



Railway Pioneering: My Fifty-Eight Years as a Railway Man

by William R Morrow

(extract)

As one of the very few railway men who can claim 58 years service it was my lot to lay down or actually work on some 1,100 miles of railway and 60 miles of tramway:-

Ipswich - Bigge's Camp

Bigge's Camp - Gatton

Gatton - Murphy's Creek

Murphy's Creek - Toowoomba

Toowoomba - Dalby

Gowrie Junction - Warwick

Ipswich - Brisbane

Dalby - Roma

Maryborough - Gympie

Bundaberg - Moolboolman

Warwick - Stanthorpe

Roma Street - Sandgate

Roma - Mitchell

Gowrie Junction - Crow's Nest

Warwick - Killarney

Ipswich - Harrisville

Rocky Water Hole - Waterford

Lowood - Esk

Nundah - Caboolture

Rockhampton - Emu Park

Caboolture - Mellum Creek

Mellum Creek - Cobb's Camp

Gladstone - 28 1/2 mile

Mareeba - Chillagoe

Chillagoe - Mungana

Mareeba - Atherton

Alma-den - Einasleigh

Tolga - Malanda

Atherton - Nigger Creek

Tramlines:

Fairymead

Gin Gin

Mourilyan

Nambour

Molloy

Irvinebank

Stannary Hills

It was in the year 1864, when a boy of twelve years, that I started my first of many years as a Railway man. My home being in the Walloon district, I heard of the projected commencement of the first section of the Southern and Western Railway. This line was from Ipswich to Bigge's Camp (now Grandchester). I was engaged as a nipper, my occupation being to hold up sleepers whilst they were being spiked to the 3'6" gauge.

On February 25th, 1864, a date which will ever remain an eventful day in the history of the Queensland Railways, Lady Bowen, wife of the then Governor of Queensland, turned the first sod and also, about six months later, drove the first spike on the first sleeper that was spiked by her Ladyship. Although in itself a very simple matter, the spiking marked the commencement of trials and struggles of a primitive and isolated colony of vast dimensions settled by a population of some few thousands. Of this small population there was but few who were experienced in the later arts of progress and the work of Railway building, which in the end stands as a satisfactory achievement and also a proof that those who have done well will persistently seek to do better.

The section to be built was over a distance of 21 miles through level country. There were no engineering difficulties to overcome excepting three bridges -- White Gully, Myeye and Ironpot. As the Bremer Bridge was not built at this time the line went out from the back of Ipswich crossing the three gullies or creeks names above. All the three bridges were built

with wooden approaches being spanned with a middle iron span. The contract was in the hands of Peto, Brassy & Betts; their chief Engineers being Mr. Fitzgibbons and Mr. Willcocks, assisted by W. A. Cross, consulting Engineer. All these three men were capable engineers. Employed on the line were some 300 navvies, who were specially brought out from England by the contractors. These men, although purely and simply navvies, were able, reliable and honest workers. It was about the beginning of summer when these men arrived and I can well remember the tortures some of them suffered with sunstroke. Happily there were no serious accidents on this section worth remembering during the two years it took to build. To about the 11 1/2 mile peg the line passed through a very poor class of country which was most unsuited for agricultural purposes. It was in this country that the first cotton in Queensland was grown; the Government of the time granting a bonus of £25 a bale for seed cotton. Beyond the 11 1/2 mile peg the line skirted the now well known scrub. At this time the first settlers had not arrived to carve for themselves a home in this dense scrub. Some two years after the opening of the line a shipload of German settlers claim the honour of converting into smiling fields and pastures what was thickly tangled and wooded scrub, and so founded the township of Rosewood.

On the completion of the first section the line was handed over to Mr. Stratham Lowe, the first traffic manager, as representative of the government. The second section of the line was continued from Bigge's Camp to Helidon. Unlike the first section, this line passed through some very rough and hilly country for the first five miles. A great obstacle in the Little Liverpool range had to be overcome in order to reach the rich alluvial flats of the Lockyer and so continue the line as far as Toowoomba. In this range was driven two tunnels, -- the little tunnel a length of between 4 and 5 chains and the Victoria tunnel (named in honour of the Queen) a length of from 20 to 21 chains. These two tunnels were a very costly undertaking having to be driven through solid rock, and also, owing to cement not being heard of at that time, they both had to be bricked and arched from end to end. The Victoria tunnel, not being finished when the railhead reached it, the contractors, in

order to avoid delay, decided to start the platelaying on the Laidley side of the Range. In order to do this a locomotive and ballast wagons had to be transported overland on a wagon specially built for the purpose. This wagon was drawn by two horses in the shafts and a team of 60 bullocks ahead of them, and landed safely on the Laidley side of the Little Liverpool in two days ready to start platelaying and ballasting.

The Bigge's Camp -- Laidley section construction will ever be remembered as it was on this section that the first strike in the history of Queensland occurred. According to the class of the work they were engaged on, the navvies were paid 6/6, 7/-, and 7/6 a day of 10 hours. Higher wage being refused them, the men downed tools and decided to go to Brisbane and state their demands to Governor Bowen. Taking possession of a train at Bigge's Camp, they trained as far as Ipswich. Those who had the fare went from Ipswich to Brisbane by boat or coach, whilst those who did not, walked. Exaggerated reports such as "a whole army of riotous navvies being on their way to plunder the city", reached Brisbane where every precaution was taken to resist them. Special constables were enrolled to save the city from these "plunderous ruffians". The whole thing ended in a huge joke; the "plunderous ruffians" proving to be "the most docile and law-abiding" body of men as could be found in the State. I wonder if these has been as big a farce ever again happen in the history of the State of Queensland as this incident?

Reaching Laidley, all engineering difficulties were dispensed with until reaching Murphy's Creek. Leaving Laidley the country passed through is rich agricultural country until Gatton, the centre for the famous Blackfellow's Creek district, is reached. Immediately beyond Gatton a large iron span bridge was built over the Lockyer Creek; the line then continues on over fairly rough hilly granite country.

At Gibbon's Camp it was found necessary to again cross the Lockyer and another fairly large iron span bridge was built over this watercourse. Rough granite country was still met with until a mile or two to and beyond Murphey's Creek where the grade to mount the Main Range started.

To conquer the Range was a task at which even the boldest constructors might hesitate. Standing on a pinnacle near Highfields after the completion of the line and looking down over the vast vista beneath, one marvels at the wonderful fortitude of the engineers and their bravery in ever attempting such a feat. To give full credit to this wonderful piece of engineering, one must remember that the engineering of that day was not up to the standard it is today. To mount the Range, grades 1 in 50, 1 in 60, and 1 in 70 had to be built as well as curves with a radius of 5 chains. It will be thus seen that much thought had to be indulged in before finally deciding which route to take. As in all mountain railways a great deal of excavating and tunnelling was necessary which proved very costly. At this time all cuttings were trimmed to a "batter rule" and in order to do this the "Fancy Slopers" were slung up on the batter of the cutting with ropes to secure their safety as regards falling, which would mean certain death. The origin of the "Fancy Slopers" is very humorous. Men who did the batter ruling were termed "slopers" and their sole duties were to dress the cutting batters. A great number of these men sought lodging at the navvies camp in boarding houses kept by the navvies wives. Invariably they would "slope" without paying their board and on one occasion I well remember a batter trimmer coming up to one of these boarding establishments to seek lodging and in order to recommend himself he explained to the landlady that he was a "Fancy Sloper". A Fancy Sloper was considered a man of some importance in those days but apparently this old lady had had an experience with "slopers" and turned him away with a scornful remark that "he wasn't going to slope her".

It was on this section that the first [unreadable hand-written insert] contract was let; it being to Messrs Fountain & Sons who were entrusted with the excavations for the first 3 1/2 miles on the Toowoomba side of Murphy's Creek. The Fountains afterwards became well known railway constructors in a fairly big way. On reaching Toowoomba the second section of the line was completed thus linking Ipswich and Toowoomba.

The next section decided on was between Toowoomba and Dalby. The line was

noteworthy inasmuch that it passed through all open plain country and also the lack of engineering difficulties of any note. Five bridges were needed on this route but they were all of a small nature incurring little expense. The absence of local ballast caused the contractor some little thought and men were sent out to sink trial ballast holes on a small knoll known as Bowenville. Their efforts proved successful and excellent railway ballast was struck a few feet under the surface. It was from this pit that the lines from Dalby to Roma and Roma to Mitchell were supplied, and the Bowenville pit has remained ever since a Government Quarry and still supplies maintenance ballast. The line continued through open plain country until Dalby was reached; -- Dalby remaining the terminus for some years.

Under contractor Dan Williams the Gowrie Junction to Warwick section was commenced. It was on this line that I received my first promotion, that being from a nipper to a leading rail borer.

My wages as a nipper were 3/6 a day and on my promotion to leading rail borer I received the magnificent rise of 2/-, and on 5/6 a day I worked right through to Warwick.

This line was noted for the beautiful agricultural country through which it passed and was destined afterwards to be the centre of the most important wheat producing area of this State. At this time there was no sign of any wheat growing but the country was in the hands of a few squatters who held these thousands of acre for running sheep. With the advent of the line there was also the advent of increased revenue. These large holdings employed about half a dozen shepherds, mostly Chinese, and as revenue producers they are now more than overshadowed by the revenue the same strip of country produces today.

Along this line was found many notable fossils of extinct birds and beasts which helped to give us some idea of the prehistoric life of our country. Most of these fossils now repose in the Queensland Museum. One very exciting incident on this line occurred some time after the line was opened. A mixed train from Warwick to Toowoomba, in charge of Guard (afterwards Commissioner) Evans, when,

nearing Glengallan, was caught in a rather severe cyclonic storm. In its intensity this storm blew the coaches off the rails on to their sides. Happily no one was hurt seriously although a few suffered minor injuries. Reaching Warwick, this line was completed, and Warwick remained the terminus of this section for some years.

Early in 1875 the missing link that was to connect Ipswich and the coast was commenced. All this portion of railway was done by Government day labour excepting a few cuttings, which were sublet to contractors. Before this line was built all communications between Brisbane and Ipswich was carried on by means of boats and Cobb and Coy's coaches. Of the former there were three that did faithful service for many years i.e. the 'Hawk' -- driven by side paddles and which made such a noise that it could be heard about an hour before it was seen. The 'Ipswich' also driven by two side paddles and a little larger than the 'Hawk', -- and lastly the 'Settler'. The 'Settler' was much bigger than the 'Hawk' or the 'Ipswich' and unlike the other two it was driven by a paddle wheel at the stern. It was considered a wonder boat by the populace of Ipswich and found much difficulty in navigating the Bremer River. Cobb and Coy's coach carried most of the travellers as the journey by coach was done in much quicker time than by boat. The line was in charge of Peter Minerham (I am not quite sure of the spelling of his name) a very able platelayer and a good all round railway man. Fortune continued to smile on our endeavours and I was promoted to a ganger -- my wages being risen to 8/- a day of 10 hours.

As a ganger my duties were to spike the rails to the 3'6" gauge. The start of the line was made to Ipswich and continued through even country until reaching the Brisbane River at Indooroopilly and here a check occurred. On the Brisbane side of the river the line was started at Brisbane and continued until reaching the line from Ipswich on the opposite side of the river. The bridging of the river at Indooroopilly (which was finished some time later) was the only real engineering difficulty of any note that occurred on the whole route. Trains commenced running to and from the bridge, passengers and goods being conveyed across the

river on a ferry until completion of the bridge in the middle of 1876.

As far as I can remember Dalby to Roma was the next Section to be attempted. This section was divided between three contractors, the first being Overend Bros, the second Fountain Bros, and the third George Bashford. I was in charge of the slooping adzing gang. The line winds through open plain country and passes the famous Jimbour Homestead, then the residence of Joshua Peter Bell, about 14 miles from Dalby. Some 40 to 50 miles beyond Dalby a patch of Dogwood scrub is struck and here a good many workmen took ill with dysentery and sandy blight. On reaching Roma the line did not extend beyond this point for some years afterwards.

At the completion of the Dalby - Roma section I commenced work on the Maryborough-Gympie line with Thorn and Annear, contractors. Unlike the previous line this line was of a fairly heavy nature through a very poor class of forest country. Several big bridges were necessary of which Mungar over the Mary River was the biggest and most expensive. This bridge was built on cylinders supporting iron spans which necessitated the employment of divers who met with some difficulty in finding a suitable foundation. I did not stay till the completion of this line but accepted an appointment of foreman platelayer with Overend Bros, who were then on the first section from Bundaberg to Moolboolaman section of 44 miles. This line did not penetrate country of any note or with any difficulties for the engineers excepting a bridge over Splitters Creek, about four miles from Bundaberg. At the 11 mile a siding was built for Gibson Bros, sugar growers, they being the pioneers of sugar growing in this district. There was a great deal of criticism levelled at this railway due to McIllwraith, the then Premier owning Gin Gin cattle station through which the line passed. It was nicknamed "McIllwraith's pet Railway" a name it retained years after. Although ridiculed, this line opened a great deal of cane country and became a paying concern. One rather serious accident occurred during the building of this line in which young probationer engineer O'Driscoll lost his life. Eight ballast trucks were left to be loaded on a 1 in 50 grade while the locomotive ran into Bundaberg for more material. With the

loading the increased weight of the ballast caused the brakes to become slightly released thus causing the trucks to run away. O'Driscoll, the engineer and his younger brother (the probationer) were riding, as was usual in those days, on the cowcatcher of the engine when they met the runaway trucks in a curve. The elder O'Driscoll climbed from his perilous position back to the footplate and escaped injury, but the younger brother was killed outright. The impact between trucks and engine was so great that the front of the engine was smashed in as far as the back of the smokebox. The trucks also suffered considerable damage. It was a few years afterwards that I returned to this line to build a tram line from Gin Gin to the Burnett River where the central sugar mill was erected.

About the middle of the seventies the Government decided to continue the line from Warwick to as far as Stanthorpe. This piece of construction was divided into two sections; the contractors for the first section being Overend Bros, and the second was, I think, in the hands of Gargett & Thomas. This line proved a very heavy and expensive undertaking, the first five or six miles being fairly easy, but heavy mountain country was reached later. About three miles the Warwick side of Cherry Gully a tunnel had to be driven through the range and this proved very costly to the contractors causing them to come out on the wrong side of the Ledger financially. The tunnel was driven through solid rock and to give some idea of the hardness of it I recollect a dray load of drills being taken to the back to Blacksmith from the tunnel mouth after having driven one solitary hole in the face of the rock a distance of 18 to 20 inches. At this time the tin rush, which proved a godsend to Queensland as the state was then faced with poverty and surplus labour, was in full swing. The finding of tin at Stanthorpe, one of the richest tin fields ever opened in Queensland, consumed a great deal of the surplus labour and thus relieved the state of a very ticklish problem. I have seen stream tin four feet of a face in the creek bank and almost as coarse as revolver bullets. The miners had no trouble in preparing this tin for market as it was just shovelled out of the face on to a platform in the creek bed, the creek washing it, and was then placed into bags and ready for market. A strange feature of this field was that, to my

knowledge no lode was ever found, being unlike the tin fields of North Queensland where the alluvial was traced from the lode.

About 1882 one of the best known lines in Queensland, that being from Roma Street to Sandgate, was commenced. The contract was in the hands of George Bashford, for whom I was foreman platelayer. The line did not follow the course it does now, his was via Normanby coming out where Mayne Junction now is, running through Albion and Nundah, these being the only two stations of any note at this time. Although a distance of only 13 miles the line is noteworthy, inasmuch that it was the first line to any watering place in Queensland. The line produced no difficulties and was finished in about 14 months.

My next line was from Roma to Mitchell, being in charge of the laying down of the permanent way under contractors Fraser & McDonald. The line was fairly cheap to build being all surface formation through rolling downs country most suited for sheep raising. Four large bridges were found necessary on the construction, -- Bungeworgora, Muckadilla, Muckabie and Amby, -- also a great number of flood openings. Some 200 to 250 men were employed on this line and one night at Bungeworgorai Creek they raided the "grog" wagon. After taking as much grog as they could to their camps, they hid the remainder in the bed of the creek where as far as I know it still reposes.

Leaving Mitchell I wandered back to Gowrie Junction, -- Crow's Nest line, being in charge of construction under contractors Gargett and Thomas. In formation the country was very moderate, interspersed with hills and valleys which gave little or no constructional difficulties.

The rich red volcanic country the line opened now settles many prosperous farmers and dairymen and also supplied Toowoomba with a great deal of mill timber. Since the original line was put down I believe several alterations and deviations have been made, -- the line now running from Toowoomba instead of Gowrie Junction.

At the completion of the Crow's Nest branch my next construction was the Warwick to Killarney Line; Gargett and Thomas having, during the

building of the Crow's Nest Line, secured the contract of the branch. I was still in charge of the construction, having secured on the previous line the position of Foreman for Gargett and Thomas, a position I held until I left their services as the completion of this line. The line is noted for the most beautiful wheat lands it passed through in the course of its 28 miles. Engineering difficulties were nil as the line ran practically on formation and the only bridge worth stating is the one spanning the picturesque Swan Creek.

Immediately after completing the Warwick-Killarney Line I took charge once more under George Bashford, of the Ipswich-Harrisville section, a distance of 19 miles. This line was built with very sharp grades, the hardest being 1 in 25, also curves of a 4 chain radius, most of these having since been eliminated and substituted by easier grades and curves of a larger radius. The country penetrated by this line is good agricultural country which has previously grown cotton on a large scale. At the time of the building of the line cotton growing was replaced by dairying and mixed farming owing to the Government having done away with the cotton bonus. One rather serious accident happened whilst this line was under construction in which two men were killed and several injured. A lengthman placed his trolley overnight on a blind siding and in taking it out next morning he propped up the points lever in order to get the trolley through on the main line and forgot to drop the ball to "Main line safety", thus leaving the points open to blind siding and "foul to main line". The work train consisting of 3 T-wagons on the nose of the engine came along just after he left, and ran into the blind siding of 3 1/2 chains. Travelling at about 12 miles an hour, the engine crushed the trucks against the stop blocks completely telescoping them.

After finishing the Ipswich-Harrisville section I took sole charge of the tramway from Mourilyan Harbour to the Mill, a distance of 5 1/2 miles, George Bashford being the contractor. Originally this line was built in order to bring the machinery from Mourilyan to the Mill site. The line cuts its way through dense tropical scrub and gave little constructional difficulties. The grim reaper, Death, claimed many workmen and it was a

common saying "that a man died for every sleeper that was put down on the line." Big, strong, able-bodied men were taken off like babies. The men contracted a strange fever known as "yellow jack", from which they succumbed in a week or less, their strength seemingly having no combating energy against this dreaded disease.

As foreman in charge of the lifting gang I commenced on the Logan Branch with Fountain Bros who were successful contractors for this section. Ned Bowden was the contracting engineer and George Forbes was the Government supervising engineer. Meeting with little obstruction along its 18 to 20 mile run, -- excepting the Waterford bridge over the Logan River, -- the line was not very costly to build.

Briggs was the contractor for the second section of the Brisbane Valley line from Logwood to Esk. Under him I had change of position, -- that being in charge of the ballast pit in the Brisbane River. I did not commence on the first section, from Ipswich to Lowood, owing to my being on the Ipswich-Harrisville route at the time this line was commenced. Running through fine cattle country the line only struck one obstacle of any note, that being the bridge over Lockyer Creek.

The wonderful North Coast district next secured my attention as I was in charge of the laying down of the permanent way on the first section - from Nundah to Caboolture. The line branched off the Sandgate line at Nundah Junction. This junction was afterwards named Northgate Junction, -- the name it still retains. The line passes through mainly ti-tree swamp, the only good piece of country being around the Pine River. Four fairly large bridges, the South Pine, North Pine, Burpengary, and Caboolture were necessary in order to continue the line to Caboolture. These were all built with wooden approaches and one steel span resting on concrete piers. This contract was in the hands of John Robb who had as his manager Mr Glerison; Steve Weedon being Government Supervising Engineer. Robb had also at this time the building of the Cairns-Mareeba line which made him famous as a contractor.

North Rockhampton to Emu Park was the second line in Queensland to be built to a watering place, -- Sandgate being the first.

Fountain Bros were the contractors; Ned Bowden constructing engineer and George Forbes Government Supervising Engineer. Running through 32 miles of very poor country very little earth or bridge work was found necessary along its length. During the building of this line very wet weather set in and washed away many of the banks in low-lying places, this causing the engineers to raise the formation levels four feet higher, bringing the whole above flood level. The railway bridge between Rockhampton and North Rockhampton was not built at this time, all trains for Emu Park starting from North Rockhampton.

About 1891 I returned to the North Coast to start on the second section of that line, from Caboolture to Mellum Creek (now Landsborough) which was about to be commenced. The contractors were Jesup and Haig; Steve Weedon being Government Engineer in charge, for whom I was foreman platelayer, this being my first position under these contractors. Unlike the first section there were no obstacles such as bridges, etc. to contend with excepting perhaps a few small flood openings which were not of any note. Sandy and wallum country is mostly met with along this line and has not been found suitable for extensive agriculture except pineapples which are extensively grown. After reaching Mellum Creek the line was pushed forward another section as far as Cobb's Camp, now Woombye, being still under the same contractors, Jessup and Haig. Running through heavy country (in fact the whole section skirted the Blackall Range) the line was fairly expensive to construct. A tunnel having to be driven 1 1/2 miles from Mellum Creek and many small bridges and concrete culverts having to be built, soon helped to mount the cost. Of the bridges there are only two of note - - Petrie's Creek and Maroochy, -- thee being fairly large. On the Blackall side of the line was found some of the finest red cedar ever seen in Queensland. One particular tree I saw measured 27 feet across the breach pieces at the stump. At this time the whole land was covered with virgin scrub and passing through about 18 months ago I was struck with the great change that had come over the district since I saw it first when I was building the line. The scrub has given way to the march of time and the

progress of man. Where the lawyer and other vines held their tenacious sway many beautiful cane, banana and dairy farms now replace them. This was my last section of the North Coast line.

Another portion of the main line to be commenced was from Gladstone to [unreadable hand-written insert] Bundaberg for a distance of 28 1/2 miles. This line was built with the object of meeting the line from Brisbane and thus linking up Brisbane to Gladstone. Overend, Paterson & Burt were the joint contractors and George Forbes the supervising Government Engineer. My position was travelling ganger in charge of the whole section.

Country of a very poor nature surrounds the line until reaching the Boyne River where the only serious problem to be overcome was the bridging of the river. The bridge is a handsome structure with two steel spans resting on concrete piers at both approaches, supported by iron cylinders built in the river bed. Unhappily the building of this bridge was marred by an accident in which a workman lost his life. Crossing the bridge he slipped a distance of 48 feet and was killed instantly. Over the river we meet with a better class of country than previously although the whole country divided by the line is good grazing country. One helpful feature on this construction was the presence of a good ballast pit, which served this and several other sections which were built later. Little did we think when we were constructing this line that in 30 years we would form a link that was to connect North Queensland with Central West Australia.

Upon the completion of this line there followed some years of depression in Government railway building due mainly to the lack of funds.

During this depression I was engaged in constructing several sugar lines for private individuals. The first was for Young Bros, Fairymead, near Bundaberg three-gauge railroad (i.e. the 2 foot, the 3 foot and the 3 foot 6 inch gauge running on the same sleepered bed) in Queensland. Their idea in building this line was two-fold; being firstly to serve their two plantations -- Fairymead and Avondale, -- with the 2 foot gauge and secondly to connect them both by rail to the Government 3 foot 6 inch gauge. Finishing this tramway I was for a time

in charge of its maintenance until the offer of the Gin Gin Central Mill construction availed itself and which I accepted. This tramway branched off the Mount Perry line at about the 29 1/2 mile peg and ran a distance of 8 miles. I also built the 1 1/2 mile line along Petrie Creek at Nambour for the Moreton Central Mill.

I now had a short spell from railway building and secured a position in Brisbane as foreman on the laying down of the first underground telephone cable system, under Overend Bros. Here finished my work on railway construction in the Southern Railway district as shortly afterwards I left for North Queensland.

August 1898 saw the commencement of my 28 years of railway activities in the North (Cairns District). The line at this time ran from Cairns to Mareeba, a distance of 46 miles; Mareeba being the terminus. The first extension beyond Mareeba was the privately owned Chillagoe line, now a Government line. This line was built by the Chillagoe Company in order to make easy access to the coast for their ore from their smelting works at Chillagoe. Another reason was that all their coal was obtained from Newcastle, -- Mt. Mulligan had not been heard of at this time -- and the building of this line obviated the necessity of expensive transshipping. This line is conspicuous inasmuch that it was all done by day labour; the engineer in charge being A S Frew for whom I was permanent way inspector. The country is not uniform, being from even to rough, with some expensive stretches. The first five miles run over very even country; from the 5 to the 7 mile peg a little heavier; and from the 7 to the 15 mile (the Walsh River) is formation. Leaving the Walsh River very even country is still met with until the 43 miles is reached, and here the granite country is struck. The line skirts the Featherbed Range, still in heavy country, and continues on to Emu Creek where the country gets a little easier for about two miles when Petford is reached. Petford, at the foot of the Lappa Range, sees the commencement of rising grades. To climb the range as far as Lappa, grades of 1 in 50 with compensating grades as well as curves of a 5 chain radius, had to be built. This 5 miles from Petford to Lappa was the heaviest piece of work on the line and therefore the most expensive; several big cuttings having to be taken out. From Mareeba

to Lappa it was found necessary to build five bridges: -- Chinaman's Creek, a timber bridge throughout; Granite Creek, built with timber approaches and one steel span supported by two concrete piers; Walsh River, with fairly big steel spans throughout with piers at each end and a concrete span supported by cylinders; Emu Creek, a fairly large bridge having timber approaches at the east and cylinders in the creek bed; and Oaky Creek bridge of one steel span supported by concrete piers. The country from Lappa to Chillagoe is very even and with difficulties of hardly any note only perhaps for a few small timber bridges which are hardly worth mentioning. All the country tapped by the line is one extensive mineral field; -- copper, wolfram, tin, molybdenite and silver being the chief minerals found thereon. The terminus of the line was Mungana, 11 miles beyond Chillagoe and here (Mungana) are all the main mines for which Chillagoe is famous.

One remarkable feature on this line is the remarkable limestone formation of the country and included in which are the famous Chillagoe and Mungana caves. Nature as a "Master of Arts" is seen at her best. In the Calcifer Hills is a striking mound of limestone resembling a huge cockscomb. This is an ideal place for naturalists seeking both endless and interesting fields of study.

Mareeba to Atherton, a distance of 21 miles, was the second extension from Mareeba, thus making Mareeba a junction. As on the Chillagoe line, A S Frew was the engineer in charge, myself being his travelling ganger. The line up as far as Tolga runs on a rising grade striking heavy granite country from the 9 to the 11 mile which is the only difficult section met with. The line opened up thousands of acres of timber country and timber is still its greatest revenue producer. Where the scrub stood at the building of the line is now dotted with many prosperous maize and dairy farms. Who has not heard of the wonderful Atherton Tablelands with all its rich resources?

The Chillagoe Company decided to enlarge its activities and built the line from Alma-den to Einasleigh. A S Frew was the constructing engineer and A C Stirling engineer for Frew. Passing through even country the line needed several bridges to assist it on its journey of 101

miles. Five of the bridges are worth mentioning: Big Tate, Little Tate, Bullock Creek, Frewhurst and Copperfield, -- the last mentioned being the biggest. On this line I met with rather a serious accident in which I lost one of my legs, being incapacitated for 18 months. At the time of the accident I was permanent way inspector, a position I held for the previous seven years. A strike lasting six weeks occurred on this section owing to a wages dispute, but it proved to be of very little benefit to the men.

To open up further scrublands the line from Tolga to Malanda was next constructed. This line was built by Government day labour under Mr. Smith, Government Engineer and myself foreman in charge of permanent way. Prior to the commencement of the line all the land the line now passes through was dense virgin scrub whereas hardly a tree is to be seen. ...

[The extract ends here at the bottom of page 18. The extract has been transcribed from the original mimeographed typescript in the Archer Park Rail Museum Collection. E&OE]