

## **‘A social disease with medical aspects’:<sup>1</sup> Miners’ phthisis and the politics of occupational health in Bendigo, 1880s – 1910**

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*‘Gold made Victoria, Victoria made Australia, and Australian gold made the present British Empire’.*

**S**o wrote George Meudell, native of Bendigo, who, with his fellow Bendigonians, created a tradition which has long held pride of place in Bendigo folklore.<sup>2</sup> However, belying the wealth from gold was the human misery associated with the mining industry – the sudden, devastating accidents and the ongoing prevalence of the miners’ phthisis epidemic. This paper examines how labour and capital in Bendigo responded to this epidemic which was arguably one of Australia’s worst industrial disasters.<sup>3</sup> Prevention, or at least amelioration, of the disease would have been possible with the institution of safety measures, especially improved ventilation, in the mines. Whilst responsibility for the disease was consistently slated to the miners themselves – due, it was said, to their obstinate disregard for safety measures, idleness or recklessness - we argue here that the fundamental causes may be ascribed to social attitudes and behaviours and lay primarily at the door of three groups: politicians and policy makers who lay down formal regulated standards and, by extension, the mine inspectors responsible for the enforcement and monitoring of those standards, the mine owners to whom fell the financial responsibility and the Amalgamated Miners’ Association (AMA) which purportedly represented the interests of the miners. In fact, early interest in the disease was mainly stimulated by the friendly societies and the medical profession who were inundated with the financial and social costs of treating sick miners and supporting them and their families. We also argue that the practice of tributing in Bendigo was not successful, tended to impoverish those engaged in it and led to significant divisions within the Bendigo Branch of the AMA, diminishing its ability to deal with issues relating to the miners’ phthisis epidemic.

The two main types of mining prevalent in Victoria, after the decline of shallow alluvial mining in the late 1860s, were deep-lead alluvial mining and quartz reefing.<sup>4</sup> In Bendigo, the deeper the mines became, the more expensive and hazardous the endeavor. Histories of successful mine owners, examining the geological distribution of the reefs

and analyzing the technology used to extract gold, are abundant.<sup>5</sup> Less available are the voices of the miners who bore the brunt of the risk attached to their labour in the mines, - the rapid and well-publicized effect of accidents or the less well-recognised, but considerably more extensively suffered, 'miners' phthisis'.

Bendigo's gold was securely deposited in quartz reefs which, when mined, produced clouds of silica dust. With the advent of deeper underground mining, pneumatic drilling, poor ventilation and poor dust control in the 1870s, the detrimental effects of inhaling silica were significantly increased and were made manifest in miners years later. Charles Dicken's old Irishwoman's views on lead mining may be said to also reflect the nature of the prevalence of disease in Bendigo when she said: 'Some of them gets ... poisoned soon, and some of them gets ... poisoned later: and some, but not many, niver'.<sup>6</sup>

Miners' Phthisis is a general term for silicosis, tuberculosis or a combination of both. Bendigo had the highest incidence of pneumoconiosis (the term which covers all lung disease caused by dust or fibres, including silicosis), of all Australian communities between the 1870s to early nineteen hundreds. Some idea of the high incidence was provided in the Minutes of Evidence given to the Queensland Parliamentary Inquiry into miners' phthisis in 1911,<sup>7</sup> which stated that between 1905 and 1906 the rate of death from lung diseases per 10,000 living miners in Bendigo was 191.6 in comparison to Queensland with 42.2 and Western Australia with 53.9.<sup>8</sup> Undoubtedly aspects of the statistical evidence provided by the Royal Commission in Queensland should be treated with caution and could therefore be problematic. This was due to the slow development of the disease, which means that symptoms were not manifest until years later (and therefore not recorded), and because notifiable diseases such as tuberculosis and phthisis might have led to double-counting.<sup>9</sup>

Concern about the disease emanated from the friendly societies and a few local doctors who were snowed under with the financial and social costs of treating sick miners and supporting them and their families. As early as 1881 *The Eaglehawk Leader* reported that 'the friendly societies of the Bendigo district are becoming alarmed at the excessive demands made upon the funds of the lodges for sick pay by those members who are engaged in mining pursuits',<sup>10</sup> a point discussed in detail by Kippen and Collins when writing on the role of the Bendigo medical practitioners.<sup>11</sup> Following agitation by the Friendly Societies and the local medical profession, publicity to garner support for

improved conditions in the mines was generated through the local press, the *Bendigo Advertiser* and the *Bendigo Independent*. These newspaper reports, re-published in a collated format by the *Bendigo Advertiser* in 1903,<sup>12</sup> identify the political struggle between workers, the local branch of the AMA, mine managers, investors and mine owners.

Of particular interest to this study is the apparent impotence/lack of support of the Bendigo Branch of the Amalgamated Miners' Association (AMA) in the face of stiff opposition from powerful mine owners. It is also important to note that proposed reforms relating to occupational health were most readily accepted by the Bendigo public during the late nineteenth and early twentieth centuries when gold production was high in Bendigo and when it was felt that the mining industry could sustain such changes. By 1910 when gold production was slumping, interest in occupational health became secondary to sustaining the industry, while other initiatives such as attempts to obtain a sanatorium for the treatment of those miners suffering from disease were stifled.

### **The Disease**

Authors such as George Rosen<sup>13</sup>, Brian Kennedy<sup>14</sup>, David Rosner and David Markowitz<sup>15</sup>, provide a useful international context for understanding the history of the relationship between mining and disease in the Bendigo context at the turn of the nineteenth-century. Of particular relevance is Rosen's discussion of the incidence of miners' phthisis in Cornwall. As with other mining centres, for example, the Transvaal and Broken Hill,<sup>16</sup> Bendigo had a high proportion of Cornish miners. Australian labour historian, Charles Fahey has calculated that of the English fathers resident in Bendigo in 1881, 46 percent were born in Cornwall. He adds 'as alluvial mining was replaced at Bendigo by quartz mining, Cornish experience in hard rock mining became essential to the economy of Bendigo'.<sup>17</sup>

The predominantly Cornish mining community in Bendigo was regarded as hardworking and thrifty whilst at the same time repeatedly portrayed as haphazard and careless. They were thus seen as the perpetrators of the afflictions which befell them. Miners' phthisis had been well known in Cornwall for centuries as an outcome of mining, and it was generally accepted as part of local knowledge. Official recognition, that inhaling dust was the 'greater evil' of the hazards of mining came with reports such

as those of Haldane, Martin and Thomas in 1905.<sup>18</sup> Closely following on the heels of a number of other international reports<sup>19</sup> was the ground breaking report by Dr Walter Summons, published as two separate documents in 1906 and 1907<sup>20</sup> providing Bendigonians with incontrovertible evidence that fine quartz dust from mining with rock drills, when inhaled, caused extensive damage to the lungs. This report was a culmination of work and action taken by various local doctors such as Cowen, Eadie, Burke and Gaffney over the preceding decade.<sup>21</sup>

Whilst silicosis alone was not recognized to be sufficient cause of serious illness, Summons, and other medical men, emphasized the link of silicosis with tuberculosis. Summons found that 47 percent of miners with silicosis showed tuberculosis in their sputum and therefore argued that 'all miners dying of lung complaint die of tuberculosis'.<sup>22</sup> Kerr divides miners' complaint into three types: Miners' Phthisis (tuberculosis); Miners' Phthisis (Silicotic); Uncomplicated Silicosis. Summons remarked on the variety of names medical men used to describe the condition on death certificates – adding even greater difficulty to the compilation of accurate statistical evidence in order to establish frequency of occurrence and the exact nature of the disease.<sup>23</sup>

An academic discussion of the difficulties of the nosological classification of the term miners' phthisis cannot convey the impact of silicosis on the men themselves or on the women who cared for them. Absent from the literature are the voices of the miners themselves. A contemporary observer of the disease, Fletcher Jones, whose autobiography includes his early years in Bendigo, paints an indelible picture of miners' phthisis in Bendigo in 1908, wrote:

Between our home and the Golden Square State School at least every third miner's cottage had a cotton sheet fixed between verandah posts, hiding a poor man with 'miner's complaint', seemingly abandoned to his fate. ... As children, playing on the Golden Square footpaths, we could hear the men coughing up their lungs.<sup>24</sup>

A rare contemporary account relating specifically to Bendigo miners are the Pope Diaries. These diaries deal with the day to day life of Bendigo miners Richard and Joe Pope and their families. Richard's diary entries graphically describe the struggle of the family to look after Joe during his illness with miners' phthisis, which he begins to recount on 9 January 1873: 'Joe my brother taking very ill, and obliged to have medical advice'. One year later Richard writes that Joe's wife was delivered of a boy, shortly

thereafter he mentions Joe's condition: 'My brother Joe getting worse, in at Homeopathic doctors today and got some medicines for him'. On 16 February 1874, 'Joe brought up much blood', and on 8 March 1874 he was much worse and again bringing up 'much blood'. On 28 March 1874 'Joe's baby died and himself getting worse'. On April 16, 1874, 'Joe brought up a good sized piece of his lung and a big lot of blood' and a month later, 'Joe's wife cleared from him and he spent the night all alone'. The next day 'Joe sent after his wife she being stopping with visits [to] Mrs Woolcock [her sister] who did all in her power to prevent her from [returning home]. But failing in that, she accompanied her to Joe's house and again tried her best to induce her to leave him and would have succeeded had I not been called out of bed to take a part in the debate after giving Mrs Woolcock some plain talk I got rid of her and prevailed on Josephine to remain with her husband.' Two days later Josephine left 'coolly wishing him [Joe] good-bye [and] advised him to go to the hospital'. Joe, now destitute and extremely ill, was brought to live with Richard and his wife. Richard was in the fortunate position of possessing a spare room or annex where he could place his brother. There he remained, cared for by Richard and his wife, until he died in July 1874.<sup>25</sup>

This attenuated description merely hints at the effect of Joe's disease on his immediate and wider family. It also partially reveals the nature of medical services available to Joe and his wife Josephine. The latter was obviously severely traumatized by his illness and the recent loss of their child. Public hospitals (or more correctly, charitable institutions) were only for the indigent and so Joe was ineligible to attend the Bendigo Hospital. Josephine may have thought that if she left, Joe may have been considered to be 'destitute' and therefore eligible for care therein but, for whatever reason, dealing with his illness was simply beyond her. Her perceived lack of loyalty was harshly dealt with by Richard who sold off their house and Joe's remaining possessions, keeping whatever meager income was gained, and attempted to deny her access to the mourning coach. Whilst Joe was a member of a Friendly Society and was seen by the Friendly Society doctor Harry Leigh Atkinson, he did not enter hospital but remained with his brother and his wife during the final periods of his illness. This was at some personal risk to Richard's own family, due to the contagious nature of the disease, and also considerable personal expense as Richard reports having to miss shifts to care for his brother.<sup>26</sup>

### **The policy and legislation**

Contemporary discussion about miners' phthisis invariably concerned the need for government intervention: to improve ventilation in the mines and to ensure that water was used to settle the quartz dust. Most local mine owners would not improve conditions in the mines without legal stimulus, as shown by the decrease in the death and accident rates in mining accidents after legislation was enacted to tighten control over the safety of mining equipment but, even then, enforcement was essential if mine-owners were to comply with the life-saving legislation.

The first discussions in Parliament about occupational health and safety related to prevention of accidents, which led to the 1865 Mining Statute and the 1873 Regulation of Mines Act. By the late 1800s, having successfully decreased the accident incidence, the State eventually turned its attention to sickness and the supply of good air to the miners, by then recognized as necessary to good health. The role of the efficient, but dust-producing pneumatic drill in the exacerbation of miners' phthisis was recognized but its importance to profits meant that there was little done about it. Ventilation in mines to remove dust, on the other hand, had considerable room for improvement and it was here that legislation was directed. The earliest official recognition of the importance of ventilation appears to have occurred in 1887 when a Ventilation of Mines Board was established, and a report issued in 1888. This report also made the important connection between the use of a water spray to lay the dust, and miners' phthisis.<sup>27</sup> The Mines Act was passed in 1890, helped on its way by a report from the Bendigo Health Officer, Dr Eadie documenting the extent of the disaster in Bendigo. This Act provided that not less than 100 cubic feet per minute of air should be available for each man and boy employed underground. Mines inspectors had been appointed with the power to enter mines for the purposes of investigating and monitoring compliance with the law since the 1860s, but they had no prosecutory power – this was the responsibility of the Minister. Not surprisingly, inaction continued and Mr Hamilton, MLA made the point in Parliament that he had received bitter complaints from the miners and that 'he was not surprised because this was a matter of life and death to them'.<sup>28</sup>

The Ventilation of Mines Board appears to have made little progress until it finally submitted a report to Parliament in 1901. Mr Peter Phillips, the secretary of the Bendigo Branch of the Amalgamated Miners' Association, in suggesting an increase in

the power of the Mine Inspector, who could then prosecute offending mine owners, was scathing in his condemnation:

I condemn the Ventilation Board tooth and nail. I have never seen a greater botch of a board in all my life, and I consider that the result of the board has been to cause the driving of nails into the coffins of hundreds of men more than would otherwise have been the case. The board cost £1900, whereas proof that the Act was quite sufficient if properly administered was given in the Princess Dagmar case, which only cost £34.<sup>29</sup>

The *Bendigo Advertiser*, in concluding a discussion about the lack of power of the Mine Inspectors, wrote that a clause in the 1890 Mines Act relating to standards of ventilation in mines appeared excellent but was hampered by a *supplementary* statement which rendered it useless.

It [the clause] plainly sets forth at the outset that an adequate supply of air (it does not say pure air) shall be produced for every man working in every mine; but it ends by merely permitting the district inspector of mines to make recommendations to the Minister of Mines in the matter of compelling companies to connect by drives or winzes, in order that the requisite amount of ventilation may be produced.

***This provision deadens the utility of the clause. It causes the delay in the production of the required ventilation, and it constitutes a loophole to a company which does not recognize that good ventilation is a factor in the economical working of its mine, to evade its responsibility by buttonholing a Minister who is not above political influence. It is not the Minister who should have the power from his distant office to say what should be done to properly ventilate a mine; it should be the inspector*** [Original emphasis].<sup>30</sup>

Others claimed that the Mine Inspector already had the power to prosecute, but had failed to do so – for example, Mr Hay Kirkwood, MLA, argued: ‘The inspectors of mines do not require more power, as they already have full power in all these matters’.<sup>31</sup>

It is a matter for conjecture whether the mine inspector would, at that stage, have asserted the power Mr Kirkwood claimed he had. Mining historian, P.G. Macumber argues that the Bendigo Mine Inspector was ineffectual, ‘mouthing such statements as ventilation in the mines being as good as you could expect’.<sup>32</sup> The number of mine inspectors assigned to cover the field was not high, and often only rudimentary inspections of mines occurred.

Following the *Advertiser* campaign in 1904, further legislation was enacted which required that 70 cubic feet of pure air per minute for each workman be provided. The Act also addressed the problems of excessive dust in mines: the Amended Mines

Act stated that 'no hole shall be drilled underground unless a jet spray of water shall be directed ... to prevent the dust'.<sup>33</sup> Macumber argues that 'it was the first clause of its kind in mining legislation and was perhaps the most important step in the battle against phthisis.'<sup>34</sup> Legislation to give the mine inspector more power was also enacted in 1904, after meeting concerted resistance from mine owners, in spite of the opinion of the then Minister for Mines, Mr. Macleod, that 'it would be unwise to put that power in the hands of any one man'.<sup>35</sup>

A further amendment to the Mines Act in 1907 gave the chief mining inspector power to order improved ventilation and to determine hours worked by miners in poor conditions. He could also order connections to be made between mines.<sup>36</sup>

Worker's Compensation for miners' phthisis was debated in the Legislative Assembly in 1908. David Smith, member for Bendigo West, argued that many of the complaints/illnesses included in the legislation were not prevalent in Victoria, and those that were prevalent were not included for compensation, namely miners' phthisis.<sup>37</sup> Smith added:

Once you fix the responsibility of the mine owner for the conservation of health of those who are in his employ, he would take steps to prevent the disease as far as possible, and there is no doubt that 99 cases out of 100 miners' complaint is caused by want of proper means of ventilation in mines. We should make mine-owners responsible for miners' complaint by bringing it under the heading of diseases mentioned in this Bill. I admit that it is a serious matter, because of the prevalence of the disease, but, at the same time, there is no earthly reason why men's lungs should be allowed to rot simply because mine-owners will not take steps to bring about conditions that will suppress the disease. It, of all diseases, should be classified in the 3<sup>rd</sup> schedule as a disease to come under the operation of this measure. The proposition of the Hon. Member for Fitzroy deserves every consideration. He pointed out that in various industries methods had been introduced that increase the risk of employees to disablement through blood poisoning. The inclusion of his proposal will certainly cover even miners' complaint, and if it is included it will make employers very careful as to the methods they introduce in their establishments. I shall certainly support the amendment.<sup>38</sup>

The amendment was lost by 16 to 25.

It took until 1936 with the passing of the Miners' Phthisis Act for the medical, safety and compensation arrangements to significantly curtail the epidemic in Victoria. In comparison, legislation was enacted in NSW in 1920 and Western Australia in 1923.

These events set the scene for the previously discussed reports by Dr Walter Summons which have been described as a watershed in the fight against mining disease.



These were powerful documents, included in them were statistical tables and graphs providing a complete categorization of the mortality rates for miners in comparison with death rates from other causes (male and female) in Bendigo and Victoria. The Summons reports generated immense interest, locally, nationally and internationally and impacted on legislation.

Although Macumber says that the struggle ended with the Summons reports,<sup>39</sup> and it is true that by 1907 conditions had improved markedly, there was very little done to improve ventilation after 1910. This was made evident by a well publicised visit by Dr W.D. Robson to Bendigo in 1949. Dr Robson representing McIntyre Research Ltd. of Ontario, Canada, arrived on 29 May, being brought out by the State Government as an expert on silicosis. McIntyre Research had developed aluminium treatment, which required miners to submit to inhalation of air containing aluminium (McIntyre) powder for ten minutes per shift as a preventative measure against silicosis. The treatment had commenced in Ontario in 1943 and was apparently extremely successful, continuing in use until 1979. Dr. Robson toured the Bendigo mines and declared that they would be unlikely to gain a licence to use McIntyre powder as the ventilation program was inadequate and that inspection and dust counts were not made frequently enough. The visit generated huge controversy with wide coverage in *The Bendigo Advertiser* in the form of articles, editorial comment and letters to the editor. Aluminium treatment was never introduced into the Bendigo mines but Dr Robson's visit highlighted the poor working conditions still present in 1949.<sup>40</sup>

### **Mine owners**

Macumber refers to an article in the *Australian Mining Standard* which severely criticized the Bendigo Mine Owners Association,<sup>41</sup> referring to it as 'this obstructive association', and stating:

If the Bendigo Mine Owners Association is to be judged by its attitude towards the Bill to amend the Mining Act, now before the Victorian Parliament, it cannot be commended for its perspicacity or its breadth of grasp upon matters vital to its own interests. It has had the measure under discussion and it has failed to advance a single suggestion of the slightest value. Its recommendations are either puerilities, or are of a character calculated to create a wrong impression as to what mining investors desire, and to obstruct the objects which the Minister has in view.... Representations so contrary to public policy and private welfare, seriously detract from whatever weight the views of the Association might

otherwise have possessed by stamping them as the opinions of reactionaries and obstructionists.<sup>42</sup>

Not surprisingly, mine-owners tended to support the view that the health of miners was primarily the business of the miners themselves – they should guard against unhygienic practices both at work and at home and should insure themselves appropriately against the possibility of illness. A fairly typical response comes from an article discussing the 1904 Mines Bill which said that it may have been more useful to induce the miners to wear respirators and to improve their sanitary habits whilst working underground than to provide adequate ventilation. 'What is needed is a clearer perception on the part of the miners of their duty'.<sup>43</sup>

The most well-known mine owner in the area was George Lansell. After the 1879 miners' strike in Bendigo, in which he sought to reduce the wages of miners, George Lansell lost much of the popular support he had previously enjoyed. Whilst he agreed that men could not work without air, his response to suggestions for increased legislation to protect miners was negative and belligerent:<sup>44</sup>

What is the use of these laws? ... For instance, what is the use of the provision of the Mines Act to the effect that all men should be lashed to the rope when descending in a bucket? It is never carried out. As soon as the manager's back is turned, the men will have it their own way.<sup>45</sup>

Lansell's views on the evils of too many laws which could have impeded his own expansionist programs are evident in his views on protectionism, and in his total disregard for sanitary regulations in his early career as a candle maker. Similarly, the attitude to miners' health lacked 'sentiment' – it was necessary to provide adequate conditions so as not to impede their productivity.<sup>46</sup>

It is difficult to get past the 'legend' of George Lansell in this discussion. He is generally portrayed as the only person who had faith in the Bendigo mines and continued to invest in and work them despite significant adversity. His munificence in donations to miners (Christmas boxes), to public charities such as the hospital and benevolent asylum, public monuments (such as the Alexandra Fountain) are always compared favourably with the lack of public spiritedness of other wealthy Bendigo mine owners such as John Boyd Watson and B. Lazarus who eschewed living in Bendigo, preferring Melbourne. Lansell was 'proudly a Bendigonian' living in splendour but amid the roar of the stampers overshadowed by the huge poppet heads of his mines. After his wife died he left Bendigo for England where he remarried, but returned after

the Bendigo community, concerned with the downturn in gold production, raised a petition of 2,628 signatures urging him to return. On his death in 1906, the same year as the first Summons report was published, he bequeathed all persons employed in his mines with a parcel of shares and set aside £70,000 as a trust fund to help widows and orphaned children of Bendigo miners. A critical account of the arbitrary use of power by Lansell which reflects his unpredictability is provided by Australian historian, Tom Roper. Lansell's much touted munificence to local charities was subject to certain conditions, and could be withdrawn – as occurred in 1879 when Lansell made it conditional that his gift of £500 to the Benevolent Asylum be placed in a bank other than the one traditionally used by that institution. When the Benevolent Asylum Board refused, he donated the amount to the Bendigo Hospital instead.<sup>47</sup>

A grey area, which complicated legislation about who was responsible for miners' health in relation to miners' phthisis and other related complaints, was linked to the practice of tributing which had its origin in the Cornish tin mines where it was worked differently and quite successfully. Tributers tended to compromise safety because of their eagerness to extract gold as quickly as possible. After a series of complaints about the impoverishment of tributers in Bendigo and elsewhere, an inquiry was conducted, *The Select Committee upon Tributing in Gold Mines*<sup>48</sup> describes local practice:

In the Bendigo portion of the Sandhurst Mining District the system generally followed is to let a tribute for six months upon a percentage on a sliding scale, the agreement being simply a verbal one, which is contrary to section 74 of the Mines Act 1890, that section requiring an agreement to be in writing and registered with the Mining Registrar. At Eaglehawk, in the same district, the same system is followed, with the exception that the term for which a tribute is let is generally for twelve months. In both Bendigo and Eaglehawk the half system is also carried out – that is, the tributer has to break the stone and bring it to the plat, from whence the company raises it and crushes it, the yield of gold being divided equally between the company and the tributer. This is only followed out strictly in a very few cases, as in the majority of instances the company also retains the whole of the yields from the copper-plates and the pyrites ...<sup>49</sup>

Many tributers did not testify before this committee, fearing retribution from the mine owners: 'Your Committee much regret that, owing to the fear of unpleasant consequences, some miners engaged in tributing in gold mines, though invited to attend to give evidence before your Committee, were unwilling to do so'.<sup>50</sup> The Select Committee concluded that tributers in Bendigo and Eaglehawk earned very little and

proposed a number of practical reforms which did not address issues of safety and hygiene.

On the whole, mine owners were an extremely powerful group, but tributers, who seemingly had control over their own working conditions, were less powerful, exploited by large mine owners and were generally poorly paid. The latter contention is supported by the evidence of Select Committee upon Tributing in Gold Mines which stated that 'the general opinion was that tributers do not, on an average, earn more than \$1 per week, and in many instances they have to pay the working expenses out of their own pockets'.<sup>51</sup>

### **The Bendigo Branch of the Amalgamated Miners' Association**

The Bendigo Miners' Association was formed in 1872 by the politically and socially active Robert Clark.<sup>52</sup> The association amalgamated in 1882 with other Victorian Unions to become the Bendigo branch of the Amalgamated Miners' Association of Victoria under the leadership of the Union Secretary, W.G. Spence.

Bendigo's local historian Frank Cusack, and some later mining historians following his lead, have adopted the view that unions in Bendigo were eclipsed by the high rate of Friendly Society membership:

Their [union] strength in the Sandhurst [Bendigo] scene in the eighties can be largely explained by the very precarious nature of deep quartz mining. Despite the effectiveness of Mackay's Act and of complementary legislation, the incidence of mining accidents involving serious injury, was still high. ... By the end of the decade a resuscitated Miners' Association had 2,000 members but, generally speaking, unionism was in a weakly embryonic state. In 1882, the local branch of the Miner's Association had fewer members than the Pride of Marong Branch of the Ancient Order of Foresters, numerically, the smallest of the forty-odd friendly societies in Sandhurst.<sup>53</sup>

In addition to the lack of union strength, it has been claimed by historians such as Blainey<sup>54</sup> the relationship between miners and employers was a relatively cordial one, largely influenced by the nature of mining (much of which was tributing) and that many of the miners were shareholders. Further, Kennedy contends that the 'tradition of unionism was weaker in the ranks of Cornish miners'.<sup>55</sup>

This 'conservative' interpretation of the role of the AMA in Bendigo has been challenged by Charles Fahey who argues that:

It is mistaken to see goldmining as an industry free of class tensions and industrial conflict. On Bendigo from the early 1860s a clear cleavage developed between the interests of mine owners and wage-earning miners, and this was little ameliorated by miners' participation in mining shareholding or gold production under tributing. Very few miners became shareholders, while tributing clearly favoured mining companies and mine owners. In the generally prosperous decade of the 1870s, miners and mine owners fought a number of bitter actions over wages and conditions. Throughout the 1880s and 1890s there were no major industrial actions in Bendigo, **yet tensions remained high over such matters as tributing. Working in a climate of high unemployment, most union officials feared taking industrial action and worked for reform through politicians** [emphasis added].<sup>56</sup>

Fahey argues that after the 1882 amalgamation with W.G. Spence's union, the Bendigo Union was reorganised along Creswick lines, and 'gradually took on the form of a friendly society'.<sup>57</sup> Spence, it would seem, was less concerned with industrial and political issues than Clarke, thus the union was not actively engaged in the recruitment of non-members or issues connected with wage rates. This perceived lack of clout and the recurrent tensions over matters such as tributing, need to be considered in order to understanding the difficulty of efforts to obtain reform in working conditions for miners.

Bendigo Labor historian, Colin Cleary, argues that membership in the AMA fluctuated depending on local issues of concern to miners. For example, after the struggle of obtaining an eight-hour day was over 'the miners lost interest in unionism, and, as the decade approached, only fifteen local miners remained in the AMA'.<sup>58</sup> However, renewed support occurred in 1879 when the mine-owners attempted to reduce wages. In 1889 a Trades and Labor Council was formed at the Miners' Association Office, to cater for all workers in Bendigo and District. Support for miners came from all political persuasions during the 1890s with the predominantly liberal representation 'winning the hearts of the miners'.<sup>59</sup> By 1901, only 10,000 out of 25,000 miners statewide had tickets. Reasons forwarded for these rates ranged from low returns for tributer miners to fear of managers. Cleary states that: 'It is significant that the majority of Bendigo miners were against political [union] affiliation, believing that the working man could vote for Labor without this formality'.<sup>60</sup> Thus, the relatively powerless position of the Association under Spence goes some way to explaining the power of the competing Mineowners Association and the paucity of response to the lobbying of the medical profession and the friendly societies for improved working conditions for the miners.

Peter Phillips, secretary of the Bendigo branch of the AMA, claimed that as early as 1884, he had 'been the first on Bendigo to deal with the unhealthiness of the mines through bad ventilation'.<sup>61</sup> The *Advertiser's* use of the word 'claims' suggests that there is some doubt, but he certainly actively supported (and may have initiated) the *Advertiser's* campaign to alert the public on the extent of miners' phthisis in Bendigo through raising by public subscription the funds to reprint the *Advertiser* articles of 1903 so that the public had free access them. But some ambivalence is apparent in his statement at a meeting in 1906 to discuss Summons' Report where he again reiterates his former statement: 'the regulations of the Mines Act as passed by the late Angus Mackay were quite sufficient for all purposes'.<sup>62</sup> It thus appears that a campaign for increased/improved legislation did not have his total support, and to what extent he represented the views of the miners is unclear. Apart from the 1910 public meeting, he was present at all public meetings related to the phthisis debates and appears to have spoken at all of them. If he lacked personal support – he had a 'long standing' feud with other members of the AMA committee which resulted in a decline in membership – his power to negotiate would have been severely diminished. Phillips resigned in 1903 after nearly 22 years as secretary, but accepted re-appointment shortly afterwards, in July 1904.<sup>63</sup>

The *Minutes of Special and Committee Meetings of the Bendigo Miners' Association*, 23 July 1885 to 2 July 1889, of which Phillips was secretary, reveal that there was only one reference to miners' phthisis and this related to a compensation claim. This entry was made on 14 October 1886 and was concerned with the death of J. Gennies [spelling uncertain] and referred to the Committee as an accident claim by his widow which could not be granted as Dr McIntyre Eadie [Health officer for Bendigo] had provided a death certificate stating that death was caused by phthisis. The miners' widow claimed death by accident due to the black mark on his side.<sup>64</sup>

Matters addressed in the *Minutes* were mainly concerned with the business of the organization, related matters such as congresses, annual election results and compensation claims. However the following items in connection to conditions in the mines were noted: reports from the Noxious Fumes Board (nitro glycerin fumes) in 1885 and 1886; that Iron sulphate spray was tried in Lazarus Co. Mine to reduce fumes; that a Noxious Fumes Meeting was to be held in Ballarat 24-26, 28 September which was reported at length in the *Bendigo Independent*; and a paper on water and its uses in mining was to be read at the Anniversary meeting Eaglehawk Branch of the Engine

Drivers Association. This small snapshot of the union's interests and activities, taken during a key period in Bendigo's mining history whilst gold production was high, may suggest a lack of active involvement in promoting improved conditions for miners but because of the nature of the source, remains inconclusive.<sup>65</sup> By the 1890s, not surprisingly, the key issue of concern (as revealed by the few extant pieces of correspondence between the Bendigo AMA to personnel in the Ballarat Branch of the AMA) was with the high levels of unemployment in the district.<sup>66</sup>

Whilst the rise of the labour movement as a parliamentary force is not the central concern of this paper, it is important to recognize the changed strategy adopted by the AMA. As Fahey stated, above, during the latter part of the nineteenth and early twentieth centuries, most union officials feared taking industrial action and worked for reform through politicians in Bendigo. For example, Labor member for Bendigo West, David Smith, championed the issue of workers' compensation for miners in parliament in 1908 (see discussion below).

### **The Miners**

Miners were cautious in their views, no doubt fearing that radical repercussions would impact on their employment prospects. One miner explained the pressure put on miners when working ground which gave a slow return:

Good ground ... makes good men, and bad ground bad men. That means when the ground is good, and men make good headway in driving it, the manager reckons that the men could not be better, but when the ground is hard or difficult to work, and they only make slow progress the manger reckons they are no good at all. Then there is always the competition among the men; one party wants to drive one hole at least per shift in ore than the other. That will, perhaps, explain away the fact that, as you say, some of the men should sooner not use the sprays. It will take a bit to rig up the apparatus, and though the manager might not object to the spray being used, he might not like the loss of time. But I think that sprays should be used in dry hot ground.<sup>67</sup>

When asked why the spray jet was not used more often, another miner offered the view that the mine managers would not go to the trouble or sanction the expense. The same miner was not an advocate of government intervention: 'Better do without the Government ... let us have moral suasion.' Mr Brittain, a miner suffering from phthisis, when asked what he considered to be the major contributing factor to his condition, replied: 'the dust and fumes from explosives are the worst things to contend with in mines, ... I worked for eight years with rock drills and I reckon that they did for me.'

The importance of the dust caused by blasting was expressed again when he added 'there was more danger from disease in the mines since rock boring machines were introduced [because] they caused more dust, and furthermore, caused the use of more explosives'. When questioned on the use of possible deterrents to counter the dust, all miners replied that sprays would be useful; for example, Mr Brittain replied 'the spray would be invaluable after firing'. He had gone back to 'faces after firing when the air was so thick with smoke and dust that [he] could not see his hand a short distance from his face ... with a spray ... a great difference would be made.' Other devices, such as respirators, were not enthusiastically received. In reply to a question on whether he liked them Mr Brittain replied: 'Well not much, but I know a man who used to wear a sponge in front of his mouth to keep out the dust'.<sup>68</sup>

Mr Brittain's emphasis on the increased hazards caused by the use of explosives and rock drills reflects the continued drive of the use of larger machinery at the expense of the well-being of the miners. The use of rock drills developed after 1876, when George Lansell, fresh from an overseas trip, enthusiastically promoted the new technology he had seen in the United States. The use of the diamond drill and its capacity to increase output changed the nature of mining dramatically. Hay Kirkwood, early Bendigo historian, described this never-ending drive by Lansell:

Respecting the deep sinking theory, Mr George Lansell ... is the only person on Bendigo who is determined to solve the deep reef problem. He has lately erected large and powerful machinery on his 180 claim, Victoria Reef ... he has all the latest appliances of rock drills and air compressors in use in the mine.<sup>69</sup>

Miners, in the face of growing unemployment, had little choice but to use the technology imposed on them large miner owners such as George Lansell.

### **Concluding remarks**

The various accounts provided by the 1903 *Bendigo Advertiser* articles in respect of miners' phthisis reflect attitudes pretty much divided along class lines, with the exception of the views of the medical profession who, in particular, were strong advocates for reform from the early 1880s onwards. That legislation was eventually enacted against such a powerful group as the mine owners, shows the force of public opinion and reflects a growing international awareness about industrial hygiene issues in overseas mining communities. It is interesting to note that South Africa had



legislation and dust measures in place and enforced by the end of World War I, but in the United States effective measures to control the disease were not in place until 1969.<sup>70</sup>

Whilst Peter Phillips, Secretary of the local AMA, played a significant role in promoting public awareness of the dangers of silicosis to men's health in the mining industry, he lacked support from the membership. From the late 1890s the labour movement in Bendigo began working through parliamentarians to effect reforms for miners. However, from the evidence analysed it could be argued that the main initiators of change in legislation affecting miners' health in the mines was a concerned group of doctors who were aware of international trends in industrial welfare and acted as mediators between capital and labour, in stark contrast to the AMA which appeared to have little interest or influence.

Significant improvement of mining conditions was only effected when the industry was seen to be able to sustain such changes and when some measure of stability had occurred in the mining industry. When the industry started to slump, from 1910 onwards, concern for the ailing industry stifled attempts to institute further improvements. Although work place legislation was tightened in the Mines Act of 1907, the 1914 Workers Compensation Act failed to include the industrial disease of miners' phthisis, as did the amendments of 1922, 1928 and 1935. The omission of miners' phthisis from the Act meant that Bendigo men and their families (and miners generally) were seriously disadvantaged.

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## Endnotes

<sup>1</sup> D. Rosner & G. Markowitz, *Deadly Dust: Silicosis and the politics of occupational disease in twentieth century America*, PUP, Princeton, N.J., 1991, p. 4.

<sup>2</sup> G. Meudell, *The Pleasant Career of a Spendthrift*, G. Routledge, London, 1929, p. 56; for a biography of Meudell see *Australian Dictionary of Biography*, vol. 10, MUP, Melbourne, pp. 490–91.

<sup>3</sup> M. James, 'The Struggle against silicosis in the Australian Mining Industry: The Role of the Commonwealth Government, 1920-50', *Labour History*, no. 65, November 1993, pp. 75-95.

<sup>4</sup> G. Brown, Victoria Mines Department, *Bendigo Goldfields*, Mines Department, Melbourne, 1936, p. 14.

<sup>5</sup> See for example Geoffrey Blainey *The Rush that Never Ended - A History of Australian Mining*, Melbourne University Press, Parkville, and Cambridge UP, London, 1963, where many pages are devoted to the discovery of gold in Bendigo; Frank Cusack, *Bendigo, A History*, Heinemann, Melbourne, 1973, which focuses on gold and its importance to the city. Also contributing considerably to the subject is James A. Lerk, *Bendigo's Mining History 1851–1954*, J. & E. Lerk, Bendigo, 1999, and his *Bendigo's Central Deborah Gold Mine and Its Era*, J. & E. Lerk, Bendigo, 1993.

<sup>6</sup> Charles Dickens, *The Uncommercial Traveller*, 1860, quoted in Roy Porter *The Greatest Benefit to Mankind: A medical history of humanity from antiquity to the present*, Harper Collins, London, 1997, p. 400.

<sup>7</sup> Queensland Parliamentary Papers [QPP], 'The Report of the Royal Commission appointed to Inquire into the following matters relating to the Mining Industry, namely: 1) The Conditions of Work in Queensland Mines in relation to the Health of Miners; 2) The extent to which the said conditions contribute to Pulmonary Diseases amongst Miners, the prevalence of such diseases, and the means which ought to be taken to bring about improvements in such conditions; 3) The expediency of regulating the employment in Mines of persons affected by Tuberculosis, and of excluding such persons from Mines, and the relief to be afforded to persons so excluded; together with the Minutes of Proceedings, Minutes of Evidence taken before the Commission, and Appendices.' Brisbane, Anthony James Cumming, Government Printer, 1911. Minutes of Evidence, p. 699.

<sup>8</sup> QPP, Minutes of Evidence, p. 699.

<sup>9</sup> Our thanks to the unknown reviewer of this paper for pointing out the weaknesses in the statistics. It is not the authors' intention to present these statistics as definitive but rather as indicative of the general nature of the spread of the affliction in various localities.

<sup>10</sup> 'Candour and progress', *The Eaglehawk Leader*, 4 June 1881, p. 5.

<sup>11</sup> Sandra Kippen and Yolande Collins, 'Radical Reformers: The role of medical men in improving working conditions in the Bendigo goldmines, 1890-1910', *Journal of Australasian Mining History*, vol. 2, September 2004, pp. 75-89.

<sup>12</sup> "'Miners' Complaint. The Primary Cause. How it may be combated.'" A reprint of articles published in the *Bendigo Advertiser* in February and March 1903 [The articles were printed by public subscription with monies raised by Mr Peter Phillips, and with the co-operation of the proprietors of the *Bendigo Advertiser* for free distribution to the public of Bendigo and district, n.d.]. This reference is hereafter referred to as the *Bendigo Advertiser Reprint, 1903*.

<sup>13</sup> G. Rosen, *The History of Miners' Disease: A medical and social interpretation*, Schuman, New York, 1943.

<sup>14</sup> Brian Kennedy, *A Tale of Two Mining Cities, Johannesburg and Broken Hill, 1885 – 1925*, MUP, Melbourne, 1984.

<sup>15</sup> Rosner & Markowitz *Deadly Dust*, pp. 200-24.

<sup>16</sup> G. Burke and P. Richardson, 'The profits of death: A comparative study of miners' phthisis in Cornwall and the Transvaal', *Journal of South African Studies*, vol. 4, 1978, pp. 147-71.

<sup>17</sup> J.C. Fahey, 'Wealth and social mobility in Bendigo and North Central Victoria, 1879-1901', PhD thesis, History Department, Melbourne University, 1981, p. 61.

<sup>18</sup> John Haldane, Joseph Martin and R. Arthur Thomas, 'Report to the Secretary of State for the Home Department on the Health of Cornish Miners' 1905, quoted in Catherine Mills, 'The emergence of statutory hygiene precautions in the British mining industries, 1890 – 1914', *The Historical Journal*, vol. 51, no. 1, 2008, pp. 145-68.

<sup>19</sup> 'Miners' Phthisis and Rock Drills', *The Medical Press*, 5 November, 1902, p. 500; Thomas Oliver 'Discussion on Miners' Phthisis', *British Medical Journal*, 12 September 1903, pp. 568-73; Thomas Oliver 'Rand Miners' Phthisis', *British Medical Journal*, 14 October 1905, pp. 919-22.

<sup>20</sup> Walter Summons, *Miners' Phthisis: Report on the Ventilation of the Bendigo Mines*, report by Walter Summons, J. Kemp, Government Printer, 1906; Walter Summons, *Miners' Phthisis: Report of an investigation at Bendigo into the prevalence, nature, causes and prevention of Miners' Phthisis*, under the direction of the Bendigo Hospital Committee and at the cost of the Trustees of the Edward Wilson Estate, Melbourne, 1907.

<sup>21</sup> Kippen and Collins, 'Radical Reformers'.

<sup>22</sup> Summons, *Miners' Phthisis: Report on the Ventilation of the Bendigo Mines*; Summons, *Miners' Phthisis: Report of an investigation at Bendigo into the prevalence, nature, causes and prevention of Miners' Phthisis*, p. 70.

<sup>23</sup> K.G. Kerr in 'A Hundred Years' Epidemic', *Health Bulletin*, nos 129 & 130, VGP, Melbourne, January-December 1965. For a more complete definition see Burke and Richardson, 'The profits of death' p. 152; G. Rosen, *The History of Miners' Disease*; J.H.L. Cumpston, 'Mining Hygiene', *Health and Disease in Australia: A History*, AGPS, Canberra, 1989, pp. 162-69; B. Gandevia, 'Occupation and disease in Australia since 1877', *Bulletin for the Post-Graduate Committee in Medicine*, Parts I & II, November & December 1971; Brian Kennedy, *A tale of two mining cities: Johannesburg and Broken Hill, 1885-1925*, Melbourne, 1984; Kerr, 'A Hundred Years' Epidemic', p. 4.

<sup>24</sup> Fletcher Jones, *The Fletcher Jones story: Not by myself*, Wentworth Press, Surrey Hills, NSW, 1976, p. 6.

- <sup>25</sup> *Pope Diaries*, Manuscript no.11918, La Trobe Library, State Library of Victoria, 9 January 1873 - 7 July 1874.
- <sup>26</sup> Richard Pope, *Diaries*, 9 July 1874; Y.M.J. Collins, Public Health in Bendigo: 1851-1907, M.A. (Hons) thesis, History and Philosophy of Science Department, University of Melbourne, 1991, p. 149. See also Appendix 3, which provide tables showing a distribution of mining accidents in gold mines in Bendigo between 1888-1910.
- <sup>27</sup> Victorian Parliamentary Papers, [hereafter VPP] 'Mine Ventilation', *First Progress Report of the Mine Ventilation Bonus Board*, VGP, Melbourne, 1888. The *Second Progress Report (1899-1900)* also refers to the physiological effects of mining in improperly ventilated mines, it is, however, more concerned with the Berry Consols Extended Mine (Allendale).
- <sup>28</sup> Parliamentary Debates, 1898, p. 1285.
- <sup>29</sup> VPP, 1893 *Report from the Select Committee upon Tributing in Gold Mines*, Melbourne, 1893, p. iii; *Bendigo Advertiser*, Reprint, 1903, p. 9.
- <sup>30</sup> *Ibid.*, p. 30.
- <sup>31</sup> *Ibid.*, p. 36.
- <sup>32</sup> P.G. Macumber 'A history of the Miners' Phthisis problem in Victoria', *Mining, Geology and Energy Journal of Victoria*, vol. 7, no. 3, 1978, p. 12.
- <sup>33</sup> *Ibid.*, p. 15.
- <sup>34</sup> *Ibid.*
- <sup>35</sup> *The Bendigo Advertiser*, 12 May 1904.
- <sup>36</sup> Macumber, 'A history of the miners' phthisis problem in Victoria', p. 15.
- <sup>37</sup> VPP, 'Worker's Accident Compensation', Session 1908, vol. 19, pp. 906-22.
- <sup>38</sup> *Ibid.*, p. 912.
- <sup>39</sup> Macumber, 'A history of the miners' phthisis problem in Victoria', p.16.
- <sup>40</sup> *The Bendigo Advertiser*, 31 May 1949. The major controversy was publicized before the visits (*The Bendigo Advertiser*, 7-12 April 1949) and on later presentation of Dr Robson's report (*The Bendigo Advertiser*, 5-12 August 1949). For discussion on McIntyre's powder treatment for silicosis, see J.J. Denny, W.D. Robson, D.A. Irwin, 'The prevention of silicosis by metallic aluminium', *Canadian Medical Association Journal*, vol 40, 1939, pp. 213-28; S.L. Rifat, M.R. Eastwood, D.R. Crapper McLachlan, P.N. Corey, 'Effect of exposure of miners to aluminium powder', *The Lancet*, 1990, vol. 336, pp. 1162-5.
- <sup>41</sup> Macumber, 'A history of the miners' phthisis problem in Victoria', pp. 12-15.
- <sup>42</sup> *Ibid.*, p. 14.
- <sup>43</sup> 'Miners' phthisis', *The Bendigo Advertiser*, 3 May 1904, p. 5.
- <sup>44</sup> Tom Roper, 'Inventing traditions in goldfields society: Public rituals and townbuilding in Sandhurst 1867-1895', M.A. thesis, History Department, Monash University, 1985.
- <sup>45</sup> *Ibid.*, p. 12.
- <sup>46</sup> For a discussion of George Lansell's disregard for health regulations in his early career as a candle maker, see Collins, Public Health in Bendigo: 1851 – 1907, Ch. 2.
- <sup>47</sup> Roper, 'Inventing traditions', Ch. 6; F. Cusack, *Candles in the dark: A history of the Bendigo Home and Hospital for the Aged*, Queensberry Hill Press, Carlton, 1984, pp. 86-7; F. Cusack *Bendigo: A History*, Heinemann, Melbourne, 1973, pp. 202-4.
- <sup>48</sup> The Victoria Report from the Select Committee upon Tributing in Gold Mines: together with the Proceedings of the Committee and Minutes and Synopsis of Evidence, 1893, Melbourne, R. Brain, Government Printer, pp. iii – iv.
- <sup>49</sup> *Ibid.*, p. iv.
- <sup>50</sup> *Ibid.*, p. iii.
- <sup>51</sup> *Ibid.*, p. iv.
- <sup>52</sup> Entry for Robert Clark (1841-1883), *Australian Dictionary of Biography on-line*, <http://www.adb.online.anu.edu.au/biogs/A030384b.htm>.
- <sup>53</sup> Cusack *Bendigo: A History*, pp. 170-171.
- <sup>54</sup> Geoffrey Blainey, *The Golden Mile*, NSW, Allen & Unwin, St Leonards, 1993.
- <sup>55</sup> Charles Fahey, 'Labour and Trade Unionism in Victorian Goldmining: Bendigo, 1861–1915', *Gold: Forgotten Histories and Lost Objects of Australia*, CUB, Cambridge, 2001, p. 67; Kennedy, *A tale of two mining cities*, p. 22.
- <sup>56</sup> Fahey, 'Labour and Trade Unionism in Victorian Goldmining: Bendigo, 1861–1915'.
- <sup>57</sup> Fahey, 'Wealth and Social Mobility in Bendigo and North Central Victoria, 1879-1901', PhD thesis, History Department, University of Melbourne, 1981, p. 61.

<sup>58</sup> Colin Cleary, *Bendigo Labor: The Maintenance of Traditions in a Regional City*, self-published, Bendigo, Vic., 1999, p. 14.

<sup>59</sup> Cleary, *Bendigo Labor*.

<sup>60</sup> *Ibid.*, p. 42.

<sup>61</sup> *Bendigo Advertiser* Reprint 1903, p. 9.

<sup>62</sup> *Annals of Bendigo*, 1892-1909, p. 342.

<sup>63</sup> *Ibid.*, 1910-20, pp. 318 & 323.

<sup>64</sup> Minutes of Special and Committee meetings of the Bendigo Miners' Association, 23 July 1885 – 2 July 1889, 14 October 1886, Noel Butlin Archives, Lloyd Rees Collection, P103/4, Australian National University.

<sup>65</sup> *Ibid.*, 23 July 1885 – 2 July 1889; 6 August 1885; 21 January 1886; 20 August 1885; 15 September 1885; 24 November 1885; *Bendigo Independent*, 9 October 1885.

<sup>66</sup> Letter from Bendigo Miners' Association to Secretary, Ballarat Trades Hall Committee, re. Unemployment in Bendigo, 16 January, 1893E97/7/9 (1893)/1, Noel Butlin Archives, ANU. Letter from Bendigo and District Trades and Labor Council (People's Party) to Secretary, Ballarat Trades Hall Committee, suggesting calling Parliament together re. Unemployment 18 May 1893, E97/7/9 (1893)/10, Noel Butlin Archives, ANU.

<sup>67</sup> *Bendigo Advertiser* Reprint, p. 19.

<sup>68</sup> *Ibid.*, pp. 18–20.

<sup>69</sup> Hay Kirkwood *History of the Bendigo Goldfield, 1851 – June 1991*, W. Wright, Eaglehawk, Vic., 1981, p. 7.

<sup>70</sup> Burke and Richardson, 'Profits of death'; Marcus James, 'The Struggle against silicosis in the Australian Mining Industry: The Role of the Commonwealth Government, 1920-1950', *Labour History*, vol. 65, November 1993, pp. 75-95.