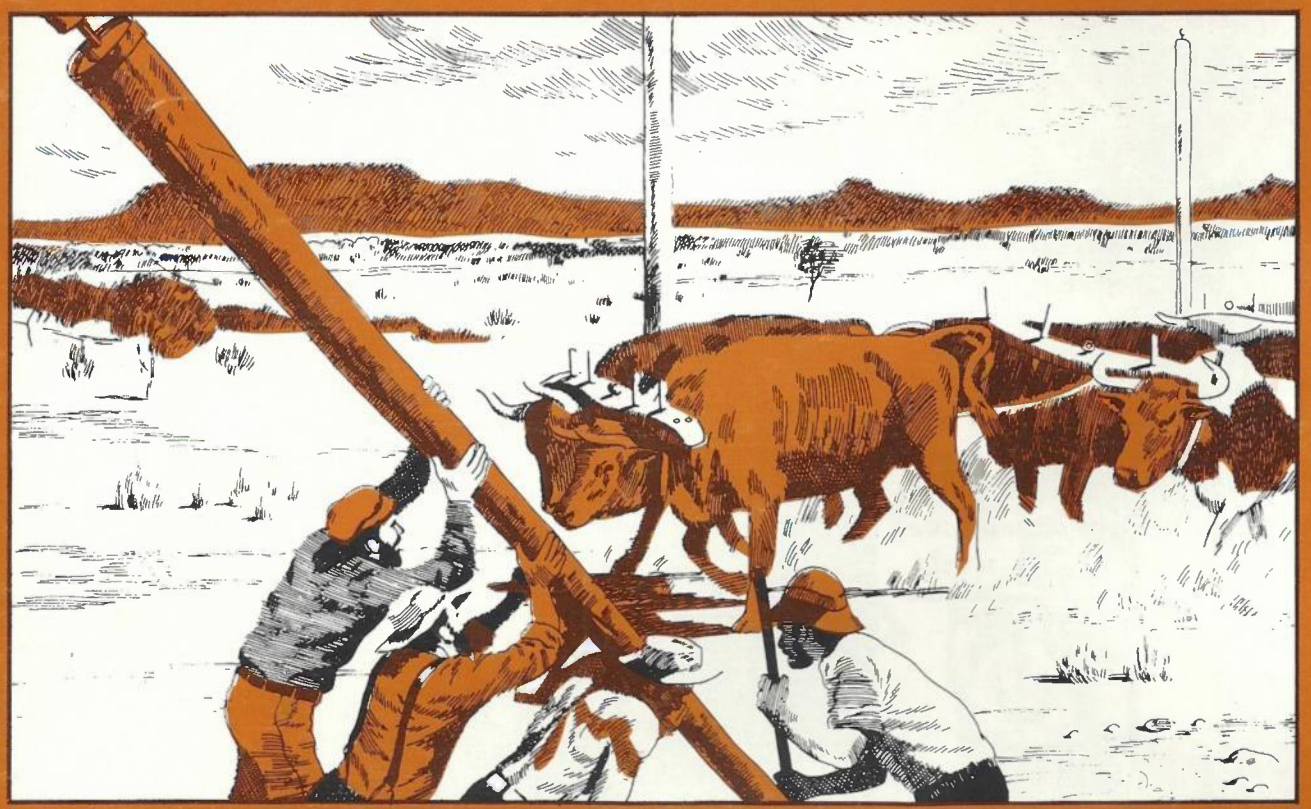
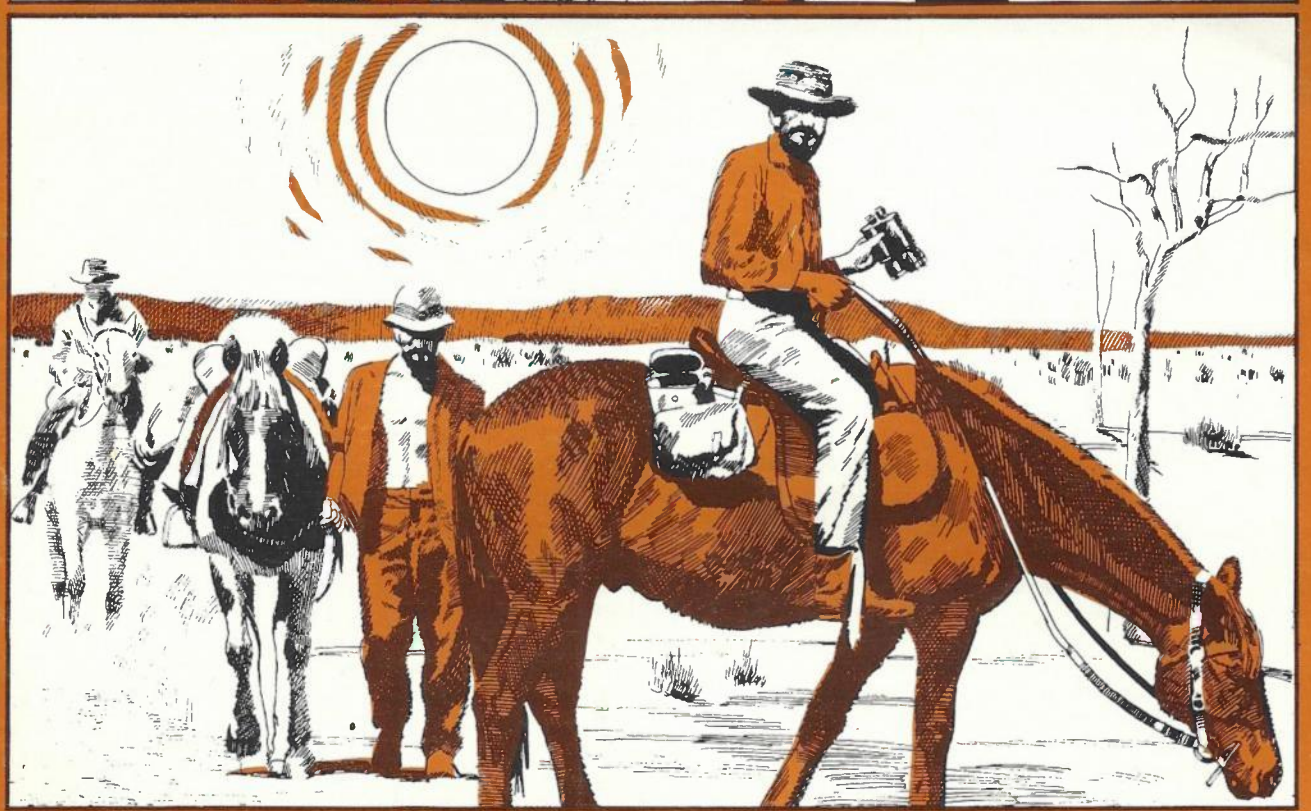
The Overland Telegraph Line





Telecom Australia

By Peter Taylor

The Overland Telegraph Line

Peter Taylor recounts the story of the construction of the telegraph line across 3000 kilometres of the desolate heart of the continent, which linked Australia with the world.

Charles Todd. Superintendent of Telegraphs in Adelaide, with his wife Alice

There are two very surprising things about the Overland Telegraph Line, built from Adelaide to Darwin between 1870 and 1872. The first is that it was built at all, for it passed through some of the most inhospitable country in the world. And the second is that this almost incredible achievement has been largely forgotten, even though the line was in operation for many years. Indeed, the first news of the bombing of Darwin in 1942 was sent in Morse down this line.

The Overland Telegraph Line was built for a reason that now seems almost trivial until we think of its implications. In the 1860s it still took at least three months for a letter to reach England. Whilst this was certainly annoying in personal correspondence, it had an even greater effect in two other areas: trade and news.

Because most of Australia's trade was with Britain, this slow communication imposed a feeling of remote control that, although long accepted as inevitable, could have serious economic consequences. When the grazier sent his wool clip to England he did so knowing that it could be nearly a year before he received the proceeds, or even knew what they were; and Australian mines could be busily producing ore without knowing that the price in Britain had slumped and that there was little hope of selling it. The Victorian world did not move as quickly as ours, but it moved quickly enough for delays such as these to be potentially dangerous.

If the economic effects were felt by only a few, the delay in news was felt by everybody. The monthly mail ship also brought copies of English newspapers and as soon

The ceremonial planting of the first pole of the Overland Telegraph Line, 15 September 1870

as they arrived the Australian newspapers published their 'monthly mail' editions summarising all the latest news from 'home'. Even though it was out of date, and by then long forgotten in Britain, it was the latest news in Australia and eagerly read in a country that thought all the important events occurred elsewhere.

The developing system of the telegraph had speeded communication to some extent. As the international system spread through Europe and India it became possible to telegraph news from London to Ceylon. There it joined the mail ship, which had left England weeks earlier, for the final stage to Australia. As the network in Australia was extended to link Brisbane, Sydney, Melbourne and Adelaide, news was unloaded from the ship at its first Australian landfall at Albany, Western Australia, and sent by a fast vessel to Adelaide, where reporters waited to telegraph their reports to papers in other States. Even with all this effort and considerable expense the latest overseas news in the *South Australian Advertiser* of 15 February 1870 was already a month old. But it had at least arrived faster than it took someone to carry it, and that was the technological benefit that the telegraph provided.

As the international telegraph system edged through India into Asia, the possibility of connecting the Australian system to it was a very exciting one for it would put Australia into direct communication with London for the first time. The trouble was that although the international system was indeed coming closer to Australia, it was coming closer to the wrong part. It was not practical to lay an underwater cable from Jakarta, which was likely to be the nearest point, round the coast to Brisbane or Sydney. The most that could be hoped for was that a cable could be brought ashore in the Gulf of Carpentaria and then be connected by a land line to Cardwell in northern Queensland, which was then the nearest point on the Australian system. It would be difficult but not impossible.

It was so logical that few questioned it. Except for a man in Adelaide called Charles Todd. Born in London in 1826, he had left school at fifteen and worked as a calculator at the Royal Observatory in Greenwich. At twenty-two he moved to the observatory at Cambridge University, where he came into contact with the new-fangled telegraph. He also met his future wife, then aged only twelve.

Six years later he left Cambridge to

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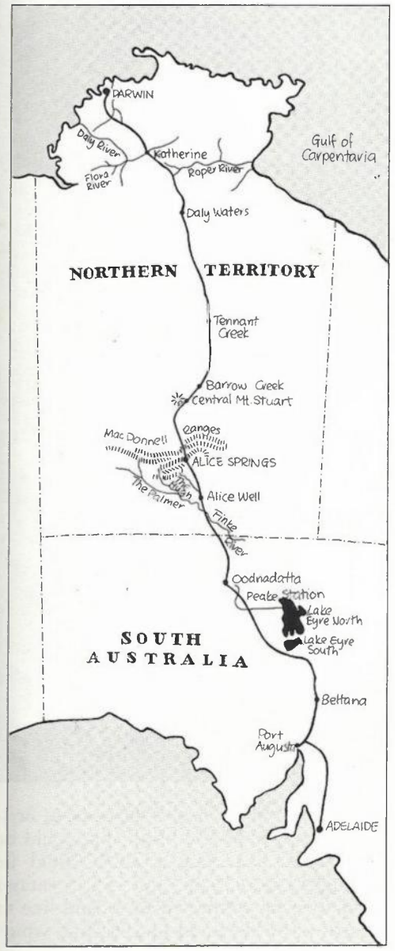
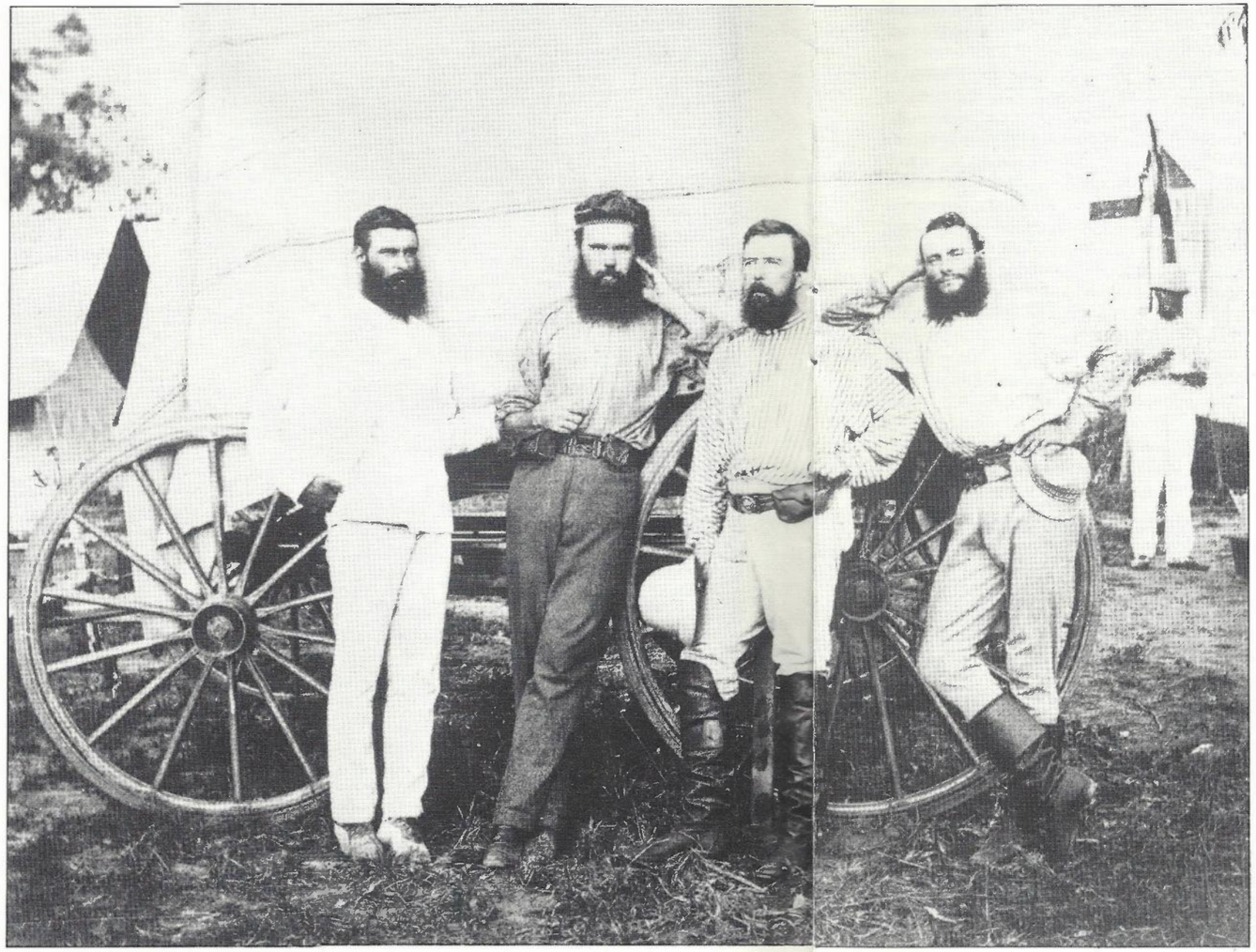


Map of The Overland Telegraph Line, 1872

return to Greenwich and there he was offered the position of Government Astronomer and Superintendent of Telegraphs in Adelaide at a salary of £400 a year. At twenty-eight, Todd knew he was unlikely to see a better offer, but he said he could not give an answer until he had seen a 'certain young lady at Cambridge'. Alice Bell, now in her late teens, consented to be his wife.

At their wedding he said, in reply to the traditional toast, that he hoped 'he would be instrumental in bringing England and Australia into telegraphic communication', but it was no more than a dream by a man who had not yet built a single line. The Todds arrived in Adelaide in November 1855 and two months later he had built a line, although it ran only the 16 kilometres to Port Adelaide. But it was a start and soon he was building a much longer line to the Victorian border, where it would join up with a similar line being built from Melbourne.

But as the international system crept towards Jakarta it seemed that his dream was as far away as ever, for Queensland was the obvious joining place and the work would be done by the government there.



At the Roper River, 1872, Charles Todd, centre right, and Robert Patterson, in charge of completing the difficult Central Section

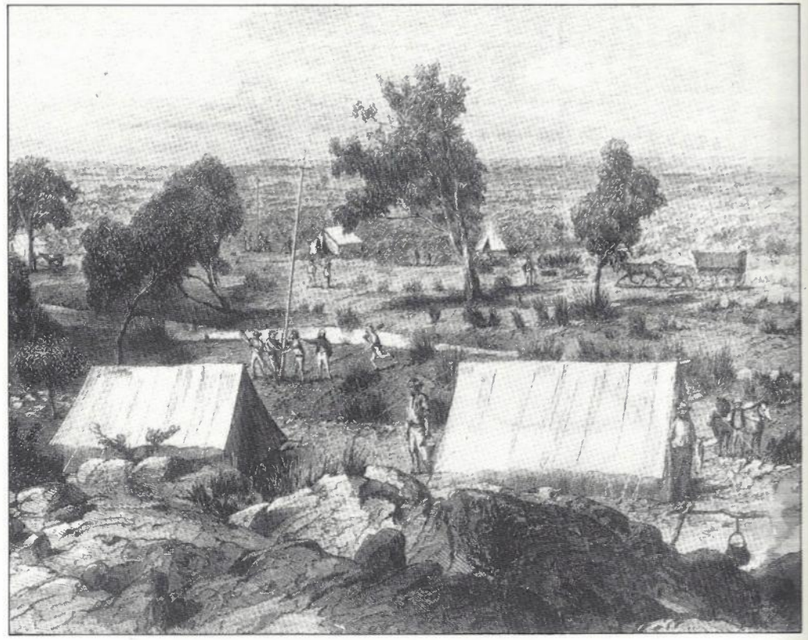
When Stuart returned to Adelaide in 1862 after successfully crossing the continent for the first time he had proved that man could survive in the harsh interior. His reports encouraged Todd to believe that it might be possible to build a line right across the continent and when the South Australian government was given all the land now known as the Northern Territory as a result of Stuart's expedition, they too could see the value of the telegraph in developing their distant northern shore.

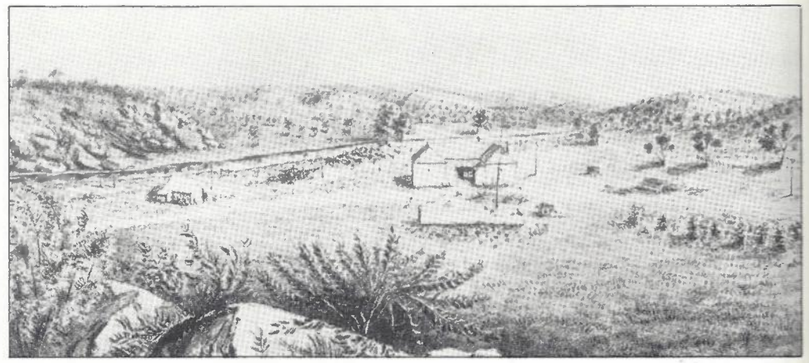
But it seemed that it would elude them, for in January 1870 the government received a letter from Captain Osborne of the British-Australian Telegraph Company saying that the company intended to bring an underwater cable ashore at Port Darwin and that from there they intended to build an overland line at their own cost to join up with the Queensland system at Burketown. The letter was simply a request for permission to build part of the line across South Australian territory, and Osborne said that his brother Noel would shortly arrive in Adelaide to discuss it.

When he did so, Todd fell on him with enthusiasm. He talked of the possibility of the line crossing the centre of the continent to Adelaide and his enthusiasm for the scheme was so infectious that the government said it would build the line at its own expense and require nothing from the company. It was a busy time, but six weeks after Noel Osborne's arrival the company had agreed on the condition that the government undertook to have the line open for traffic by 1 January 1872. It was less than eighteen months away, but the government agreed. Queensland was furious, and rightly so.

After the excitement had died away, Todd realised what a massive job he had taken on. The line would be 3000 kilometres long and would have to pass through country about which they knew nothing other than what Stuart had told them nearly eight years earlier, and which was unoccupied by white people for more than 2000 kilometres. And although Stuart had survived with a small and fast moving expedition, they would have to take scores of men and animals into the heart of the continent, where there were no tracks and little water, and where they would have to transport every last item of food and equipment.

Todd's first need was to know more about the country and he selected a station manager called John Ross to take a small party on a quick journey of exploration to find the water courses, and thus a possible route, and to locate suitable timber for the poles. He was to follow Stuart's track as closely as possible and was to be back at the northern edge of white settlement by the middle of October. By then Todd planned to have moved men and materials there and they would need to know what Ross had discovered before deciding on the route ahead.





Top: erecting a pole at one of the camp sites. An engraving from the 'Illustrated Sydney News'

Above: the Alice Springs Telegraph Station as it looked in 1872 shortly after construction

As Ross took his party into the wilderness in early July, Todd started planning at a furious pace. He decided to divide the route into three sections so that work could proceed on each at the same time. Of these three, he assumed that the Central Section, which ran through the very heart of Australia, would be the most difficult and he decided to build that section with

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government working parties under the control of surveyors from the Lands Department. The Southern Section, which was likely to be the easiest, would be built by a contractor, Edward Meade Bagot, whilst the Northern Section, which would work south from Port Darwin, would be built by a contractor called Darwent and Dalwood. The terms of these contracts were severe and all work had to be carried out to the satisfaction of the government overseer who would work with them. The work had to be finished by 1 January 1872.

Soon the whole of Adelaide was involved in equipping the parties. Animals had to be selected, stores bought, wagons built and harness made. Even such a simple item as the pin that would nail the insulators to the top of the poles had to be made and one timber yard was soon turning them out at the rate of 3000 a week. The excitement was almost overpowering and when Darwent and Dalwood advertised for eighty men for their Port Darwin expedition more than 400 applied. When the thousands of spectators turned out on Saturday 20 August to watch the party leave for the North on the thousand-tonne steamer *Omeo* it was only four weeks after the contract had been let.

When they arrived at Port Darwin in early September the settlement there had a population of about forty and the Government Resident's office was a tent with a flag pole through the middle. To them, the news was startling, for they had assumed that the line would be built to Queensland and now here was this bustling party telling them that instead it would be built overland to Adelaide, and that there was no time to lose. Six days after their arrival the Government Resident's daughter declared the first pole 'well and truly fixed'.

Meanwhile, at the end of August the first of the working parties of the Central Section had driven their wagons out of survey yards into King William Street and, cheered by the huge crowds that lined the way, they had started their long journey north. By the middle of September the rest of the teams had left and at the end of the month Bagot left with his party for Port Augusta. They planted their first pole the day after they arrived and by nightfall they had poled about a kilometre. It could hardly be measured on the map, but at last work was in progress at both ends. 3000 kilometres of emptiness separated them.

The ships at the head of the Roper River, an incongruous sight deep in the heart of the Territory

Ross, meanwhile, was leading his party back south after a journey that had taken them well into the MacDonnell Ranges. Short of provisions, they crossed the Finke River at Stuart's crossing place and followed it down for about 30 kilometres to its junction with the Hugh and there found good water. It was an important discovery for the place, which was later called Alice Well, would make an ideal depot camp for the Central parties as they moved up to their sections. On schedule, Ross led his men into the outstation at The Peake in the middle of October and about a week later the first of the working parties arrived after their long journey from Adelaide.

Todd himself had left Adelaide in early October and after travelling through the Southern Section, he met Ross on 24 October at Strangways Springs. There they held a conference about the route ahead. The first part seemed clear enough and the parties could move up to the camp at Alice Well and prepare themselves for the next stage. But the problem was that Ross had failed to find a way through the MacDonnell Ranges, and until he did the more northerly parties would be unable to reach their ground. So in the middle of November Ross took his party north again with instructions to find a way through the Ranges and to return to Alice Well in time to meet the first of the advance parties there. He was then to determine the best route with the overseers of the northern parties before leaving to go north again, this time to the Roper River to meet with William McMinn, the overseer of the Northern Section, who would then need information about his route to the south.

As Todd returned to Adelaide Ross again passed through the Ranges, but again his route was unsuitable for the line. He went north as far as Barrow Creek before turning back to cross the Ranges further west at Brinkley's Bluff. But Stuart had crossed the Ranges here and they already knew it was unsuitable. When they met the advance parties at Alice Well, after a journey of ten weeks, they knew little more than when they had left.

Todd had assumed that by now there would be a choice of several routes, but instead they had none and the parties for the northern sections were completely blocked at Alice Well, even though work was progressing well in the south sections.

With Ross busy making preparations for his long trek to the Roper River, two overseers, G.R. McMinn (brother of the overseer in the Northern Section) and W.W. Mills, set out on another attempt to find the way through the Ranges. Having split up, McMinn found his way through the first line of hills at Temple Bar and camped in bad weather in Simpsons Gap, just to the north. Climbing the hill at the side of the Gap he found he could see for about 50 kilometres to the east and was certain that he had found the way through. Joining up again with Mills, they hurried back to Alice Well.

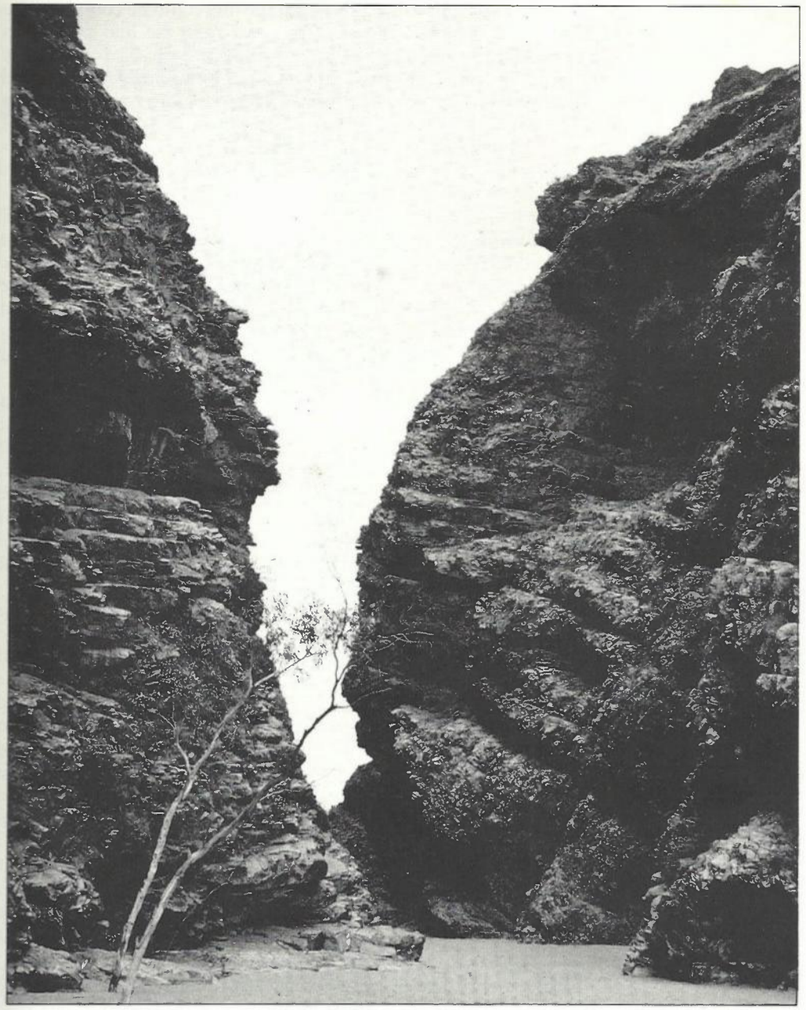
There it was decided that Mills would go back to quickly explore the country to the north and he left on the same day that Ross left for the Roper River. Mills soon found a way through to open country north of the Gap with little difficulty and on 11 March 1871 he found a dry riverbed 'with numerous waterholes and springs, the principal of which is the Alice Spring, which I had the honour of naming after Mrs Todd'.

As men, animals and stores now started to move through the Ranges, Todd had every reason to believe that the line could be completed on time. The latest news he had from Port Darwin was that by early November they had built about 145 kilometres of line and by the end of March work on the Southern Section was well advanced. By the end of May the most northerly of the Central Section working parties had reached its ground, eight months after leaving Adelaide, and work was now in progress all along the route. Or so they thought. But they were wrong, for on 8 July 1871 the *Gulnare* suddenly sailed into Port Adelaide and on board were most of Darwent and Dalwood's men from the Northern Section. Overseer McMinn soon explained why: he had cancelled their contract.

At first they had made good progress and by early December they were just south of the Adelaide River, having built 143 kilometres of line in fifty-four days. And then it rained. When they reached the Katherine River at the end of January it was in flood and although they were able to cross it by building rafts, they knew that the flooding between there and Port Darwin would make it impossible to move supplies to them. They worked as far as the King River but when McMinn returned there after an unsuccessful trip to the Roper River to meet John Ross he found the work had been abandoned. The men had refused to go any further and they had withdrawn to the Katherine. When McMinn found them there on 3 May he cancelled the contract as he could see no way that Darwent and Dalwood could complete the job on time. Although the contract allowed for this, it was a hasty move. The work had been held up by the Wet and although McMinn now took over the stores and the men on behalf of the government he had little prospect of doing any better.

McMinn had failed to find Ross at the Roper because Ross was still several hundred kilometres further south. After an epic journey using only a prismatic compass, a protractor and a carpenter's pencil Ross had, not surprisingly, made an error of navigation and had reached the Roper much further west than he intended. But in doing so he had found a much better route and as he hurried on to the end of the line with this important information he was surprised to find it deserted. On 6 June he met two police troopers who told them what had happened and that McMinn and the party were leaving for Adelaide that very day.

Their sudden arrival in Adelaide appalled everybody, and none more than Charles Todd. Whatever his legal justification, McMinn's action meant that the chances of finishing the line on time were now very slight and the urgent need now was to reform the party for the Northern



Simpson's Gap which allowed the Line to pass through the MacDonnell Ranges

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Section and get them back on the job as soon as possible. The man chosen to lead it was a railway engineer called Robert Patterson. He was a complex man, a pedantic public servant who took himself seriously and who valued his reputation about almost anything else. He was not the type of man to appeal to Charles Todd but he had one major advantage: he was available. He was appointed to lead the government working party on 12 July and was promised a huge bonus of £1500 if he could complete the line to the northern boundary of the Central Section by 31 December 1871.

Once again Adelaide was thrown into a flurry of excitement as preparations got under way. A saddler produced, amongst other things, 153 sets of wagon and express harness, 600 pairs of hobbles, 1500 straps and thirteen saddles — all in ten days. Finally on 27 July, less than three weeks after the return of McMinn, Patterson left Port Adelaide with a new expedition for Port Darwin. In fact, its destination had been a matter of some argument. Both Todd and Patterson thought they should head for the Roper River, which runs into the Gulf of Carpentaria, as the end of the line was now much closer to the head of the river than it was to Port Darwin. But they had been over-ruled by Premier Hart, who was concerned that if the small steamer that had also been chartered for the trip failed to arrive, then the expedition could find itself at the mouth of the river with no means of landing the animals and stores.

They arrived in Port Darwin on 24 August and once again the tiny settlement was galvanized into action as the expedition made ready to move south to take up the work. But many of the animals had died on the voyage and Patterson now faced the same situation that Darwent and Dalwood had when they arrived: the need to make as much progress as possible before the Wet once more brought work to a standstill.

Soon there was a long procession of men heading south, but as they reached the Katherine they telegraphed to Patterson that they were finding the going very difficult. In the dry season water was scarce and they were suffering more stock losses as they went. But still they pushed on, assuming that Patterson would somehow manage to replace the stock and their equipment, much of which was disintegrating as they went. But a ship that Patterson had sent round to the Roper in the hope of taking supplies up the river had been wrecked and he knew that he no longer had the transport to relieve them.

With his hopes in ruins, Patterson knew he must call for help from Adelaide and on 25 October he was able to send a message to Todd via a ship that would call at Ceylon, from where it would be sent to Australia on the next mail boat. In it he said that the expedition was breaking down because of excessive stock losses and because of the difficulty of passing through the dry country between the Katherine and King Rivers. Unless more supplies could be sent quickly, he would have to withdraw to the Roper River when the Wet started.

If he thought his misery was complete he was wrong, for later that day the first of the cable ships arrived to start laying the underwater cable to Indonesia. As the rest of the fleet arrived a few days later their efficiency was in marked contrast to the shambles that Patterson found himself in. At dawn on 7 November several hundred men brought the cable ashore and with the end connected to the instruments in a hut on the beach, the ship *Hibernia* headed out to sea, paying out the cable behind her. It had all been so effortless that it was difficult to realise that this was the cable that would join Australia to England. By 19 November the cable had been brought ashore at Banjoewangi and on that day Port Darwin, one of the most isolated settlements in Australia, was in communication with Europe.

The company had now completed its part of the agreement and would now be able to extract heavy penalties from the South Australian government if the overland line was not ready in time. But there was little chance of its completion. As Patterson made his way south to join his working parties, not one pole had been erected since McMinn had cancelled the contract. When the first rain fell in early December the men could at last start moving south again. Patterson wrote, 'I have met with defeat of fame but I hope in time to think of it with less pain than it gives me now.'

Patterson had arranged for another ship, the *Bengal*, to carry stores round to the Roper and as his men became bogged in the now flooded country he left with a small party to make his way to the river. He reached it on 31 December 1871, the day before the line should have been finished, and as he huddled in his sodden

The Telegraph Station at Alice Springs, the place synonymous with the centre of Australia and named after Alice, wife of Charles Todd

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camp he knew that the New Year could hardly be worse than the old.

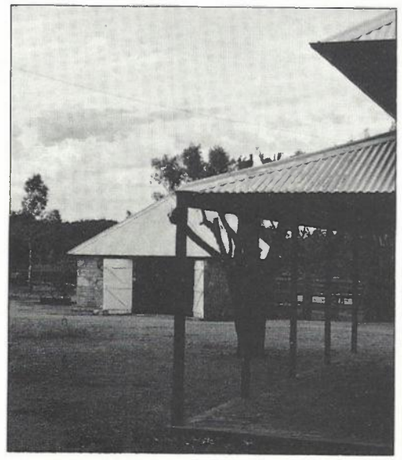
The next day Patterson made a boat out of one of the wagons by taking the wheels off and covering the sides with canvas. It was a dreadful craft for that swollen and fast running river, but Patterson knew that he must go downstream in the hope of meeting the *Bengal*. Their camp was 145 kilometres from the mouth of the river, and they could not be sure that the ship would be able to make anything like that distance upstream. But if they did not find the ship they would surely die, as there was no way they would be able to make their way upstream to get back to the camp. It could only be a one-way trip.

The following day Patterson and four volunteers launched the dreadful craft and headed downstream. They spent a miserable night in pouring rain but late the following day they saw the masts of the *Bengal* through a gap in the trees and after a hair-raising trip of nearly 50 kilometres they knew they were safe.

On board, Patterson learnt that as a result of his message another expedition was on its way from Adelaide, this time heading for the Roper River, and that it was being led by Todd himself. Patterson was furious, for whilst he needed the supplies he certainly didn't need Todd. He knew that there would be little chance of regaining his honour now as it would look as if Todd had rescued him, whereas Patterson was sure he could rescue himself given the supplies and good conditions. He decided he would resign as soon as Todd arrived.

Meanwhile, Patterson went back up to his camp by longboat to supervise the building of a jetty there so that the ships would be able to unload their supplies. He also tried to send some of the *Bengal's* supplies out to the men marooned on the line, but the ground was so flooded that it was impossible to get through and so he went down the river to wait the arrival of Charles Todd.

Todd arrived in the *Omeo* on 27 January and immediately smoothed Patterson's ruffled feelings. He had come to help, he said, not to take command and that as far as he was concerned Patterson was still in charge. But the steamer that was to be used to ferry the stock up the river had not arrived and Todd now found himself in the very situation that had worried Premier Hart. With no means of landing, the stock would surely die and the ship would be forced to leave for Port Darwin. The only alternative was to try to take the *Omeo* herself up the river, but what chance had a thousand-tonne ocean steamer of making 145 kilometres up an unexplored river? Little enough, but it was worth a try.

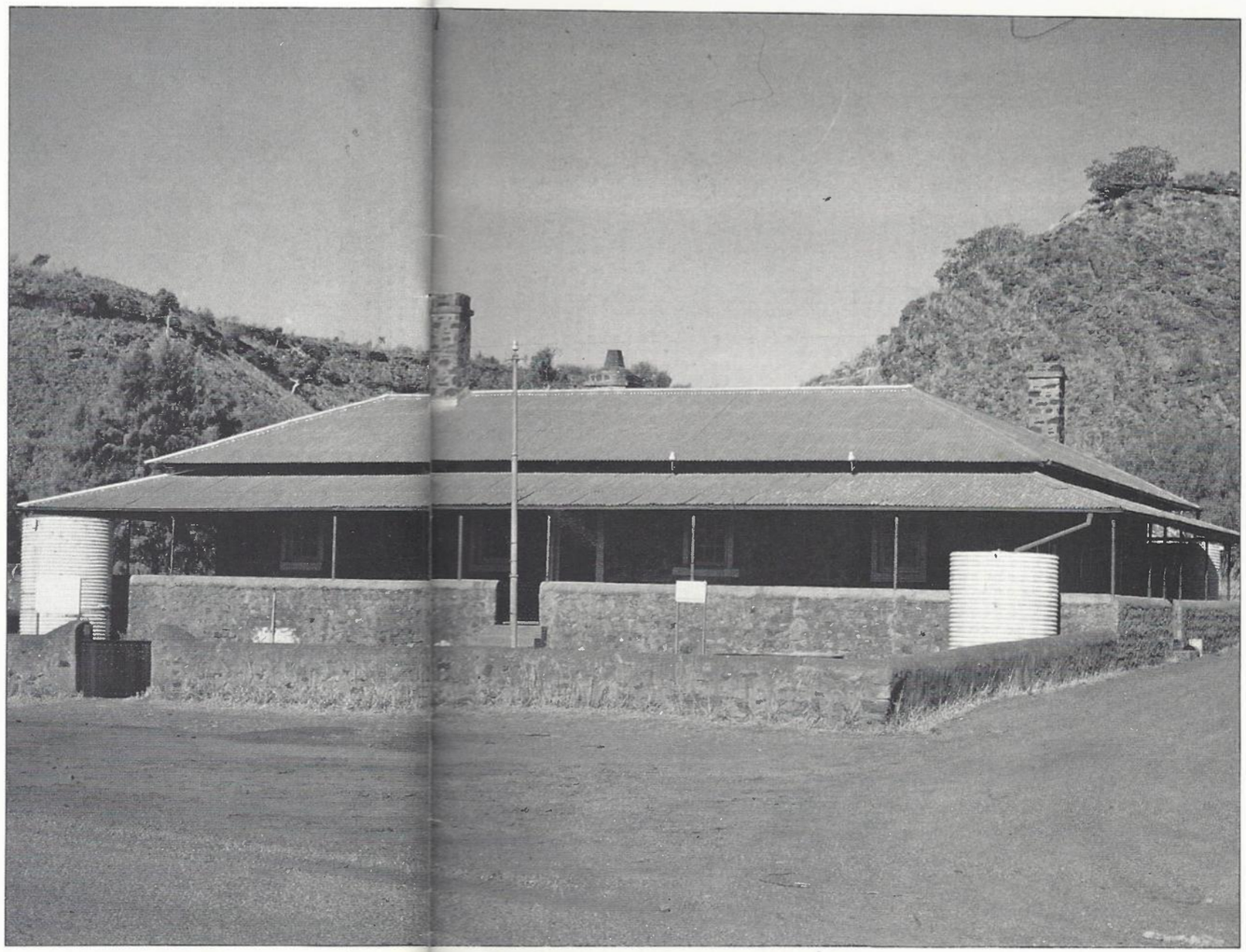


The buildings at the Alice Springs Telegraph Station as they are today

With the light fading, Captain Calder slowly edged the ship over the bar and with men taking soundings on both sides the ship entered the river. Three days later she joined the *Bengal* and from there sent a boat back to the mouth of the river. There they found the small steamer, the *Young Australian*, waiting for them, unaware that the *Omeo* was already well up the river. A few days later all the ships were safely at Patterson's camp and the *Omeo* finally came to rest against the crude jetty. It was an incongruous sight — a thousand-tonne ocean steamer deep in the forest of the Northern Territory and 145 kilometres from the sea.

But although they now had abundant stores, there was still no way they could move them out to the line as it was raining harder than ever. The *Omeo* left the jetty for her return voyage on 13 February and a few weeks later the jetty, which had been 7 metres above her decks, was now 3 metres under water. It was not until 25 March, four days after his twenty-eighth birthday, that Patterson was able to leave the camp with a string of packhorses.

The Wet ended as suddenly as it had started and by early April the jetty was once more high and dry as the river settled back into its usual course. Patterson found that the men on the line had survived, but only just, and soon they were able to start work again as the ground dried and the floodwaters receded. With the breakout from the Roper complete, Todd now went by sea to Port Darwin with the intention of travelling overland to Adelaide so that he could inspect the line on the way. But he found that there were no horses available there and he had to return to the Roper Depot a fortnight later to use those that had been landed there. It was a frustrating business, especially as he had to let Patterson take charge of the race to close the gap in the line. The Southern Section had been finished some time ago, and the men in the Central Section were edging the line northwards to meet the Northern Section. If they could only bridge the gap somehow, the line could be used and the penalties reduced.



The Telegraph Station at Barrow Creek, between Alice Springs and Tennant Creek

By one of those coincidences that happen in real life, but which seem too contrived for fiction, the means were already at hand. For earlier that year John Lewis had left Adelaide with a string of horses with the intention of starting a stud in Port Darwin. By May they had reached Barrow Creek and the solution was available — they would ride a pony express between the gap in the line. As Todd made his way south from the Roper he reached the end of the line at Daly Waters and there found a number of international messages waiting to be sent south. As the pony express took them south to Tennant Creek, which was the other end of the gap, the news came through from Port Darwin that the underwater cable had failed and contact with Jakarta had been lost. It was disappointing, but it gave them a chance to complete the gap.

Work went on furiously as Todd, who had been joined by Patterson, continued south. They reached the end of the southern wire at Attack Creek and using a pocket Morse key, Todd was able to communicate with Adelaide for the first time since leaving there for the Roper. As Todd left to continue south, Patterson turned back to join his men and supervise the final link in the line.

On 22 August 1872 the only gap in the line was a small one at Frew's Ponds where Patterson was camped. They had deliberately broken the line there so that Patterson could perform the joining ceremony when the real gap had been closed further south. But when that important moment came his triumph nearly turned to farce when they found that the tension on the wire was so strong that they could not bring the ends together. In the end Patterson joined them with a spare length of wire whipped onto each end, but as he did so he received an electric shock from all the batteries that had been installed in the repeater stations between there and Adelaide.

If Patterson thought the glory was his, Adelaide knew it belonged to Charles Todd. Camped that night at the foot of Central Mount Stuart in the very heart of the continent, Todd clipped his instrument onto the line. Suddenly the whole of Adelaide wanted to congratulate him and he received message after message until the night became so cold that he could no longer work the key. And this small, unassuming man, who had left school in Greenwich at fifteen, slept under the frail wire that now connected Adelaide to Darwin and which would soon connect Australia to England. It was done.

In one year and eleven months they had built a telegraph line more than 3000 kilometres long through country that had been crossed only once and which was, for the most part, uninhabited by white people. They had cut and planted more than 36,000 poles and they had transported over 2000 tonnes of material into the centre of Australia. They had cut and cleared tracks 10 metres wide through 800 kilometres of thick forest and scrub. They had worked in the northern Wet and in the arid harshness of the Centre. They had taken a fleet of ships 145 kilometres up the Roper River and they had built nine substantial repeater stations. All in one year and eleven months.

On 20 October 1872 the underwater cable was repaired and two days later the first message was received from London. And what had previously taken three months could now be done in seven hours.

As the men returned to Adelaide, 15 November was given over to celebration. The men formed up in the new Post Office and with a band at the front they swung out into King William Street to march to the Exhibition Grounds as the Town Hall bells rang out and the crowds cheered. There, Charles Todd addressed them in a speech that was frequently interrupted by cheers from the men as he told them that it was the proudest day of his life. And with that bond that unites men who have achieved difficult things together, they knew it was. For it was theirs too.

Now mostly forgotten, they left their names on the map of the Centre and the North. But if you stand in the fading light at the Telegraph Station at Alice Springs and let the silence surround you, you will know something of their achievement.

Reprinted from "This Australia" Vol. 1 No. 1, Summer 1981-82
Issued by the Information and Publicity Office, Telecom Australia.