



# AUSTRALASIAN MINING HISTORY ASSOCIATION

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### EDITORIAL

#### 'The Darwin Conference'

As a relief from the usual boring editorial, our 'Dear Leader', President, Ross Both, has offered his thoughts on the recent Darwin Conference:

The 21<sup>st</sup> Annual AMHA Conference was held in Darwin from 21-25 June and followed by a two-day excursion to Pine Creek. This was our first conference in the Northern Territory and a welcome escape from winter for those of us from southern climes. A good number took advantage of the opportunity to travel by rail to Darwin, enjoying two days of comfort and excellent service on the 'Ghan'.

Organisation of the conference was coordinated by our tireless Secretary, Mel Davies, supported by Territorians Bev Phelts and Janie Mason and input from ex-Territorian David Carment. Just over eighty registrants attended the conference.

Activities commenced with a Welcome Reception at the NT Archives Centre on the afternoon of Sunday 21 June, hosted by the Minister for Arts and Culture, the Hon. Gary Higgins. The Minister was unable to be present but we were warmly welcomed by the Director of the Archives, Phyllis Williams, and following the reception we were shown around the Centre and able to view a selection of documents of interest to mining historians.

Business sessions were held in the auditorium of the NT Museum and Art Gallery. As the venue was well beyond walking distance from the CBD, where most attendees were staying, a shuttle bus service was operated by our ever-faithful volunteers, Adrian Hutton and Greg Knapman. After a Welcome to Country by a representative of the Larrakia Nation, Peter Waggit, Director of Mining Compliance, NT Department of Mines and Energy, delivered a comprehensive keynote lecture on mining in the Northern Territory, past and present. General papers presented at the conference were of high quality and covered a particularly broad spectrum of topics, illustrating the diversity of mining history interests of our members. The recipients of the Student Travel Grants this year were Ella Stewart-Peters, of Flinders University, and Kal Ellwood, of James Cook University, Cairns. Their papers demonstrated the value of the grants in attracting contributions that help to keep us informed of current student thesis research at the universities.

A departure from the usual format of our conferences was that, in the absence of mine sites in the vicinity of Darwin, there were no short excursions during the conference itself. This lack was compensated to some extent by a visit to the Oil and Gas Laboratories at Charles Darwin University.

The conference dinner was held at the Novotel, a fine choice of venue with excellent catering. A highlight of the evening was a surprise musical duet presented by that well-known troubadour Mel Davies and a newcomer to the world of vaudeville, Barry McGowan. Rapturous applause ensured we were treated to an encore.

The conference closed with the traditional presentation of awards. The Coathanger Award was presented to our valiant Secretary for his fortitude in continuing with his duties throughout the conference despite tripping on the leg of his bed on his first night in Darwin, damaging his knee and nose, and cracking a rib.

The Brake Shoe Award was (once again) made to Barry McGowan, on this occasion for revealing the above-mentioned musical talents at the conference dinner. On the final evening, a cruise on Darwin Harbour gave us the opportunity to pass a relaxing few hours on the water, enjoying the food and drink in good company.

The first day of the post-conference excursion involved an early delay due to a mechanical problem with one of the buses (fortuitously outside a brand new MacDonald's) but we were still able to make our scheduled stop for refreshments at the Adelaide River Railway Station. We then moved on to the Goldfields Loop with lunch at the colourful Grove Hill pub and stops at the small Burrundie Cemetery and late 19<sup>th</sup> century Chinese ovens. After a night in Pine Creek, the morning was devoted to inspection of the railway station and mining machinery in Miners Park. After lunch more bus trouble resulted in a very slow return to Darwin.

### **FORTHCOMING EVENTS**

#### **AMHA 22nd Annual Conference, Cobar, NSW, 2016 (16-21 October)**

Note the dates on your diary and keep your eye on our Association webpages for information. One happy hint is to book your accommodation well in advance.

You might also want to stay on a few days to enjoy the delights of the local Miner's Ghost Festival.

#### **International Mining History Conference, Linares, Spain**

Registrations are now open for the 11<sup>th</sup> International Mining History Congress to be held in Linares, Spain between the 6<sup>th</sup> and 11<sup>th</sup> September 2016.

The programme should appeal to all members, as there is a smorgasbord of activities that include convivial gatherings, trips to various mining venues, visits to museums, tapas events and excursions, as well, of course, as the more serious business sessions. Get in early to take advantage of 'Early Bird' registration fees. A happy hint: wait until the organisers have completed arrangements with 'Pay Pal' to transfer your fees (they don't have credit card arrangements) – this will prove much cheaper than electronic transfers via your friendly banker.

NOTE: The conference web site also provides information on travel and accommodation. For full registration and other details see the web page at: <http://www.mining2016linares.com/?lang=en>

### **PUBLICATIONS**

**John P. Hamilton, *Adjudication on the Gold Fields in New South Wales and Victoria in the 19<sup>th</sup> Century*, The Federation Press, Annandale, NSW, ISBN 978 1 76002 030 9, HB September 2015. Pre-publication price \$150.**

Member John Hamilton has written this much-anticipated book that is based on his 2014 PhD, awarded by Macquarie University. In his research, John made good use of his legal expertise as a Judge in the Equity Division of the NSW Supreme Court to look at the inception of adjudication systems on the goldfields in NSW and Victoria in the 19<sup>th</sup> century. This is a virtually untouched field and covers the system adopted to resolve disputes among gold miners. The book concentrates on the period 1851 to 1875 when the adjudication systems were at their most active. In both NSW and

Victoria the first adjudicative system was that of appointment of Gold Field Commissioners who were appointed to issue licences and to settle disputes. While successful in NSW, the Commissioners operated in Victoria only until 1855 after being discredited by the Eureka Stockade uprising, to be replaced by Wardens and Local Courts. In NSW, however, the Commissioners operated until 1874, after which they too were replaced by Wardens' Courts.

The publication should present a completely new perspective to what went on in the adjudication system and should thus be of particular interest to our members. To obtain a copy of the book, orders can be made online at [www.federationpress.com.au](http://www.federationpress.com.au)

**Simon Cubit & Nic Haygarth, *Mountain Men: Stories from the Tasmanian High Country*, Forty South Publishing, Lindisfarne, Tas, 2015. ISBN 9780994252791 – forthcoming**

Nic Haygarth appears to be putting in a lot of overtime, as this is his 2<sup>nd</sup> book for 2015, and follows up a couple of publications in 2014. He's also hoping to have yet another out by Christmas! This new publication, written in conjunction with Simon Cubitt contains the biographies of 10 Tasmanian bushmen from the period 1870-1990. Included are two mineral prospectors, Paddy Harnett, discoverer of the wolfram mine near Mount Oakleigh; and William Aylett, co-discoverer of the North Mount Farrell silver-lead mine. Both were also osmiridium miners on the west coast and at Adamsfield in south-western Tasmania. To purchase, and to make Nic happy, click on the following link:

<http://www.simoncubit.com.au/content/shop>

## **BITS AND PIECES**

### ***Witwatersrand Gold***

Are you aware that in 1886 (some sources say 1885) the fabulously rich Witwatersrand gold mining field in South Africa was discovered by an Australian with experience of gold mining in this country, who recognised the rock he was

digging up to build a house at Langlaagte farm, as coming from a gold-bearing formation? This piece of historical detail was emailed to me by Eddie Moss Johannesburg, who is the son of Ted Moss, the man behind the movement to renovate and update a memorial park to the man who discovered the fabulous main reef. Today the **George Harrison Park**, complete with the 10-stamp battery that was erected by Sir George Robinson at the site in September 1886, sits at the suburb of Langlaagte as a South African national monument.

Unfortunately, little appears to be known about George Robinson, other than a statement in *Wikipedia* that says he sold his claim for 10 pounds (other sources say a few hundred pounds), and then disappeared

However, the discovery by Ozzie, George Harrison is not without its critics, because some sources point to Jan Gerritze Bantjes as the first to discover gold, with the explanation that the rival claims are associated with British/Dutch animosity linked to the Anglo Boer War, with the verdict as to the discoverer going to the winning side! Further investigation shows that Bantjes discovered gold in June 1884, followed a few months later by the Struben brothers. However, these were but minor reefs and thus the claim that it was George Harrison who should be remembered, as it was he who found the main reef that set the scene for the greatest goldrush in history. See the following sites for additional information: [http://info.goldavenue.com/Info\\_site/in\\_a\\_rts/in\\_civ/in\\_rush\\_safrica.html](http://info.goldavenue.com/Info_site/in_a_rts/in_civ/in_rush_safrica.html)

<http://www.sahistory.org.za/places/johannesburg>

[https://en.wikipedia.org/wiki/Witwatersrand\\_Gold\\_Rush](https://en.wikipedia.org/wiki/Witwatersrand_Gold_Rush)

### **Northern Territory News**

Ruth Kerr has kindly forwarded the following pieces of information:

a) The MacDonnell Range Reef Mine self-guided walk at Arltunga has been closed indefinitely because of a rock fall. The area is on the Binns Track, which is

accessible all year round. Northern Territory Worksafe will inspect the mine on behalf of The Parks and Wildlife Commission to assess the mine's safety and accessibility.

(Source: *Northern Territory News* 27 July 2015, p. 9)

b) The Battery Hill Mining Centre and tours at Tennant Creek were re-opened by the Chief Minister Adam Giles MP on 10 July 2015. The Northern Territory government provided an Industry Development Grant to complete renovations and improvements to revitalize the centre. The displays include an underground mine shaft and original gold battery and the McLaughlin Minerals Collection. The underground tour runs twice a day on weekdays and once a day on the weekend. The Corrections Barkly Work Camp provides three low risk prisoners to do maintenance work five days a week.

(Source: *Tennant and District Times* 17 July 2015 p. 5, including photograph)

## **INFORMATION WANTED & REPLIES TO PAST QUERIES**

### **Disintegrator Inquiry**

Member Keith Preston adds some additional information to the answers supplied in the previous newsletter: this should make you all sleep more contentedly:

Further to Volker Hahl's query concerning a 'disintegrator' and Peter Benkendorff's description of 20th century hammer mills, historical sources relating to the introduction into Tasmania of early 19th century forms of rock crushers are presented below. The mainland states also seem to have followed a similar 'evolutionary path.

### **Rock crusher or disintegrator? – Notes on early Tasmanian examples:**

Contact with Volker Hahl indicates that his enquiry was stimulated by a reference to a 'disintegrator' supplied by 'Hope of Yarra Glen, Melbourne' for the Storey's Creek mine in Tasmania (Ref: *Launceston Examiner*, 30 July 1886, p. 4) Arthur Hope's Yarrabank Engineering Works

had developed the 'patent disintegrator' by mid-1884 which comprised 'two cones, having serrations, or teeth, projecting inside and outside from their surfaces, and terminating at their lower parts to plain faces, which revolve, and are adjustable to any degree of fineness by a regulating screw, having an elastic spring to prevent breakages'. (*Bendigo Advertiser*, 4 June 1884, p. 3; *Tasmanian News* 7 February 1884 p. 4) This description suggests an early design of cone (or gyratory) crusher that was developed further in the early-1900s in the UK by Hadfield's Steel Foundry Co. A Hadfield cone crusher was installed at the Anchor tin mine in north-eastern Tasmania in 1904. (TAHO MININD1904-4, December 1904, p. 10) Designs continued to evolve during the 20<sup>th</sup> century and models remain in production today, competing with jaw or impact crushers.

A further type of 'disintegrator' was developed in the early-1870s by Thomas Carr in the UK, comprising 'two solid steel discs, about 4in [probable typo for 40in] in diameter, running on the same shaft. These are studded around the entire circle with four [concentric] rows of round steel bars, a foot long by 1½in thick ... the discs revolving at from 400 to 600 revolutions per minute' (*Bendigo Advertiser*, 29 January 1876, p. 2; *Daily Telegraph*, 15 June 1892, p. 3) This describes an early form of hammer or impact mill, later developments of which were outlined by Peter Benkendorff in the June 2015 Newsletter. A number of 'Carr's disintegrators' were imported into Tasmania (and other mainland states) during the 1890s, one used at the All Nations mine at Moina where components remain on site (see MRT website for an illustration, Parry Kostoglou report ASR 2000-03, October 2000, p. 19) It appears that early terms for a rock crusher were generally restricted to 'stone breaker' when describing the widely distributed jaw crusher or 'disintegrator' for other designs, the terms jaw, hammer and cone-crusher being introduced during the 20<sup>th</sup> century.

## Brunel Kay

Member and President of the Goldfields Historical Society, Scott Wilson, forwarded a couple photographs of a medal presented to Brunel Kay in 1900. These were forwarded to him by Peter Chatfield who is researching the background of his Great Uncle who is known to have been a consulting engineer in Kalgoorlie at the latter end of the 19<sup>th</sup> century. It is believed he worked at the Kalgoorlie Goldmines Ltd (later GMK), and possibly at the Sons of Gwalia. He also worked in Melbourne as an Engineer.



If you have come across Brunel Kay and can shed light on his ventures, and on the medal, Peter Chatfield would be

delighted to hear from you at:

<mailto:havachat818@gmail.com>

## CONGRATULATIONS

Congratulations to our esteemed member, **Prof. David Branagan**, who was recently awarded the 2015 Sue Taylor Friedman Medal by the Geological Society of London for his contributions to the history of geology. The learned society has over 9,000 Fellows as members, that number illustrating the prestige associated with the medal that was first awarded in 1987. The Geological Society itself has been in existence since 13 October 1807 and received its Royal Charter on 23<sup>rd</sup> April 1825.

## MEMBERSHIP RENEWALS

There are still a number of people who haven't yet renewed their memberships for 2015. With the next volume of the journal about to be printed, please update your membership so that you can remain on the list to receive the 13<sup>th</sup> volume. To join, click on the following 'Register Now' address or access on our webpage:

<https://www.registernow.com.au/secure/Register.aspx?ID=15167>

While we still accept paper registration forms and payments by cheque, it will ease the burden of administration on the Secretary/Treasurer if you pay on-line. **Overseas members** in particular will find this method both more convenient and much cheaper, as the cost by the bank for converting an overseas cheque has recently **been raised to \$15**.

## ANNUAL GENERAL MEETING

**Newsletters** – Please note that following a motion that was passed at the AGM, **newsletters will no longer be sent via ordinary mail to those with an email address**. This is to combat costs and the administrative burden of printing, and the licking and addressing of envelopes. Postage costs are also expected to rise by about 30 per cent in October for domestic mailings – the costs for overseas postage has not yet been revealed but is expected to rise substantially.

**Communication** - Also on the books is a move to improve communication among members by setting up a page where interaction can take place on the webpage or through Facebook. This should appeal to all thumb twiddlers.

**Honorary Life Memberships** – The following changes to the constitution to allow for the presentation of Hon. Life memberships were passed:

*5.1 There shall be five categories of membership, Full, Family, Full Time Student, Institution, and Honorary Life.*

*5.2 The award of Honorary Life Membership may be made to an existing member on the basis of a long period of outstanding service to the Association. Recommendations for such an award shall be made by the Advisory Committee and confirmed at an Annual General Meeting.*

**Fees** – It was agreed that these remain the same for 2016, viz: Ordinary members \$35; Family \$45; Institutions and Societies \$50; student members \$15; Overseas members an additional \$10 to cover postage costs.

**Conferences** – With the 2016 conference already scheduled for October 2016, it was a welcome surprise to see a number of offers from people and organisations to accommodate future meetings. With the policy of giving two year's notice, to allow adequate time for details to be finalized, it was agreed that the 2017 conference should take place in the Traralgon area of Victoria.

It was agreed that Johanna Sykes should organise a local committee and

that she continue negotiations with the Federation University to accommodate the conference.

### **Election of Officers and Committees:**

The following members were elected to serve for the year 2015-16:

**Patron:** Prof. Geoffrey Blainey, AC

**President:** Dr Ross Both.

**Vice President:** Prof. Ken McQueen

**Secretary/Treasurer:** Mel Davies, OAM

**Auditor:** Dr Harjinder Singh, FCPA, CPA.

### **Committee:**

**ACT** Aert Driessen &

Dr. Barry McGowan.

**SA** Dr Peter Bell & Dr Brian Hill

**NSW** Prof Adrian Hutton & Greg Knapman

**NT** Prof. David Carment and Dr Bev Phelts

**QLD** Dr. Ruth Kerr, OAM & Dr. Jan Wegner

**VIC** Nick Williams and Dr Mike Williams.

**TAS** Greg Dickens & Dr Nic Haygarth

**WA** Wendy Carter and Howard Tew

**NZ** Dr Lloyd Carpenter & Dr Philip Hart

**Journal Editor,** Mel Davies

**Assistant Journal Editor:** Nick Williams

**Webmaster:** Stephen Imrie

### **JOURNAL**

Volume 13 will be going to the printers any day now. Once more there are a variety of mining related topics on offer that should make for good reading. We have also received a few offers for 2016, and if you are interested in making an offering, the earlier you do so, the more time we have for preparation. So, keep them coming in, remembering that we have a two-section (refereed and un-refereed) coverage in the publication.