



AUSTRALIAN MINING HISTORY ASSOCIATION

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Patron: Professor Geoffrey Blainey, AC

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Editorial

There are two items of interest to mining historians that caught our eye recently, and both relate to Western Australia.

The first relates to the Kalgoorlie School of Mines with the announcement that future intakes of students will only be able to take up tuition at Curtin University's Perth Campus. This comes as a surprise when we realise the extent of the mining boom in the Golden West and the desperate need for trained mining personell. The School has a fine reputation both within Australia and throughout the mining world thus making the situation appear to be against the interests of the mining sector. No doubt a case can be made on economic and strategic grounds to concentrate undergraduate studies in Perth while leaving Post Grad work to the Kalgoorlie site, but the feeling among many is that the Kalgoorlie environment is one that is condusive to making the rounded mining professional and that any deviation from old practice will be to the detriment of the industry.

The second issue is associated with the Kalgoorlie based Miners and Prospectors Hall of Fame. This has met with financial problems that has seen it run into the red. Again, perhaps surprising considering the export performance of the industry in the state, though perhaps

partially understandable when the recent economic slump is taken into consideration. However, as announced on 1st March, the WA government has agreed to provide up to \$365,000 over the next 12 months to support the organisation providing it could find matching funds from sponsors.

It appears that to date promises have been made from about 20 companies to ensure the Hall of Fame is saved from administration, and the Government of WA has already stated management of the body will be restructured and plans developed to map out the future. There are also plans to launch an appeal for a Trust Fund of \$10 million to provide a source for future development. Anyone wishing to contribute can do so by contacting the APMHF at 08-9026-2700.

The two items do present paradoxes, the first on how a major training ground for the mining industry can face problems so soon after, and presumably on the verge of another boom; and secondly how the showpiece for the industry can also face possible closure under the same scenario. Our mining institutions seem to share the cycle of fortunes faced periodically by the mining industry but surely it is imperative for its own self-interest for the mining sector to actively support its training institutions and those that reflect their historic contribution to society.

Forthcoming Conferences

AMHA 16th Annual Conference, Greymouth, New Zealand, 5-11 July 2010

Points of Clarification:

Those going on the two-day pre-conference mining history tour on Monday 5th and Tuesday 6th July, will need to arrive in Greymouth on Sunday, 4 July. Conference bags can be picked up from the registration desk situated in the foyer of the Kingsgate Hotel from 1.00pm, and the tour will head off from the hotel at 8.30am on Monday 5th July. Remember to bring a **small overnight bag** as the bus cannot accommodate all your luggage.

Please note that those attending will not return to Greymouth on the Monday night. That night (Monday 5 July) will be spent in Reefton. You will have to book your own accommodation there. There are several hotels and fairly basic motels in Reefton, (Reefton Hotel, Reefton Autolodge – also known as Dawson’s Hotel, - Wilson’s Hotel and the Inghanghua Hotel, etc.). You can also book at the old nurses’ quarters at the hospital at a very reasonable price. There are also some B & Bs. Best to Google *Reefton accommodation* to make a selection, or email the Grey District Council Events and Promotions Office <info@greydc.govt.nz> They can provide information and make bookings for you. Those attending these tours should omit the Monday night, 5 July, from their Greymouth booking.

As a reminder, the business sessions will take place from Wednesday 7 July to Saturday 10 July, at the Kingsgate Hotel, 32 Mawhera Quay, Greymouth.

To cater for those arriving in Greymouth on the Tranzalpine train on the Sunday preceding the conference, the NZ committee has arranged for the museum in Greymouth, History House, to open from 2 to 4 pm that day. The museum is well worth visiting. It gives a comprehensive overview of the history of the development of the West Coast, and is a repository of West Coast history, with a significant emphasis on gold rush history. The collections are

primarily photographic and written history of the Grey area, and there is a large collection pertaining to the gold mining industry on the West Coast. There is an extensive resource relating to social history prior to 1920 and family history research. The museum asks that if anyone has any specific requests for information or photographs, that they contact the museum (email history-house@xtra.co.nz) prior to arriving to give staff more time to search their archives for suitable material. Located at 29 Gresson Street, the museum is down the Grey riverbank from the conference venue, the Kingsgate Hotel in Mawhera Quay. History House is within easy walking distance of the Hotel. Come out of the Hotel and turn left down Mawhera Quay.

It is also recommended that those arriving in Greymouth on Tuesday, 6 July for the conference business sessions (which runs from Wednesday to Saturday inclusive) avail themselves of the opportunity to visit the museum on the Tuesday afternoon. The packed conference programme will allow little other opportunity to visit the museum as its opening hours are from 10am to 4 pm weekdays. History House charges \$5 admission.

You are also warned to bring along some warm clothing and suitable footwear as it gets quite cold in ‘them thar hills’ and mine sites in the wet can pose a problem if you only wear sandals! Brian Hill suggests you bring over your thermals and old ski jackets.

Note that the local committee (Brian Hill, John Barry & Philip Hart) have done a marvellous job in raising sponsorship, so that much of the conference is costed to individuals at bargain rates.

See registration form enclosed with this newsletter for details. Note that Australian delegates should send their forms to the Secretary and pay in Australian dollars, while our Kiwi friends (to save on exchange rates and bank charges) should register with Brian Hill. Keep an eye on our web page for possible updates.

Bits and Pieces

Copper research project

For much of the 19th century (especially between 1830-70), Swansea in Wales was the copper-smelting centre of the World. Its tentacles stretched out to many countries, including Australia, and as well as proving an export destination for copper ores, Swansea in turn exported smelting personnel and the 'Swansea method' of smelting. Chris Evans, Glamorgan University, and a group of Welsh historians, archaeologists and heritage personnel are keen to explore the links between Swansea and the rise of a global mining complex by linking to those with an interest in the subject. They are interested in pursuing a number of areas where the influence of Swansea was felt abroad. These include industrial technologies; industrial relations; the role of diasporas; the effect on maritime developments and ports associated with the Swansea trade; the growth of urban centres because of their link with Swansea, cultural and social developments in the linked countries, and other ways in which the development of the Swansea smelting industry impacted on the world. If you are interested in any aspect of the relationship and its impact, e.mail Chris Evans at cevans3@glam.ac.uk

Family Honour!

On page 85 of the AMHA's most recent journal (Vol. 7), Ken McQueen recorded that at a meeting of the Belmore Freehold Silver and Lead Mining Company Limited in 1869, the meeting "discussed what action to take regarding Mr J.H. Wymond, the legal manager of the company, who had recently been committed for trial on a charge of obtaining money under false pretences..." One of our esteemed members, John Wymond, to whom J.H. Wymond was a Great Grandfather, wishes to put the record straight by pointing out that from what he knows, his relation was found not guilty, and it appears that it was his predecessor who had been responsible for the financial 'discrepancies'.

After this affair J.H. continued to manage many more mines throughout the rest of his career. John also records that his family had a long record of being active in mining, especially around the Coolgardie region of Western Australia where his Great Grandfather was at one time the Mayor.

The family was quite wealthy when they left that area for Broken Hill where they pegged the ground alongside the line of strike but subsequently lost everything they had. As John states, "it was then back to basics as both official managers and on-site mine managers throughout WA and the Victorian goldfields". A familiar story of rags to riches and back again! Well almost! Hopefully, this information will see family honour redeemed!

National Archives

Those who have been following the battle to retain the National Archives at state level will be pleased to know that after a concerted effort by concerned individuals and organisations, the issue has been resolved with the Federal Government agreeing to keep them open. The only concern at the moment is in relation to the Northern Territory where it has been decided to 'co-locate' the archive – what that means is yet to be determined!

Train Buffs!

Those among us who have a penchant for trains (and we have quite a few) might be interested in the following call for papers:

'Essays are being solicited for an edited volume on the topic of trains, modernity and cultural production. The volume is intended to be interdisciplinary and transnational in scope, likely covering areas such as Europe, South and East Asia, Latin America and more, and spanning the period of the mid-to-late nineteenth century to the present day. Submissions of interest will not have been published elsewhere, and will deal with railroads, trains, subways, etc. from a perspective grounded in cultural studies or cultural history, either incorporating an analysis of cultural artifacts or dealing with

train travel in a more theoretical sense in a specific regional, urban or area context. Comparative studies are also welcome'.

If interested, please send a detailed abstract of 300-500 words to Benjamin Fraser (Hispanic Studies, English Studies [US, UK, AUS, NZ], South and East Asian Studies) or Steven Spalding (French and Francophone Studies, Germanic and Eastern European Studies, Middle-Eastern and African Studies) by 30 September 2010. If your proposal is accepted, the final essay of 7,500 - 11,000 words will be due by 1 March 2011.

Papua New Guinea

In our December newsletter we posed a question by Professor Suzanne Mentzer of Rice University, regarding the fate of her ancestor, George Wishart Bowman, who it was believed went to Papua new Guinea as a member of a prospecting expedition to that country in 1874.

Member Peter McCarthy kindly followed up the query and while acknowledging that Bowman probably attended the Melbourne meetings, it seems probable that he did not actually travel as a member. Peter provided information on various expeditions to Papua as outlined in diaries and newspaper reports but to illustrate the arduous nature of prospecting in that area during the 19th century, the following is an example of what happened to a party that set forth in 1879:

Melbourne Argus 24 January 1879

THE VICTORIAN EXPEDITION TO NEW GUINEA.

Another attempt to prospect New Guinea for gold has resulted disastrously. In July last a number of Victorian colonists formed themselves into a company, and organised an expedition with the view of exploring the northeastern portion of the island. The schooner Dove a vessel of about 50 tons burden, was purchased and provisioned for seven months. A stock of beads knives axes, and pieces of cloth was also provided, for the purpose of trading with the natives. The

vessel sailed from Melbourne on the 3rd August, for Astrolabe Bay with 17 hands on board, viz -Mi Alex Ross Rennie (captain), Mr Bull (mate) and Messrs Turnell, M'Leod, Haestermann, Herbertson, Robertson, Wilcox Kellett Greenwood Filmore Faulkner, Stevens, Schmidt Peck and Guller. Yesterday we received the painful intelligence from our Brisbane correspondent of the total failure of the expedition and the wreck of the Dove. The party, it appears, arrived safely at Astrolabe Bay, and the prospectors went ashore, but found no gold, and were soon prostrated with fever, to which three of the party succumbed at once and one afterwards. Subsequently while cruising along the coast when near Threefold Bay the vessel was attacked by natives, who, however were beaten off. The troubles of the party did not end here, for shortly afterwards the vessel sprang a leak, and a ship bound for Yokohama being sighted, all hands were taken on board, and the Dove was abandoned. The following is the telegram alluded to -

BRISBANE, THURSDAY

... the party being attacked by fever and every one prostrated by the disease, they were compelled to lay the vessel to. Three men died from the malady, viz , George Wilcox, Arthur Stevens, and John Kellett. Before the close of October it was decided to make for Amboma. The prospectors were attacked near Threefold Bay, northwest of Astrolabe Gulf, by natives in canoes. They beat them off, but shortly after the vessel sprang a leak. Luckily they fell in with the Ship Sir Launcelot, bound from London to Yokohama, whose captain kindly received them, and landed them at Yokohama on December 10. One more death occurred, that of Charles Greenwood, who succumbed on November 25.

Reefer's Hotel

Shirley Jones has a photograph, probably 1870s, of the Reefer's Hotel that she would like to identify. It's a fairly substantial

building, in a rough hilly area of bushland. There are a few tents and shacks, a mill (possibly timber) with rough tracks in between on a rough clearing on the side of a hill. Shirley has searched the Victorian/NSW Hotel listings as the photo came with early East Gippsland photographs of road making and early townships. If anyone can give her a clue re the location she would be delighted to hear from you. Shirley can be contacted at: <shirleyjones26@bigpond.com>

Tunnels or t'other?

Linda Carmody has a document that lists a relative as having been a 'tunlrs man' at Bendigo. She presumes that this means he dug tunnels – but would like confirmation, or if not a tunneller, some other explanation of his designation. Linda can be contacted at: lcarmody2@optusnet.com.au

Churchill Fellowship Report

One of our esteemed members, Corinne Unger, has recently completed a report on her Churchill Fellowship that she took overseas when investigating 'abandoned mine rehabilitation programs and post-mining land use'. The research was conducted from leading practice programs in the northern hemisphere. Her six-weeks study tour included;

- the International Atomic Energy Agency (IAEA) in Vienna, Austria,
- Wismut uranium mine rehabilitation project (since reunification of Germany) near Chemnitz,
- the lignite mining area of Lusatia in eastern Germany being redeveloped for tourism and other new economies,
- Cornwall England based at the Post-Mining Alliance, Eden Project,
- the National Orphaned and Abandoned Mine Initiative and MEND – Ottawa, Ontario
- Crown Contaminated land program, Victoria (Vancouver Island) British Columbia in Canada.

To view Corrine's report and photographs of various sites and locations, see: <http://www.churchilltrust.com.au/fellows/detail/3411/>

Corrine also wishes to encourage others to apply for Churchill scholarships in subject areas where it is seen there is a need in Australia for which the answer lies in studying overseas. For further information on Corrine's project, see: <http://www.churchilltrust.com.au/application/download/>

Journal

Folks – pickings are looking rather slim! Only two articles to date and we have a journal to fill with papers by September. So those who are hesitating (and there are a number I know who are considering submitting) please get them to the editor asap. Your reward will be in seeing yourself in print and in enhancing the glories of the Association.

The style sheet can be viewed on our web page where you can also see other instructions as to length, etc.. And remember there are two sections: one for refereed articles; the other for un-refereed.

It would be appreciated if submissions could be made by July so that we can go through the editing process in time for printing, and so that we can get the refereed articles out to the reviewers.

Annual General Meeting

Please note that the Association's AGM will take place at the Kingsgate Hotel, Greymouth New Zealand at 4.30pm, Saturday 10 July. This early notice is to give everyone the chance to bring up items for discussion. Also to abide by our rule 11.4 in the constitution we have to give at least 14 days notice of proposed changes to the constitution. As its not certain whether the June newsletter will reach people within the statutory 14 days, notice is hereby given of the following proposed changes. These are changes we have been instructed to adopt by the Department of Commerce WA so as to conform with Associations

Incorporation Act (1987), under Schedule 1(6) of the Act, and Section 23 of the Act:

That after Rule 8.2 of our constitution which states, *The Executive Committee shall be elected at an Annual General Meeting according to the rules*, a sub-clause 8.2(a) be added, to read, *A committee member's term will be from his or her election at an Annual General Meeting until the election at the next Annual General Meeting after his/her election, but he or she is eligible for re-election to membership of the committee.*

2. *Under Rule 9, General Meetings, add clause 9.5, to read: Annual General Meetings shall be held within four months after the end of the Association's financial year.*

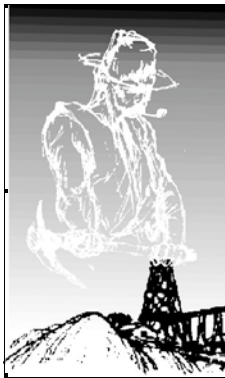
It might be noted that we decided at the Lithgow AGM that the end of the financial year would in future be 30th June.

MJD/March'10

Yet another photo of the conference contingent at Lithgow 2001



Photograph, it is thought, either from Leonie Knapman, or Greg Dickens, or Robert Ashley



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Newsletter No. 2 June 2010

Patron: Professor Geoffrey Blainey, AC

ABN 96 220 329 754

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Editorial

Much has been said in recent days of the proposed 40% levy on super-profits for miners. No comment on the pros or cons here – we leave that to wiser heads (?) but it does raise some interesting questions as to the levies on miners in the past.

Our earliest European mining activities go back to the government run, convict worked collieries in NSW where there was obviously no question of levies being demanded, but what happened when other mining activities eventuated? When the establishment was handed to private owners was production taxed, and later did the Australian Agricultural Company pay more than just the £1million it gave for its land grants in the Newcastle area? One of the problems for colonial governments was the conundrum of whether minerals below the surface belonged to the Crown, and if so how was this to be taxed? The earliest test probably occurred in South Australia in the 1840s but while the government gained by putting mineral lands up for sale or auction there seems a dearth of information on actual taxation of production (if any). It is commonly known that the alluvial miners in Victoria and NSW were charged a fee for licences, but again there appear to have been no levies charged on gold or other minerals that were won. In the age of company mining from the 1860s it appears

that the initial land purchase fees or leasing charges were the sole payment made, but was that the true situation? So when did taxes on production or profits come into the equation? In the early 20th century there were some taxes paid by mining companies but on what? During the World Wars some companies were taxed out of existence (along with other problems such as labour shortages, lack of equipment, soaring costs, etc). In one particular case in the early 1930s the Federal Government actually paid a bounty to gold miners, ostensibly to encourage them to employ more labour and to encourage marginal mines to come into production. That bounty was paid on increases in production based on the average production over the previous three years. But soon after this, in the 1940s, the same companies faced emergency taxes, and those companies that were registered in both London and Australia found themselves paying double taxation. What it amounts to is, in the opinion of the writer, that there is much to be learned about the mining taxation regime(s) over time. Seems this might well be a research venture worth exploring. What distinctions were there between the colonies/states in the way they financially exploited the mining sector; what types of taxation have been implemented over time; and have tax regimes returned a fair rent to governments?

Forthcoming Conferences

AMHA 16th Annual Conference, Greymouth, New Zealand, 5-11 July 2010

Its almost here, our first foray onto foreign soil, and glad to say, the attendance is up to our usual levels with a fair number of Ossie members and a growing number of Kiwis. Speckled with a few visitors from the US of A and Japan, it looks as if the conference will be up to the usual high standard, with presentation of a broad spectrum of mining history papers and promise of some active social activity, especially when noted that one of the highlights will be a visit to the historic Monteith Brewery! See menu below. As a reminder, if attending the Reefton tour, bring only an overnight bag.

Bits and Pieces and Requests for Information

Wildlife

Here's an unusual one – Ruth Harries works for a wildlife production company in the UK called Tigress Productions and is currently researching a new series for *National Geographic* called 'Wild Case Files'. The series looks at wildlife mysteries across the globe - talking to the scientists who are investigating them, reconstructing key events and discussing any conclusions. Her particular interest in this instance is to trace any pictures or records that exist pertaining to American goldminers in the 1850s who came to Australia accompanied by a Puma. Presumably there were, thereafter, reported sightings of a Puma or Pumas on the goldfields. If you have come across photos or written reports then please contact Ruth with the sources and you'll probably be blessed by a reference in the credits!

Ruth can be contacted at:
<RuthHarries@tigressproductions.co.uk>

Long-lost relation

One of John Jenkins' great-grandfathers, by magnificent name of Alexander **Theodore Fredric Bernier De La Grange** was, according to the family record, a disenfranchised French engineer, who fled

to Sydney in the early 1870s. He married a Sydney girl in 1875 and they stayed in NSW for some time; his seven children were born there 1875-1893. Thereafter (1890s >) he took his surviving family to Kalgoorlie, where he was a mines engineer. Later he lived in Perth/Fremantle. He died in the Perth Hospital in August 1926, and was buried in the Karrakatta cemetery.

John would greatly appreciate any information on his Great Grandfather but would also like to be informed of any publications, archives etc., that would likely be useful in his search. Contact:

(Dr) John Jenkin, Emeritus Scholar, La Trobe University, Vic. 3083.

Tel. 03-93471975. E.mail:

<j.jenkin@latrobe.edu.au>

Victorian goldfields – an appeal from the 'Hart'!

From across the Tasman, a request from Philip Hart for assistance in tracing anything to do with James de Hirsch (from Munich), who was in Melbourne (and probably the Victorian goldfields) in the early 1860s. Probably a miner rather than an investor, but could have been both. Also information on Jules George Wilson, a Frenchman, who was probably mining in that period. Contact Philip at:
<PRHart@Waikato.Ac.NZ>

Journal

Glad to report that my gloomy report in the last newsletter where I complained of a dearth of papers has turned to relief, for a number have been submitted and a few more have been promised within the next few weeks. Also delighted to report that we have received generous sponsorship from **Newcrest Mining** that should take care of our publishing and postage costs for the year.

The only cause of concern has been the decision by the ARC to take us off the official publications list where we had been previously placed under category 'C'. This turned out to be a piece of unbelievable bureaucratic ineptitude, for the reason given

was that the assessors (the 'expert assessors' as they claimed) could find no record of the journal having an ISSN number, nor any information on how papers were refereed. As the Ed. scathingly responded to this revelation – 'who assesses the assessors?', for a glance at the inside cover would have given them instant information – thus suggesting that the 'experts' made this decision without actually viewing the publication. We are now in the process of ensuring that this doesn't happen again, and incidentally we are not the only angry organisation, for others, including one of our foremost geological journals found it had been downgraded without explanation or consultation. There is certainly a lack of transparency and incompetency in this august and elevated keeper of our national standards and among other changes we have suggested that the body in future should consult with its constituency!

New Publications & Releases

Rick Wilkinson, *Knights, Knaves and Dragons: 50 Years inside APPEA and Australia's Oil and Gas Politics*, APPEA, Canberra, 2010; \$66 [?] (includes postage), available from APPEA, Canberra.

The following information is unashamedly taken verbatim from the information supplied by APPEA in May 2010, when launching member Rick Wilkinson's new book on oil and gas history that covers the past half-a-century.

'APPEA celebrates its 50th anniversary this year, but few realise that today's sophisticated professional organisation which represents Australia's entire upstream petroleum industry began as a desperate attempt by a few local explorers to be heard and taken seriously by the leading politicians in Canberra.

Sharing a passionate vision, these men completely rejected the prevailing notion that Australia was geologically too old to contain commercial oil reservoirs. Banding together in a small room in Sydney

in December 1959 they formed the Australian Petroleum Exploration Association and began a campaign to convince the politicians, bankers, brokers, journalists and the general public that indigenous oil not only could be found, but had to be found as a matter of vital national security.

Branded an *ad hoc* bunch of crusaders by government, the initial APEA was a fiercely independent group which resisted the inclusion of the foreign oil companies into its ranks. During the next few years, gradually and a touch grudgingly, the founders realised that the best way forward was to present a united industry front. The overseas companies joined just as the golden age of Australia's oil discoveries dawned in the 1960s. Vindicated explorers had little chance to savour their finds before the government changed its tune and began to regard Australia's sudden move to self-sufficiency in oil as a lucrative source of revenue. APEA began a new campaign against what it saw as excessive taxation and over-regulation.

It's a campaign that has continued on a number of fronts and at varying intensity ever since. The high pressure resource rent tax and cash bidding debates of the 1980s for instance, evoked rising tensions. At the same time the association has tackled other common threads within the industry, including the need to establish a sound industry-wide code of environmental practice, the need to create a culture of health and safety for its employees and the need to give support to educational programs that bring fresh blood into the ranks as well as to inform the community at large.

There has also been a shift in emphasis to champion the use of natural gas as an abundant, efficient environmentally friendly fuel and no longer a commodity that is second prize. With a change of name to take note of the importance of the production aspects of the business, APPEA moved its secretariat from Sydney to

Canberra in the 1990s and has since become a premier body within the resources and energy sector that has gained the respect of government as a source of detailed research and considered advice. It's a far cry from the rowdy, sometimes ill-disciplined confrontations of 50 years ago.

Drawing extensively on the first hand experiences of those involved, the story goes behind the scenes into the corridors of power in Canberra and the offices of the secretariat to shed light on the origins of petroleum policy decisions and the measures taken to counter or temper their unwanted side-effects. It details the industry's relationships with energy ministers, their departments and other government bodies as well as the sometimes tense exchanges between member companies and the association itself. Above all and aided by hundreds of photographs, some published for the first time, the book profiles key people involved from all sides of the spectrum and reveals the personalities, the dedication, the fervour, the conflicts and the humour that often coloured the debates.

Michael Waterhouse, *Not a Poor Man's Field - The New Guinea Goldfields to 1942: An Australian Colonial History*, Halstead Press, (forthcoming) July 2010, with foreword by Ross Garnaut. Cost \$59.95, or from the author at the reduced rate of \$50 (+ postage and handling) - order via website <www.notapoormansfield.com>.

The publication explores how the Morobe goldfields developed between the wars into the second richest gold mining area in Australasia (WA being the richest).

The success of the goldfields depended on many extraordinary aviation feats. Aeroplanes ranging from single engine plywood biplanes to large Junkers G31 single wing freighters flew in everything required to establish and maintain all mining operations, three hydro-electric power stations and several townships. As a consequence, New Guinea led the world in commercial aviation

throughout the 1930s; world records were often set and as often broken.

The book also discusses Australia's colonial experience under the League of Nations Mandate. It explores, from both white and black perspectives, early encounters between villagers and Europeans and the indentured labour system which drew New Guineans from all over the country to the goldfields. Other themes include the camaraderie among small white settlements in an alien environment, race relations in a colonial society, the Japanese invasion and its consequences, and the (mal) administration of New Guinea.

The author, Michael Waterhouse, is the grandson of Les Waterhouse, who as a Director of BGD, oversighted the company's operations. Les was also a Director of Placer Development and Guinea Airways, the latter being the largest aviation company on the field. Michael has held senior positions in the Commonwealth Treasury and Westpac.

Philip Goldswain and William Taylor (eds), *An Everyday Transience: The Urban Imagery of Goldfields Photographer John Joseph Dwyer*, UWA Publishing; 2010; HB, 200pp, over 150 photographs coupled with essays. \$59.95 plus \$9.90 postage from UWAP, M491, 35 Stirling Hwy, Crawley, WA 6009. Or order via web at: <marketing@uwap.uwa.edu.au>

John Joseph Dwyer photographed the Western Australian Goldfields from 1896-1917, during which time he witnessed and documented the rise and fall of towns during the gold rush. His images captured the changing faces of townships, the affect on industrial landscapes and the social changes that took place. Many of the photographs are made public for the first time, while a number of essays in the book offer insights into the nature of the historical images.

MJD/June'10

AMHA 16th Annual Conference
GREYMOUTH, NEW ZEALAND
4-11 July 2010

Business Programme

(Note: It is possible that this programme might be slightly amended)

Sunday 4 July

1.00-4.00: Registration at Kingsgate Hotel.

2.00-4.00: 'The History House' (Greymouth Museum) open especially for those on pre-conference tour.

4.00: Two Monteiths tours for pre-conference tour group.

MONDAY 5th July

Bus leaves Kingsgate Hotel at 8.30 for pre-conference tour. Visit Dobson-Brunnerton coal mining area, morning tea at Nelson Creek, and lunch at Waiuta. Talk and tour of Waiuta ghost town. Overnight stay at Reefton. *[To save space on the buses please leave large suitcases at Greymouth and take only overnight bags].*

TUESDAY 6th

Leave at 8.00 for Globe mine tour, Blacks Point, museum, battery, and Reefton School of Mines, with lunch at Reefton Oddfellows Hall. In the afternoon, visit Pike River coal load out and coal processing facility.

For those arriving in Greymouth on this day, 'The History House' will be open until 4.00.

6.00pm: Mayor's Civic Reception, Grey District Council Chambers, Puketahi Street [just off Tainui Street, which runs down to Mawhera Quay]. Commences with refreshments accompanied by Mike Williams' photos of AMHA's Lithgow Conference. Then performance by Greymouth High Kapa Haka Group, welcome by Mayor Tony Kookshoorn, and presentation by Les Wright, of Punakaiki, aka 'The Tin Man'.

WEDNESDAY 7th

8.50: Welcome by Peter Bell, President of AMHA.

West Coast Coal Mining: *Chair:* Peter Bell

9.00: Stuart Henley, 'King Coal on the West Coast: The rise and fall and revival of the West Coast coal mining industry'.

9.30: Brian Wood, 'West Coast Coalmining Communities: Using Genealogical Sources for Historical Analysis'.

West Coast Gold Mining and its Legacies

Chair: Nic Haygarth

10.30: Gareth Thomas, Paul Thomas, and Les Wright: 'Around the Globe and Back Again'.

11.00: Jim Staton, 'Waiuta Gold: Environmental Legacy'.

11.30: John Green, 'Banbury Tourist Mine and Tramway Development Plan'.

Miners and Their Experiences: *Chair:* Barry McGowan

1.00: Simon Nathan and Les Wright, 'The Photography of Joseph Divis: Blackwater mine and the Snowy River battery in the early 1930s'.

1.30: Jo Hart and Paul Kearns, 'The Runanga Miners' Hall Project'.

2.00: Anne Both, 'From Plants to Miners' Hats and Magnetic Exploders'.

Tasmania: *Chair:* Ross Both

3.30: Roger Kellaway, 'Reacting to Otago: The Search for Gold in Tasmania 1861-1865'.

4.00: Peter Brown, 'The Track is Their Story: Reading the People into the Artifact'.

4.30: Greg Dickens, 'The Mines of Western Tasmania'.

6.00: Monteith's tour.

THURSDAY 8th

Mining at Waihi and during the Great War: *Chair:* Philip Hart

8.45: Doreen McLeod, 'Newmont Waihi Gold's Oral History Project: Telling it the way they saw it'.

9.15: Sue Baker Wilson, 'The New Zealand Tunnelling Company'.

Dredges: *Chair:* Brian Hill

10.15: Nic MacArthur, 'The New Zealand Gold Dredge – A Macro-innovation?'

10.45: John Barry and Margaret Mort, 'Two Shillings a Minute: Operations of the Rimu Gold Dredging Company 1921-1953'.

11.15: Nic Haygarth, 'Golden Fleece? Tasmania's disastrous trans-Tasman dalliance with gold'.

12.30: Depart for Brunner Industrial Site and Blackball, guided by Brian Wood. Visit to Birchfield's gold dredge, guided by John Barry. Afternoon tea at Blackball.

FILM EVENING: *Chair:* Mel Davies

7.15: Robin McLachlan, 'Fracas, Fizzle and Fortune: South Island Miners on the Klondike, 1898-1899', followed by his film *The Letter* (17 minutes).

8.10: David Sims' film, *After 90 Years* (15 minutes).

8.25: *Waihi: Gold Town 1948* (20 minutes).

8.45: *Miners at War: Relatives Remember* (15 minutes).

FRIDAY 9th

9.00: Leave for Shantytown.

Miners and Mining Buildings: *Chair:* Leonie Knapman

12.30: Julia Bradshaw, 'The "Chinese Invasion" of the West Coast Goldfields'.

1.00: 'John Isdale, 'The First 125 Years of the Thames School of Mines'.

1.30: Peter Bell, '150 Years at the Wallaroo Smelters'.

2.00: Leonie Knapman, 'A Coal Miner's Daughter'.

Oil: *Chair:* Ken McQueen

3.00: Adrian Hutton, 'Mining Joadja Creek Kerosene Shale, New South Wales: A Salute to Perseverance'.

3.30: Jim Enever, 'Mining for Oil in Victoria: The Lakes Entrance oil shaft'.

New South Wales: *Chair:* Ann Both

4.00: Ken McQueen and Robert Barnes, 'The Maitland Bar Nugget: A Key Link to the Gold Rush Heritage of New South Wales'.

4.30: Barry McGowan, 'Diggers, Dredges, and Dancing Girls: the Araluen Goldfield of New South Wales'.

5.00: return to Greymouth.

6.30: Bus leaves Greymouth for **Conference Dinner**, Shantytown

SATURDAY 10th

8.00: Leave for Punakaiki

Australasia, the USA, and Fiji: *Chair:* Adrian Hutton

1.00: David Branagan, 'Six Personalities Seeking for the Pot of Gold: Australasian Connections: Practical and Academic'.

1.30: Peter Clayworth, 'Pat Hickey's Apprenticeship: An education in mining and militancy in New Zealand and the USA, 1900-1908'.

2.00: Aert Driessen, 'A History of the Emperor Gold Mining Company, Vatukoula, Fiji'.

Mining in Far Off Places: *Chair:* Roger Kellaway

3.00: Ross Both and Antonio Angel Perez, 'Mining Heritage of the Linares-La Carolina District, Spain: From Bronze Age to the Twentieth Century'.

3.30: Peter Maciulaitis, 'We've Always Preferred Lucky Geologists to Good Ones'.

4.00: **AMHA ANNUAL GENERAL MEETING**

6.00: Monteith's tour.

SUNDAY 11TH

8.30 Leave for post-conference tour to Kumara, Goldsborough, Stafford, Arahura River, Hokitika, Ross, and sites en route.

ABSTRACTS

Note: As a DVD of the conference is to be produced, could all participants with photos (with captions) from the conference and the field trips who are willing to have them considered for inclusion in the 'conference activities' slide show please send copies to Ross Both (rosannb@bigpond.net.au). Copies of the DVD will sent to all those attending the conference, and additional copies will be available from Mel Davies.

John Barry & Margaret Mort: Two Shillings a Minute: Operations of the Rimu Gold Dredging Company 1921-1923

By innovation and change the gold dredge in New Zealand evolved into an efficient gold-saving appliance. Introduced into California by Robert Postlethwaite, the technology was beefed up by American mining engineers. North American successes prompted British and American mining houses to search worldwide for dredgeable deposits.

In 1918, Robert Cranston visited New Zealand on behalf of a New York mining company and purchased dredging properties held by Rimu Options Ltd south of Hokitika. Funded by American capital, the Rimu Gold Dredging Company was registered on 12 July 1920, and dredging commenced on 12 September 1921. By 1930 the wooden pontoon required replacement, and as much low-grade ground remained the dredge machinery was upgraded and transferred to a new steel pontoon. The western edge of the license was reached on 8 April 1953, and as no further ground had been found the dredge was advertised for sale.

From 47,851,000 cubic metres dredged, 319,345.3oz of gold bullion was recovered. The company also supplied Hokitika with electricity from its Kanieri Forks power station. Total dividends were £759,802, most of which went to the American owners. The company was a just employer and its American management was highly regarded.

Peter Bell: 150 Years at the Wallaroo Smelters

The Wallaroo smelters, in the heart of South Australia's Copper Triangle, operated for 65 years from 1861 to 1926, producing 333,000 tons of copper and significant quantities of other metals. This paper describes those decades of production as the smelters' technology evolved from Welsh reverberatory furnaces through waterjacket blast furnaces to electrolytic refining and converters. It also traces the smelters' next 84 years through a long process of closure, demolition, and abandonment. For about 50 years the site was a derelict and rather noxious wasteland.

More recently, its immediate surroundings have been transformed by a marina, a ferry terminal, and a housing development, and plans are afoot to develop the smelters site itself. Since 2007 the author has been involved in a project to define the extent of the heritage site and open it up to visitors by a pedestrian access path combined with an historical interpretation trail.

Anne Both: From Plants to Miners' Hats and Magnetic Exploders

In the seventeenth century, John Tradescant the Younger obtained samples of a tropical tree which yielded a rubber-like substance which he named "Mazer" wood. Its commercial potential was not developed until its reintroduction in 1843 by William Montgomerie, who recommended that it could be used in surgery.

Palaquium gutta provided the Industrial Revolution with Gutta-Percha, subsequently developed into many new products. Its insulating properties were used by cable and telegraph companies, and many domestic items were produced. In mining, it was promoted as increasing safety and reducing costs, and products made from it such as suction pumps, clack seals and lathe bands could be found on most nineteenth century mine sites world-wide. It is still used in the manufacture of some mining products.

Ross Both and Antonio Angel Perez: Mining Heritage of the Linares-La Carolina District, Spain: From Bronze Age to the Twentieth Century

Mining in the Linares-La Carolina district in Jaen Province, southern Spain can be traced back 4,000 years, when the Bronze Age Argaric people mined outcropping veins of copper. Iberians, Carthaginians, and Romans later mined copper and lead. There are no references to mining during the Moorish occupation or the Middle Ages, but mining revived after 1563 and increased after the Crown became involved in the Arrayanes mine in 1749. Installation of a Cornish pumping engine on El Pozo Ancho mine in 1849 led to a mining boom that transformed the local economy. Most mines were equipped with Cornish steam engines, which dominated the landscape. Many new mines were financed by British, French, German, and Belgian capital, the Spanish government retaining the Arrayanes mines, the largest in the Linares district. After the last mine closed in 1991, the Colectivo Proyecto Arrayanes was formed to record, conserve, and interpret the mining heritage.

Julia Bradshaw: The ‘Chinese Invasion’ of the West Coast Goldfields

The Chinese were one of the many different nationalities to come to the West Coast in search of a fortune. Although during the gold rush and for many years afterwards the Chinese were the largest minority group on the Coast, until recently very little has been known of their story. This paper explores the arrival and distribution of the Chinese, details of their mining experiences, and their successes and failures. Included are stories of some interesting individuals such as Young Hee, who organized an important anti-opium petition, and Lily Chow Fong, the wife of a Chinese merchant, who ran her own business in Greymouth.

David Branagan: Six Personalities Searching for the Pot of Gold: Australasian connections: practical and academic

In view of the relative proximity of Australia and New Zealand, it is natural that there was frequent interchange between many individuals and companies interested in mining and geological activities. This paper discusses the work of six personalities, Georg Heinrich Ulrich (1830-1900), Frederick Wollaston Hutton (1836-1905), Joseph Campbell (1856-1933), James Malcolm McLaren (1873-1935), Robert Alexander Farquharson (1883-1959), and George Herbert Watson (1894-1963), covering a wide range in time and interests, with links in time and space. All had major interests in gold, and worked in both New Zealand and Australia.

Peter Brown: The Track is Their Story: Reading the people into the Artefact

The Mole Creek Track, also known as the Innes Tract, was made between central Tasmania and Rosebery on the West Coast in the 1890s. 120 kilometres long, it was cut over two summers by gangs of day labourers working for the Public Works Department. The standard of construction varied, partly because of the differing nature of the ground, partly because the track was cut from both ends at the same time, and partly because of the varying quality of supervision and the morale of the workers. The two gangs worked in different labour markets with significantly different expectations. Inefficiencies at the western end were increased by a partial breakdown of the organizational structure, and standards at the eastern end varied despite consistent work gangs and supervision, resulting from decisions made by the overseer.

Peter Clayworth: Pat Hickey’s Apprenticeship: An education in mining and militancy in New Zealand and the USA, 1900-1908

Patrick Hodgens Hickey, union organizer and socialist activist, was one of the most colourful and militant leaders of the ‘Red Feds’, the Federation of Labour. Hickey first came to national prominence leading the Blackball strike of 1908, and went on to try to create One Big Union to overthrow capitalism. He had a leading role in the Red Fed challenge to the arbitration system, which sparked the most intense period of class confrontation in New Zealand, culminating in the Waihi strike of 1912 and the Great Strike of 1913. Although born in New Zealand, Hickey acquired both his activism and many of his mining skills as an itinerant worker in the USA in 1900 and 1903-1906. This paper, based on Hickey’s letters from both America and Dennistown, on the West Coast, outlines how he acquired the skills that made him an experienced miner in both hard rock and coal mines and examines his education in politics and union organization by the militant Western Federation of Miners. Hickey’s mining skills combined with a good reputation amongst fellow miners as a good worker was essential for his being taken seriously as a union activist. His story illustrates the role of mines around the English-speaking world as bases for militant activism.

Greg Dickens: The Mines of Western Tasmania

Mining in Tasmania has a long and varied history. Aborigines mined flints, salt, and ochre, and after 1803 the early settlers mined sandstone, limestone, and clay for building materials and coal for fuel. The first major mineral find was in 1871, when tin was discovered at Mount Bischoff. This led to further exploration and the discovery of other major mineral fields.

Western Tasmania contains several highly mineralized zones, and Mount Bischoff, Renison, Mount Lyell, Rosebery, and Hellyer are world-class mines in both size and grade. For the past 140 years the region has been the lifeblood of Tasmania’s mining industry, currently about 50% of the state’s total export income. This paper provides a chronology of the exploration and development of the principal mines.

Aert Driessen: A History of Emperor Gold Mining Company Ltd, Vatukoula, Fiji

Sporadic reports of alluvial gold in the Tavua area, on the northern side of Viti Levu, circulated in Fiji from around 1872. Patrick Costello, owner of the Shamrock Hotel in Lautoka and a passionate prospector, funded prospecting parties in 1915, 1924, and 1928, without success. The Tavua basin, a collapsed caldera some 50 kilometres east of Lautoka, was probably not covered in any of these explorations. In the latter part of 1932, Costello grub-staked his 72 year-old Scottish-born foreman, Bill Borthwick, to prospect it. On 5 November, Borthwick traced alluvial gold to an outcrop, and within a week Costello pegged out a prospecting license of

200 hectares. On 23 November, Costello informed the Colonial Secretary of his discovery, which he named Vatukoula, meaning Golden Hill. Costello offered the prospect to Waihi Gold Mining Company of New Zealand for development, but by dallying they allowed events to overtake them.

In Sydney, recently-ousted Federal Treasurer Edward Granville Theodore (Red Ted) read of the find, contacted Costello, obtained samples, formed a syndicate with John Wren, Patrick Cody, and Frank Packer, and arrived in Fiji on 30 May 1933. By 1934 there were three mines, Emperor, Loloma, and Koroere, all effectively controlled by the syndicate, and by the end of 1935 Theodore had accumulated more wealth than he could have imagined as a boy.

In December 2006, after some 70 years of operations and 7 million Troy ounces of gold, the Emperor mine, the last to operate, was placed in care and maintenance, with the loss of 1,700 jobs. But the 5.6 million ounces still remaining at a time of rising gold prices was bound to attract attention. In 2009, Vatukoula Gold Mines was floated on the Alternative Investment Market in London, and by 2011 it expects to be producing at the historical levels of 100,000 ounces a year.

Jim Enever: Mining for Oil in Victoria: The Lakes Entrance Oil Shaft

From 1940 to 1950, a novel attempt was made to recover oil from a sand horizon at about 360 metres depth near the town in Lakes Entrance in East Gippsland, Victoria. At that time, the Lakes Entrance Oil Field was the only source of liquid 'well' oil known in Australia. Encouraged by the need for an indigenous supply of petroleum during wartime, the Commonwealth Government tried to induce private enterprise to undertake a trial of an innovative development method involving the drilling of horizontal holes into the producing zone from the bottom of a vertical shaft. When private enterprise struggled to raise the necessary finance, the Government, in conjunction with the Victorian Government, stepped in and ran the project itself. A shaft was sunk through the soft, water-bearing strata, and a number of short horizontal holes drilled into the sand to test the oil flow. Disappointing results from these tests, combined with a reappraisal of the potential of the field and the end of the war, led to the governments terminating their direct involvement. Handed back to private enterprise, the project was seen through to completion, but by 1951 it was clear that commercial production would never be achieved. The project was abandoned at the end of that year.

John Green: The Banbury Tourist Mine Development

The Department of Conservation has undertaken to give initial protection to all historic heritage sites over 30 years old on land it administers until an assessment of significance is completed to determine whether to include them in its inventory. Avoidance of adverse effects of human activities is the appropriate management regime for 90 per cent of the heritage assets managed by the department. Areas such as Denniston have a distinct physical nature, and the deterioration of historic sites is a consequence of climatic extremes rather than human threats.

The vision for Denniston is a well-orientated, well-informed, and enjoyable visitor experience which will encourage people to stay longer in the area and leave with a greater understanding of the historic values unique to this special place. Development will consist of three main components:

- Coaltown/iSite at Westport, interpreting the mining industry and acting as a gate way to the Denniston experience.
- Banbury mine underground experience, to be developed adjacent to the brake head/incline, conveying the story of workings and workers and transporting visitors deep into the heart of an historic mine by tram and following the journey of coal from the face to the port.
- Friends of the Hill Museum will focus on the life of a miner and the mining community with emphasis on the stories of past residents.

Joe Hart and Paul Kearns: The Runanga Miners' Hall Project

The Runanga Miners' Hall is central to the mining heritage of the region, and is a significant building in terms of the history of industrial unionism on the West Coast and in Australasia. The presentation will cover the history of the coal mining town of Runanga, the hall, and plans for its restoration and the development of a museum of mining heritage.

Nick Haygarth: Golden Fleece? Tasmania's disastrous trans-Tasmanian dalliance with gold

A piano-tuning, potato-growing ex-Prussian engineer named Rudolph Wachsmuth sparked a hydraulic gold sluicing craze in Tasmania during the 1890s, encouraged by Government Geological Surveyor Alexander Montgomery. Both men had experienced the success of hydraulic sluicing in Otago, and predicted good results in Tasmania. Several New Zealand 'hydraulicers' were recruited. Lavish expenditure and ludicrous ambitions, however, could not disguise that the Tasmanian goldfields chosen were too small to be worked economically. Shareholders found out the hard way.

Stuart Henley: King Coal on the West Coast (The rise and fall and revival of the West Coast coal mining industry)

Since 1880 coal mining has been the life blood of the West Coast economy. While it was gold that lured thousands of people to the region in the 1860's, the gold rush was short-lived and it was the coal mining industry that contributed most to the development of the West Coast. Coal was first discovered by Brunner near Greymouth in 1848 and in 1860 thick, high quality coal seams were found in the Buller Coalfield. Exploitation was initially hampered because of a lack of infrastructure but by the 1880's the ports of Westport and Greymouth, supported by railways, were in operation and the coal industry rapidly expanded.

West Coast coal was renowned for its superior steaming qualities and was used to fuel the emerging New Zealand economy. In 1914 coal production (all from underground mining) reached 1.34 million tonnes with 2550 people employed. After WW 2 a major decline set in with hydro-electricity and diesel fuel becoming readily available. A number of larger underground mines closed in the 1960's and by 1989 there were only 72 coal miners left in the Greymouth Coalfield.

Interest by Japanese coking coal buyers led to a major revival with most of the production increase being exported. In 2006 coal production was a record 2.86 million tonnes (80% from opencast mining) and there are now over 1000 people directly employed. With a number of new mines coming into production, the future for the West Coast coal mining industry looks bright.

Adrian Hutton: Mining Joadja Creek Kerosene Shale, New South Wales: A salute to perseverance

School of Earth and Environmental Sciences, University of Wollongong

Joadja Creek kerosene shale produced one of Australia's first, if not the first, successful petrochemical industries. This shale, up to one metre thick, occurs in a coal seam, cropping out around the sides of the valley. Exploiting the shale required hand-mining techniques strongly influenced by the geology of the deposit. Immediately above the seam the thick coarse sandstone provided an excellent roof unless there were rock falls. The seam lensed out quickly, and mining heights were somewhat restricted near its extremities. Initially all mining was based on the „pick and shovel“ method, with two men working the seam from adits driven from the valley sides or from drives from these adits. Efforts to mechanize the work were limited by the nature, thickness, and shape of the shale lens.

This paper examines the geology and mining techniques used.

John Isdale: Thames School of Mines

Initiated by the government to improve mining and increase revenue, and opening at Thames in the late nineteenth century, the Thames School of Mines was one of over 30 such educational institutions in New Zealand. My paper explores:

- The growth of this institution since 1886, the addition of specialized buildings to meet various needs, and success in developing better extraction processes and training people to work these technologies.
- The additions to the curriculum that were so successful that the school continued for another 40 years rather than close when mining ceased, effectively, in Thames in 1914.
- The survival of this unique complex, achieved with the help of Australian and Canadian mining companies, and the work of my late parents, A.M. and J.A. Isdale.
- Some of the people who worked in, for, against, or benefited from the school, including James Black, the founding father, and Hugh Crawford, the last director.

Today the buildings, including the unique 110 year-old mineral museum, are one of 15 manned Heritage Destination sites owned and operated by the New Zealand Historic Places Trust.

Roger Kellaway: Reacting to Otago: The search for gold in Tasmania 1861-1865

In early 1862, the *City of Hobart* stopped in that city on a trip from Dunedin to Melbourne. On board were 125 passengers, mainly diggers returning to Victoria from the Otago goldfields. Some took the opportunity to join an expedition to check reports that a valuable outcrop of gold had been found near the lighthouse at the entrance to the Derwent River. This Iron Pot gold rush on 13 February 1862 was the shortest in Tasmanian history: it was all over by 10 pm that day.

This event illustrates a growing problem. Otago was playing the same role as Victoria in the 1850s by causing many, mainly males, to leave Tasmania. In September and October 1861, 1,204 had left for Otago on ships sailing directly to Dunedin, and an unknown number went via Melbourne. Although many returned, increasing numbers of women and children went to join their husbands. Other opportunities, mainly town-based, attracted other emigrants, and empty houses were increasingly common in both Hobart and Melbourne.

This paper examines three strategies designed to counter emigration by developing a Tasmanian goldfield. One was to encourage men with Otago experience to mine in the Fingal Valley or prospect for gold

elsewhere. Another was to promote prospecting by the public funding of a reward. The third was to redirect the efforts of the Colonial Geologist towards searching for gold on the West Coast. The effect of these policies ranged from negligible to limited in the short term, but may have had some longer term impact.

Leonie Knapman: A Coal Miner's Daughter

In 1940, and only a few weeks old, a baby in her mother's arms entered a coal mine at the base of Macquarie Pass, west of Wollongong, for the first time. After this, many a weekend passed with mother and baby accompanying the miner as he prepared the mine for the men to work it on Monday. When only a few months old, the family moved to Glen Davis, where her father worked at the shale mine in the new township. As an experienced operator, he later opened up the coal mine downstream to supply the power station. Most weekends were spent at the coal mine, with the now young girl taking messages or lunches into the mine for her father.

In 1954, Glen Davis closed, the family moved to Mittagong, and the miner started working the anthracite mines which had been abandoned in the 1880s because the heat from the anthracite was too intense for the Mittagong iron work, built in 1848. Weekends were often spent at the mine or in the yards where the anthracite was being prepared for export. At the same site petrol was being made from Joadja Creek shale and sold to Ampol and Peters Ice Cream for their fleet of trucks. Now somewhat older, the miner's daughter wonders whether any child would be allowed inside or even near a coal or shale mine today.

Nic MacArthur: The New Zealand Gold Dredge: A macro-innovation?

From 1890 to 1930, British and Australasian mining writers recognized the New Zealand gold dredge, developed in Otago, as a world-first. More recently, English mining historian Roger Burt's review of international mining technology in the nineteenth century has confirmed this dredge as the first of its kind. He classifies it as one of only seven „macro-innovations“ that transformed mining throughout the world in the latter half of that century.

Burt appears to base much of his case on something known as a Ball dredge. This was not a bucket ladder dredge, the essential characteristic of the New Zealand one, but a cutter suction one, described by the New Zealand Mines Department's Inspecting Engineer as a 'mere toy'. This paper investigates whether 'the New Zealand dredge' was a macro-innovation or not, using detailed local information and reviewing its evolution, extensive capabilities and efficiencies, and the rapid diffusion of its technology around the world. It appears that Burt may have been right for the wrong reasons.

Burt also questions why the dredge was developed in New Zealand when better deposits existed in California. Unusually, world-class technology had been created in a small, isolated region with limited resources. This indicates that the huge physical and technical resources of the United States were not necessarily an advantage in technological innovation if operations, engineers, and engineering workshops were in reasonable proximity. The New Zealand gold dredge is of greater significance in technological history than has generally been recognized.

Barry McGowan: Diggers, Dredges, and Dancing Girls: The Araluen goldfield in New South Wales

The Araluen goldfield was the largest alluvial field in New South Wales and one of the most productive and enduring in Australia. Mining commenced in 1851, with a long boom beginning in 1858. By the mid-1860s, the population was 10,000 or more, and small syndicates of working miners had given way to large companies with subscribed capital. Notwithstanding a succession of debilitating floods, the main boom lasted until 1871, when floods wiped out many claims. Araluen then commenced a slow but steady decline until 1900, when mining revived with the advent of bucket dredging and the help of New Zealand expertise and capital. The last dredge clanked to a halt in 1926.

Araluen was famous for more than its gold. In the 1860s, its alleged saturnalias and orgies, along with the depredations of bushrangers such as Ben Hall and the Clarke gang, gave much concern to the authorities. Hotel owners hired teams of dancing girls, the new arrivals taking to the floor after an obligatory footbath in tubs of champagne. This paper addresses the unusual and intriguing history of this field and discusses the dichotomy between the alleged excesses of the miners and other reports which portray Araluen as firmly in the grip of such middle class values as respectability and domesticity.

Peter Maciulatis: ‘We’ve always Preferred Lucky Geologists to Good Ones’

In 1982, Franco Nevada Mining Corporation Ltd (FNMC) was created by Seymour Schulich to test the entrepreneurial skills of young metals analyst Pierre Lassonde. FNMC went public in 1983, and over the next 20 years grew into the world’s fifth largest gold mining company as measured by market capitalization.

FNMC operated with a very small staff of employees and consultants. Initially, it attempted to achieve cash flow by finding and then mining a deposit. Attempts to develop reserves at an inactive gold mine and later by drilling a low-grade gold resource both failed. In 1986, two consulting geologists alerted Lassonde that the underlying royalty on the Goldstrike property in Nevada was for sale. It was producing only 42,000 ounces of gold per year. By acquiring the royalty FNMC gained instant cash flow without a discovery or mining. A few months later, American Barrick Resources Corporation purchased the operations, and Goldstrike was on the road to becoming the largest gold mine in US history.

In 1985, FNMC commenced grassroots exploration. As royalty income quickly increased, FNMC feared becoming a passive foreign investment company, and accordingly with a sister company provided its consulting geologists with a budget of \$600,000-\$1,000,00 (Canadian) per year. In 1993-4, a high-grade deposit was found, helping to double the value of the companies.

Robin McLachlan: Fracas, Fizzle and Fortune: South Island Miners on the Klondike, 1898-1899

South Island miners, particularly from the West Coast, figure prominently among the more than 200 New Zealanders known to have gone to Canada’s Yukon to take part in the Klondike gold rush of 1898-1899. This presentation recounts the experiences of some of these men and gives their assessments of ‘the last great gold rush’. Amongst them are Dr Edwin Dunn, Westport doctor and founding president of the Yukon Medical Association, and John Donnellan, whose arrival in Greymouth was unlike that of any other returning Klondiker. The research for this paper draws on ‘Diggers on the Klondike’, a project exploring the experiences of Australians and New Zealanders.

Robin McLachlan: ‘The Letter’: Film researched and written by Robin McLachlan

Hundreds of Australians and New Zealanders were among the thousands who responded in 1898 to the call of the Klondike. Drawing on letters sent home, *The Letter* offers in storytelling form a true record of experiences common to many. *The Letter* is a tale of adventure, of climbing the icy Chilkoot Pass and riding the wild Yukon River, of anger aroused by corruption on the goldfields and of awe at the magic of a Yukon winter. But, as with all adventures, there is sometimes a price to be paid.

Doreen McLeod: Newmont Waihi Gold’s Oral History Project: Telling it the way they saw it

Since 2005, Newmont Waihi Gold has carried out an oral history project, interviewing people from all sectors of the Waihi community aged from 8 to 80 and beyond. To date, 65 interviews have been recorded and transcribed which, along with the photographs collected, provides a comprehensive documentation of Waihi’s social, cultural and economic heritage. The project provides research material on the people, social history, early and current mining practices, and the role of mining in shaping today’s district.

The project seeks the anecdote, the yarn, and the description of the everyday event, the lived experience. First-hand accounts capture the ordinary – sometimes extraordinary – lives of people, giving a voice to those who are often left out of historical records.

Ken McQueen, Robert Barnes: Maitland Bar Nugget: A key link to the gold rush heritage of New South Wales

On 17 June 1887, three alluvial miners, Jonathon Thorpe, Isaac Holmes and Frederick Leader, discovered a large gold nugget near Maitland Bar on Meroo Creek, 22 kilometres southwest of Mudgee in central NSW. It was unearthed at a depth of 3.4 metres from a terrace mined during the 1851 gold rush. After being displayed at Mudgee, it was sent to Sydney for display there and at exhibitions in Adelaide and Melbourne.

The nugget, containing 313.093 ounces of gold, was purchased by the government for £1,236 and until 1996 was kept at the Department of Mines’ Geological and Mining Museum. When this closed, responsibility for it was transferred to the Department of Mineral Resources, and it is now kept in a vault at the National Australia Bank in Sydney. Over the years it has been displayed at important exhibitions, including the World’s Columbian Exhibition in Chicago in 1893 and the ‘Gold and Civilisation’ exhibition in Canberra and Melbourne during 2001. It is the last remaining large nugget known from the New South Wales gold rushes, and is a key physical link to that state’s gold rush heritage. Its present value exceeds \$A1 million, but its heritage and scientific value

far exceeds this amount. It is important that the nugget be preserved and treasured.

*Simon Nathan, Les Wright: **The Photography of Joseph Divis: Blackwater mine and the Snowy River battery in the early 1930s***

The Blackwater mine at Waiuta worked a narrow but persistent gold-bearing quartz reef, producing over 22 tonnes of gold from 1908-1951. The ore was processed at the Snowy River battery, 900 metres from the mine, until 1938. After being crushed, a slurry was passed over copper amalgamating plates coated with mercury, after which the courser residue was crushed again, passed over Wilfley tables, roasted, and finally treated with cyanide.

A huge investment was needed to develop the mine and build the battery. A modern plant when opened, and progressively modified over the years, by the early 1930s it was out of date and a significant percentage of the gold was not recovered. In 1938 a modern plant close to the Prohibition shaft replaced it.

Expatriate Czech miner Joseph Divis took a series of photographs of the mine and battery for the *Auckland Weekly News* in 1931. These are a unique record of the machinery and processes used in the early part of the twentieth century.

*Jim Staton: **Waiuta Gold: Environmental legacy***

Waiuta produced gold from the Blackwater and Prohibition mines between 1908 and 1951. Ore was processed by stamper battery in Snowy River until 1938 and then by ball mill at the Prohibition site until 1951. Both sites used similar chemical gold recovery processes, of which various relics remain, mainly in the form of cyanide solution tanks and concrete foundations at the Snowy and the ball mill foundations at the Prohibition; an Edwards Roaster was used at each site. Not until 50 years after the mines closed was the toxicity of the sites determined, and another five years of sampling and analysis followed before any remedial work was begun by the Department of Conservation.

Scientific papers and a major thesis have helped to define the contaminated areas of most concern, and measures have been put in place to contain the most toxic sites. Currently the department is working with CRL to complete an analysis of downstream water quality with a six-month treatment trial of water coming from the most contaminated site. This will be followed up with the removal and containment of the primary source from the Prohibition site.

*Paul Thomas, Gareth Thomas, Les Wright: **Oceania Mines***

Paul Thomas will explain Oceana Gold's mining operations at Reefton and how the commercial tour opportunities came about and their success. A DVD covers the history of gold mining on the West Coast, historic footage of the Blackwater mine, the development of the Oceana mine, mineral exploration, and environmental restoration after mining ceases. Les Wright will explain the uncovering, investigation, and recovery of historical artifacts, including the B shaft winder house, the aerial tramway terminal, and the double brick detonator store and explosives magazine. Gareth Thomas will participate in question time at the end.

*Sue Baker Wilson: **The New Zealand Tunnelling Company***

In September 1915 the Imperial Government requested that the Australian and New Zealand Governments raise an Engineer Tunnelling Company to counter the German underground war. New Zealand miners served underground in a secret war, driving tunnels towards enemy lines as the Germans were driving tunnels towards them. The first to complete their tunnel and detonated the charge would live; anyone underground when the charge went off would die from either the blast or carbon monoxide poisoning. Later the Tunnelling Company extended caves under Arras to house a hospital, billets, kitchens, and up to 20,000 men. Towards the end of the war, after three weeks at a bridge building school, they constructed the longest bridge ever built during the war, at Havrincourt.

The last of the Company arrived back home in April 1919. They returned to the mines, where their skills were urgently needed, and their story was forgotten. This paper will briefly detail the history of the company and its activities, and provide present day links.

*Brian Wood: **West Coast Coalmining Communities: Using genealogical sources for historical analysis***

The two communities are Brunnerton and Blackball and the events, the litigation that followed the Brunner mine disaster 26 March 1896 and the Blackball strike 27 February – 13 May 1908.

The analysis argues that country of origin, time of arrival, place of residence, ethnicity and colonial experience were significant elements in the composition of the litigants and the initiation and outcome of the strike.

AMHA ANNUAL GENERAL MEETING

To be held at 4.00pm Saturday 10th July 2010
Kingsgate Hotel, Greymouth, New Zealand

AGENDA

1. **Minutes of Lithgow AGM, 28 October 2009**
2. **Matters Arising from Minutes**
 - a) Journal Sponsorship
 - b) Journal Accreditation with ARC
 - c) Web page
 - d) Constitution of the Executive
3. **Treasurer's Report/Auditor's Report year ending 31 December 2009**
Treasurer's Report/Auditor's Report 6-months ending 30 June 2010
4. **Correspondence**
5. **Motions and Changes to Constitution**

As instructed by the Department of Commerce Western Australia we have to amend our constitution so as to conform with Associations Incorporation Act (1987), under Schedule 1(6) of the Act, and Section 23 of the Act:

a) That after Rule 8.2 of our constitution which states, *The Executive Committee shall be elected at an Annual General Meeting according to the rules*, a sub-clause 8.2(a) be added, to read,

A committee member's term will be from his or her election at an Annual General Meeting until the election at the next Annual General Meeting after his/her election, but he or she is eligible for re-election to membership of the committee.

b) Under Rule 9, General Meetings, add clause 9.5, to read:

Annual General Meetings shall be held within four months after the end of the Association's financial year.

6. **Election, or Confirmation, or Appointment of Officers**
 - a) Patron; b) President; c) Vice-President; d) Secretary; e) Treasurer; f) Auditor; g) Committee (not less than seven additional members); h) Journal Editor; i) Sub-editor.
7. **Setting of Fees for 2011**
8. **Journal Update**
9. **General Business** (items may also be raised from the floor)
 - a) Report on venue and date for 2011 Conference
 - b) Report on venue for 2012 Conference
 - c) Nominations for 2013 Conference

Current Executive Committee members are:

Patron	Prof. Geoffrey Blainey, AC
President	Dr. Peter Bell (SA)
Vice-President	Dr. Ruth Kerr, OAM (QLD)
Secretary/Treasurer	Mr. Mel Davies, OAM (WA)

Current Committee members are:

ACT - Chris Carter, Barry McGowan, Ken McQueen.

SA - Ross Both, Greg Drew, Graham Hancock.

NSW - Graydon Henning, Leonie Knapman, Ross Mainwaring, Graham Wilson.

NT - David Carment.

QLD - Jan Wegner.

VIC - Sandra Kippen, Mike Williams; Nick Williams.

WA - Wendy Carter, Charlie Fox, Richard Hartley, Gerry MacGill,

TAS - Chris Boron, Greg Dickens, Nick Haygarth.

NZ - Brian Hill, Philip Hart.

Current Journal Editor: Mel Davies. Current sub-editor: Nick Williams.

Editorial Board: Dr. Peter Bell; Dr. Patrick Bertola; Prof. Gordon Boyce; Prof. David Branagan; Prof. Roger Burt; Prof. David Carment; Ass. Prof. Charlie Fox; Dr. Graydon Henning; Dr. Diane Menghetti; Prof. Jeremy Mouat; Prof. Ian Phimister; Prof. Ian Plimer.

nevertheless a fun evening, and one that featured the memorable gyrations of a bevy of Can Can dancers from the local community.

It was pleasing to welcome some new blood to the organization, with our Kiwi cousins contributing a number of interesting papers, and also new members to the Association, thus bringing up our total membership to just below the double century (198, plus a record number of 16 institutional members at the time of writing). It augurs well for our relationship with historians over the Tasman, for it was enthusiastically agreed to hold the 2012 conference in Waihi, on the North Island. Waihi has a fine mining heritage and should prove another excellent venue for our intrepid jet-setting members and New Zealanders alike. Photos can be seen on our web page. See comments on the AGM below.

Forthcoming Conferences

Cornish Association of SA: Biennial Seminar Wallaroo 12 May 2011.

This will be (held in association with Kernewek Lowender

The Cornish Association committee calls for papers associated with 'The Ingenious Cornish: Inventions, Enterprises & Exploits'. 'Ingenuity' is interpreted as ideas and/or skills applied in innovative, clever and possibly unusual ways. Papers can focus on any of a wide range of areas, from engineering inventions, innovative farming or mining methods, metallurgy, plant breeding, developments in medicine, significant business enterprises, building design/construction, frontier exploration, transport, general resourcefulness, and so on.

As in previous seminars, the committee's intention is to focus on Australian contexts and events in the papers. Abstracts must be submitted no later than 11 October 2010. For further information contact Dr Jan Lokan, Seminar Co-ordinator, PO Box 515, McLaren Vale SA 5171, email

lokan@acer.edu.au or download from the web: at <http://www.kernewek.org>

On the Surface: The Heritage of Mines & Mining, 14-16 April 2011, Innsbruck.

The focus of this conference in Austria is upon the heritage of mining and the extractive industries; the physical sites and the social legacies left on the Earth's surface. Some former mines, mining landscapes and communities have gained heritage status and have become popular tourist attractions while others lie abandoned as pertinent and problematic markers of a changed world. This international conference seeks to critically examine the powerful and on-going fascination with mining and how mining heritage now plays an important role in wider agendas of economic and cultural development. The Centre for Tourism and Cultural Change, Leeds Metropolitan University UK, in partnership with the Department of History and European Ethnology, University of Innsbruck, Austria, welcome abstracts from a variety of disciplines and fields including: architecture, art history, history, sociology, anthropology, ethnology, cultural studies, geography, tourism studies, museum studies, archaeology, ethnology, linguistics and economics.

For list of themes see the web page below. Please submit a 300-word abstract including title and full contact details as an electronic file to ctcc@leedsmet.ac.uk. Abstracts accepted no later than 19th November 2010. See: http://www.tourism-culture.com/conferences_and_events.html Or email ctcc@leedsmet.ac.uk

9th International Mining History Conference, South Africa, 2011

The details are still being finalized but the conference will definitely be held between 15-18 August. The location will probably be close to Rustenburg, centre of the biggest platinum industry in the world. This is less than two hours from Johannesburg. Keep your eyes on our webpage for updates.

**AMHA 17th Annual Conference,
Handhorf, South Australia 2011.**

Please note that the dates for the conference are as follows:

Pre-conference tour – 12 & 13 September

Business sessions - 14th to 17th
September

Post-conference tour – 18th September

Journal

This should appear in your mailbox soon. There's quite an eclectic collection of articles that should make for good bedtime reading. My usual postscript – it's never too early to submit – and contributions for the 2011 journal will be gladly received.

New Publications & Releases

Leonie Knapman, *Glen Davies in the Blue Mountains of New South Wales: A Shale Oil Ghost Town and its People 1938-1954*, Halstead Press, Sydney, pp. 270, 400 photos, maps and drawings.

Price \$50 (plus \$9 postage in Australia for either one or two books) if purchased through Leonie. For Electronic Direct Banking call Leonie at 02 48711804, or e.mail <leonieknapman@bigpond.com>

Long in the making, Leonie Knapman saw her much anticipated book on the history of the oil shale town of Glen Davis launched on 25 September, at the State Mine Museum, Lithgow, NSW. As a brief summary, Leonie, the daughter of the manager of a coal mine situated in the vicinity of the local oil shale deposit was brought up at Glen Davis, lived there until 1954 and spent 25 years researching the history of the local industry. To quote Leonie's flier:

'Set in the Capertee Valley, Glen Davis is located northeast of Lithgow in the Blue Mountains. The Capertee River cuts through the valley as it travels to the Colo River and to the coast. The valley is approximately 300 metres above sea level with stunning 500 metre sandstone cliffs towering above it. Although oil shale was discovered and worked in the Capertee Valley before 1900 production did not

come into prominence until the formation of National Oil Pty Ltd in 1937.

The manufacture of oil from shale has a long history in Australia commencing at America Creek near Wollongong on the South Coast of New South Wales in 1865. Shale oil employed one out of every 1000 Australians by 1880. The industry was based on retorting (heating) oil shale found in the mountains at Joadja, Hartley Vale, Torbane, Newnes and Timor near Murrurundi. The richness of the shale allowed labour intensive underground mining and efficient retorting procedures to be economically viable. Initially kerosene was the main commodity distilled from the oil shale together with paraffin wax for candles. Later as Australia's car population grew, petrol became the most important product and during World War II a plant was established at Glen Davis to produce petrol.

While the Glen Davis works was partly a response to the unemployment of the depression years of the 1930s the works took on a greater significance with the onset of war when the vulnerability of Australia's oil supplies was clearly demonstrated. The Government of the day should be given some credit for its foresight. After the war Glen Davis was living on borrowed time. It had consumed large amounts of public money and the operation became increasingly uneconomical. The Commonwealth Government had nationalised the venture in the war years and had invested a lot of money to upgrade the refinery. By 1947 designed capacity had increased to ten million gallons of motor fuel however in that year only four million gallons were produced. By 1950 output was down to 2.4 million gallons. By 1951 the annual output from the Glen Davis refinery was equivalent to one day's petrol consumption Australia wide. Production cost five shillings and three pence a gallon; petrol could be imported for one shilling and three pence a gallon. The main problem was not so much the

refining process but the inability to increase oil shale output from the mines.

The closure of NOP should not have come as a surprise. It had been troubled for years and was kept operating at a loss for political reasons. If the miners had lifted the darg on output of shale it may have survived for a little longer.

When the government mooted closure of the company it sparked state-wide controversy and workers took matters into their own hands. On the night of 12 June 1952 fifty-two miners began a stay-down strike lasting 26 days. It was the longest stay-in-strike in Australian history. In spite of the efforts of the Commonwealth authorities to shut down the retorts they mysteriously kept working to prevent their dismantling. The authorities removed the power fuses to force the retorts out of action but they were replaced just as quickly and shale for the retorts seemed to appear from nowhere. The day the strike ended was an emotional one. A large crowd of families and visiting miners waited as the men emerged on electric loco hauled transports. Unfortunately their efforts and discomfort were in vain. The closure still took place. It was the last straw for the residents who thought their homes and jobs were secure.

Today, over fifty years later, the valley has returned to farming and grazing as it had been since the 1800s, a far cry from the turbulent fourteen years of NOP. Glen Davis has been stripped of its town status. It is as if the Government had tried to wipe it off the face of the earth. To the thousands who lived in the valley it represents more than a shale mining ghost town - it is part of their past and it is not difficult to see why they return time and time again'.

Bits and Pieces and Requests for Information

World Heritage and Mining research

Mario Rimini, University of New South Wales is interested in finding people prepared to become involved in his project that seeks to see Queenstown

become listed on the World heritage list. He also wishes to contact other people with a similar interest in promoting mining areas. As Mario states, there is enormous 'potential of the country's mining history to be recognized as a crucial heritage object and as a possible goldmine for cultural/natural heritage conservation, ecotourism, geotourism, and community development, mining and landscapes'. He notes that mining towns are well represented in other countries among cultural World Heritage sites and finds surprising that despite the social, economic, historical and environmental prominence of mining in this country the potential has remained untapped.

He points to existing mining World Heritage sites such as Cornwall and Devon, Sewell in Chile, Falun in Sweden. Roros in Norway, and Zollverein in Germany, as examples of what can be attained.

Mario has already been in contact with some of our members trying to promote Burra as a World heritage site but would be delighted to get in contact with others who would like to promote other areas or become involved in his Queenstown project. He suggests places such as the Goldfields regions in WA and Victoria, Broken Hill in NSW and iconic South Australian mining landscapes

For a Tasmanian newspaper article on his activity see:

<http://www.theadvocate.com.au/news/local/news/general/raw-beauty-a-drawcard/1278396.aspx>

To contact Mario, e.mail him at: Mario Rimini <mg.rimini@gmail.com>

Historic Home Sale

Got a few bucks to spare? Peter Bell passed on this piece of information regarding the sale of 'Ivanhoe', the previous residence of George Brookman, who headed the South Australian syndicate that pegged the Ivanhoe, Great Boulder and Lake View leases in 1893. It's expected to fetch a mere \$7 million. For those wishing to dig into their

pockets details can be viewed at:
<http://www.domain.com.au/Property/For-Sale/House/SA/Gilberton/?adid=200856642>
6

It's advertised as "a magnificent stone mansion of grand scale and gracious disposition beautifully balanced on splendid park grounds in excess of one acre. North/South floodlit tennis court, in-ground solar heated swimming pool, two wine cellars. Excellent garaging. Equivalent of some fourteen main rooms offer large scale family living and entertaining with gracious formal living rooms with open fire places, high ornate ceilings and large picture windows all overlooking this glorious garden estate". Now who can resist that, and for only a cool \$7 million or so!

Mount Milligan film

In 1971 the ABC made a black & white TV documentary called *Too Young to Die*, commemorating the 50th anniversary of the Mount Mulligan coalmine disaster. They have resisted all requests to screen it again. However, for anyone interested, Mike Pearce the director has posted a low-resolution version of the programme at: <http://www.youtube.com/user/MikePearceFilms#p/a/u/0/yp6bysvSqcE>

The First Geophysical Surveys for minerals conducted in Australia.

UK based Robert Vernon is on a quest and asks readers if they can help trace information on a subject close to his heart. Robert writes:

"The early history of geophysical prospection for minerals is poorly recorded and the names of Alfred Williams and Leo Daft may only get a brief mention in any works on the subject. However the Daft-Williams system patented in the early 1900s was a method of earth resistance surveying for minerals that employed a system of alternating electric currents and telephone receivers.¹

Although actual records of their surveys are sparse, there are adequate

accounts of their surveys on a number of British mine sites. Their techniques were later employed on mine prospects around the world including Australia: the first geophysical surveys for minerals conducted there.²

Daft and Williams, both British by birth, but naturalised Americans, established in Britain what was probably the first geophysical prospecting company in the world. *The Electrical Ore-Finding Company Ltd.* was formed in 1901 but only operated in Great Britain until late 1905, when it was put into liquidation. In addition a second company, *Andyers Ltd.* was formed by Williams and Daft in 1904 to manage international operations, and administer their worldwide patents.

Ernest Lidgey, an Australian mining geologist, came to England in 1902 to promote Australian mining. He had previously been involved with gold mining in Victoria, and later worked for the Hampton Plains Estate south of Kalgoorlie. In England he had heard about the Daft-Williams system and witnessed demonstrations of the equipment. In June 1903 Lidgey invited 'a number of gentlemen with mining interests' to a meeting in London and explained in some detail how the Daft-Williams system could be used for finding gold. Western Australia was most heavily represented at the meeting.³ Lidgey acquired a license to use the equipment in Australia, and returned there with two electricians, where he was engaged by Hampton Plains Estates to spend one week a month on mineral prospection.⁴

Lidgey arrived in Kalgoorlie in August 1903, and was ready to demonstrate the Daft-Williams equipment, initially at Hampton Plains, but there was also speculation that it would be used elsewhere on the goldfield.⁵ At the end of August the equipment was in use on the Adeline lease of the Hannan's Proprietary Company.⁶ Other mines where surveys

were conducted included Associated Northern.⁷

During 1904, the equipment had traveled east to Ballarat, Victoria, where it was being operated by a Mr Dawson, who was in charge of the electrical branch of the Ballarat School of Mines, and Mr Allan Bowler, former Mayor of Scarsdale, a mining engineer, where the surveys were being conducted.⁸ It is clear from newspaper articles that the intent was to also use the equipment in Queensland, and possibly the Northern Territory, and may have been used there during 1905, although no articles relating to that year have been discovered.

However, by October 1906 the rights to use the equipment had apparently been acquired by the Cobar Corporation of New South Wales. Surveys were testing the width and continuity of the Budgery Lode by the North Cobar Exploration Company.⁹ Newspaper articles indicate that other surveys were also conducted in late 1906, (Bungendore and Budgery North Copper Mine) and early 1907 (Condobolin, Parkes and Forbes Districts, as well as the Mount Boppy area).

By April 1907 the Cobar Corporation were using the system at Kapunda where an inquisitive horse nearly got electrocuted to death by the equipment. Other surveys were later conducted at Kadina and Port Lincoln.¹⁰ The last known ore-finding surveys in Australia were conducted in October 1907 at Hamley Copper Mine, Moonta, South Australia. Based on the survey results, development work was commenced from Treuer's Crosscut to intersect an 'identified' lode.¹¹ Newspaper reports indicate that the drivages were continued until the end of the year, but to no avail, the lode was not found.

I have briefly presented to you, the chronological history of the first geophysical surveys for minerals in Australia. It is also known that patents were taken out in most of the Australian States. The patent granted to Williams

and Daft in Victoria (number 20287 dated 28th August 1903) for example (which I have a copy of), was applied for through an Agent, Edward Waters junior, of Melbourne.

However, what are generally lacking are details of the conducted surveys, and any photographic evidence of the Daft-Williams system. The only definite survey results I have are from Ontario, Canada, and the only photographs of the equipment are from the British press (see Figure 1) taken at a public demonstration in Ealing, London, conducted across a buried strip of metal.

I know that there are some references that I do not have, like articles in the *Kalgoorlie Miner*, but surely someone somewhere must have photographed this unique equipment in operation, or filed away the survey results; on a fading piece of tracing paper, for example! Being an optimist, I would like to think that the original equipment still exists in a museum somewhere; that really would be a discovery. So if you do have information on any of the above, please contact me.

As a footnote, there is mention of an Electrical Ore-Finder in the South Australian State Archives. It was apparently operated by a Mr Spry in 1919, and used up to about 1930. Photographs however, suggest that Mr Spry's equipment was no more than a sophisticated dowsing rod, far removed from the Daft-Williams system.

References : Vernon, R., 'A Very British Enterprise' the History of Geophysical Prospection for Minerals in Britain in the 19th and early 20th Century', *Papers: 7th International Mining History Congress*, Bhubaneswar, India, 2007; Vernon, R., Alfred Williams, Leo Daft and 'The Electrical Ore-Finding Company Ltd', *Memoirs: British Mining 86*. Northern Mine Research Society, UK, 2008. MacGill, G., The King's Battery and Mr Lidgley's Grand Vision for the Hampton Plains. *Journal of Australasian Mining History vol. 2*, September 2004, p. 194. 'An Electrical Ore-Finding System'. *The Mining Journal, Railway and Commercial Gazette*, 20 June 1903, pp. 743, 748. 'Kalgoorlie Mining', *The Advertiser* (Adelaide) 31 July 1903, p. 7. 'Kalgoorlie Mining', *The Advertiser* (Adelaide) 20 August 1903, p. 8.

'Western Australian Mining', *The Advertiser* (Adelaide) 19 January 1904, p. 7. 'A Fairy Tale of Science, the Electrical Ore Finder Vindicated', *Hawera and Normanby Star* (New Zealand), 12 September 1904, p. 4. 'The Budgery Mines', *The Sydney Morning Herald*, 20 October 1906, p. 10. 'Searching for a Copper Lode', *The Advertiser* (Adelaide) 5 April 1907, pp. 4, 6. 'Hamley Copper Mine.' *The Advertiser* (Adelaide) 17 October 1907, p. 9. The Daft and Williams system of electrical prospecting for mineral ores, *The Electrical Engineer* (London), February 1902, p. 260.

If you have any information on the subject, please contact:

Dr Rob Vernon, 2, Grange Field Road,
Bredon, Tewkesbury GL20 7AZ, UK
E.mail: rbrtvernon@aol.co

Fig. 1: The Daft and Williams Electric Ore Finding Equipment. The Ealing Trials: The transmitting equipment is shown in the foreground. The receiving equipment is fixed on the tripod to the rear. It is probable that the two men standing on the right of the photograph are Daft and Williams (extreme right).



Obituary

George Compton 1921-10 August 2010

A graduate of the West Australian School of Mines [WASM], George Compton has been described as an icon of the Goldfields. George, son of prominent geologist and historian of the WA goldfields, George Spencer Compton, was a long time member of the AMHA and will be remembered by many who attended our Kalgoorlie conference in 2001 for his penetrating questions and philosophical approach to life. George had his studies as a geologist interrupted by the 2nd World War when he served as a navigator in the

RAAF but later went on to take out his degree at West Australian School of Mines. Last May, George was able to help pay back his *Alma Mater*, when presenting the inaugural \$7,500 'George Compton Geology Scholarship' to student Mark Thompson. A larger than life character, George passed away after a long, distinguished and eventful 89 years, during which time he contributed invaluable service to the WA gold industry.

As Kalgoorlie member Scott Wilson states:

'George was a well-respected fellow about the town and the mining fraternity. He was always free with his advice (and his opinions!) Many a yarn was told at the Palace Hotel by George to the wide eyed young geo or prospector and in later years a story that started out discussing a missing section of Diamond Drill core from the Queen Margaret Gold Mine invariably ended up with George in the wilds of Papua, flying upside down while being chased by a Jap Zero!'

Scott also records that with the assistance of David Reed and Reed Resources Ltd, George published his memoirs, *The Hills - A personal history of Kalgoorlie mining*, West Perth, 2006. ISBN 0-646-45905-8

George will be greatly missed and our sympathy is extended to George's family and friends.

Annual General Meeting 2010

Kingsgate Hotel, Greymouth 10 July

Thirty-two members attended the meeting and among matters discussed was the name of the Association. Because of our strengthened links with New Zealand it was agreed that a change of name to *Australasian Mining History Association* was desirable, and a motion to that effect was foreshadowed for the 2011 conference in South Australia. It was also agreed to hold the 2012 conference in Waihi, NZ, with Doreen McLeod and Sue Baker Wilson both volunteering to organize that event. Nick and Mike Williams offered to organize a conference at Beechworth, Vic in 2013,

while Ken McQueen suggested Cobar or the ACT might be an alternative.

It was noted that our membership continued to grow but as in previous years the difficulty of finding young recruits to our ranks was noted. One positive development was the sponsorship received from Newcrest Mining for the printing of our journal – a situation that allowed us to maintain membership fees for 2011 at the current level.

After many years in the Chair (from 2002), Peter Bell stepped down to make way for a new President, long time member Ruth Kerr who has had many years experience in a number of prominent historical and heritage organisations.

In his address, Peter noted the progress made since our inception with special reference being made to the Journal and the recent improvement in the quality of the web page, both of which were raising our profile in the general and mining community. He also noted that we had developed into a broad based organisation that appealed to a wide spectrum of interests, as illustrated by the variety of papers presented at the conference. This was a strength not noted in other organisations that he belonged to and he believed that we enjoyed a spirit among members that was unique.

Peter also referred to the success of our conferences and thanked the organisers of the current conference, Brian Hill, Philip Hart and John Barry for their efforts in making the journey from Australia so worthwhile.

Ruth Kerr thanked Peter for his efforts over the years and hoped to be able to keep up the standards attained since he had taken office.

Also voted onto the Executive was Ross Both who took over the position previously held by Ruth. The Patron was re-elected unopposed, and the committee members remained largely as in 2009-10.

Elected Officers & Committee for 2010-2011

Patron: Prof. Geoffrey Blainey, AC

President: Dr. Ruth Kerr, OAM

Vice-President: Dr Ross Both

Secretary/Treasurer: Mel Davies, OAM

Committee members

ACT Dr. Barry McGowan,
Dr. Ken McQueen.

SA Dr. Peter Bell, Greg Drew,
Graham Hancock.

NSW Dr. Graydon Henning,
Prof. Adrian Hutton,
Leonie Knapman, Graham Wilson.

NT Prof. David Carment.

Qld Dr. Jan Wegner.

Vic Sandra Kippen, Dr. Mike Williams,
Nick Williams.

WA Wendy Carter, Ass. Prof. Charlie Fox,
Dr. Richard Hartley, Gerry MacGill,

TAS Greg Dickens, Nick Haygarth,
Chris Boron.

NZ Dr. Brian Hill, Dr. Philip Hart.

Journal Editor: Mel Davies

Assistant Editor: Nick Williams

Webmaster: Greg Drew

Dynastic Orders!

Presidential Elegance – Presidents Past and Present in front of Dredge in muddied water, New Zealand! Peter Bell and Ruth Kerr



