Editorial
As members will see towards the end of the newsletter, there has been a wonderful response to the call for papers at our forthcoming Broken Hill conference. There are a number of familiar speakers but also fresh names and even an international speaker. This is encouraging indeed for our first stand alone conference. We hope that members will provide support and while the feedback to date indicate a large attendance, the registrations have been slow to flow in. Can I appeal (as treasurer) that if you intend to register that you do so soon? This will remove all anxiety as far as the Adelaide organizing committee are concerned and will allow them to more efficiently finalize the planning. This includes booking of venues, for if we anticipate 100 and only half that number turn up then obviously we would need book a smaller venue and probably save on costs.

With respect to the post-conference tour, anyone interested should contact Peter Bell with regards to the details. I am led to understand that one of our high profile and more respected members will be conducting the tour.

Congratulations
Congratulations to Northern Territory committee member and keen supporter of the AMHA, Prof. David Carment, who was recently made a member of the Order of Australia (AM). David received the award for service to the community, particularly for his work for the National Trust and for his scholarship and research into Northern Territory history. David is also currently President of the Australian Historical Association and Dean of the Faculty of Law, Business and Arts at the Northern Territory University. David frequently provides information for our newsletter and has presented papers at some of our conferences. Is there a lesson for other members here, who may aspire to national recognition!?

Grants
The Northern Territory is offering grants ranging from $500 to $7,000 in order to support research and writing on Northern Territory history. The closing date for applications is 2 May 2003.

For further information please see www.nt.gov.au/nta or email nt.archives@nt.gov.au
**Forthcoming Conferences**

*Mining History Association (USA) 14th Annual Conference.*

This year’s conference will be held at Cripple Creek, Colorado, between 5-8 June. Retired metallurgist and AMHA President, Ed Hunter, has been busy making plans for an exciting event and will divulge all if you contact him at PO Box 150300, Denver, CO 80215.

Information can also be collected from the AMA webpage at:  
http://www.mininghistoryassociation.org

*International Mining History Congress, Akabira, Hokkaido, 26-29 Sept. 2003*

Just a reminder that details on the Congress including pre and post conference tours can be viewed on the Congress webpage:  
www.imhc2003.com

We have indications that at least half-a-dozen members will be attending so that we can again expect to have an important input into this international mining history forum.

**Information Wanted**

Member Robin McLachlan is conducting research on the life story of Colonel George W Bell, one time American Consul in Sydney, well-liked man about town, personal friend of NSW Premier George Reid – and says Robin, con man, bigamist and bogus US Army colonel.

With respect to the aforementioned gentleman, Robin would appreciate hearing from anyone who may be able to provide some leads on the following:

In 1899, George W Bell, Thomas Hussey Kelly, and Robert Newby Kirk, all resident in Sydney, took out patents in both NSW and Western Australia for ‘an improved explosive’. They obtained the formula from an American, William Crocker Quinby, then temporarily resident in Sydney. To quote from their patent application - In order to manufacture this improved explosive, the leaves or plants (Eucalypti and Melaleuca recommended) are nitrated by immersion in a mixture of 2 parts sulphuric and 1 part nitric acids and, on cooling, the product afterwards washed either in water or in a weak alkali solution, then dried and converted into a powder. As well as being used as a free running powder, it can also be loaded into cartridges, compressed into blocks or used in combination with other explosives.

Has anyone encountered references to the manufacture or use of this explosive, perhaps on the goldfields of Western Australia? Has anyone encountered any of the above four gentlemen in their mining history research? Kelly has an entry in the ADB, which indicates considerable mining interests. Kirk is linked in the patent applications with the Kallenite Syndicate and RN Kirk & Co, 16 O’Connell St, Sydney. Do these organisations ring any bells?

Speaking of bells, George W Bell (1837-1907) is the main focus of my research. If anyone has encountered this name in any circumstance, I would very much appreciate receiving details. However, if Bell (alias Colonel Bell) owes you or any of your ancestors money, my advice is to write off the debt as an educational experience.

Robin can be contacted at:  
1566 Orange Road, Bathurst, NSW 2795  
Tel. 02-63384350.  
e.mail: Chintola@telstra.com
Papers to be Presented at the AMHA Conference Broken Hill
2 – 6 July 2003

For further information on the conference, contact: AMHA President, Peter Bell, Tel. 08-83731900, pbell@adelaide.on.net or Greg Drew, Tel. 08-84633270. e.mail: Drew.Greg@saugov.au For registration information contact Mel Davies, 08-93802939. e.mail: mdavies@ecel.uwa.edu.au or write to address at head of this newsletter.

Clive Beauchamp
The Anatomy of a Strike: Wentworth Gold Mines, Lucknow, Orange, NSW, 1897

Peter Benkendorff
History of Portland Cement

Kathy Bennett
Outback Archives: Reflecting the Community and Region

Ralph Birrell
Gold Amalgamation and Chlorination

Ross Both
Broken Hill South’s Quest for New Mines: the Kanmantoo venture

Gordon Boyce
Devices for Reducing Negotiating Expenses in Australian Mining

Greg Drew
The Dilemma of Abandoned Mines in South Australia

Jim Enever
Gold Mining on the Mornington Peninsula

Philip Hart
Australian Capital in New Zealand: the Te Aroha Silver and Gold Mining Company

Matthew Higgins
'To the Turon I Must Away': days of gold, decades of change at Sofala and the Turon Goldfield

Brian Hill
Explaining the Reefton Paradox

Keith Johns
A Mirage in the Desert?: discovery, evaluation and development of the Olympic Dam orebody, Roxby Downs

Ruth Kerr
The Role of the Broken Billionaires in North Australia

Sandra Kippen
Responses of Medical Men to Mining Disease on the Bendigo goldfields

Gerry MacGill
The Northampton State Lead Battery, Western Australia: History and Conservation

Ross Mainwaring
Hill-Billy Coal: a pictorial study of the coalfields of Kentucky and West Virginia, USA

Sarah Martin
Karnu Yaakatyi or the Broken Hill: an Aboriginal perspective

Justin McCarthy
Heritage Planning on the Line of Lode

Barry McGowan
Boom and Bust on the Barrier

Robin McLachlan
Ophir at Fifty

Bill O’Neil
The BHP Lockout of 1909: the view from three generations of Broken Hill miners

Ian Plimer
The Past is the Key to the Present

Fredric L. Quivik
The Inspiration Consolidated Copper Company's Flotation Mill and the Beginnings of the Flotation of Copper Ores in the United States

Gilbert Ralph
The Broken Hill - Collins House Connection

Maja Sainisch-Plimer
Charles Rasp, Founder of Australia’s Silver City Broken Hill

Williams Nicki
Brass among the Gold: the development of the assay balance
MEMBERSHIPS
If you find a form enclosed, it signifies that you have not yet renewed your 2003 membership. Your early attention to this matter would be greatly appreciated.

JOURNAL
This is progressing. We have had a good response following our call for papers and a number of them are now in the hands of referees. We also have a number of papers proofed and ready for the non-refereed section.

June Newsletter
You will no doubt notice that this March edition of the newsletter is somewhat sparse when compared with recent editions. This has been due to a lack of time to go hunting for material and also to a shortage of information offered by members. If anyone has anything to submit for the June newsletter, this would be gratefully accepted. In that edition we will also be publishing abstracts of the Broken Hill Conference papers, and hopefully there will be one or two book reviews.

*If the Fat Controller saw this he would have a fit!*
Editorial
It’s that time of year again when members get together for intellectual and social stimulation. The Broken Hill Conference is almost upon us but there is still time for those who have been wavering to decide to take the plunge and either drive or fly to the Silver City.* Enclosed with the newsletter is the programme and abstracts for this our ninth annual conference. While the second conference to be run entirely by the Association (the first was at Kalgoorlie two years ago that included the organizing of the AHA and Australian Economic History Society conferences), this is our first stand-alone event. If the selection of papers is anything to go by and if the efforts of the Adelaide Committee of Peter Bell, Greg Drew, Bernie ‘O’Neil and Ross Both are considered, then it promises to be a great success.

Note to, that the conference will feature the Annual General Meeting. If you have any items you’d like discussed, or if you’d care to either nominate or re-nominate for a position on the committee, then please inform the Secretary as soon as possible. Nominations may also be taken from the floor. Agenda items and order of business is enclosed.

* If the airfare direct to Broken Hill looks expensive, take advantage of the minibus arrangement from Adelaide and return. Though note, you will have to book soon and its suggested that in order to ensure there are still places available, you contact Peter Bell at: 08-83731900, pbell@adelaide.on.net

There is also a train service to Broken Hill.

For those short of a bob or two, or who enjoy the carefree environment, there is a Youth Hostel quite close to the conference venue.

*Please note that if deciding to pay at the conference, we can only accept cash or cheques. We do not have EFTPOS or credit card facilities.
Congratulations

Congratulations to Wendy Carter who recently not only managed to complete her Masters at Deakin University but was also awarded the title of ‘Citizen of the Year’ for Kalgoorlie-Boulder. This recognized her many community projects and activities including the contribution made over a period of fourteen years to the Australian Prospectors & Miners Hall of Fame & the Eastern Goldfields Historical Society. Wendy has recently left the area but I’m sure that Kalgoorlie – Boulder’s loss will be Kununurra’s gain. Folks can catch up with Wendy at B/Hill.

Forthcoming Conferences

*International Mining History Congress, Akabira, Hokkaido, 26-29 Sept. 2003*

Just a reminder that there’s still time to register for the Congress. Details, including pre and post conference tours can be viewed on the Congress webpage: [www.imhc2003.com](http://www.imhc2003.com)

*6th National Conference of the Australian Forest History Society*

As some of our members are interested in this area of study, especially as mining in forest areas has been a feature of Australian mining development, we wish to announce that the above conference will be held at Augusta, Western Australia between 12–17th September, 2004. The theme is: ‘A Forest Consciousness’. For expressions of interest, contact: tel/fax: 08-93841249, or e.mail: jsbinet@hotlinks.net.au

Note: Augusta is located in a very attractive area of hardwood forest of WA, is in close proximity to the sea and within easy striking distance of the Margaret River wineries. Coaches will be available to take delegates from Perth to the location.

Heritage

*From the Minerx Report*

“WA’s oldest mining shaft is to be listed on the State’s Register of Heritage Places and will be protected as a public reserve. The State Government has acquired 3200sq m area in Armadale, containing the Coles Shaft, which marks the beginning of the State’s mining industry. The Western Australian Mining Company began mining lead and copper at the site in December 1846 and the shaft was sunk to about 15m. It is now the only mine from the 1840s left on the Darling Scarp.”

We are pleased to report that the AMHA had input into the decision as we made a submission to include the site on the heritage listing.

Information Wanted

*Glebe Mine*

Leanne Hallway says that she is trying to find out the year of the ‘Glebe’ Mine disaster. She believes it was prior to 1894 which was the year her Great Great Grandfather came to Western Australia. If anyone can help, please contact Leanne at: leader_possum@hotmail.com

*George Bronder*

Suzanne Bronder wishes to know if anyone during research activities has come across a miner by the name of George Bronder? There’s not much to go on other than that George lived in Brooklyn, New York where he worked with his father as a mechanical engineer. In 1926 he moved to Australia with his wife Dorothy and daughter Sonia. He
had a penchant for writing on sporting events (he excelled at the javelin) and at some time may have turned his hand to journalism. Nothing else known, other than that he tried his hand at mining. If you’ve come across him in any capacity, then Suzanne would appreciate if you could contact her at: sbrondersr@aol.com

Eclipse Gold Mines NL
Damon Holliday asks whether anyone has any knowledge of the location of Eclipse Gold Mines NL? The company was registered in NSW and was active in the 1950s.

If you can help, Please contact Damon at: Damon@sharedata.co.uk

Plod Card
I’ve received a query about a ‘Plod Card’. The correspondent states that one dictionary he has found uses the term plod to describe an area of land worked by a miner. The other possibility is a work card used to detail the work done each day - a clock on clock off card, though not necessarily related to mining. Any light on this would be appreciated. Please contact me directly if you can and I’ll not only let the correspondent know but will also enlighten all the eager members who await with bated breath the explanation of this term.

Alice Cornwall
Andrew Thompson, University of Leeds is attempting to obtain information about a mining prospector and manager, Alice Cornwall (aka Princess Midas!), who was born in England (Essex). She migrated to New Zealand, and ended up raising capital in London for several Australian mining ventures, as well as managing mines in Ballarat (including the Speedwell mine) in the late 19th century. Does anyone have any information, or can you suggest sources. There is nothing in the general Australian and NZ biographical dictionaries. If you can help, the contact details are:

Dr Andrew Thompson,
School of History, University of Leeds,
Leeds LS2 9JT, U.K.
Tel: (0113) 2333609.
hisast@ARTS01.NOVELLEEDS.AC.UK

Australian Economic History Review
While we are currently in the final throes of producing the first volume of our journal, can I alert members to the opportunities that lie in publishing in the AEHR? The editors are looking for papers that have a socio-economic bent that relate to mining and would even consider putting out a special mining edition if there was sufficient support. This is a prestigious journal that has previously published papers with a mining flavour that have been submitted by several of our members. Papers are particularly welcome on mining history of the Asia-Pacific region (including Australia and New Zealand).

If interested, and also if you would like to consider editing a special mining history volume, please contact the assistant editor of the AEHR:

Dr. Pierre van der Eng
School of Business and Information Management,
Faculty of Economics and Commerce,
Manna Neumann Building,
ANU, Canberra ACT 0200.
Tel. 02-61255438.
e.mail: pierre.vandereng@anu.edu.au

FUTURE AMHA Conferences
If you wish to nominate, or wish to suggest venues for future conferences, please let me know so that the venues can be discussed at the Broken Hill Annual General Meeting in July.

**Post-Conference Tours – Broken Hill**

For the information of people attending the Broken Hill Conference:

In addition to the Line of Lode tour on the morning of Sunday 6 July, the following tours have been arranged and will be led by Barry McGowan.

**Sunday 6 July, 1.30 – 5.30 pm:** Day Dream Mine (including tour of the mine and inspection of smelter and town site) and Silverton.

**Monday 7 July, 8.30 am – 5.30 pm:** Byjerkerno, Purnamoota and Terrible Dick.

For information on these sites, see Barry's book *Australian Ghost Towns*. The cost of the Sunday afternoon and Monday tours will depend on the number of participants but is expected to be in the range $50-80 (including the Day Dream Mine tour but excluding meals and accommodation). The cost for the Day Dream Mine tour ONLY will be approx. $20 (depending on numbers). Participants should ensure they book accommodation in Broken Hill to cover the extra nights as required. Final details and costs will be announced at the conference.

To ensure there are still places available, anyone not already booked but interested in the post-conference tour should contact Ross Both: ross.both@adelaide.edu.au or Greg Drew: Drew.Greg@saugov.sa.gov.au

**Mini Bus to Broken Hill**

People who have registered to travel from Adelaide to Broken Hill by minibus should let Peter Bell know where they will be staying in Adelaide, so that arrangements can be made to pick you up on the morning of Wednesday 2 July.

Contact: 08-83731900, pbell@adelaide.on.net

There are two buses travelling. They are small 10-seater vehicles, so it would be appreciated if you can keep your luggage to a minimum.

MJD/June’03
CONFERENCE ABSTRACTS

This study analyses the background to and traces the course of the thirteen-week strike (involving 400 workers) at the Wentworth Proprietary Co gold mines at Lucknow, near Orange, NSW, in 1897. It discusses the company’s motives for reducing wages and instituting “degrading” search conditions on employees. Were management’s allegations of extensive ore pilfering merely a subterfuge? Why was the Mine Superintendent so intransigent in his dealings with miner’s representatives? It also examines how ministerial interference with the role of the Mining Warden inadvertently led to the Management being granted a suspension of labour conditions (preventing the lease being cancelled). This allowed Management to continue operating by engaging “black-legs” from inter-state and re-employing surface workers- thus breaking the strike. Cessation of the strike: with searching relaxed and restoration of wage rates-but greatly reduced workforce.
Significance of the dispute: highlighted the need for compulsory arbitration system; ministerial intervention provoked a political storm that threatened the Reid Government; and the involvement of Labor members in the strike demonstrated how the parliamentary wing of the party could assist workers practically, countering charges of elitism.

Peter Benkendorff: *History of Portland Cement*
It has long been proposed that Joseph Aspdin was the father of Portland cement because he used the name in a Patent dated 1824. However, evidence outlined indicates that he only produced hydraulic lime and further he was not the first to use the name Portland cement. The first to produce something close to Portland cement was William Aspdin in 1844. He did not patent his discovery and used the name Portland cement as a marketing tool. Others soon followed.
The available machinery and chemical knowledge on cement compounds held back production of quality cement until the late 1860s. The surge of production, particularly in Germany, lead to the push for the world’s first Standard published in 1877. This did not have a definition but an amendment in 1887 put in a definition, which required clinkering of the raw materials. Something similar was included in US and British standards first issued in 1904.
In Australia prior to 1977, it was generally believed that the first commercial Portland cement was produced at Portland NSW (named after Portland Cement) in 1889. Then, it was claimed that William Lewis made the first cement in 1882 at a plant in Adelaide. However, the evidence indicates that Lewis followed Joseph Aspdin and made no more than hydraulic lime for a few months. All the early producers struggled to match imported cement up to 1901. A new modern plant with rotary kilns (amongst the first in the world) started in 1902 at Portland. This plant designed, constructed and managed by the brilliant Dr Scheidel expanded rapidly and by 1912 was producing 40% of Australia’s cement consumption.
At Portland there exits the remains of 1883 Bottle lime kilns, 1889 millstone grinding plant, a number of buildings from the 1902 plant, quarries and a coal mine. It is the birthplace of the Australian cement industry and deserves recognition.

Kathy Bennett: *Outback Archives: Reflecting the Community and Region*
An archive collection has always existed within the Broken Hill Library Service since its inception in 1906. Today the Outback Archives is a regional repository for State Records of New South Wales as well as a recognised community archive. As a collection it has predominantly reflected the mining, industrial, commercial and physical aspects of the city and surrounding region, with less emphasis on social development and little or none on indigenous history and the role of women.
One of the challenges of the Outback Archives is to maintain and develop the existing collection while redressing the inadequacies that exist. Another is to make the collection accessible while ensuring its conservation by the use microfilming and digital technology. The development of a digitised photographic database, both for the general collection and a special indigenous collection, has been a major component in responding to this challenge. The database includes thousands of photographs depicting Broken Hill’s mining heritage, social, industrial and physical history. This paper will discuss the history of the Archives, its place within the community, aspects of the collection – both in the strengths and weaknesses of its focus and the physical nature of the material, and those areas currently under development.

Ralph Birrell; *Gold Amalgamation and Chlorination*
Although the extraction of gold from crushed ores was described in detail by Agricola in the sixteenth century the introduction of the process in eastern Australia was accompanied by continuous debate on whether it was best to use mercury in the mortar box or not, whether mercury wells were effective, whether blanket strakes should be vibratory, whether mercury coated copper plates were better than strakes and whether to roast before or after crushing or not to roast. These issues were made more complicated when mine depths reached the water line and the presence of sulphides in the ore often sickened the mercury and reduced the amount of gold recovered.
Years of experiment solved this problem for many mines but the more refractory ores defied treatment. In 1875 the
Plattner process to extract gold was introduced in Bendigo and Ballarat successfully but was expensive and further experiments in the 1880s developed a more effective and cheaper process which was used widely in eastern Australia up to WWI for very refractory ores until replaced by processes using cyanide. The paper will argue that the Australian mining industry of the nineteenth was more sophisticated in the use of science and technology than is often believed and will question Jan Todd’s comment that ‘despite some pockets of experiment with chlorination, the vast bulk of the gold mining industry was ignorant of chemical extractive processes and the scientific principles which governed them’.

**Ross Both; Broken Hill South’s Quest for New Mines: the Kanmantoo venture**

The Broken Hill South Silver Mining Company was floated in 1885 to work Blocks 5, 6, 7 and 8, located immediately adjacent to the southern side of the Broken Hill Proprietary Company’s property. The first dividends were paid in 1897 and Broken Hill South went on to become one of Australia’s major mining companies, with investments in mining and industrial operations elsewhere in the country. Its most prosperous years were in the late 1940s and the 1950s. With falling ore reserves in its Broken Hill mine in the mid-1950s the company began an aggressive mineral exploration program on its mine leases, in the Broken Hill district in general, and elsewhere in Australia. The need for copper for the smelter at Port Kembla, partly owned by Broken Hill South, led it to carry out major exploration programs in the Cobar and Kanmantoo areas.

Copper ore had been mined at Kanmantoo in the eastern Mount Lofty ranges from 1846 until 1875, with production of about 19,000 tonnes of ore from several small mines. Exploration by the Austral Development Company in 1938 found evidence of a wide zone of low grade mineralization. In 1962 Mines Exploration Pty. Ltd., wholly owned by Broken Hill South, commenced an exploration program in the Kanmantoo region, employing geophysical methods. A strong induced polarization anomaly was tested by diamond drilling and an exploratory shaft, and samples for metallurgical testing were taken from underground development from the bottom of the shaft. The decision to develop an open pit mine was taken in October 1969 and an operating company, Kanmantoo Mines Ltd., was formed, with Broken Hill South the main shareholder (51 per cent). Mining commenced in August 1970. The mine produced good profits in the financial years 1972-73 and 1973-74, but thereafter incurred losses as a result of falling world copper prices and rising operating costs. The mine closed on 30 June 1976, having produced 4,050,000 tonnes of ore averaging approximately 1 per cent copper. At least 8 million tonnes of ore averaging 1.1 per cent copper remain beneath the now abandoned open pit.

**Gordon Boyce; Devices for Reducing Negotiating Expenses in Australian Mining**

Strangely, transaction cost economics devotes little attention to the expenses that parties incur when they actually negotiate deals. Instead, Williamson concentrates on the underlying variables (transaction-specific investment, the frequency of exchange, the number of bargainers, and the degree of prevailing uncertainty) that shape the institutional outcomes of negotiating processes. He also focuses on ex post adjustments that are undertaken to modify an initial agreement, and in this context he highlights the role of “communicating economies” that parties who have some shared affiliation can achieve (1985: 64). However, Williamson does not concentrate directly on the dynamics of initial deal making activities, and his framework treats bargainers largely as “given”.

In an effort to develop a more dynamic framework for evaluating co-operative inter-firm structures, Ring and Van de Ven (1994) introduced the idea of relationship building as a continuous process. This consists of three stages – negotiation, commitment, and execution -, which are repeated over and over as parties forge their first agreement and then, make refinements in an ongoing manner. This approach explicitly addresses negotiating activities, and it incorporates formal, legal, and informal social-psychological processes, all of which may shape outcomes.

The aim of the present paper is to build on the insights provided by Williamson and Ring and Van de Ven by exploring in detail the dynamics of non-intermediated dealmaking. While recognising that negotiations will subsequently affect the quality of inter-firm relationships, the discussion concentrates primarily on initial bargaining in order to identify cost elements and devices that parties use to mitigate these expenses. The paper focuses on costs rather than outcomes, although we do allude to the benefits of successful deal making, the records available do not support comparison of expectations with outcomes. Negotiating expenses (particularly those that are time related) can be very significant indeed, especially when highly complex agreements have to be arranged between a large number of parties who must engage in multilateral discussions.

These ideas are explored using evidence drawn from the records describing how the Western Mining Corporation structured its negotiations with Japanese and Canadian firms. The paper identifies distinct steps in the negotiating process, cognitive maps, devices that parties can use to facilitate transitions between these stages, and standard conventions that can be employed to accelerate progress.

**References:**


**Greg Drew: The Dilemma of Abandoned Mines in South Australia**

The two major issues associated with abandoned mine sites in South Australia are the heritage significance of the site and its safety and/or environmental risk.

Systematic heritage assessment of mines has been previously undertaken to develop a statewide strategy for giving systematic priority to conservation and interpretive programs. This assessment has been the basis for most of the mining heritage conservation and interpretive projects undertaken. In South Australia there are only two options for conservation of mine sites – do nothing and allow the site to decay naturally, or conservation of ruins in their present state with minor restoration and reconstruction of structures to provide focal points or visitor centres. For the vast majority of mine sites the former is the only option.

The Office of Minerals and Energy SA (MER) has commenced an Abandoned Mines Project to create a database of historic mines with the ultimate aim of risk management of mine sites on Crown land. This will involve the identification of the various hazards on the site and the assessment of the overall risk of the site. A Risk Score, calculated using the hazard risk, and accessibility and exposure of a site, will be used in conjunction with its heritage significance to prioritise abandoned mine sites for risk management programs. Strategies for risk management will include isolating visitors from the site, backfilling, capping and fencing.

**Jim Enever: Gold Mining on the Mornington Peninsula**

Situated about 100km south of Melbourne Vic, the Mornington Peninsula separates Port Philip and Westernport Bays. Not noted among Victoria’s gold producing areas, the Peninsula does, however, boast a small slice of gold mining history among its better known agricultural origins. Located on the Peninsula is an area of geology reminiscent of the central Victorian Goldfields, complete with auriferous reefs that have supported both alluvial and reef mining activities. Never of any great consequence in the context of the Victorian economy, these mining activities did, none the less, contribute to the development of the Peninsula. Leaving behind no signs of settlement and little in the way of extant evidence of mining activities, it is difficult to build any sort of a picture of the way things were in the second half of the nineteenth century on these diggings. This paper attempts to draw together this limited history and integrate it with some of the remaining physical evidence to give some insight into this little known chapter in Victoria's gold mining history.

**Philip Hart: Australian Capital in New Zealand: The Te Aroha Silver and Gold Mining Company**

In 1886, William Robert Wilson, a founder of BHP, visited America to obtain experts for the Broken Hill mine and battery. During his return, he was told by a director and manager of the Battery Company at Waiorongomai of the large lodes in their property which they could not develop through lack of capital. Wilson inspected the ground, was impressed, and formed the Te Aroha Silver and Gold Mining Company with leading investors in BHP. Under the supervision of John Howell, later of Broken Hill, the 'best battery in Australasia' was erected. Although this was claimed to operate successfully, an insufficient amount of good ore meant mining ceased. To replace expensive cartage using a tramway with three self-acting inclines, a 5,600 feet low-level tunnel was proposed. As financial assistance from the government was declined, the company fulfilled its threat to remove the machinery to Broken Hill and abandoned its mines.

This paper illustrates the common practice of investors erecting an expensive plant before doing sufficient prospecting to ensure there were adequate ore reserves and cheap local fluxes for the smelter. Experts were proved to be fallible, and created loss to investors and a serious setback for local mining.

**Matthew Higgins: 'To the Turon I Must Away': days of gold, decades of change at Sofala and the Turon Goldfield**

The Turon Goldfield, north of Bathurst, was one of the major goldfields of NSW and today Sofala remains as Australia’s oldest surviving gold town. The Turon witnessed the intensity of the 1851 rush, significant technological developments spanning a number of decades, important political events and a high population of Chinese miners. Today’s Turon landscape bears witness to the area’s golden past, and the town of Sofala increasingly draws artists and film-makers.

**Brian Hill: Explaining the Reefton paradox**

Economic theory has it that during the period of the gold standard, because of gold’s fixed nominal price, the output of gold should have varied counter-cyclically with fluctuations in the level of economic activity. However, the history of Reefton, which was New Zealand’s second biggest gold field, poses something of a paradox in the field’s first 40 years to 1912.

Although Reefton’s level of output varied during the periods of inflation and deflation, and then inflation again, in New Zealand during this period, the variations in the field’s output of gold demonstrated the opposite to this theory from 1872 to 1912.

Reefton’s gold mining industry boomed during the inflationary Vogel boom in New Zealand, and then was depressed during New Zealand’s "long depression" from 1883 to 1895 despite the favourable economic conditions then for gold mining. Then Reefton’s gold output expanded during the economic recovery and inflationary period in New Zealand from 1896 to 1912, even though the real price of gold fell because of its fixed nominal price.
This paper analyses the factors pertaining in Reefton from 1872 to 1912 the economic effects of which were more dominant than the effect of the changes in the real price of gold during this period, and explains the "Reefton paradox."

R. Keith Johns: A Mirage in the Desert? Discovery, evaluation and development of the Olympic Dam Orebody, Roxby Downs

The discovery of extensive polymetallic mineralisation buried in a near-desert at a depth of 330m and its subsequent development into what has become one of the world's truly great mines owes much to the endeavours of a few individuals but a great deal more to coordinated team efforts over a period of about 13 years.

In the beginning, explorationists displayed flair in generation of ore model concepts and, perhaps, enjoyed some good fortune, not least of which was a supportive Board of Directors. There ensued a period of rare excitement as the dimension of the resource unfolded, and enthusiasm in preparation for its recovery and processing, and marketing its products - copper, uranium, gold and silver.

But it wasn't all plain sailing for Western Mining Corporation and the Olympic Dam Mine on Roxby Downs pastoral station. The developers would have to contend with politicians and government departments, not all of whom were favourably inclined - particularly as the orebody had a significant uranium content and all that entailed for the nuclear fuel cycle, for health, the environment, the greenies and for the unknowing. Development would impinge on the Woomera Restricted Area and would have consequences for the opal mining industry at Andamooka and at Coober Pedy. And timing was coincident with moves directed toward achievement of Aboriginal land rights, a new awareness for recognition, heightened expectation of financial and other gain, and concern for protection of ancient traditions and sacred sites; Aboriginal land rights and emotive aspects of mining had become unfortunately and irrevocably linked. There were also counterproductive blockades, protests and demonstrations; attacking the project was, for some, an exercise bordering on the inane.

Inevitably, sanity would prevail and Olympic Dam was officially opened on 5 November 1988 - a mine that blinkered doctrinaire political opportunism had labelled as a mirage in the desert: some mirage, some desert!

Ruth S. Kerr: The Broken Hillionaires in North Queensland

The silver discoveries in north Queensland in 1883 at Mount Albion west of Herberton were quickly described as the new Broken Hill. From then on the north's entrepreneur, John Moffat, sought out Broken Hill and Melbourne capital to develop the mineral region. He succeeded at Chillagoe and Mount Garnet in 1896. Directors of Broken Hill Proprietary, William Knox of Melbourne, and James Reid formerly of Bowen and Ravenswood and editor of Broken Hill's Silver Age, were attracted to promoting new regional industrial complexes. They enlisted Herman Schlapp, metallurgist, and Alex Stewart, manager, of Broken Hill. Their enterprise transformed north Queensland, produced amazing share windfalls for the directors, but their smelters closed and had to be subsidised and taken over by the State to maintain local population centres for the next 50 years. This paper analyses what the Broken Hillionaires sought to achieve in the north.

Sandra Kippen: Responses of Medical Men to Mining Disease on the Bendigo goldfields.

Mining disease, known variously as miners' consumption, miners' sickness, miners' phthisis, miners' tuberculosis or, quantitatively, the disease of worn out miners, became an issue of public concern in the early 1900s. In Bendigo, the local general practitioners were called upon to manage the condition, which was bringing early death in epidemic proportions to the men working underground in the goldmines. The cause of the disease was a subject of much debate and the medical opinion was divided between a 'blame the worker' approach which held that the genesis of sickness lay in the constitution and intertemperate behaviour of the miners, and a 'blame the employer' approach which placed the responsibility firmly on the conditions in which the miners were forced to work. This paper examines the responses of the medical practitioners who, in aligning themselves with or against the mining companies operating on the Bendigo goldfields, were instrumental in negotiating the working conditions for miners.

Ross Mainwaring: Hill Billy Coal: the coalfields of Kentucky and West Virginia

The coalfields of Appalachia provide a most interesting contrast with the coalfields of the different states of Australia. The early day remoteness of the mining towns, known also as 'patches', was dictated by the mountainous terrain and this isolation influenced the way of life of the miners and their families. Each mountain valley held captive its own mining town whose business revolved around a coal mine and a company store. In the days before paved roads and automobiles the railway was the sole transport artery linking mine to market; they still are of great importance for the transport of coal. The industrial and cultural background of the region is in marked contrast to Australian coal regions. The author has undertaken many field trips to this Appalachian region so this slide presentation will feature the many sights of the coal mines and towns of these valleys.

Gerard MacGill: The Northampton State Lead Battery, Western Australia: history and conservation

The State Battery Service was established in Western Australia in 1897, when the state Parliament approved the expenditure of £30,000 for the purpose of establishing state-run batteries. The principal aim of the service was to promote mining by providing plants for crushing, ore dressing, cyanide treatment or smelting in districts where
large deposits of ore were to be found, but where plant was not available at reasonable rates, and where such plant was deemed necessary for the development of mining. At its peak the system ran forty batteries, predominantly treating gold ores. Exceptions were a tin dressing plant at Greenbushes, a small tin dressing plant installed at the Marble Bar battery, and the Northampton lead battery, established in 1954 to promote lead mining in the Northampton Mineral Field. The battery had a chequered history over its 29-year life. It is listed in the State Register of Heritage places, but its future is dogged by many difficult issues of conservation and the legacy of a highly contaminated site.

Sarah Martin: Kamu Yaakatyi or The Broken Hill: an Aboriginal perspective
The outcropping orebody of Broken Hill and many other surrounding landscape features are full of history for the Aboriginal people from the local area and as far away as the Flinders Ranges. Much of this history relates directly to the geology and landforms also of significance to mining history. This paper outlines some of the stories about creation ancestors, powerful rocks, significant landscapes, and the vitally important water resources. The creation of Broken Hill itself is discussed, the Aboriginal contribution to the identification of the famous lode, and the role Aboriginal people played in mining and the mining community. Other important landscape features such as the Pinnacles are described from an Aboriginal perspective, as is the role that the unique Broken Hill rocks played in the local and regional economy and social life prior to the rapid disruption that resulted from pastoralism and mining. The transformation of creation stories to incorporate new details about the mineralogy illustrates how elements of traditional culture adapted in an attempt to adjust to, incorporate and acknowledge the new order imposed by the miners.

Justin McCarthy: Heritage Planning on the Line of Lode
The Line of Lode comprises all the major mine sites in Broken Hill. These are the former North Mine, South Mine, Zinc Corporation and New Broken Hill Consolidated. As part of recent works funded from the Commonwealth Government's Federation Fund, a major Conservation Management Plan and integrated Interpretation Plan have been prepared for the Line of Lode. At the time of writing, parts of the site were still operational and plans are in place to open up a new decline that will keep the mine going for another ten years or so. These documents consider the history and significance of the place as a basis for formulating appropriate conservation policies and interpretation strategies within an ongoing operational framework. This paper will provide an overview of the nature of the mining infrastructure at the site and summarise the approach taken for its conservation and interpretation.

Barry McGowan: Boom and Bust on the Barrier
Fuelled by increasingly high, and at their peak, almost outrageous silver prices, mining turned the harsh, craggy landscape of the Barrier Ranges into a hive of activity in the 1880s, as one rich surface deposit after another was discovered. This activity gave rise to a number of towns, most of them based on silver mining, but others like Euriowie, based on tin mining or other minerals. The most significant and enduring of the towns was Broken Hill, but it was predated by Silverton and a number of other settlements, such as Thackaringa, Purnamoota and Day Dream. Falling yields and plummeting prices brought an end to the mines.

The early settlements were wild places and the scene of much drunkenness and disorderly behaviour. Eventually, however, they succumbed to the civilizing influences of commerce, church and family. At Silverton there are numerous sandstone buildings, including several churches, a masonic hall and municipal chambers. The remains of the other towns are less substantial, but still very compelling, for they also included churches, banks, hotels and the like. My paper discusses the growth of these settlements and their demise, placing some emphasis on their physical remains and heritage values.

Bill O'Neil: The BHP Lockout of 1909: the view from three generations of Broken Hill miners
The industrial tradition of Broken Hill was shaped by the struggles of the early twentieth century. This paper describes the great lockout of 1909 from the union viewpoint. Michael O'Neil, miner and unionist, was a participant in the lockout. His son, Bill "Shorty" O'Neil was the youngest miner to take part in the strike that followed in 1919-20, and went on to become President of the Barrier Industrial Council from 1956 to 1969. The author of this paper is his son Bill, who was also President of the BIC from 1985 to 1995.

The paper describes the background to the 1909 lockout, its links with the shearers' strikes of the 1890s, and how its aftermath led on to the 1919-20 strike, which was a breakthrough for the trade union movement in Broken Hill.

Ian Plimer: The Past is the Key to the Present
The sulphide orebodies at Broken Hill, from stratigraphic base to top, comprise C Lode (Zinc Lode), B Lode (Zinc Lode), A Lode (Zinc Lode), 1 Lens (Zinc Lode), 2 Lens (Lead Lode) and 3 Lens (Lead Lode). The Broken Hill ores are hosted by and formed at the same time as a sequence of incredibly complicated ancient overturned rocks that have been bent double thrice and then refolded and faulted at least six times.

In the 19th and early 20th Century, metals markets and metallurgy were such that only the lead lodes were mined for lead and silver (which reports to lead in Broken Hill concentrate), zinc ore was not mined and the
zinc minerals in the Lead Lodes were discarded. Very high-grade silver ores were mined in the oxidised part of the Lead Lodes in the 19th Century. Some 57 Mt of ore was mined from Consolidated Mining Lease 7 (CML7) which constitutes the old South Mine comprising the original 7 leases and leases variously exploited by BHP, Sulphide Corporation, Junction, Junction North, North Broken Hill, South Broken Hill and Minerals Mining and Metallurgy. The Zinc Lodes, which constitute the greatest mass of sulphides in the Broken Hill field, were ignored and unmined on CML7.

At the southern end of field, the exploitation of 105 Mt of ore comprising both the Zinc and Lead Lodes financed the growth of CRA. The tonnage of mined Zinc Lodes exceeded the tonnage of mined Lead Lodes. In terms of revenue generated at Broken Hill, in the 1970s zinc surpassed lead and silver. The Zinc Lodes have been mined from the old Zinc Corporation Mine up to its northern boundary (CML6-CML7 boundary). The Zinc Lodes clearly have no respect for a legal lease boundary and continue into CML7 yet they were not intersected by underground diamond drilling by either BHP or Normandy Mining Ltd. Recent drilling by Consolidated Broken Hill Ltd intersected the Zinc Lodes in a south-plunging west-dipping monoclinal structure.

In 1913, BHP discovered the Western Mineralisation, a down dip extension of the Zinc Lodes. Because of the high costs due to labour, taxation, royalty, transport, smelter treatment charges, water, electricity and local government rates, the Western Mineralisation was too low grade for profitable mining. In the 1950s and 1960s, the Western Mineralisation was re-evaluated by Broken Hill South but was never exploited due to the above high costs. In the 1970s, the Zinc Lodes were discovered during deep drilling at North Broken Hill Ltd. In the 1983, the zinc-rich Centenary Lode was discovered under Broken Hill and in the late 1980s zinc lodes were exposed but not mined in the Kintore and Blackwood Open Pits.

Various Broken Hill geologists have argued that there is probably >30 Mt of unmined medium grade zinc ore on CML7 in the Western Mineralisation and, by the late 1990s, all of the high costs at Broken Hill had greatly decreased, there was high unemployment of miners and labour conditions had changed significantly. It was at this time that Consolidated Broken Hill Ltd negotiated to purchase CML7 from Normandy Mining Ltd and since purchase has re-evaluated 120 years of data on CML7. This data was on 7 different grids and in fathoms, feet and metres thereby requiring a complete resurveying of CML7.

Since acquisition, Consolidated Broken Hill Ltd drilled both the Zinc and Lead Lodes near the CML6-CML7 boundary, evaluated the remaining ore in the Kintore and Block 14 pits, drilled the remnant lead lodes in the Browne-Marsh Shafts area on the northern boundary of CML7 and undertook some 20,000 m of drilling of the Western Mineralisation. Since acquisition of CML7, Consolidated Broken Hill Ltd has drilled more than 60 cored diamond drill holes, every one of which has hit ore. Further work on the Western Mineralisation includes infill drilling, metallurgical testing, mine modeling and bankable feasibility studies for what will be a new mine at Broken Hill, the Rasp Mine. The Rasp Mine will owe its origin to an understanding of Broken Hill geology integrated with an understanding of the historical mining, metallurgical and cost conditions in the Broken Hill field.

Fredric L. Quivik: The Inspiration Consolidated Copper Company's Flotation Mill and the Beginnings of the Flotation of Copper Ores in the United States

The Inspiration Consolidated Copper Company began operating its new flotation mill near its mine in the Globe/Miami mining district of Arizona in 1915. It was the first production-scale flotation mill for copper ores to be built in the United States. This paper will describe the history of its development in the context of the history of the development of flotation technologies at Broken Hill and elsewhere, in the context of the transition from selective mining to mass mining in the U.S. copper industry, and in the context of Inspiration's place in the corporate hierarchy of that copper industry. Rudolf Gahl was Inspiration's metallurgist in charge of developing a concentrator for the company's new porphyry mining operation in Arizona. The paper will examine his experiments with flotation and his correspondence with officials of Minerals Separation Company, Ltd., and with metallurgists at the Anaconda Copper Mining Company, with which Inspiration was closely affiliated. Finally, the paper will offer some suggestions to explain why the mining industry in the United States waited nearly a decade after the successful implementation of flotation technologies at Broken Hill before fully embarking on adapting its own methods to the promises of greater recoveries offered by flotation technologies. The paper will be illustrated with slides.

Gilbert Ralph: The Broken Hill - Collins House Connection

This paper examines the links between Broken Hill and Collins House, Melbourne, which became the headquarters of all the major Broken Hill mining companies after it was built in 1910 by W.L. Baillieu on wealth accumulated from Broken Hill investments. It reviews the inter-relationships between these independent companies and their directors and the many new enterprises which emerged from their creative minds, including smelting, refining, paint, paper, chemicals, cables, tubing, aluminium, metal fabrication, bronze, electricity generation and aircraft. The paper refers not only to the building itself but the involvement of the Baillieus, Robinson, Fraser, Stewart, Clark, Somerset and Monash families.
Keir Reeves: The Forgotten Quarter: Chinese diggers on the Mount Alexander diggings
Past simplification of the Chinese experience on the diggings has highlighted the need for a more complex interpretation of their role in Castlemaine society. A case in point is the European understanding of Chinatown, initially the primary place of place of residence for an ethnic group in the community. Later it took on a cultural rather than spatial form: that place where the Chinese could be contained, consigned to a marginal position in history, typecast as exotic and atypical. Clearly what this discussion of Chinese–European experiences on the diggings illustrates is that the cultural identity of the Mount Alexander goldfields community (or for that matter constructions of nineteenth century Australian identity) need not been seen from a solely European standpoint. This is a point that previous conventional and progressive narratives have failed to fully acknowledge. This paper will argue that Chinese-European relations on the Victorian goldfields were more complex than popular historical narratives portray. It will also be argued that it is only by using a broad range of primary sources including mining material culture, mining landscapes in conjunction with existing archival records can a history of the Chinese on the Mount Alexander diggings be written.

R. Maja Sainisch-Plimer: Charles Rasp, Founder of Australia’s Silver City Broken Hill
Twenty years of research has uncovered the intriguing and fascinating life story of Charles Rasp, discoverer of Australia’s famous Broken Hill silver-lead-zinc ore body and founder of a mining company that evolved into today’s multinational Broken Hill Proprietary Company Limited.

For more than a century the story of Broken Hill’s discovery was the fairytale of the German-born boundary rider Charles Rasp who struck it lucky by discovering the magnificent line of lode in the gossan-capped hill called the Broken Hill in the far west corner of New South Wales. Long shunned by prospectors and nicknamed the ‘hill of mullock’, the Broken Hill made him a multi-millionaire and Australia’s Silver King.

Many have tried to uncover Rasp’s pre-Australian life story, to no avail. Charles Rasp was not Charles Rasp. He had changed his name, hidden his noble background and tightly guarded his secret: the true reason for escaping to Australia. For the media, friends and even his beloved wife he had slipped into the role of a former clerk of humble origin who had worked in the export department of a chemical firm in Hamburg, Germany, and who had migrated to Australia for health reasons. The few who knew better had sworn to silence, and Rasp’s secret was nursed and kept. It stayed intact for one hundred years.

It was Rasp’s portrait, taken in 1886, shortly after the B.H.P. had poured out the first phenomenal dividends to its shareholders, that captivated me and caused a detective itch that did not leave until all mysteries surrounding Rasp were solved.

It took thirteen years of intricate research in persona in as many countries on three continents to unravel his true identity and piece together the turbulent lives of Rasp and past generations of his family, and of the man who had adopted Rasp’s true identity, playing havoc with my research. And it was to take further seven years of detective work to fathom the incredible events of Christmas Night, 1870 on the outskirts of Paris that had rendered twenty-three-year-old Rasp a fugitive for life and which prove once more that truth is stranger than fiction.

The biography of Charles Rasp is currently being written.

Nicki Williams: Brass Among the Gold
Assay office chimneys can still be seen in the remains of many Australian mining sites, such as Arltunga in NT, Cue in WA, and Wallaroo in SA. Assay offices required accurate analytical balances, which were imported from overseas firms such as Oertling in London. The development of the assay balance reflects the increasing sophistication of machining and metallurgical processes, but what has been the fate of these beautiful precision instruments? We have found balances, in various states of preservation, in many places in outback Australia, as well as in museums, tertiary institutions and private homes. This paper explores some of the background of mining areas and associated Oertling balances discovered during exploratory trips over the last ten years, particularly in 1995 and 2002.
AUSTRALIAN MINING HISTORY ASSOCIATION INC.

ANNUAL GENERAL MEETING
To be held at: Trades Hall, Broken Hill
Saturday 5 July 2003
at 5.00pm

AGENDA

President’s Report and observations

1. Minutes of AGM 26th September 2001

2. Matters Arising from Minutes

3. Treasurer’s Report/Auditor's Report year ending 31 December 2002
   Statement of Income and Expenditure 1st January to 30 June 2003

4. Correspondence

5. Election or Confirmation of Officers
   a) Patron: b) President; c) Secretary; d) Treasurer, e) Auditor; f) Committee (not less
      than seven additional members) #

6. Motions and Changes to Constitution

7. Setting of Fees for 2003

8. General Business (items may be raised from the floor)
   a) Report on venue and date for 2004 Conference
   b) Call for venue for 2005 Conference

Current Executive Committee members are:
Patron Prof. Geoffrey Blainey, AC
President Dr. Peter Bell (SA)
Secretary/Treasurer Mr. Mel Davies (WA)

Current Committee members are:
ACT  - Chris Carter, Barry McGowan.
S.Aust - Brian Hill, Bernie O’Neil.
NSW  - Graydon Henning, Ross Mainwaring, Tony Webster.
NT   - David Carment.
Qld  - Ruth Kerr, Diane Menghetti, Jan Wegner.
Vic   - David White, Ralph Birrell.
WA   - Patrick Bertola, Wendy Carter, Charlie Fox, Sachiko Sone.
Tas   - Greg Dickens, Glyn Roberts.
NZ   - Philip Hart.
Editorial

The Broken Hill conference was a huge success and shows that the Association can certainly stand on our own feet when it comes to organizing our own functions. Broken Hill was a marvellous venue and with the help of the local City Council, local mining companies and the assistance from the unions in allowing us the use of their magnificent facility, the Trades Hall, then we were almost assured of success. The local organizing committee of Peter Bell, Ross Both, Greg Drew and Bernie O’Neil excelled themselves in organizing the programme of events so that both the conference proceedings and the social functions went off smoothly and without a hitch. Everyone stated they had a grand time but one of the highlights of the week was without doubt the performances of Barrier Industrial Unions Brass Band and the Broken Hill Community Choir. It was indeed heartening to see ex-directors of Western Mining and other notables joining heartily in the chorus of the Red Flag and other worker related renditions. It might be true to say that along with Bill O’Neil’s vivid and stirring recollections of his Union days on the Barrier that was presented at one of the sessions, the revolutionary fervour touched even the stalwarts of capital.

As usual, the sessions showed the great variety of interests shared by our membership. All papers received full support from beginning to end (something rare in most conferences where people tend to slope off late in the day) and the presentations were all excellent. Ian Plimer as keynote speaker set the tone when he gave an inspiring illustrated history (and projections for the future) of Broken Hill, while wife Maja Sainisch-Plimer, also a keynote speaker, gave fresh insights into the mysteries surrounding the background of Charles Rasp who was responsible for discovering the great lead and silver lodes.

There were a number of tours including an underground venture to Delprats and a couple of days were spent by some members who accompanied guide Barry McGowan on a tour of historical sights in the area that has since attracted some glowing and positive reports. The conference dinner held at MacGregors
Restaurant, provided a fine panoramic view of the city lights – even more lit up than some of the diners who were enjoying liquid refreshment to wash down their food. It was indeed a conference to remember. ‘Foreigners’ Fred Quivik (USA) and Peter Claughton (UK) were presented at the dinner with Broken Hill ties, and must have been pleased with their trophies as both have since joined the AMHA.

In attendance for the sessions and social functions was Catherine Frayne of the ABC who conducted interviews that hopefully should provide the Association with some publicity. You can listen to her programme on **Hindsight - ABC Radio National, Sunday September 28 at 1405hrs (rpt Thursday October 2 at 1305hrs)**. In the programme, the above mentioned secrets of Charles Rasp will be revealed to one and all.

**Annual General Meeting**

Thirty-six members attended the AGM thus ensuring some lively debate. With the decision to publish an annual edition of the *Journal of Australasian Mining History*, the matter of fees raised particular interest. Everyone agreed that fees were generally on the low side and with the journal costs and recent rise in postage, it was decided that the following fees be charged for 2004, with a couple of additional categories being introduced (so save up your pennies before the new year!):

- Unwaged students - $15.
- Retirees - $25.
- Waged members $35.
- Joint family membership $45.
- Institutions - $50.

The fees are still remarkably cheap by current standards.

With respect to future conferences, it was agreed that we should try to organize our own at least every other year. As determined in 2002, the 2004 Conference will be held in conjunction with the Australian History Association’s meeting at Newcastle, while a small committee of Sandra Kippen, Ralph Birrell and James Legg are already getting together to plan for a conference at Bendigo in 2005. It was also heartening to receive an offer from Graham Hancock who spoke on behalf of South Australia’s Copper Coast Council to hold our conference in the Moonta-Wallararoo area. Whether that will be in 2006 or 2007 remains to be determined.

With Greg Drew and Laith Reynolds agreeing to work on our web page, we should hopefully see some great improvement in design and up to date information (including a chat line) in the next few months.

**Congratulations**

Congratulations to Jillian Koshin who has just obtained her PhD from Deakin University. Her thesis was on Eric Reece, a former premier of Tasmania, and developmentalism. After working in odd jobs including mining jobs for several years during the 1920s and 1930s, Reece started his career as an AWU union organiser on Tasmania's West Coast, working mainly around the mines there. Elected to state parliament in 1946 as part of a Labor government, he was appointed Minister for Mines in 1947 and held that portfolio (even after becoming premier in 1958) from then until 1969 and then again from 1972-75.
Forthcoming Conferences

Call for papers – Abstracts (300 words maximum) should be forwarded to me (the AMHA Secretary) not later than 1st December 2003.

For other information contact:

David Lermmings,
Convenor AHA Biennial Conference,
University of Newcastle, Newcastle,
NSW 2308
e.mail: David.Lemmings@newcastle.edu.au

The venue for the conference will be the Newcastle City Hall. The theme for the wider AHA conference will be ‘Visions’.

Registration details will appear shortly on the AHA webpage at: http://www.theaha.org.au/

Information Wanted

Quarries
Peter Bell has received a query from a Flinders university archaeology student, asking if anyone knows of any research that's been done on quarries in Australia. The student is interested in historical or archaeological research. If you have any information would you mind passing it on to Peter at: 08-83731900, pbell@adelaide.on.net

Smelters
Wendy Gatehouse states that she is researching her great-grandfather's involvement in the copper mining industry in the period 1860-1927. Her query relates to the qualifications (if any) required by a person whose occupation was a ‘Smelter’. Would this have been a trade requiring an apprenticeship, and if so, under whose guidance would this apprenticeship have been conducted?

If not an apprenticeship or trade how did one progress to the position of ‘Smelter’? Her research indicates that there were several positions subordinate to that of ‘smelter’. This suggests that expertise was gained either through specific training or years of working at various positions at a smelting works (thus learning on the job). An interesting question and one that I and I’m sure other members would be pleased to hear about.

Wendy’s contact details are:
Mrs Wendy Gatehouse, 28 Benny Street, WOOKM Q 4507 Phone 3410 1639
e.mail: oznedkelly@hotmail.com

Oertling Assay and Analytical Balances - Appeal for Information
Nick Williams is hot on the trail. At the Broken Hill conference following her paper on the subject, she was ebullient over a local discovery and her appetite has been whetted for more. This is therefore her appeal:

I am the Curator of the Faculty of Science Instrument Collection at Monash, and have a particular interest in analytical balances, especially those made by the UK firm of OERTLING. I have an ongoing collaboration with two Historians of Science in UK, who are about to begin writing a history of Oertling, and one of my tasks is to try to trace as many as possible of the balances which were exported here, initially for gold assay, but later for industrial and educational needs. I have found Oertling balances in museums, tertiary
institutions and private homes, but I’m sure there are many more.

I would be most grateful to hear from anyone who has information about an Oertling balance – the details listed below can enable us to identify the year of manufacture, year and type of repair, and even the identity of the original maker and repairer.
Details needed are:

- A photo if possible, preferably against a plain background (a sheet is fine), with the front glass open, to minimise reflections;
- The beam length, distance between the two end knife edges;
- The serial number, which is usually on the base of the pillar, but sometimes on the beam;
- An exact transcription of any markings (usually pencil), on any of the drawer surfaces or the drawer cavity; and
- If there are no drawers, an exact transcription of markings in the slot (usually the left hand one), of the front sliding door of the case.

Thank you in advance,
Nicola Williams, Hon. Senior Lecturer, Monash Chemistry.

She can be contacted at 16 View Mount Road, Glen Waverley, Vic 3150. e.mail: nicola.williams@sci.monash.edu.au

With a little promotion, Oertling could become the sport of the future!

Responses to Information Wanted

Plod Card
A number of authoritative answers were received on the query in the last newsletter regarding the origin of ‘plod cards’,

From the wise lips of Tess Thompson comes the following response:

Plod was a common term on the Eastern Goldfields mines during the time I was growing up. My dad would use it as a term to describe 'knocking off' (finishing for the day), as “Well, I've filled in my plod - I can knock off now” - or if you were being a bit lazy he might say “you won't have much to put on your plod today.” I gathered that at work they actually had a card that they filled in as their plod.

From the far away shores of the Apple Isle, Jillian Koshin stated:

Re the query about plod cards, or plod sheets as they are also called. They are, as you say, a work card detailing the work done. At the end of the day he area of the mine where one worked, the particular job one was doing, and the time taken for that job or particular activity are entered on the form. They are not an old thing. The 'official' name for them in 'Daily Performance Sheet'. They have headings such as blasting, drilling, ground support, transport (of gear), etc. with spaces for the amount of time spent on each or any of the activities. There is also a section for safety aspects of the particular job or area, comments on other details, delays, down-time - eg. due to machinery breakdowns, power failure etc.

At the end of the shift, all the plod sheets are deposited with a shift boss or similar who has the task then of entering the details into the computer. They are not an old thing as they have only recently (during the last decade) been introduced Underground of course, there is no need to clock on or off. You can only get in and out at certain times of the day anyway.

Brian Hill, now domiciled in the land of the Kiwi, states:

These are cards used in mines to record and confirm the productivity of contract miners, and of other piece workers underground, to calculate pay. For example, a trucker tramming dirt from a stope to an underground ore pass will be contracted at so much a truck for the ore he tips down the ore pass. The underground shift boss will confirm the number of trucks each shift and sign the plod card, which later goes to the mine pay office to be used in calculating the piece worker’s pay entitlement for the period.
So now we know! A little controversy over whether they are ‘new’ as suggested by Jillian, or ‘old’ as suggested by Tess. Thanks to all three who responded.

An Icon Falls into Foreign Hands (Again)

The following is an historical reminder from Peter Bell that wheels tend to turn and turn!

The Xstrata takeover of Mount Isa Mines prompted a considerable amount of media comment along the lines of an Australian icon (or sometimes a Queensland icon) ‘being lost to overseas ownership’ or ‘falling into foreign hands’. Perhaps the journalists might have benefited from reading a bit of mining history. MIM was originally formed in Sydney, not Brisbane, and was only registered in Queensland in 1931 as a condition of the construction of a state railway to the field. Because of the mine’s voracious appetite for investment capital, in 1927 - when the company was only three years old - the majority of shares in MIM were bought by Russo-Asiatic Consolidated, then for the next 54 years the company was majority-owned by variously the Mining Trust of London, then the American Smelting and Refining Company (which only sold its last 15% in 1996). Other investors who held shares and options in the company's early decades were the Anglo-American Corporation, British Metal Corporation, Morgan Grenfell & Coy and Chester Beatty's Selection Trust. From 1930 until 1953 the general manager (later managing director) and many of the senior technical staff were Americans. Only since June 1981 have the majority of MIM shares been back into Australian hands. While it is nice to indulge in sentimental nationalism, the reality is that in the critical years, there was simply not sufficient capital and expertise available in Australia to develop an enterprise as costly and technically demanding as Mount Isa.

Peter Bell

New Publications


Alan Mayne is an Associate Professor of History at Melbourne University, and some members might remember that he gave an interesting paper on the topic of Hill End at our 2002 Brisbane Conference. Hill End lies some 300km north-west of Sydney and was a major boom town during the gold rush and is today a cultural heritage site. The book probes beyond conventional heritage interpretations and both reinterprets and debunks some of the myths about the town.


One of our US members, Ron Limbaugh along with Willard Fuller, have just published the above book that examines the economic, political and social effects of gold mining in Calaveras County in California’s central Sierra country from the first discoveries in the 1840s until the present. Included are the effects on race, gender and class, the impact on native American Indian communities, as well as a study of the spectrum of
technology from the earliest placer efforts through drift and hydraulic mining to advanced hard-rock industrial mining. Additionally, the authors examine the ways that mining practices changed as the ores were depleted and how the communities evolved from mining camps into permanent towns with new economic foundations and directions.

The publication offers a detailed and meticulously researched history of mining and its economic impact in this region and may be of interest to mining historians everywhere. The book can be ordered at:
Eurospan University Press Group
Tel.: 44 (0)20 7240 0856
www.eurospanonline.com/1-877-
NVBOOKS/ www.nvbooks.nevada.edu

JOURNAL
The long awaited Journal is with the printer. Paid-up members will soon receive a free copy of this first edition in the post. 

MJD/Sept’03

Your Committee
The following members were appointed at the AGM. For contact details see our web page at: http://www.econs.ece1.uwa.edu.au/AMHA/amhamain.htm

Officers
Patron: Prof. Geoffrey Blainey, AC
President: Dr. Peter Bell
Secretary: Mr. Mel Davies
Treasurer: Mr. Mel Davies.

Committee –
ACT Mr. Chris Carter, Dr. Barry McGowan.
SA Dr Ross Both, Mr. Greg Drew
NSW Dr. Graydon Henning, Mr. Ross Mainwaring.
NT Prof. David Carment AM
Qld Dr. Ruth Kerr OAM, Dr. Jan Wegner, Dr. Diane Menghetti.
Vic Mr. David White, Ms. Sandra Kippen.
WA Dr. Patrick Bertola, Ms. Wendy Carter, Dr, Charlie Fox, Dr. Sachiko Sone.
TAS Mr. Greg Dickins, Mr. Glyn Roberts.
NZ Dr. Brian Hill, Dr. Philip Hart.

Broken Hill Junction head Frame (Photo Gerry McGill) (Space Filler)
Editorial
It’s nice to realize that the last of our stated objectives, the printing of a Journal has been completed. It has taken almost 10 years but perhaps it takes time before some sense of maturity and stability is established that allows an organization to have the confidence to launch into its own publication. To date, comments on the Journal of Australasian Mining History have been very complimentary and with the support of members both as contributors and those called upon to act in more official capacities as Board members or as referees, we can hopefully project a continuing future for both the journal and the wellbeing of the AMHA.

Enclosed with this newsletter are your renewal membership forms for 2004. As mentioned in the last newsletter, the fees have been increased to accommodate the cost of publishing the Journal. While the first issue was paid from accumulated funds, the necessity of this increase is so as to cover the cost of future volumes. We value your membership and hope the new fees won’t deter you from renewing for the New Year.

National Cultural Heritage Forum
Peter Bell reports that he attended the National Cultural Heritage Forum Visions Workshop in Canberra on 19-20 November, representing the Australasian Institute for Maritime Archaeology. AMHA member Dr Ruth Kerr was also there, representing the Federation of Australian Historical Societies. A large proportion of those present were Canberra bureaucrats from the Department of Environment & Heritage and the Australian Heritage Commission, with the rest from Australia ICOMOS, the state heritage chairs & officials, and nine representatives of other national organisations involved in heritage conservation.

Much of the agenda was about the new Commonwealth heritage legislation which will commence in January 2004, its implications, and spreading the word. Look out for the Distinctively Australian publicity campaign in the next few months, which will promote the new National Heritage Register. There is an opportunity here to raise public
awareness of mining sites of national significance, and perhaps the AMHA should develop a list of such sites and become involved in the process of nominating them for the National Register. Heritage conservation is not our core business, but I would like to hear members’ views on the subject.

Report on International Mining History Congress, Akabira, Hokkaido, Japan

As will be attested by any of those fortunate enough to attend the event, the 6th International Mining History Congress was a great success. The presentations were excellent and the quality of social events and interaction superb. The hosts at Akabira, a relatively small coal-mining town, could not have been more welcoming and those attending were treated to a smorgasbord of entertainment by the Congress organizers and local community. What also impressed was the contribution of local volunteers, who seemed delighted to have an international event in their midst. Needless to say, at the social functions the beer and sake flowed freely, there were mountains of delicious food and lots of song and dance. Included in the repertoire were a number of mining related entertainments that included a dance group of miners’ wives from Kyushu in the South of Japan who had everyone enthralled (and in action) with their miners dance routine. As would be expected, the Aussie contingent was well to the fore in all the activity – namely Chris and Janelle Carter, Peter, Nancy and Sarah Claughton, Arthur and Noreen Jones, Sachiko Sone, Kuntala Lahiri-Dutt and yours truly.

Two papers were given by our resident members (also by non-resident members Roger Burt and Jeremy Mouat who each presented keynote papers): Chris Carter, ‘Bark Huts, Calico Tents and Shanty Towns – Reno a 19th Century Australian Mining camp’, and Sachiko Sone, ‘Child Labour on Japan’s Chikuho Coalfields’ (these and other papers can be downloaded at:  http://www.imhc2003.com/)

The Congress had an extremely memorable start when an earthquake of 8.2 on the Richter scale hit at 5.30 on the first morning, followed 40 minutes later by one equally as large but of lesser duration. This, it was reported, was the biggest quake to have hit Hokkaido in living memory. At least it woke people up early enough to attend the first session and thankfully no-one was the worse for wear from the experience and all heroically carried on regardless!

Conference tours to mining places of interest and mining museums were a highlight of the occasion, as were the post conference optional tours that gave people a chance not only to extend their knowledge of Japanese mining but to also sample the wider world and Japanese culture.

Indeed a memorable occasion that will be remembered for years to come by all who participated.

Akabira Business Meeting

The Congress Business Meeting was held on the final day. Usually, the next congress location has already been determined but unfortunately the sponsorship had fallen out of the Vancouver location that had been determined at the Milos Meeting. Calls have since gone out to the wider community for organizers to offer locations for 2006. Offers will have to
be made by 31st January 2004. So, if any of our members feel that they can raise sponsorship and have the organizational ability and the will to make an offer then please submit to me something in writing by the due date. Expressions of interest have already been received from various parts of the world.

The Meeting also called for country representatives to be placed on a web-correspondence page that will be run by webmaster, Peter Clauhtagton, from his Exeter University International Mining History page. The address is: http://www.ex.ac.uk/~RBurt/MinHistNet/

We called on our committee members for our representatives and Chris Carter and Barry McGowan, both with past experience of Congress activities, were chosen. Yours truly, as Secretary of the International Mining History Congress will also be on the panel, along with our Exeter University member Roger Burt, who was elected President at Akabira, and member Jeremy Mouat who will represent Canada.

**Forthcoming Conferences**

*AMHA – in conjunction with AHA Conference, Newcastle, 5-9 July 2004.*

*URGENT*  
Don’t delay – abstracts were due to be submitted to me by 1 December, but the date has now been extended by a month. To date, only four abstracts have been received.

For conference registration and other details see the AHA web page at: http://www.theaha.org.au/

*Quong Tart, 1850-1903 – Conference on Chinese in Australia and Pacific Region, The Powerhouse Museum, Sydney, 1 to 4 July 2004*

Proposals for papers and panels on any topic related to the life, times, and contemporaries of Quong Tart are called for. AMHA members might be particularly interested in the following two areas:

* comparative gold fields history;
* social, cultural, and economic history of Sydney and NSW, 1850-1903.

Abstracts of no more than 300 words should be submitted by 1 February 2004 to the Conference Convenor, Henry Chan at: henry.chan@asia.usyd.edu.au or by fax 02-4782 9773.

Full information about the conference and about Quong Tart may be obtained from the conference web page, at: http://www.arts.usyd.edu.au/departs/history/quongtart/

*British Australian Studies Association (BASA) Biennial Conference, Cardiff University, 2-5 September 2004*  
Members with a penchant for travel might care to visit the capital of Wales for this conference the theme of which is: *Projecting Australia.* Organizer, Bill Jones, provides the following outline:

‘The Land of Gold’, ‘Hell on Earth’, ‘The Lucky Country’ - Ideas, images, clichés and stereotypes of what Australia is, has been, and could be, have been plentiful and widely available for internal and external consumption. Who are, and have been, the producers of these representations? What are, and have been, the mechanisms they have adopted to disseminate their constructions of Australia and how have media and messages shaped and interacted with each other? The conference will explore how agencies - e.g. governments, public bodies, voluntary organisations, political parties, film, television and radio, the press,
academic study, creative writing, art - have projected Australia, and seeks to evaluate their reception in, and impact on, the continent itself and the wider world.

Papers that take up the broad conference theme are invited in relation to history, fine art, ecology, politics, mythology, literature, film studies, media studies, anthropology, architecture, law, popular culture, religious studies, economics, women's studies, war studies, education, migration studies, multiculturalism, technology and society, sociology, geography, sports studies and photography.

Papers from postgraduates especially welcome. Notification of acceptance of papers will be sent out in early February 2004. It is expected that a conference issue of BASA's journal, *Australian Studies*, will publish a selection of the papers. The conference programme will include an afternoon bus tour with commentary of the world famous former coal-mining 'Valleys' to the north of the city.

Abstracts not exceeding 200 words need to be submitted by the end of December 2003, to:

Dr Bill Jones, President, BASA
School of History and Archaeology, Cardiff University,
PO Box 909, Cardiff CF10 3XU
Tel. (+44) (0) 29 2087 6104;
Fax (+44) (0)29 2087 4929
E-mail: joneswd@cardiff.ac.uk
http://www.cf.ac.uk/hisar/people/bj

Conference, Greece
An International Conference ‘Advances in Mineral Resources Management and Environmental Geotechnology’ will be held in Chania, Crete Island, on 7-9 June 2004.

Detailed information about the conference topics, the programme committee, the call for papers, the registration and accommodation procedure is available on the web site: http://heliotopos.conferences.gr/amireg2004

The deadline for abstracts submission is 15th December 2003.

Information Wanted

*Spurling Photographs*
Christine Burgess writes: I am currently researching my family tree, with particular reference to my grandfather, Stephen Spurling III, who was a professional photographer in Tasmania in the late 1800's and early 1900's. His father and grandfather were also professional photographers (confusingly, all were called Stephen), so their photos date back to the earliest examples of photography.

I have been trying to trace photos taken by Spurling I, II & III and I would be particularly interested in locating any Spurling photos your members may know about. Stephen Spurling III worked in the mines on the West Coast of Tasmania and returned many times to photograph the region. It is also known that Stephen Spurling I and II visited the gold fields in Bendigo and New Zealand around 1870. It is believed they took their cameras with them, but to date I have not discovered any of their photographs of these places. 'Spurling' photos can usually be distinguished by either a stamp on the back, or a handwritten note on the bottom left-hand corner of the photo, stating the place, plate number and then, Spurling.

Please address all correspondence on this matter to:
Responses to Information Wanted

Plod Card - Again
To continue the saga for one more edition, Jillian Koshin states:

‘Tess Thompson is right of course: plod sheets are old. I looked again at my comments and realized where I’ve gone wrong. Where I’ve written twice that they ’are not an old thing’, I meant they are not JUST an old thing, that they are still in use and in some (newer) places only recently introduced under the name 'daily performance sheet'. (This is often the case where mining companies have moved to using outside contractors and where the old-style contract miner – Brian Hill’s piece worker - is a thing of the past, as in Tasmania). I also realized that in my haste, a few words were missing from my original e.mail response.

This is what should have been said:

‘At the end of the shift, all the plod sheets are deposited with a shift boss or similar who has the task then of entering the details into the computer. They are not an old thing as they have only recently (during the last decade) been introduced in some mines. Not all mines use them. Underground of course, there is no need to clock on or off. You can only get in and out at certain times of the day anyway...’

So there is no controversy over whether they are old or new. They're old. My apologies to Tess (and newsletter readers) for my poor expression’.

Readers are promised that this will be the very last comment on Plod Cards!

Web Information
Early this year (Newsletter 31), there were a couple of reviews on scripophilly (interest in scrip). Rob Vernon (UK) has sent a useful web page for anyone interested in entering the field. The Australian page contains a number of mining scrip for sale that might tempt some of our members to become scripologists, or perhaps to just purchase one or two items that relate to their research interests. Rob can vouch for the authenticity and fair dealing of the firm. Address is:
http://www.collectors-gallery.co.uk/

Comment
Use of maps and diagrams in recording mining history
Tassie committee member, Glyn Roberts, has some thoughts on maps and illustrations that he’d like to share. Any comments from members on this matter will be welcomed.

It surprises and concerns me that, broadly speaking, mining historians (and historians in general) have not yet realised the value of specially prepared illustrations to enhance their texts. Before the advent of computers, historians were, no doubt, put off by the technical, financial and, perhaps, editorial problems of having special maps prepared, especially for use in papers. I purchased a book recently which gave a broad overview of mining in the context of world history but the author chose to restrict his illustrations to small scale maps of regions of the world, avoiding the necessity for his readers to pull out an atlas but contributing little to the detail of his text. Papers still being published
suggest that maps and diagrams do not yet figure largely. This is a pity.

Computer facilities now exist for drawing specialist maps that can provide readers with a unique insight into the areas discussed and diagrams such as sections can give a vivid insight into the vertical scale and complexity of some mining ventures. Superfluous details from the source base maps can be left off and a final product enhanced by highlighting those aspects that are important in the accompanying text. Of course, such aids to the text need careful formulation and mistakes avoided, as happened in one of my own maps where a reduction in size introduced an error in the quoted scale. Bar scales do not suffer from this problem.

I can recall attending a lecture about forty years ago in the Mines Department of South Australia, given by an American who was an expert in the preparation of illustrations. His main comment was concerned with lectures but applies equally to written material: ‘If your audience cannot read what is on the screen, do not insult them by projecting the image!’

We have got past the stage of producing ill prepared text but there is a long way to go in raising the standard of accompanying maps and diagrams.

Obituary
John Douglas Kerr 1942-2003
It is with great regret that we announce that John Kerr of Brisbane died suddenly on 26 November 2003. John had been a member of AMHA and attended a number of national and international mining history conferences. He made a distinguished contribution to Australian mining history with his book *Mount Morgan: Gold, Copper and Oil* (1982) and his articles on Queensland's mining railways.

There was far more to John's historical work than that. His first love was railway history, and he published extensively in that field, and was active in several railway historical associations. His published work ranged across local and regional histories and the Queensland sugar industry. He edited the *Journal of the Royal Historical Society of Queensland* for 18 years, raising it to a respected scholarly standard. John's background was not in the humanities disciplines like most historians; he brought a statistician's eye to history, and this showed in his meticulous factual accuracy and clarity of judgment.

John and his wife Ruth made a highly-respected team in Australian historical circles, cooperating in research and writing, and publishing their own and other historians' work. They have long been famous for their generosity to other researchers; always happy to share notes and findings from the formidable information resource they have compiled over several decades of scholarship.

John will be sadly missed. We extend our deepest sympathy to our member Dr Ruth Kerr.

*Peter Bell*

Snippets (or stocking filler!)
Street Names
Those who were at Broken Hill in July will remember John Kerr’s keen observations at the sessions and his contributions for the wellbeing of the Association at the AGM. John was also a frequent contributor to the Newsletter, the following being the last
correspondence received from him just a week or two before his death.

John informed that in 1938 the Brisbane City Council renamed several hundred streets to eliminate duplication of common street names such as William, Jane and Short Streets, and such inspiring appellations as First, Second and Third Streets. Those in the Western suburbs were named after pioneers, including several identified in the cryptic notes of the Council Minutes as being Queensland miners. These were: Baty Street, St Lucia; Couldery Street, Ashgrove; Horsburgh Street, Kelvin Grove; Townley Street, St Lucia; Dowling Street, Auchenflower; and Suthers Street, Gympie (particularly identified as a Gympie mining engineer). In addition, Willcocks Street at Mitchelton was named after the contractor G.C. Willcocks who had many mining investments. John lives near the aforementioned Baty Street, which as Peter Bell points out, could well be named after well-known mining identity Chester Beattie, who pronounced his surname as Baty.

So mining leaves its mark beyond the cessation of a mine.

**JOURNAL**

Following agonizing problems with the formatting, the *Journal of Australasian Mining History* has finally seen the light of day and has been circulated to all members. Work will start soon on the second volume and if you have something to offer then please feel free to make a submission. However, before actually sending in a disc or a document, please contact the Secretary/Editor for a copy of the style sheet, as a specific format has to be adopted to ensure uniformity. As a reminder, the publication has sections for refereed and non-refereed papers, the former being rigorously reviewed by referees. Please indicate your preference for refereed or un-refereed status in your submission.

**New Publications**


Mac Nicholl has taken the trouble to compile correspondence and photographs from Victorian miners, George and Ern Bottoms who like many of their compatriots had the wanderlust. Leaving Victoria at the beginning of the twentieth century, they headed to Kalgoorlie but as the West Australian boom tapered they returned to Victoria for a short while before setting their sights on the Gold Coast of Africa (present day Ghana) where they respectively took up management and contracting posts in the gold mines. Some of their prolific correspondence was retained by Victorian based elder brother, Martin Bottom, who systematically filed them away until they were re-discovered by the descendants. The collection might be of interest to Victorian historians in that some local mining personalities are mentioned, and might also be of interest to anyone studying gold mining on the West Coast of Africa. While there is only limited information on mining at Tarkwa and Abboson, the attitudes to the local population should be of interest to social historians, if only for the attitudes expressed on race and cultural differences a hundred years ago. What
can mildly be referred to as ‘racist sentiments’ are widely scattered throughout the correspondence from those less enlightened times.

Please send orders to:
Mr. Mac Nicoll, 110 McIlwraith Street, Princes Hill, Vic. 3054.


Enamoured with all things Cornish, SA member Keith Johns adds to his previous addressing of Jeff Buller’s Mining in Cornwall series that appeared in Newsletter Issue 22, No. 4 December 2001, and Issue 25, No. 2, June 2001. Volume Six covers a large area of country bordered by Launceston and Saltash in the east, Padstow in the northwest, and extending to the southwest of St. Austell.

Mining of copper and tin-ores was the most important industry in Cornwall for hundreds of years and over that time production waxed and waned as demand for the metals fluctuated. Though requiring large amounts of capital, many ventures yielded little or no financial return but they did prove positive in that the investment generated spilled into the local communities. The mines covered in Buller’s latest publication were of this nature in that they were small-scale enterprises that never made fortunes for their shareholders.

Contained within the pages of this book are images of many of the mines in the area and of the men that worked them. Mining, alas, is a bygone industry in the Duchy and the memory is fast fading. All that remains to remind us of past glories are empty engine houses, names on maps and photographs such as those liberally distributed through the pages of this publication.

To order, e-mail: sales@tempus_publishing.com

**JOURNAL ERRATUM**
Please note that in Ken McQueen’s article, ‘Difficulties with Refractory Ores: History of the Tolwong Mines, Shoalhaven Gorge, NSW’, p. 118, Table 1, column 1, the analysis for the S value should be 30.25 and the Total 99.52 and not 0.25 and 9.52.

**Telephone Number**
The University of WA telephone number has been changed – see address at head of this newsletter where 6488 replaces 9380.

**MEMBERSHIP FEES**
Your early attention to payment of fees would be greatly appreciated. As we always like to see new faces, perhaps you could also photocopy your membership form and pass on the copy to a friend, or perhaps leave it somewhere, such as at your local library or museum or history society, where it might be picked up by an interested party.

**MERRY CHRISTMAS & A HAPPY NEW YEAR TO ALL MEMBERS**
**MAY SANTA MAKE ALL YOUR WISHES COME TRUE**

MJD/Dec’03