North Queensland gold miners played a pivotal role in achieving Federation of the Australian colonies, despite the fact that most of them gave the Commonwealth Constitution Bill a low priority. Their importance lay in their numbers and their well-developed political skills. While north Queensland was originally occupied by non-indigenous settlers as sheep-grazing country, by 1900 mining was a vital part of its economy. At the end of the century the north had three major industries: grazing, sugar cultivation and mining, but only the miners stood to gain unequivocally from Federation. They voted accordingly, swung the marginal Queensland vote and pushed that colony into the Australian nation.

Mining has been crucial to the development of north Queensland, despite the fact that the region’s first non-indigenous settlers were pastoralists. In 1861, sheep owners took up land in the Kennedy and Mitchell pastoral districts, in January and October respectively. Their arrival started a flurry of speculation which saw all land from the Burdekin to the Gulf of Carpentaria taken up within three years. The speculation was about wool for a booming English textile market which, in 1861, lost vital supplies of raw materials from America when the Union forces blockaded the export ports of the cotton-growing south. As English cotton mills converted to wool, the possibilities of the vast new sheep-grazing lands of north Queensland seemed limitless: a pastoralist’s dream. So greed for English cloth makers’ money opened up the northern sheep runs and established coastal towns to service them; but by the middle of the 1860s the dream had already faded. Sheep had been an environmental disaster. In only five years their cloven hooves and close cropping led to erosion and the replacement of sweet grasses with coarser species. Among these was spear grass, which killed sheep and ruined fleeces. Poor management also took its toll on the hapless animals. The pastoralists did not own their land, and their leases were insecure, so they were unwilling to invest in improvements, particularly fences. Shepherds tended the unfenced sheep and used portable hurdles to control them at night. Tropical parasites, such as lung and fluke worm, blow flies and foot rot, spread rapidly as they huddled together between these flimsy barriers. Then in 1865, when both land and stock had seriously deteriorated, the American Civil War came to an end. British textile producers again focussed on cotton cloth and the wool market collapsed.1

Pastoralists and townspeople alike faced ruin. Townships from Bowen north existed to export wool and to supply the stations with equipment and provisions. Clearly, if Europeans were to stay in the region they had to find an alternative staple to wool; equally clearly this would have to involve cattle. Cattle grazing, however, presented enormous problems. Wool was light, compact and non-perishable; relatively easy to transport to the coast and ship out to England. Meat was heavy, bulky and, without refrigeration, very perishable. So, despite experiments with minor products such as tallow, hides and meat extract, it was obvious that the industry could not survive unless large numbers of meat-eaters could be attracted north; and Australian history had already shown that the easiest way to create an instant population explosion was to discover gold. Therefore, late in 1865, the Townsville business community offered a reward for the first payable gold found in its hinterland.2 The government backed this by incorporating a similar reward into the Gold Fields Regulations of 1867. Early finds on the Star River were not promising but, in July 1867, prospectors pegged the rich alluvial leads at Cape River. As diggers fanned out from the Cape, further discoveries were inevitable. The first of these was Ravenswood, discovered in 1868. Gilbert River and Woolgar were proclaimed in 1869. In 1871 prospectors found the Etheridge
and the Broughton River fields followed, in December, by what would prove to be the greatest of the north Queensland goldfields: Charters Towers. Within two decades of its discovery, that field contained Queensland’s second largest city, a city that exerted a powerful influence on the colony’s labour movement (Fig. 1). In 1893, when the Australian Labor Party contested its first Queensland election, the Charters Towers miners fielded candidates in Kennedy and had links with Labor hopefuls in Flinders, Burke, Wookathakata, Herbert and Cairns. In 1899, the miners supplied the world with what was probably its first Labor head of state, Andrew Dawson, Premier from 1 to 5 December. By the time of Federation, the mines of Charters Towers had produced nearly 4,000,000 fine ounces of gold.

So in 1900, north Queensland’s gold miners were enormously important to the colonial economy and had considerable power to influence its political direction; but the issue of Federation was clearly not their major preoccupation. There were a number of far more pressing issues, probably the foremost of which was the weather. At the time of the referenda, the colony was in the grip of a severe and prolonged drought. Like farmers and graziers, miners, especially gold miners, depended very heavily on adequate rainfall. On primitive shows and fields, they needed water to wash alluvial gold and to separate gold particles from quartz. Small-scale miners on more developed fields depended on central gold mills to crush their stone and extract their metal. Drought led to shortages of feed for the horses or bullocks that hauled the heavy rock to the mill, raising the cost of cartage and eroding profits. Even highly mechanised mines with tramways linking them to their own mills were vulnerable to drought. At the turn of the century, most gold ore was milled in stamp batteries. Millers fed the broken quartz into mortar boxes where heavy iron pestles, called stamps, pounded it into fine particles. The stamps were set, in groups of five, in wooden or iron frames to form batteries (Fig. 2). The ore particles were forced out through a screen on the front of the mortar and then washed over a mercury-coated amalgamating table where gold particles
amalgamated with the mercury. The rest of the rock washed away.5

To work efficiently, the process required a huge amount of water. If the miller did not add enough water to the mortar box the ore was not forced out quickly enough and, instead of fine particles, the stamps pounded it to a slime. The slime coated the gold particles, preventing them from amalgamating with the mercury, so they were washed off the table along with the waste rock. In an ideal mill, each stamp would use around 40,000 litres of water a day; in other words, 200,000 litres a day for each five-stamp battery.6 No northern Queensland miller ever had a hope of being able to use so much water, so northern milling practice was normally inefficient.7 In time of drought the entire process could become impossible and mills would be forced to lay off their workforce. Because the northern mines were rarely highly capitalised, owners could not afford to raise significant quantities of ore whose gold extraction might be indefinitely delayed. Therefore, they too had to stand down their workers. By 1900 many of the larger mills were supplementing their crushing with chemical extraction. The revolutionary new cyanide process was invented in Scotland, but given its early field trials at Ravenswood and Charters Towers.8 It involved mixing the pulverised ore (or sands that had earlier been discarded) with a weak solution of potassium cyanide. The cyanide dissolved the gold, allowing a gold solution to be separated from the waste material. Millers then retrieved the gold by running the liquid over zinc shavings which precipitated the precious metal out of the solution.9 In 1899, more Charters Towers gold came from re-treating discarded tailings with cyanide than from milling new ore.10 But even this process demanded an abundant water supply.

So, as the Australian colonies moved towards Federation, Queensland gold miners were more preoccupied with keeping their jobs than with referenda. They were also deeply concerned about their health. Gold mining was not a safe occupation, even in the biggest and best equipped nineteenth-century mine. About nine out of each thousand Queensland metal miners were killed or injured each year; in the north this proportion was often doubled (Table 1).11 The most common problems occurred in poorly equipped shafts and tunnels. There were, for example, only nine safety cages in use on the Charters Towers field at the end of the nineteenth century12 and, in a report published in 1901, a mining inspector noted that one of the major Brilliant mines was transporting all its miners up and down the shaft in a bucket which had no guide ropes or even a swivel hook. The shaft was 852 metres or 2,556 feet deep.13 Rock falls caused even more accidents, though fewer deaths. Almost invariably the Mines Department blamed such accidents on the incompetence of the victim. For instance, when James Little died in Kelly’s Queen Block in 1901, the inspector reported that the:

Sufferer went knowingly and unnecessarily under some ground where a shot had been fired, when a fall occurred and he was crushed to death.14

Also, by this time metal miners were becoming aware that their work made them susceptible to potentially fatal diseases. Among these were typhoid and what was then called ‘enteric fever’ spread by appalling underground hygiene. For example, at Charters Towers the Brilliant Extended mine employed 428 underground
workers who shared a total of six galvanised iron toilet pans, which were emptied once a week. The miners did not use them. The inspectors described most mines as ‘bad’, ‘fouled’ or ‘offensive’.15

Another major health concern at the turn of the century was what was called ‘miners’ phthisis’. Basically, this was caused by silica particles being breathed in and then scratching the inside of the bronchi and, later, the lungs. Inside the lung the jagged edges of the silica particles caused low, chronic inflammation. The lungs then grew fibrous tissue to envelop the irritating particles, but this new tissue was not fed by any blood vessels and, in fact, interfered with the work of blood vessels feeding the lung. Therefore it interfered with breathing. As more fibrous tissue formed, small areas of the lung were separated off and stopped working. The onset of the disease was insidious; only after irredeemable damage had been done did definite symptoms present themselves. The early signs were frequently recurring coughs and mild attacks of bronchitis in men whose general health appeared good. This situation could last for some years before the miner began to notice that he was short of breath.

The breathlessness increased until, even when resting, the sufferer wheezed and the slightest exertion caused stridor and rapid breathing. At this stage the phthisis forced the miner to leave work; indeed, he was incapable of any physical labour.16 However, when deaths occurred they were normally due to lung infections, particularly tuberculosis, which the fibrous organs could no longer combat. By the turn of the century, doctors were able to recognise suspected phthisis in its early stages and, provided the miner could afford to leave his underground work immediately, his prognosis was good. The problem, of course, was that not too many miners could simply stop or change their work. These men often delayed seeking help out of fear of being laid off. They doctored themselves in various, rather dubious, ways. One ex-miner told the Royal Commission into the Mining Industry that:

I would get a crust of bread or a piece of boiled fat bacon and eat it. Some people drink a pint of beer, but that will not wash the dirt out of your throat at all. I boil the bacon fat and eat it, and it takes away the dirt out of my throat. You want to put something rough in your throat to remove the dust before you have a drink. And then afterwards, if you feel inclined, you can have your pint of beer. But I

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<th>Killed or injured</th>
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know some people who would sooner have the pint of beer first.17

In general, the miners were far more conscious of private than of public issues. Nevertheless there was one political cause that attracted considerable attention on the turn-of-the-century goldfields. This was the war in South Africa (the Boer War) which had broken out on 11 October 1899. Many of the miners were sympathetic to the ‘Uitlanders’ over whose rights to citizenship and the vote the war was ostensibly fought. Throughout the nineteenth century, miners, in a sense, formed an international community which followed gold from Victoria and New South Wales to New Zealand, Queensland, New Guinea, Western Australia or South Africa: wherever the trail of discoveries might lead. Wherever they found themselves their political obsessions remained similar; and high among them was the demand for democratic rights which had exploded at Eureka half a century earlier. Many of the miners had been born in Britain18 and some had actually lived and worked for a time as ‘Uitlanders’ on the goldfields of South Africa. Therefore, the Boer War was a major issue in mining towns. In Charters Towers, for example, the Relief of Mafeking triggered what the press described as ‘unparalleled demonstrations of patriotic fervour’.19 On 23 May 1900, the day designated a public holiday to mark the event, some 12,000 citizens of Charters Towers joined in a parade, bonfire and general merriment. Charters Towers provided Queensland’s most decorated soldier of the Boer War: Major Frederick William Toll commanded the Fifth Contingent (the Queensland Imperial Bushmen) during 1901.20 The town also sent more than 100 volunteers to fight against the Boer.21 Quite a number of them never came back, though only two were killed.22 Indeed, it must be conceded that the promise of a free passage to some incredibly rich goldfields might have increased the miners’ enthusiasm for war in South Africa. Even so, the ‘Uitlander’ cause was very popular on the northern mining fields and, in 1910, the people of Charters Towers erected an attractive and unusual kiosk in Lissner Park to commemorate townspeople who volunteered23 (Fig. 3).

Even though the miners had more important things on their minds, they did play an important

![FIG 3. The Memorial Kiosk in Lissner Park, Charters Towers. On the enclosed side of the kiosk are inscribed the names of the Charters Towers men who fought in the Boer War. It is still one of the town’s favourite picnic spots. (North Queensland Photographic Collection, James Cook University, Townsville, CTHP, V6, 198)](image-url)
part in Federation. When Australia became a nation on 1 January 1901, it was after a long series of discussions, conferences and popular votes or referenda. The outcomes of the referenda, in which the electors of each separate colony decided whether or not they wanted Federation, were by no means clear before the event. In particular, the fairly new, but already very influential, Australian Labor Party was split on the issue, especially in Queensland. Those labour people who opposed Federation were not necessarily against the creation of a Commonwealth; they disliked the terms of the Commonwealth Constitution Bill, which they considered undemocratic. They opposed the amendment clause, the establishment of a Senate with its 5,496 for and 3,786 against.29 Only the Queensland could not have retrieved the situation with 13,239 for and 13,296 against. Central southern Queensland marginally rejected the union with 9,531 votes against Federation. The rest of the colony decided whether or not they wanted Federation. When it came to the referendum the northern miners were very important. Of all Australians, Queenslanders were the least wholehearted about the new nation. The Queensland referendum was won by fewer than 7,500 votes.28 Indeed, had it been left to those living in the southern and central districts of the colony, the move might have been rejected. Before counting the postal (‘envelope’) ballots, which made no real difference to the result, Brisbane voters registered 5,440 votes in favour and 9,531 votes against Federation. The rest of Queensland marginally rejected the union with 13,239 for and 13,296 against. Central Queensland could not have retrieved the situation with its 5,496 for and 3,786 against.29 Only the north, in particular the huge electorate of Charters Towers, could swing the colony’s vote behind Federation. In that city, some seven or eight thousand people attended meetings for or against the Bill on Friday 1 September 1899. Federationists organised a procession led by a brass band; anti-Billites held a four-hour open air meeting during which a Federation flag was captured from its youthful mouth-organ playing bearers.30

In the event the ‘antis’ lost their nerve. On 2 September more than 1,000 eligible voters stayed home and Charters Towers voted 2,438 for, and only 832 against Federation.31 Across the north, 14,313 Yes (as opposed to 4,383 No) votes eased Queensland into the new nation. While the Labor split in this overwhelmingly Labor electorate resulted in the miners’ Yes vote being marginally lower than the north Queensland average, nearly seventy-five per cent of Charters Towers voters said ‘Yes’. Because Charters Towers was overwhelmingly the biggest electorate in Queensland, this swung the poll. So even though their concern about jobs, health and soldiering were more urgent, the northern miners demonstrated their strength by playing a crucial role in creating a nation that would remain dependent on its mineral wealth.

ENDNOTES

1. For accounts of northern pastoralism, see Anne Allingham, ‘Taming the Wilderness’: the First Decade of Pastoral Settlement in the Kennedy District (Townsville: Department of History, James Cook University, 1977); and Anne Smith & B.J. Dalton (eds), The Bowly Papers (Townsville: Department of History and Politics, James Cook University, 1994).

15. Report of the Royal Commission appointed to inquire into the following matters related to the Mining Industry, namely the Conditions of Work in Queensland Mines in relation to the Health of Miners, etc., pp. 340-44.
17. Royal Commission into the Health of Miners, p. 15.
18. Census of the Commonwealth of Australia, 1901. In this census 30.34 per cent of adult males in the Kennedy District had been born in Great Britain.
21. Neal, Charters Towers and the Boer War, p. 49. The actual number of volunteers is unclear. Only 82 names are inscribed on the Charters Towers honour board, but Neal states that a number of names were omitted.
23. This kiosk, which includes the Boer War honour board, is entered on the Queensland Heritage Register.
26. *Eagle*, 5 August - 2 September 1899. The *Eagle* was strongly opposed to Federation.
27. Andrew Dawson, speech at Brisbane, reported in the *Brisbane Courier*, 8 August 1899.