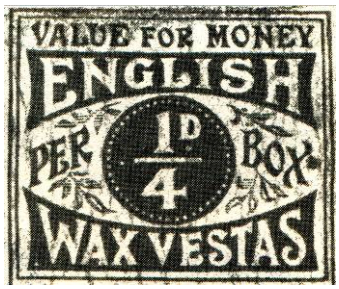
Initially smoking was for the more well-to-do 'gentlemen' but as prices dropped more people took up the habit, including women. These noxious match products were first marketed by Samuel Jones, who had seen a demonstration, even though they could flare up when lit and had a strong smell of sulphur. People still got burnt when someone's clothing could catch fire, with women's clothing especially vulnerable. The term 'Lucifers' endured as another word for matches into the 20th Century.



Basically until 1888, when Ebenezer Beecher patented his continuous automatic match manufacturing machine, matches were made by hand. Shortly after Sweden's match making industry was engaging some 7,000 workers and delivering around 40,000 tons of matches each year.

Seeing a further opportunity to make another product silver smiths and jewellers were soon selling silver vesta matches cases (above) to smokers and others. Some of these were quite elaborate in design and they could be personalised as gifts with the receiver's initials or some tender words of endearment engraved onto the vesta match cases.


All general stores in Lithgow sold wax vestas - these being a match with a short shank of wax-coated threads. Generally they were packaged in a cardboard box though later a 'pill' type container was used, as were small metal tins. Certain packages of vestas sold for an English farthing, (below), which was one quarter of one penny, thus four farthings made a penny. Australia used English coinage until well after Federation, and then it was still legal tender through to the 1930s.




The farthing was quite small, about the size of a five cent piece and in those days was treasured by small children as they could buy several lollies with one.

By 1910 the American company Diamond Match patented the first non-poisonous safety match meaning children didn't die if they ate matches.

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## OIL SHALE PROCESSING

Apart from the Lithgow locals and some others in the district few people would be aware of the shale oil deposits in areas around Lithgow. Commander Duprey mentioned in his report that kerosene shales were observed near Lithgow in 1825. Keen geologist Mr. W.B. Clarke investigated shale at the Hartley Vale outcrop in 1841. Thomas Brown also knew about the shales as he was probably keeping an eye on developments in processing of such shales in Scotland. Thus he had specimens of some Hartley Vale shale shipped overseas to be displayed at the Paris International Exhibition in 1862.

Three years later the patents in Scotland on 'How to process the shale' had expired so two Hartley Vale companies commenced. The Kerosene Oil and Paraffin Co. Ltd was launched, followed just a couple of months later by the Western Kerosene Oil Company. Later, in 1871, the two companies merged and was known as The New South Wales Shale and Oil Company Ltd. Some reports show that the Lithgow region contained some of the richest deposits of oil shale in the world.

Oil shale was found and treated at Hartley Vale, Torbane, Newnes, Katoomba, Glen Davis as well as other sites. Whilst kerosene and oil was the main output during World War Two at the Glen Davis works, it supplied much of the petroleum needs of the nation. Glen Davis was built in 1938 in the Capertee Valley by National Oil Pty Ltd, however when the war finished and imported petroleum supplies returned to cheaper pricing the plant closed. In 1954 it was sold off with just ruined brick buildings remaining these days but still worth a visit.

So how was the oil shale ore or torbanite processed? It was mined at Newnes for example from two shale mines and the ore conveyed via a series of skipways to the retorts or stockpiles. A gantry then lifted the ore

over the river to the retorts. A coal mine was also worked to feed the power station and the steam locomotives and other boilers.

Retorting produced a type of crude oil which afterwards was distilled and treated to make a range of products for eventual sale. The ore was heated in the retorts to produce ash and a useable oily vapour. After some initial problems and modifications the retorts served their purpose to release a crude oil which was gravity fed for further treatment. Repeated distillation was then undertaken to separate qualities of oils by the use of different types of stills and condensers. The process was reasonably complex with various processes involving a number of stages which explains the high processing and equipment costs. Some oils underwent other processes, for example heavy oils were treated to get out paraffin wax, this taking place in the paraffin sheds. The paraffin later became candles produced on the site in the Candle Factory. Petrol was also made at Newnes as part of the process.

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## JOSEPH COOK - THE LITHGOW MAN THAT MADE CHANGES IN THE POSTAL SYSTEM

Joseph Cook was a Lithgow man who became Australia's sixth Prime Minister on 24th June, 1913, and served in this position until 19th September, 1914. He had initially won the seat of Hartley to serve his constituents in the Legislative Assembly.


Earlier in October 1893 he had been elected as leader of the Parliamentary Labor Party. He was a man with quite firm beliefs however over time he did change his mind on issues as well as politics. The following year, in July, he was returned to the Assembly as an independent Labor member.

George Houstoun Reid's ministry was the 28th ministry of the Colony of New South Wales and had been swept into power on the free trade issue. Joseph Cook was offered the position of Postmaster-General in the Reid government which he accepted as he felt he could contribute more as a minister rather than on the back bench.


Hartley again supported Joseph Cook in the ministerial by-election which saw him returned with an increased majority. It was then that he built his new home in Lithgow.

The role as the Colony of New South Wales' Postmaster-General was indeed very important. The postal system was still growing and it was a huge responsibility even though the position offered £1,500 per annum. He held the position as Postmaster-General until August 1898.

As part of his job with the Post Office Joseph was keen to issue the first New South Wales Diamond Jubilee Charity stamps in 1897, though he had moved on by then. They have the unique honour of being the world's first charity stamps. Other major countries only began the practice of issuing charity stamps in 1905 after observing the results in Australia. Charity stamps, were and still are produced, and sold at a premium over their postal face value with the 'profit' used for charitable causes. In the New South Wales case the charity stamps were issued to raise funds for the construction of a hospital in Sydney for consumptives (those suffering with TB) in recognition of Diamond Jubilee of Queen Victoria when England and the British colonies celebrated 60 years of the monarch on the throne. The charity stamps were issued in postal denominations of one penny and two-pence halfpenny representing their postal value however they were physically sold at twelve times these amounts – i.e. one shilling (1/- or 10cents) and two shillings and six pence (2/6 or 25 cents). Victoria had also heard of the idea from Joseph Cook and also issued Diamond Jubilee charity stamps in a similar format, just a few weeks after New South Wales.

Only 40,000 of the shilling and 10,000 of the two shillings and sixpence stamps were issued. They were very unusual stamps in that they were both four times bigger than ordinary stamps. Another unique feature at the time was that they were printed by lithography in more than one colour at the Government Printing Office in Sydney. The stamps were printed in sheets of 40.

As the first issues proved quite successful the idea was used again in 1900 when Victoria and Queensland issued charity stamps to raise funds

for the families of wounded soldiers from the Boer War. Patriotism was riding high and the postal authorities felt that the idea had merit. The four charity issues are now the only ones of their kind issued in Australia.

The green stamp (previous page) shows the design of the stamp that sold for one shilling (below - a typical Queen Victoria silver shilling of the type used at the time) has an image of Queen Victoria on the upper right of the stamp. The central montage depicts an angel holding a fatigued person in a bush setting. Along the top are the words "Consumptive Home". The issue was designed by Mr. C. Turner.


The stamps were sold over an eight week period with many 40,000 of the penny stamps printed along with 10,000 of the 2½d issue being sold.

A shilling issue appears on the envelope (previous page) from Victoria. In addition extra stamps have been added to pay the postage. I would say the person who wanted it posted had already purchased the shilling stamp from New South Wales. Unfortunately there were no issues in future years.

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## SEA URCHINS AND FOSSILS

The general public often cease to be amazed at what people collect and at the same time what is produced by nature. The sea urchin is a case in point with these unique marine creatures often being part of seashell collections as well as the fossilised specimens, so don't be surprised if you see some at GEMBOREE 2017.

Their name 'urchin' comes for the spiny hedgehogs which would curl themselves into a similar ball so it was probably logical that early seafarers thought that the many sea urchins resembled them with their spines. Some early seamen even referred to them as 'sea hedgehogs'.

I recall they were quite common around the Port Macquarie area and the south coast, especially after rough seas and their breeding cycle. The urchins lived on the kelp beds with plenty of these marine plants also evident with the sea urchins washed in. A local tribal elder referred to them as 'Spiny Sea Urchins' and he would collect some to take home and eat.

Sea urchins were a delicacy for the early aboriginals who lived on the coast and particularly collected for large feasts and corroborees. They were put into the coals to cook in their shell before a hole was hit into the side and the flesh removed. This practice is evident in the old middens found in some coastal areas.

Known as Echinoderms these under-sea animals come in a great variety of sizes and shapes with almost 1,000 species known.

These humble sea urchins are essential in the ocean's eco system as they tend to balance the marine algae ratio. These grazers of algae are omnivorous which means they can eat plants and dead animal debris such a bits of fish, starfish, barnacles, sea cucumbers, mussels, jelly fish and even sponges.

These unusual sea creatures have a mouth and legs but no eyes or brain. They exhibit a five-part symmetry (imagine a pie cut into five slices) thus they are known as a pentamerism. Their upper body is domed with the underside tending to be flatter and their internal organs are encircled within this shell. These creatures excrete their waste from the top of their skeleton.

Their soft tissue mouth is found under the urchin and has 'five teeth' inside it, the latter being composed of calcium carbonate. The teeth are self-sharpening and are pretty tough as they have been known to chew into rock. These teeth make it easy for the creatures to feed on the fleshy kelp beds. The mouth is in the middle of the underside of the sea urchin's round shaped body.

Whilst one would think they couldn't move by themselves they actually have five-paired rows of tiny tube feet each with small suckers at their end and are located within the spines. These small tube feet are common to all sea urchins but they move ever-so-slowly by means of these hundreds of "adhesive" feet which the sea urchin 'pumps' seawater in and out of to facilitate movement.

Most sea urchins when fully grown, and they are slow growers, are in the range of 2 to 5 inches, the largest being over 12 or 13 inches.

These circular sea urchins are known for their bristly skin and spikes which is necessary for their protection. Another advantage, especially those sea urchins that have longer needle-like spines, is that they can wedge themselves in between rocks or into crevices so it is able to fix itself firmly to the rocks so water currents or predators can't move them easily. They are attached in a sort of ball-and-socket system.

Whilst most spines or spikes are not dangerous some can be venomous, though if any spike goes into the skin it does need to be removed. The size of spines vary between the species but generally they seem to be around ½ an inch to 1½ inches long with the longest being around 11 inches long. The slate-pencil sea urchin has quite big, thick but blunt spines, like short lead pencils.

Those sea urchins that don't have spikes will exhibit a harder outer shell which will be covered with bulky chalky plates.

The sea urchin can be found basically all around the world however most cannot handle freezing water so they are rare in the Arctic and Antarctic but they do exist there. Basically these marine animals live on the ocean floor and have a preference for rocky areas as well as coral reefs.

Whilst many sea urchins are found in shallower water where they benefit from the wave action, deep sea dredging trawlers bring them up so much so in some areas they are effecting the populations of certain sea urchins. Some species are known to live over 15,000 feet deep.

I recall when I was in Canada years back visiting relations and we went out on a boat to look at the otters who were diving down to bring up sea urchins and a rock, the latter to break it open on their chest. But it's not only the otters who are predators to these underwater animals. Eels look for these spiny marine creatures along with birds, larger fish and certain types of fish, crabs, lobsters and man, the latter in some countries thinking it's a delicacy whilst others think they make them more virile.

Colours can vary from greys, black, browns, dull brown shades, olive to various faded greens, blue, purplish, red, even deep reds. Some are even known to give off an iridescent glow in the right light conditions.

Their closest relative is the sand dollar which turn up from time to time on certain beaches, the largest number I have seen were in Fiji. Some marine scientists believe that some sea urchin can live over 150 years.

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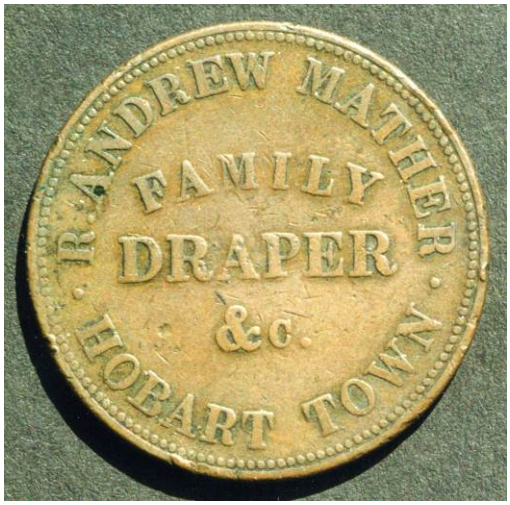
## OLD TOKEN FOUND AT LITHGOW



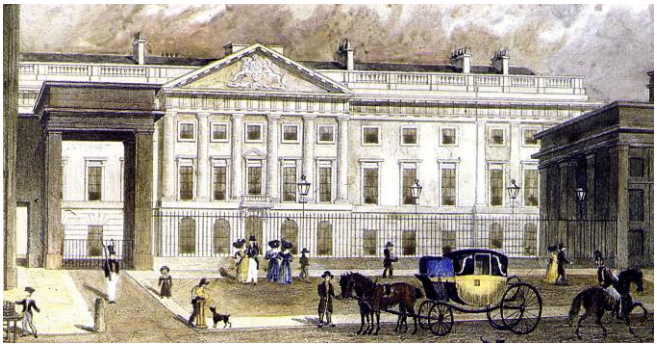

It may seem unusual as to why a one penny copper Tasmanian tradesmen's token would be found in Lithgow in New South Wales. These tokens were actually illegal as they had not been officially issued by the British Government. The tokens came about because the British Government could not supply adequate amounts of small change to the Southern colonies. The lack of farthings, pennies and halfpennies was hampering local businesses and commerce so numbers of businesses and tradesmen decided to issue their own coinage in the form of tokens. The gold rush was exacerbating the problem with the influx of prospectors arriving in large numbers by sailing ship.

The first copper tokens to be issued in New South Wales was in 1852 by Samuel Peek for his Tea Stores in Sydney. As proprietor of Samuel Peek & Company he could also make a small profit on the tokens he had minted and issued. An added bonus was that they would advertise his business and where it was situated in Sydney.

Tokens circulated to other Australian colonies, especially by shrewd men who would buy up tokens cheaply after they had been deemed illegal in one colony and take them to another before that colony made them illegal. The first colony to pronounce them illegal was Victoria in 1863, followed by the colony of New South Wales in 1868. Western Australia has the honour of being last in proclaiming them illegal in 1878.

People often travelled and would take tokens with them, after all they were money. Initially as the Government could not supply enough coins they

seemed to turn a blind eye to the problem but after more coinage was shipped over by British authorities from the Royal London Mint, below, that local powers that be took action here.



The token found in Lithgow was issued by Robert Andrew Mather, Junior, who managed the Family Drapery business in Hobart Town in Tasmania. Whilst many tokens have dates this one is not dated but it was issued around 1860. The token was minted by Heaton & Sons in Birmingham in England and shipped to Tasmania, usually in wooden barrels. The drapery establishment was commenced by his father in 1823 having arrived in Hobart Town the year before with his wife. The store was still in existence almost ten years after Federation.

The obverse (front), on previous page, just has the words - FAMILY / DRAPER / &c. in the centre with R. ANDREW MATHER. around the top. Around the bottom is 'HOBART TOWN'.

The reverse, (below), depicts a female figure representing a standing Justice, facing to the left. Whilst this token is quite worn our female is wearing a blindfold and is extending out in her right hand a set of balance scales. In her left hand she is grasping an inverted cornucopia from which an assortment of fruit pours onto the ground at her feet. Her flowing dress is of an ancient-style pulled in at her waist. Each arm has dress material draped over them. The token has a background showing the ocean with a three-masted sailing ship under full sail just on the horizon to the left of our lady.

Around the top of the token is the word 'TASMANIA', (seen above). The edge of the token has a beaded border.

## SPHALERITE CRYSTALS ON POSTAGE STAMP


One of the nations around the world that have released postage stamps featuring either miners, gemstones, minerals, fossils or mining operations is Hungary.

One stamp, above, was issued by Magyar Posta as one of a further set of seven to mark the Centenary of the Hungarian Geological Institute – each stamp featuring individual minerals and fossils from the Institute's collection. The first stamp in the set was issued by Hungary on 1st September, 1969, with the last distributed on 21st September, the same year.

The 60 filler multi-coloured stamp features the mineral greenockite. This postage stamp was designed by Hungarian artist Pal Varga, who also produced the final artwork.

The stamps were printed in sheets by the photogravure process which is an intaglio printmaking process in which photographic images are printed using forms of mechanised etching plates. The earliest form of this process had been fostered in the 1830s. The required diagram is etched onto the cylinder using a photographic process which screens the stamp's image. The process has a broad diversity of tones and produces rows of cells which make up the image on the photogravure stamp plate.

The series also featured fossilised Zelkova leaves from Fuzerradvany, a fossilised fish Clupea hungarica from Rakos, quartz crystals from Gyongyosoroszi, an ammonite from Villany, a copper specimen from Rudabanya, a fossilised turtle, Placochelys placodonta, from Veszprem and cuprite crystals from Rudabanya.

The stamp featured above shows greenockite, calcite and sphalerite crystals with their resinous lustre. It is a zinc sulphide mineral that is found in many collections. As a mineral, sphalerite is sought after by collectors world-wide. They are quite abundant as sphalerite is the most significant zinc ore to be found in the earth's crust. Greenockite is also a mineral,

considered quite rare, and formed mostly of the element cadmium, a fine coating of which is on the calcite. It is virtually found all the time in company with sphalerite.

Sphalerite's name originated from a Greek word "sphaleros" which means deceiving, misleading or treacherous. The name stemmed from the difficulty in identifying the various sphalerite samples and its manifestations in the early days. Some miner's called it 'Black Jack', 'Zinc Blende', 'Rosin Jack', as well as other names. Some mines where it was mined had a noticeable smell of sulphur. Miners would usually locate the sphalerite in fractures, cavities or veins where zinc-bearing liquids had oozed up through carbonate rocks. It is found in igneous, metamorphic and sedimentary rocks where the sphalerite can boast some impressive crystal colloidal masses.

Crystals can be translucent to transparent, giving a streak which may be white to a yellowish brown. Whilst many of the highly lustrous, black crystals are the most common. Colours can range from brown, green, red, white, grey, yellow, to even colourless. Sphalerite crystals look a yellow-orangeish colour when held under either type of ultra violet light.

Mined here in Australia it is also found in numerous countries around the world. Countries include the United States, Germany, Ireland, India, Czech Republic, Bolivia, Alaska, Mexico, Kazakhstan, Sweden, China, Canada and Peru. Many of these deposits of sphalerite are commonly accompanied with calcite, pyrrhotite chalcopyrite, galena, marcasite dolomite or pyrite. In some mines valuable rare trace elements have also been associated with the sphalerite and can include germanium, cadmium, gallium and indium.

With a hardness on Mohs Scale of Hardness of 3.5 to 4, sphalerite is rarely used in jewellery as it is considered not suitable though this does not stop some lapidarists from faceting sphalerite crystals. As sphalerite crystals are relatively widespread some nice mineral specimens are currently on the market. Sphalerite is mainly used for the extraction of zinc.


Hungary has had an impressive postal system for a long time. It was the Habsburgs under the Austro-Hungarian Empire that firstly set up deliveries of mail around the country. Their first public mailboxes, to allow residents to post letters, were initiated in 1817. In 1855 all mail was to be delivered to the home address where possible. By 1859 express delivery rates were announced. On 1st May, 1871, Hungary introduced their own postage stamps after formerly separating from Austria in 1867. They were of poor quality even though it was printed by the lithography method at the State Press of Buda. In 1874 the nation became a founding member of the Universal Postal Union. By 1886 Hungary had introduced their newspaper stamp and in 1896 letter deliverer's bicycles were initiated. By 1908 they were fully independent but the forthcoming World Wars saw much of their infrastructure destroyed. During World War Two Hungary operated a military post department. In 1990 their Post Office became a separate company, Magyar Posta, as witnessed on their current stamp issues.

The Geological Institute of Hungary founding charter was signed by the Emperor Francis Joseph II and is the oldest still operating scientific research institute which was established in 1869, as the Hungarian Royal Geological Institute. It is located in an impressive monument building with a turquoise and blue ceramic tile roof in Budapest. Built in 1898 – 99 it also features fossils as part of its exterior decoration. Odon Lechner was the designer in 1896 along with the building supervisor Sandor Hauszmann.

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