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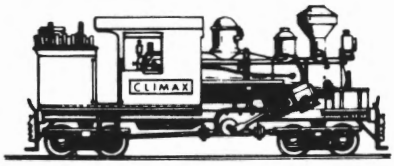

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EDITORIAL

This issue returns to the Society's roots, as it were, with three articles on the timber industry. However, the growth and maturity of the LRRSA is reflected in the range of material presented — from Western Australia, New South Wales and Victoria — and the new authors represented — Jeff Austin, Laurie Holmes and John Ritter. Welcome aboard!

I have been grateful to receive a continued supply of well researched material for publication over recent months and forthcoming issues will bring a interesting selection of articles. *LR.99* will offer some most welcome contributions from Tasmania and No. 100 will offer a special issue on the timber tramways of the Dorrigo Plateau in New South Wales. I trust that readers will find the offering interesting and rewarding.

RFM

Cover: On enthusiasts day, 8 June 1985, ILRMS Davenport 0-4-0ST locomotive *KIAMA* (1596 of 1917) hauls passenger cars No. 2 and 430 at the Albion Park Museum. Photo: Ken McCarthy

TIMBER TRAMWAYS OF LOWDEN, WESTERN AUSTRALIA

by Jeff Austin

Introduction

Lowden is a farming area located in the picturesque Preston River valley, approximately 240 km south of Perth. Well known today for potatoes which grow in the rich soils of the flood plain and rolling hills, it once was the scene for a very active timber milling industry. The bare hills now give no hint of the majestic stands of jarrah (*Euc. marginata*) which flourished in the area at the turn of the century.

Railway Beginnings

Although the forests in the Preston Valley had long been regarded as amongst the finest in the south-west, little was done to harvest this vast resource. This changed however when the WAGR railway from Donnybrook to Preston Valley (later Noggerupp) was opened on 25 March 1908. The "opening" ceremony took place at the newly completed 'Excelsior Saw Mill' of Messrs Sexton & Drysdale at Preston Valley. Both the 'Excelsior Saw Mill' and 'Ferguson Mill' at the 10-Mile (later Lowden) had been constructed at the same time as the WAGR line, and so commenced operating simultaneously.

Ferguson's Mill

The mill at Lowden was built by the prominent Perth businessman JM Ferguson in 1908, who had a 'Sawmilling Permit' for 19000 acres granted from 1 May 1907. John Maxwell Ferguson was a Scot who had come to Western Australia as an infant in 1842. After a successful career as a sea captain he went into business, co-founding the Swan Brewery in 1876. By the 1890s he was a successful merchant with sawmills in Perth. His first 'bush' mill opened in February 1899 at Logue Brook near Harvey. The mill and its horse drawn wooden railed tramway operated until 1907, when everything was transferred to the new mill at Lowden.

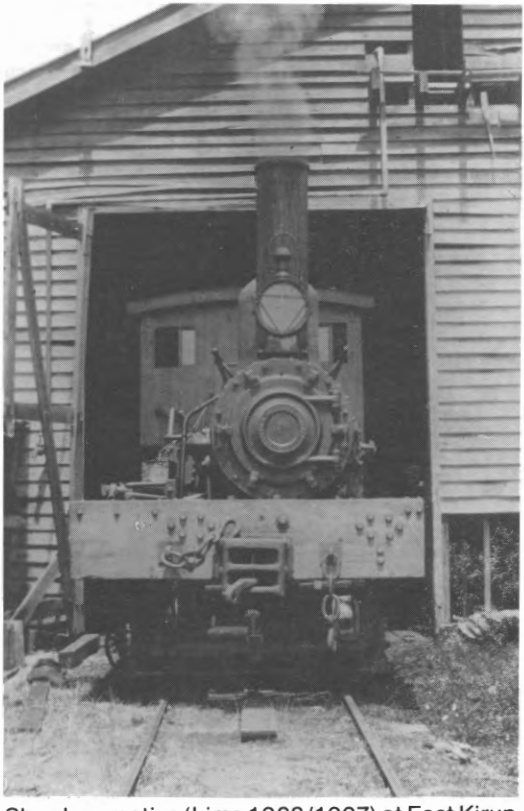
The mill was located 1 mile south of Lowden siding at the foot of the steep range of hills which

Ferguson's *Shay* locomotive (Lima b/no. 1968/1907) after transfer to Millar's East Kirup mill, c.1934-39.
Photo: Millars (WA) collection

border the Preston River valley. The small creek nearby supplied the water to the mill boilers and the employees' huts. These huts and a hall were built on the hill slopes surrounding the mill. The only brick building was the mill manager's house which was prominent on a hillside away from the rest of the community. The mill itself used twin saws powered by a 48 hp steam plant, producing 30 loads per day of sawn timber.

Timber Tramway

To ship out the finished timber, Ferguson constructed a 3 ft 6 in gauge steel railed tramway from Lowden siding to the mill. To operate this line he placed an order with the 'Lima Locomotive & Machine Co' for a 2-truck B-class Shay locomotive. This was an unusual choice of locomotive, but was probably based on the company's future requirements for a locomotive to negotiate the very steep country south of the mill. The Shay (B/No. 1968/1907) was delivered to Lowden in December 1907. The Railway Construction Branch, PWD had not formally handed over the line to the WAGR at this time, but local newspapers had reported Christmas picnic trains running out to Preston Valley, so there would have been no problems moving the Shay to Lowden.



Shay locomotive (Lima 1968/1907) at East Kirup mill.

The Shay's first year was somewhat restricted to the siding — mill connection, logs recoverable near the mill being hauled by horses. A log landing midway along the tramway was the only one at that time. As these areas were cut out the tramway was extended further south over the steep hilly sections. WAGR wagons were permitted over the siding to mill line only.

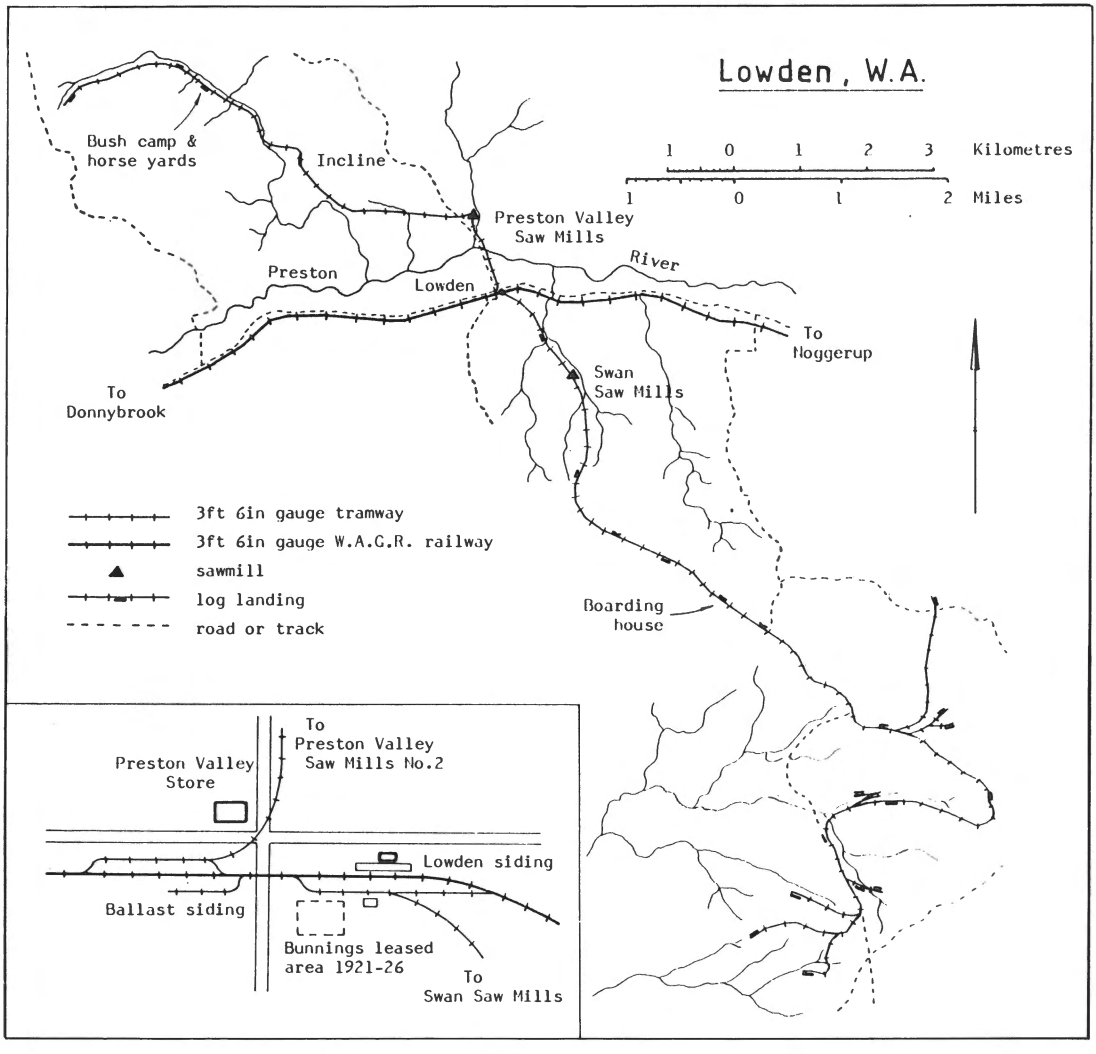
Swan Saw Mills Limited

After only a year of operation Ferguson found himself in financial difficulties probably as a result of the establishment and equipping of the new Lowden mill. At a meeting of the company on 14 August 1908, JM Ferguson Ltd went into voluntary liquidation with RH Millar and EC Millar appointed as joint liquidators. Ferguson remained as an adviser to the liquidators.

From this point the Lowden mill became a "satellite" mill of the vast Millar's company. At a subsequent meeting of JM Ferguson Ltd in March 1910 the company was formally wound up. Following the Millar's "take over", the mill operated under the new name, Swan Saw Mills, Ltd. The new management left the mill to continue much as it had done since opening. The tramway reached the No. 5 log landing during 1909. The Shay locomotive was transferred to another Millar's "satellite", Timber Corporation at Greenbushes in mid 1909, being replaced by the ex Canning Jarrah Timber Co locomotive *JH Smith* (Kitson B/No. T299 of 1899). During 1910 several new "bush" spurs were surveyed by Millar's to reach the remainder of the timber concession. These lines were laid down over the next 4 years and served the mill until its closure.

Description of the Tramway

From Lowden siding the tramway traversed level country to the south east for the 1 mile to the mill. About halfway along was the No. 1 log landing where the line also crossed a small creek. For the last couple of hundred yards to the mill the line ran between large stacks of seasoning timber. Passing through the mill the line immediately began a steep climb over the hills. In the first mile it climbed 300 feet with the steepest grade being 1 in 11. Having reached the No. 3 landing the grade improved to about 1 in 50 for the next 2 miles. At the No. 5



landing was a boarding-house for the bush workers. From there all the spur lines descended into the gullies where log landings were located. Total bush trackage beyond the mill amounted to about 15 miles.

Working the Line

With a lack of turning facilities, the locomotives headed boiler first into the forest. The steep grades necessitating a shuttle up and down the hill to assemble a train at the No. 5 landing. These rakes were then deposited at landings and later delivered loaded to the mill. Trains often carried employees on the timber rake to and from the cutting area. At the top of the hill south of the mill, passengers would disembark and walk the remaining 2 miles. The brakes would be applied to all wagons before the train proceeded cautiously down the steep descent.

Mill Closure

The departure of men to World War I brought about the closure of the mill in 1914. It was not dismantled however, and sleeper hewers continued the activity throughout the concession area. Periodically the mill locomotive ran out into the forest to bring in loads of hewn sleepers which had been stockpiled at landings. This downturn in use resulted in the 2-6-2 *JH Smith* being replaced by the diminuitive forest veteran *Samson No. 2* (Beyer Peacock & Co B/No. 3120/1889). Leased by

SAMSON No. 2 (Beyer Peacock 3120 of 1889) operating on a Millars timber tramway in Western Australia. This 2-4-0T locomotive served at Swan Mills from 1914-18. Photo: WA Forests Department

Millar's to Swan Saw Mills from 1914-18, this small 2-4-0T hauled the irregular train service until the return of *JH Smith* late in 1918.

Early in 1920 the Swan Saw Mills Co opened a new mill at Claymore on the WAGR railway to Nannup. The mill machinery at Lowden was dismantled and transferred along with most of the employees. *JH Smith* was used to recover remaining bush trackage at Lowden, before it too went to Claymore. The company's siding and points at Lowden were removed in May 1922, so ending the Swan Saw Mills association with the Preston Valley.

Bunning Bros Mill

While Swan Saw Mills were in the throes of relocating away from Lowden, a new mill was in the course of construction on the north side of the Preston River. Bunning Brothers had been associated with the area since their acquisition of the old Excelsior Saw Mill at Noggerup in May 1914. This mill was known as the Preston Valley Sawmill No. 1, utilizing an extensive tramway network to transport logs to the mill. The new mill at Lowden became known as the Preston Valley Sawmill No. 2, and was built by Mr Roeger in February 1920.

It was located in Wellington Loc. 502 about 1 mile north of Lowden siding. Water from the adjoining creek was used in the 28 hp steam plant to power twin and circular saws. A small community of employees and their families lived in huts surrounding the mill.

Jarrah trees felled on private property in the surrounding area were hauled in by teams of horses, with the finished sawn timber transported by road to Lowden siding and stacked on land leased from the WAGR. The very nature of the country made this work often difficult and dangerous as man and horse struggled on the generally wet and slippery ground.

Tramway

By 1922 most of the easily accessible timber had been cut out and the excellent jarrah in the State Forest to the north west was beyond the reach of the horse teams. Bunnings opted to build a wooden railed tramway of 3 ft 6 in gauge, hauled by horses to exploit this area. This was unusual for Bunnings as they had used steam locomotives and steel rails on all their other timber tramways in the south west. I believe that Mr Roeger, who had often visiting Bunnings' Wandoo Timber Co mill near Muja, was impressed by the large wooden railed tramway of the Collie Land & Timber Co Ltd at Shotts. The limited life of the Lowden mill probably made a

tramway of this construction quite suitable.

The line was extended progressively west of the mill apace with the tree felling. As it neared Waterfall Gully however, it soon became apparent that horses would not be capable of climbing the steep hills. The solution came in the form of a double track incline, similar to the one in use by the Whittaker Bros at North Dandalup. Bunnings incline was about 400 yards long, cut into the face of the hill on about a 1 in 8 grade. Steel rails were used to simplify point work at the top and bottom. A long wire rope attached to the 2 ascending empty wagons and one descending loaded wagon was controlled by a large braking wheel mounted at the top of the grade.

Trees from private property continued to supply the mill until the end of 1924, when the tramway was finally built into the State Forest. With this extension came the establishment of a bush camp about 3 miles from the mill.

Siding on the WAGR

With the ever increasing volume of timber being transported to Lowden siding, a steel railed tramway was laid from the mill to a private siding on the WAGR. This line made possible the delivery of government wagons to the mill, where timber could be loaded directly for shipment. The new siding was west of Lowden, 9 chains long and completed in October 1926. Horses remained the hauling power to the siding.

Description of the Tramway

Leaving the siding, the tramway curved across the front of the Preston Valley store and followed the east side of the Wellington-Lowden Road. The Preston River was crossed by a timber bridge built alongside the road bridge. The rail bridge was higher and became a public thoroughfare at times when the road bridge disappeared under flood-waters. From the river the line gently climbed to the mill site. The wooden bush line can best be described as a "roller-coaster", with its numerous rolling hills. From the top of the incline it crossed the Waterfall Gully on a small bridge, before following this watercourse to the bush camp. Here were located several small huts and horse yards. The remaining 1½ miles passed a couple of log landings, finishing in a gully near the Queenwood Road.

Formation of Bunning Bros horse tramway in February 1982 looking down the 1 in 10 incline at Forests' farm. Photo: Jeff Austin

Lowden siding in March 1984. The Swan Sawmill tramway swung away to the right off the siding about centre of photo, while Bunning Bros leased the timber stacking area at right from 1921-26.
Photo: Jeff Austin

Logs were hauled to the landings by horses, where they were winched onto the waiting wagons. These were then pulled by 8-10 horses in single file to the top of the nearest grade where they were released. The brakeman riding on the rake would apply the brakes when it came to rest, awaiting the horses to catch up and repeat the process.

Mill Closure

As was the situation for many timber mills in Western Australia, the prosperity of the 1920s ended with the Depression years. A number of small mills closed during this period and Bunnings' Preston Valley Sawmill No. 2 became one of them. The onset of the Depression simply hastened the inevitable closure as the company's concession supplied an ever decreasing number of millable logs.

During 1929 the rails from the mill to Lowden were recovered, leaving the company siding to be finally dismantled in November 1931, the mill machinery going to Bunnings mills at Yornup and Manjimup.

Lowden Today

Lowden these days is best known for its potatoes rather than timber milling. The hills which once supported jarrah forests have been terraced and irrigated to grow many tons of potatoes.

Lowden siding, which was once the nucleus for much of the districts existence, was closed and removed in May 1985. Deliveries of superphosphate and shipping out of local products were insufficient to avoid the onset of deregulation and road transport.

The formation to the Swan Saw Mill is mainly under a new bitumen road that terminates at the old mill site. Earthworks for this road have erased much of the site and only the odd piece of rusty metal lies in the scrub. The crumbling remains of the manager's residence is amongst some old farm machinery on the adjoining property. The bush formations have been graded into forestry roads and only their gentle curves and grades give away their ancestry. The clearing where the boarding-house stood at No. 5 landing has had little regrowth, with a well still visible. Unfortunately much of this area is quarantined under the Forest Diseases Act,

thus prevening thorough investigation of spur lines.

The Bunnings siding, opposite the now closed Preston Valley store, is faintly visible alongside the WAGR line. The bitumen road north from Lowden is off centre in the road reserve with the tramway formation on the east side. The Preston River bridge is not evident as the modern road bridge required extensive alterations to both river banks. The mill site is in a pastured paddock from which all physical traces have been removed by years of ploughing. However, the formation of the wooden railed bush line is still very easy to see. Here and there sections still containing sleepers can be found. The incline is generally undisturbed because the steep ground makes farming difficult. It still contains many sleepers and lengths of wire rope lay entwined amongst the peppermint trees. Evidence of the braking wheel or its mountings was not sighted as this part has been affected by ploughing. Once into the State Forest the formation is very obvious and easy to follow. The remains of the bush camp and horseyards are still discernible in the thick scrub. Further investigation beyond this point was once more interrupted by forest quarantine, but should be in good condition with the possibility of locating log landings still intact.

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Interviews

Phil Ryan — son of Swan Saw Mill manager, assistant surveyor, Millar's c1910.
Jack Atherton — farmer near Swan Mill area.
Jack Forrest — owner of property logged by Bunnings 1920s.
Lou Roeger — son of mill manager Bunnings.
Keith Gardiner — teamster on Bunnings tramway.
Margaret Forrest — present owner of property crossed by Bunnings tramway.

THE MILLS AND TRAMWAYS OF THE ALLAMBEE DISTRICT

by MJ McCarthy

Early Timber Milling

Prior to the 1880s the region south of Yarragon, 115 kilometres east of Melbourne, was covered with a dense forest which, once the railway arrived, invited the introduction of sawmilling on an extensive scale. At various times between 1879 and 1902, four major tramways were constructed to carry timber from the hills to Yarragon Railway Station.

By the turn of the century most of the area constituting the steep slopes on the northern fall of the hills had the timber removed and converted to grazing country, but the last remaining mill of this early era of sawmilling, owned by William Richards, worked until 1902. Although Richards mainly drew his logs from the northern fall of the range, unlike the others, he positioned the mill on the southern fall, on the fringe of the area that is known today as Allambee.

When Richards' mill closed the region was devoid of a sawmilling industry for although Allambee had good stands of milling timber, notably Mountain Ash, Messmate and Gum, most of it lay along the deep gullies in the headwaters of the Tarwin River. Extraction of this timber was dependent upon the construction of roads, capable of carrying heavy tonnages.

After the turn of the century improvements were made to the early tracks running south from Yarragon and other new roads were built. This allowed the re-establishment of sawmilling beyond the logging areas of the early Yarragon mills.

The character of the industry in the area changed with this rebirth. The Yarragon mills had all been relatively large affairs, whereas the Allambee mills were, in the main, small concerns operating at each site for only a year or two. The nature of the country determined this. The deep, steep-sided gullies made logging difficult with frequent moves of the milling plant necessary to make the concern pay. Many of the mills were served by short, inclined tramways which carried the timber from the mill to either the Yarragon-Leongatha or Yarragon-Mirboo Roads. The first of these mills was that of Joe Keeble.

Joseph Keeble

In about 1908 Joseph Keeble, who had previously been milling at Darnum, west of Yarragon, estab-

lished a mill on the east side of the Yarragon-Mirboo Road about one mile (1.5 kms) south of Richards' old site. Little is known of Keeble's mill except that it was a spot mill (i.e. it had only one saw-bench) and it was connected to the road by means of a winch operated inclined tramway about 500 yards (0.5 km) long. The timber was carted into Yarragon by bullock wagon.[1]

The mill was at this site for only a year or so as by 1910 Keeble had moved it onto his own property at Bona Vista, south of Nilma and to the west of Yarragon.[2]

Co-operative Box Company of Victoria

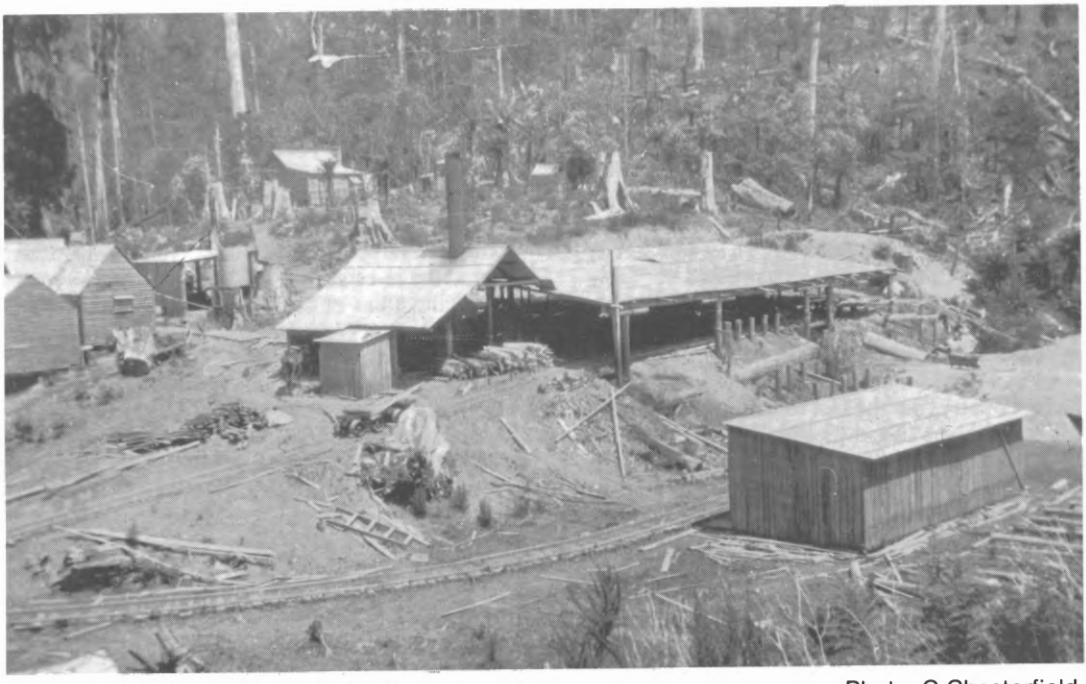
In 1922 the Co-operative Box Company of Victoria, a subsidiary of the Gippsland and Northern Company, established a mill on the Deadlock Creek, south of the Allambee Estate School.

An inclined tramway, operated by a winch located at the mill, provided an outlet to the Yarragon-Leongatha Road. At the top of the incline the timber was transhipped onto road vehicles and carted to Yarragon Station.

The mill was positioned on the west side of the creek below the Dawson family house. Bert Dawson was manager of the mill for some time and Mrs Dawson ran a boarding-house for the mill workers.

Life in the vicinity of a bush sawmill could be perilous at times. In 1922 Mrs Dawson and her children were lucky to escape death or serious injury when a new boiler, which weighed about 6 tons, broke away from the lowering rope and careered uncontrolled down the tramway. At a point just short of the boarding-house it left the rails and crashed past the house missing it by inches. Such events were not uncommon at mills especially those incorporating an incline. Mill owners generally laid out their mill in such a way that a runaway would miss buildings and work areas, but in this case, the truck derailed half way down the incline and took off at an angle, narrowly missing the house.

All log snigging at the mill was performed by winch, but in 1923 a start was made on a logging tramway running to the north. The earthworks for the line were completed and sleepers for the first section were split and stacked awaiting the laying of rail when the Company decided to close down the mill. The plant then lay idle for two years until 1925 when it was dismantled and moved to Black Sands near Yarra Junction.[3] The stack of split sleepers could still be found at the mill-site until quite recently.[4]



Trevorrow's mill at Allambee in 1926. Photo: G Chesterfield

Allambee Sawmilling Company

In 1923, following the closure of the mill, three of the former employees of the Co-operative Box Company, Paul, McLean and Batcheldor, together with S Rand, formed the Allambee Sawmilling Company. They established a mill on a branch of the Moonlight Creek, 2 miles (3 km) south-west of the Allambee Post Office.[5]

Initially timber was carted by horse drawn wagon to Yarragon, but, in September 1923,[6] because of the poor condition of the track leading to the Yarragon-Leongatha Road, a 3 ft gauge tramway was constructed from the mill across the Allambee Estate Road, through the bush for about 1½ miles (2 kms) to a spot half a mile below the Yarragon-Leongatha Road. From this point an incline was constructed taking the tramway to within a few hundred yards of the road. The line then ran down to stop beside the road 1½ miles south of the Allambee Post Office.[7]

The tramway was constructed using wooden rails and split sleepers. Nine bridges were crossed over the route, all being of simple construction and consisting of two stringers strung across the creek with decking on top.[8]

Trading as the Allambee Sawmilling Company, the mill operated for only 18 months, as early in 1924 the plant was sold to the Dry Kiln Seasoning Company (DKS Co) which had JT Trevorrow and Sons, a Melbourne engineering firm, and Joseph Thomas as the principal shareholders.[9] The firm did not immediately make use of the tramway over its full length. Instead, they ran the timber down to a depot that had been established by the former owners[10] about 800 yards from the mill. There were two reasons for this. The harsh winter of 1924 and the change of ownership had depleted the mill of much of its workforce, making the manning of the incline winch difficult. The other reason was that the firm was experimenting with the use of motor trucks along the Allambee Estate Road in preference to using the tramway. This situation did not last long, however, as the condition of the road resulted in the reopening of the tramway through to the Yarragon-Leongatha Road during June 1925. Even so, along with most of the other millers, the company was forbidden to use the road for timber traffic during some of the winter months. The narrow tyres of the early motor trucks badly cut up the local roads in their soft winter condition.[11]

By this time the tramway had not been used for over twelve months and had deteriorated to the extent that it had to be relaid for most of its length. Many of the bridges along the line were rebuilt and

Trevorrow's timber tramway at Allambee in February 1927. Photo: G Chesterfield

the incline winch had suffered damage during the idle period. When operations were recommenced the winch boiler was found to be faulty and was replaced. The new boiler was manufactured by Trevor Building Equipment, a subsidiary of JT Trevorrow and Sons.[12]

The mill was powered by a large multitube, underfired boiler also manufactured by Trevor Building Equipment. It was fired using the green off-cuts from the mill.[13]

Close to the mill a 5 stall stable was built alongside the tramway while further along the line a blacksmith's shop was constructed. The number of men employed at the DKS mill varied from time to time but averaged at around 20. Many lived in the huts at the mill but some preferred the comfort and convenience of Mrs Tate's boarding-house located near the stacking yards, 800 yards along the line. Mrs Tate was the wife of a local farmer and she

Horse tram on Trevorrow's tramway, Allambee, February, 1927. The horses were *Billy, Boxer, Violet* and *Malley.* Martin Evans is the driver. Photo: G Chesterfield

provided board for about 6 of the mill crew.[14]

For some time the mill boiler also provided steam for one of the two log hauling winches. The winch was operated by the mill crew, which meant that the mill had to stop when logs were being hauled. Eventually, in 1924, another Trevor boiler was installed to operated the winch allowing the mill to continue to work while logs were hauled.[15]

By 1925 the length of the winch haul to the mill was about a 100 yards (1 km), representing the effective limit of haulage. The firm then constructed a 3 ft gauge (914 mm) log tramway running south-west of the mill, roughly following the route of the winch track. At the end of the line (about ¾ mile) a log landing was built and the winch was moved to the site. A larger boiler was fitted to the winch at the same time. Logs were winched to the landing then loaded onto trucks and run down to the mill by gravity on the tramway. Horses were used to pull the empty trucks back to the winch site.[16]

The tram from the mill to the Yarragon-Leongatha Road was hauled by a team of four horses to the bottom of the incline. From the top of the haulage the trucks were allowed to run under gravity down to the Yarragon-Leongatha Road. Horses were used to haul the empty trucks back to the winch site where they would be attached to the rope and lowered down the incline. Much of the trip back to the mill was by gravity, but the horse team was connected at the depot for the haul up to the mill.[17] The tramway was badly damaged in the 1926 bush fire but was repaired and back in use within a few weeks.[18]

The mill and tramway ceased operating in December 1927. The plant was dismantled soon after by the company and removed to East Gippsland.[19]

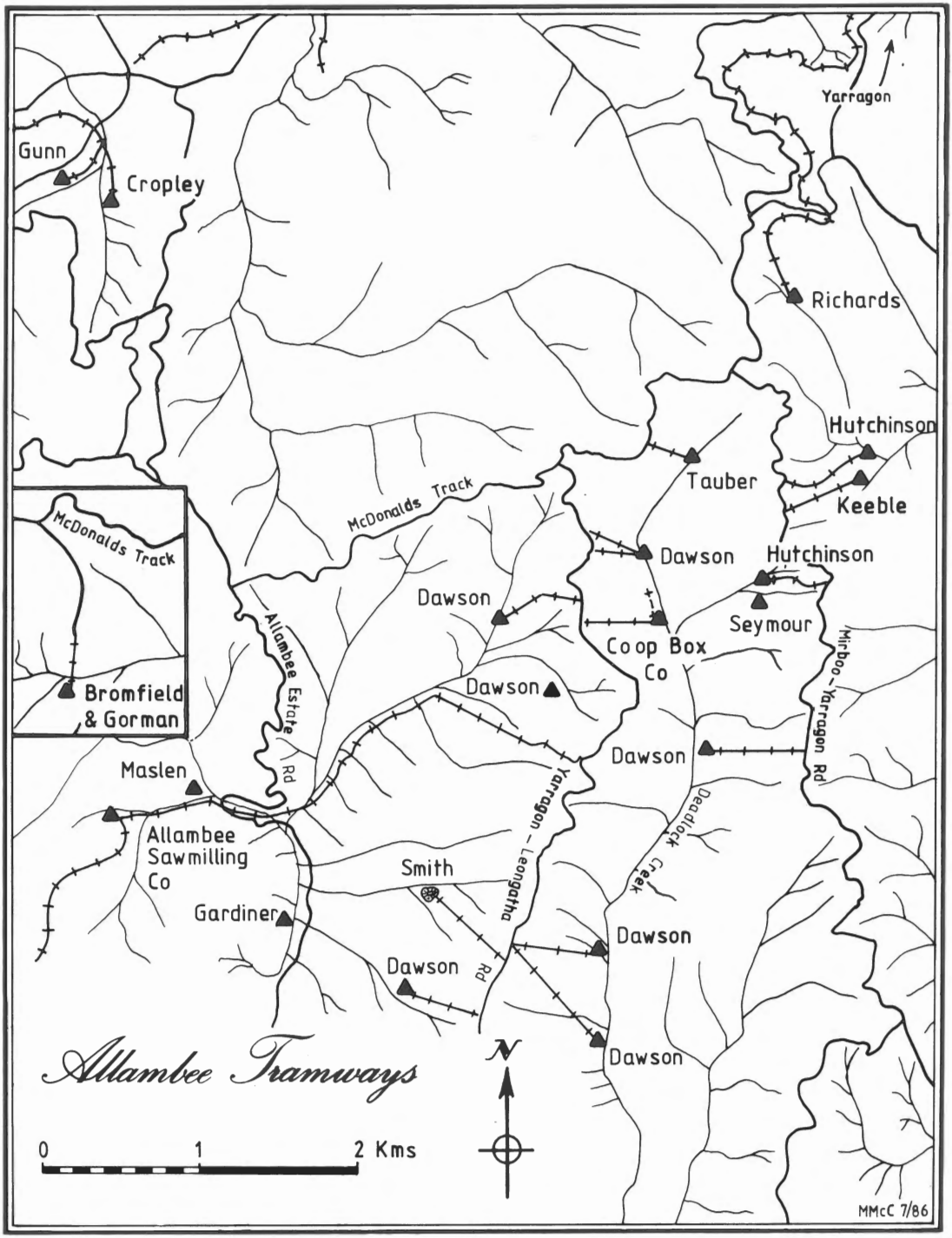
Hutchinson

In 1923 Joseph Hutchinson established a mill very close to the site vacated by Keeble in 1910. The type of mill established by Hutchinson is not known but he was cutting mostly Mountain Ash which was prolific in the area.

A horse-drawn tram was used to carry the timber up to the Yarragon-Mirboo Road. The mill was shifted to a new site on the west side of the Yarragon-Mirboo Road in 1926. Once again a tramway was laid to the road. The mill operated at this site until about 1930 when Hutchinson g ve up sawmilling and became an auctioneer in Melbourne.[20]

Bromfield and Gorman

In about 1929, Percy Bromfield and Henry Gorman, who had been milling in the Childers area for many years, moved their mill to a site to the south-east of Mt Worth which is 4½ miles (7 kms) south-west of Yarragon.



The mill was on the south side of the Moonlight Creek and was powered by a multitube, underfired boiler. About ten men were employed. The output from the mill, which consisted mostly of casing timber, was transported over a 3 ft gauge wooden-railed incline tramway up to a track which ran out to McDonalds Track, about 1000 yards (1 km) away. The incline was powered by the logging winch purchased from JT Trevorrow and Sons when their mill closed in 1927.

From the mill the tramway ran down to the Moonlight Creek about 100 yards away. It crossed this on a low log bridge and then ran up the opposite bank for about another 400 yards. The timber was collected from the top of the incline and taken to Yarragon by motor truck.

The incline winch was positioned at the mill, a pulley wheel was located at the other end of the tramway to enable trucks to be hauled up the northern bank of the creek. The loaded truck was pushed out from the mill-shed to the start of the incline where the cable was connected and the winch would lower it down to the creek and haul it up the other side. Log hauling was performed either by bullock team or by the incline winch depending on where the logs were located.

The mill operated at this site until about 1935 when it was shifted to Tanjil Bren where it was known as Bromfield and Cook's.[21]

Dawson

In 1929 Bert "Pops" Dawson purchased the property formerly owned by the Gippsland and Northern Company on the Deadlock Creek. Much timber remained on this block which had been partly cut over 7 years earlier by the Co-operative Box Company. Dawson established a spot mill for cutting case timber about 400 yards to the north of the old site.

A 2 ft gauge (610 mm) incline tramway was laid up to the Yarragon-Leongatha Road where the timber was stacked on a platform prior to being despatched to Yarragon by motor truck.

For most of its length the tramway was laid with light weight iron rails, obtained from Smith's quarry to the north of the mill, but because of the limited quantity of these rails available, about 50 yards of 3 in by 3 in wooden rails were also used.

The winch on the incline was powered by a 5 hp McDonald petrol engine which hauled a long wheelbased four-wheeled trolley up the line.

The mill was initially powered by a 10 hp McDonald kerosene engine but this was soon replaced by a 16 hp Ruston Hornsby and finally, in 1931, by a Ronaldson and Tippet kerosene engine obtained from the Trafalgar and Yarragon Co-operative Butter and Cheese Company's factory at Yarragon.

A horse was used for snigging logs to the mill. The mill crew consisted of Dawson, his sons Cedric and Keith, and George Bell, a local farmer.

The tramway was used for only one winter, as in summer it was possible to get a motor truck down to the mill allowing the timber to be despatched by road.

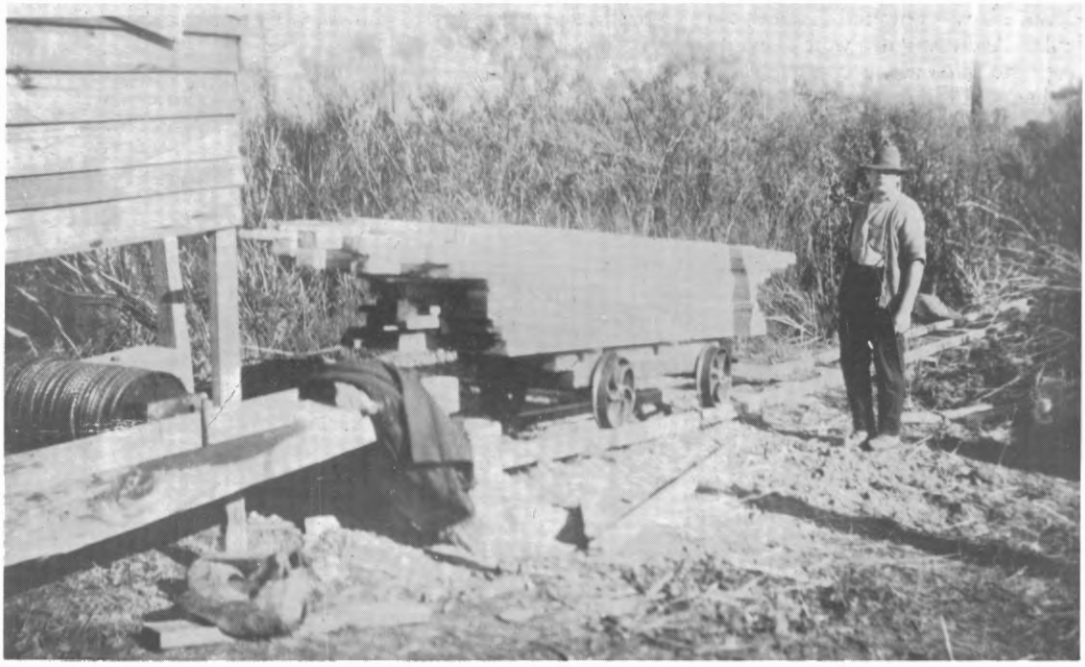
The Dawson property was separated from the Yarragon-Leongatha Road by a 50 yard strip which was crossed by the tramway. This narrow piece of land was owned by a local farmer who also held the contract for delivering the Dawson timber to Yarragon by motor truck. When, in 1930, Bert Dawson purchased his own truck and took over the delivery of the timber himself, a dispute arose which culminated in the farmer preventing Dawson from having access through his land. Dawson then laid a new tramway, using the iron rails from the original line, across to the north-west corner of the allotment, where a new platform was constructed. Access was then gained through the block owned by George Bell, to the north of Dawson's property. This line was used during the winter of 1930.

In 1931 the mill was shifted south to another site on the Deadlock Creek. The arrangement at this site was similar to the previous location; a 1000 yard (1 km) 2 ft gauge incline was constructed, the iron rails being used for perhaps half its length.

The winch at this site was powered by an engine out of a 1908 *Star* motor vehicle. As well as a platform at the top of the incline, a shed was also constructed to protect the case timber from discolouration due to water. The mill operated at this site for only about a year as in 1932 it was shifted about a mile to the north and a new tramway was laid up to the Yarragon-Leongatha Road. This line terminated only a few yards from the previous tramway and the original shed and platform were used again. The iron rails and most of the wooden rails from the previous line were also used.

In 1935 the mill was shifted to McCarlough's property near where Trevorrow's tramway had run 8 years earlier. At this site road access was possible all year round so no tramway was laid. The track into the mill followed Trevorrow's tramway formation for much of the distance.

The mill was shifted a further 1½ miles (2 kms) south in 1937 to a property owned by C Hearst. At this site a breaking-down bench was installed, increasing the capacity of the mill, and a tramway was constructed up to the west side of the Yarragon-



Pops Dawson at his incline winch on Chesterfield's property at Allambee in 1941.
Photo: G Chesterfield

Leongatha Road. The mill only operated for a year at this site. In 1938 it was moved to a location near Mt Worth, close to McDonalds Track and not far from the site previously occupied by Bromfield and Gorman.

No tramway was used at the Mt Worth mill, which was burnt out in the 1939 fires. Much of the equipment was salvaged and, late in 1939, the mill was re-erected on land belonging to Pops Dawson not far from the first mill site. A tramway was laid to the east of the mill, which was on the Tarwin River, up to the Yarragon-Leongatha Road. The iron rails, by now in very poor condition, were used once again at this mill. An interesting feature of the tramway at this site was the installation of a turntable at the top of the climb from the mill. This was used to turn the trolley in the direction of the road 300 yards to the south-east. Because of the long wheelbase of the trolley and the sharpness of the curve, it was not possible to change the direction of the trolley simply by curving the rails. The haul up the incline was accomplished by a winch powered by the engine out of a *Durant* motor car, but the trolley ran to the road by gravity. Man-power was used to push it back up to the winch site. By this time the mill was cutting scantling timber, so no shed or platform were proved at the road.[22]

Although timber was still plentiful on the block, in 1940 the mill was shifted several miles to the south-east on to a block owned by George Chesterfield. The Dawsons had purchased the timber rights to this property apparently with a time provision so further milling on Dawson's block was postponed for a couple of years.[23]

An inclined tramway about ¾ mile long was laid to the east of this mill up to the Yarragon-Mirboo Road. The iron rails were by now unusable and the line was constructed entirely with wooden rails which had been cut prior to leaving the site on Dawson's property.

The mill operated at this site until 1942 when it was shifted back onto Dawson's property. The tramway was relaid to this site entirely with wooden rails. The turntable was once again incorporated in the arrangement.

This was the last Dawson mill to use a tramway. In 1944 the mill was shifted back onto the Gippsland and Northern block, by now owned by Cedric and Keith Dawson, where it operated for several years. Keith and Cedric continued their sawmilling activities until their retirement in the late 1960s.[24]

Unknown mill at Allambee in the 1920s.

Others

Other tramways are known to have existed in the Allambee district but few details of them seem to have survived. A mill with a horse-drawn tramway to the Yarragon-Leongatha Road was put in by a man named Tauber at a site just north of the Co-operative Box Company's location around 1910 but nothing else is known of this venture. Tauber was to later own a mill at Noojee. Other sawmills in the area were operated by Sam Gardiner and Sons, Jim Henry, T Seymour and Sons, Walter Maslem and Arthur Broad, Samson and Alstergren.[25] Gardiner apparently had a log tramway in use for a short period at one of his sites but no details of this could be found.[26] Other than sawmill tramways a short iron-railed tramway existed in the early 1920s at Alex Smith's quarry south of Hutchinson's mill sites.[27]

Acknowledgements

I would like to thank the following people for the assistance given by them in the collection of the material for this article; Hugh Clark, Cedric Dawson, Coral Baglin, George Chesterfield (dec), Arthur Hutchinson and Ray Williams.

References

1. George Chesterfield 8/12/1978.
   George was a long time resident and property owner in the Allambee area. He worked at a number of the mills in the area and provided me with a considerable quantity of information, maps and addresses. He passed away a couple of weeks after I spoke to him.
2. Cedric Dawson 11/2/1979
   Cedric is a son of Bert "Pops" Dawson and worked at most of the Dawson mills. He also had an extensive knowledge of the other mills in the area.
3. Forests Commission of Victoria File 23/1393.
4. As for note 2.
5. As for note 1.
6. *Trafalgar and Yarragon Times* 14/9/1923.
7. As for note 7.
8. Hugh Clark 18/12/1978.
   Hugh worked at Trevorrow's mill in 1926/27. He later worked for Bromfield and Gorman at Mt Worth before eventually moving to Rubicon where he was employed by Clark and Pearce.
9. Forests Commission of Victoria File 31/2468.
10. *Trafalgar and Yarragon Times* 15/2/1923.
11. As for note 1.
12. As for note 1.
13. As for note 8.
14. As for note 8.
15. As for note 8.
16. As for note 8.

17. As for note 1.
18. As for note 9.
19. As for note 9.
20. Arthur Hutchinson 1/5/1979.
    Arthur is the brother of Joe Hutchinson. He worked with Joe at their father's Coalville mill and later had his own mill at Hill End.
21. As for note 8.
22. As for note 2.
23. As for note 1.
24. As for note 2.
25. As for note 1.
26. As for note 8.
27. As for note 2.

CARSON'S TIMBER OPERATIONS IN THE OLNEY STATE FOREST, NEW SOUTH WALES

by Laurie Holmes and John Ritter

Early Days

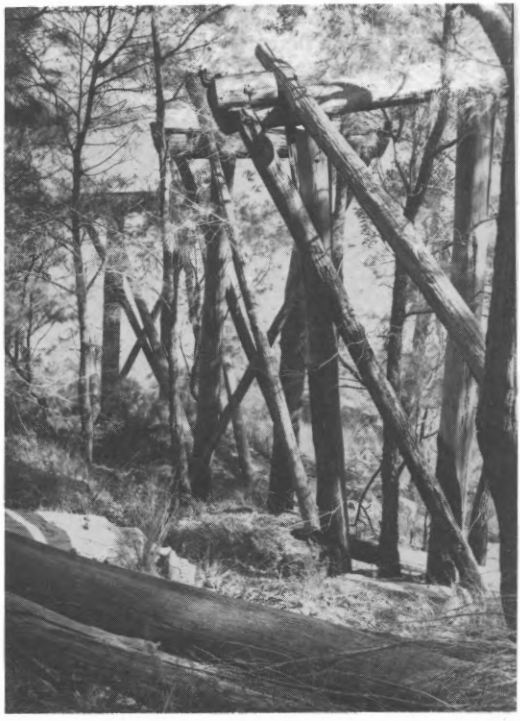
In the early 1920s Frederick J Carson, an enterprising American from Denver, Colorado, began timber operations in the Olney State Forest (SF No. 124), some 20 km northwest of Wyong, New South Wales. He bought the old Stinson mill in the hamlet of Yarramalong, from Shem Davis in about 1922. Some years later (probably early 1926) he moved it from Stinsons Lane to a site about 4 km north, at the junction of Cedar Brush Creek and Ravensdale Creek, the local name for this arm of the Wyong River. It was known as the Brush Creek mill site.

Carson had a licence to log timber in the area of Olney Forest known as "The Null", a spur of high land terminating above the junction of Ravensdale Creek and Gavenlocks Gully, about 9 km north of Yarramalong.

The extent of this lease is not known; the Wyong Forestry Office has no records of Carson's operations on file. In fact little at all is recorded of the early days of timber extraction in the area. The Forestry Commission had one clerical officer at Wyong and one Forester, who rode out to the various operations on horseback once or twice per month. There was plenty of good timber in the area, including stands of Australian red cedar (*Toona australis*) and it appears that licence boundaries did not count as much as natural geographical boundaries.

In the early operations, felled logs were snigged out of the gullies and slopes to one of several loading dumps located along the main ridge. They were brought down from the mountain by bullock wagon, following a circuitous route along an old track down the eastern side of the Null into Gavelocks Gully, and thence along Ravensdale Road to the mill. Early bullock wagon drivers were Ernie Stinson, Herb Kelly and Jim Dixon, with Keith Hollingsworth and Mick Perry arriving later, around 1926.

About a dozen men worked at the mill. The engineer and saw doctor was Allie Campbell, with Bert Davis as benchman and Eggleton Walters on the middle (friction) bench. Laurie Davis (tailerout), Percy Perry (docker) and Ted Greentree (frame hand) worked in the mill, Len Butler, Stan Greentree and Rupert (Mick) and Harold (Pony) Bailer worked in the log yard and the timber yard hand was Jack Schfleet.



Remains of the top end of the flying fox in 1953. The piers are heavily braced against the curve.
Photo: L Turton

Developments

In the bush, bullocks were used at first for snigging, with George Smith[1] as regular driver. They were replaced about 1923 (possibly as late as 1925) by a Holt hauler and winch. Around 1926, a new Caterpillar model *Sixty* crawler tractor was purchased, reputed to have been the first of its kind in Australia. It was put to work hauling logs along the ridge from the winch sites to the loading dumps. Jim Dixon then operated the Holt hauler while his brother Bill drove the tractor.

It appears that this pattern of operations continued until at least 1926, possibly as late as 1928. The pattern would vary according to the location of good stands of timber, market demands, breakdowns and, in particular, the weather which could bring operations to a standstill during the wet months February-March. The slowness and difficulties of wagon haulage down the mountain spurred Fred Carson to examine a direct route: dropping 1970 ft (600 m) straight down the escarpment of the Null to the gently sloping Ravensdale Valley below.

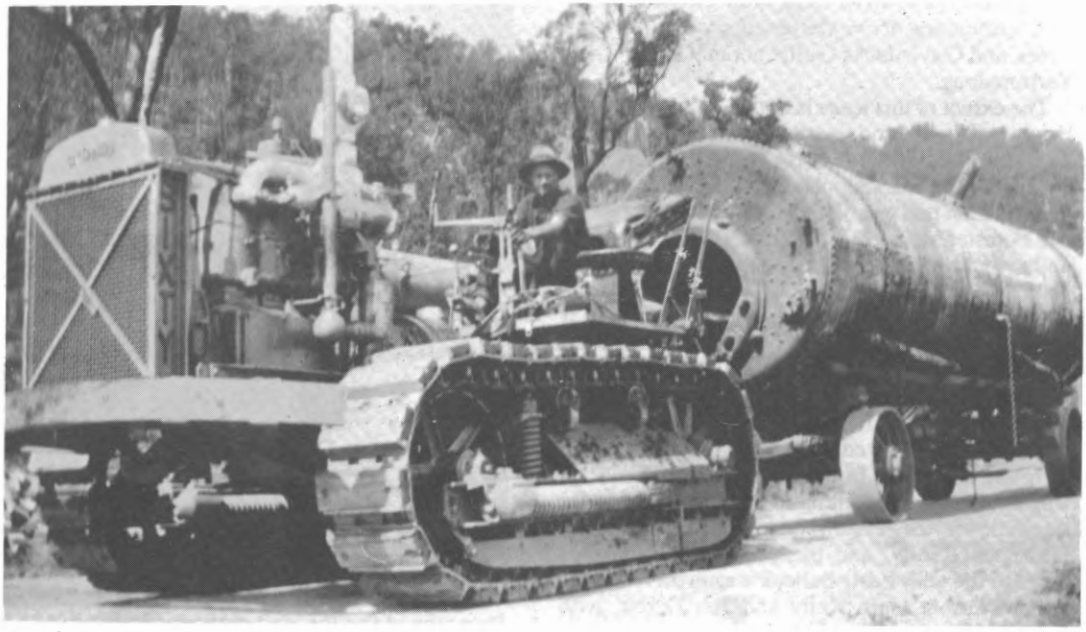
Flying Fox

Carson's first attempt to improve transport was a flying fox, dropping westerly from the point of the Null to the valley floor. It was built some time between 1926 and 1928. It was operated on a series of wooden piers which carried an overhead cable of about 1.5 inch (38 mm) diameter[2]. They were heavily braced and followed a curved path to the brow of the escarpment. The top pulley unit had a brake-operated drum. Logs were slung by chains at each end, fixed to twin-wheel trolleys. The anchor sheave was attached to a large tree on the valley floor, right alongside the Ravensdale road. The winchman was Barney Allen, assisted by George Smith.

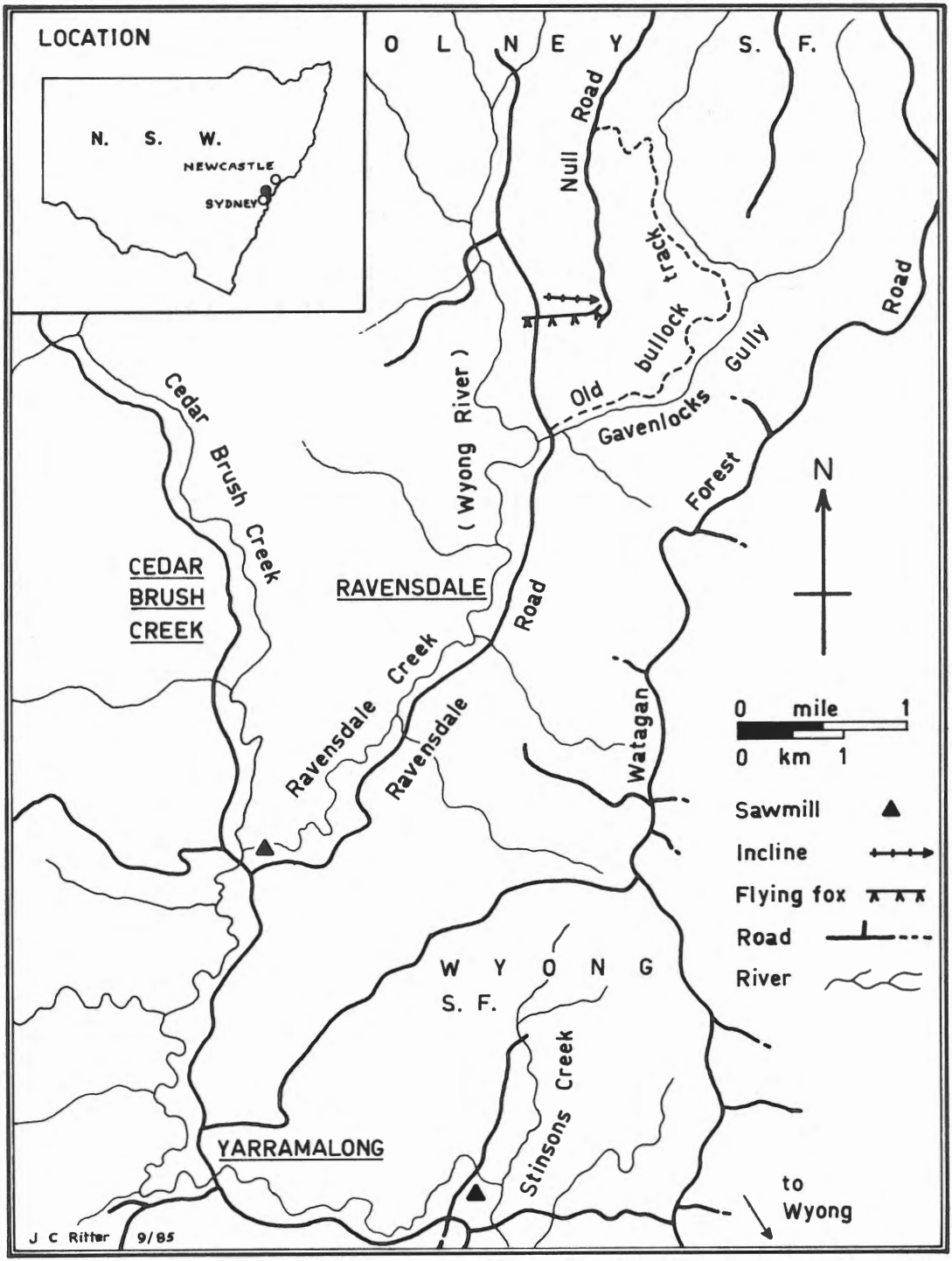
Since the mill was moved up from Yarramalong by early 1926, Carson may well have combined this shift with the erection of the flying fox. The new transport arrangements reduced the road haulage distance from 12.5 to about 5 miles.

With the fox system installed, the Caterpillar *Sixty* tractor continued hauling logs along the ridge to the head of the ropeway. At the bottom, logs were loaded directly onto a wagon and taken to the mill along Ravensdale Road.

Shortly after moving the mill, Carson purchased a While truck and timber jinker. As this was of 1925-26 vintage, it was most likely purchased new and may well have hauled logs from the outset of the flying fox operation. Nevertheless, according to



The Caterpillar tractor hauling a steam boiler from Wyong to the site at Brush Creek in early 1926. Bill Dixon is the driver. Photo: R Bradley; L Holmes collection



one verbal report, Mick Perry was still bullock driving until 1928. It is possible that mechanical breakdowns or adverse weather caused Carson to retain the bullocky's services; the various dates are too uncertain for anything more than conjecture.

Tramway Incline

The flying fox system was apparently not the success which Carson envisaged. Its operation was slow and plagued with problems, presumably numerous breakdowns. A tramway incline was built parallel to the fox on the north side.

The tramway was built as a double incline, using wooden rails to 3 ft (914 mm) gauge. The gradient was mostly 1 in 3 to 1 in 4, with the top 300 ft being much steeper, about 1 in 1. It was operated by an endless rope system using two bogie sets, the descent of the loaded set being checked by the unloaded returning. The upper tower housed a winch and drum brake, and bell brakes operated on each bogie. At the bottom dump, logs were rolled off the bogies onto one of the two loading stages, one for each track of the incline. They were then loaded onto the White timber jinker and transported to the mill. Peter Dixon usually drove the jinker.

Closure and Moves

Carson's operations in the Olney Forest ceased sometime in 1934, when the mill is known to have closed. A farewell party for the Carson family was held at Yarramalong public hall in March 1935[3]. Carson took the mill and a number of employees north to a site on Berrico Creek, some 20 km west of Stratford. There he set up a bush settlement which he named "Carsonville". By May 1935, the mill operations had resumed and the men's huts were occupied, although not finished.

This area was cut out around 1940 and the outfit was moved 80 km northwest to Craven Plateau, the site being named "Craven Bush Mill". After Fred Carson's death in 1943, his remaining son Eric and daughter Mavis took over running of the mill[4]. The timber here lasted until 1945. They then moved the outfit to Gloucester, where they operated for many years, finally setting in 1978 to Blue Metal Industries of the Alan Taylor Group.

Present Day Remains

Of the flying fox, substantial remains of several

General view of Carson's incline, c.1926-28. The descending logs provided useful power for getting gear and supplies (a drum of tractor fuel in this instance) up to the Null. Mick Bailey is on the descending bogie. Photo: G Smith; L Holmes collection

Top of Carson's incline soon after opening. Photo: EP Carson; L Holmes collection

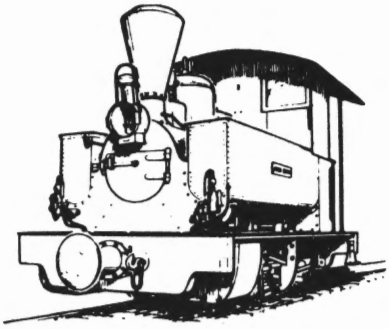
sets of piers at the top of the ridge were still standing in 1955, but all traces were gone by 1983, except for a few sets of the metal rope carriers. The tramway was abandoned after Carson's departure and successive bushfires have obliterated all but a few sleepers and rails in the shallow rock cutting near the top. The Brush Creek mill site is now derelict, lying immediately to the west of the present day mill operated by Keith Smith.

Sources of Information

1. Reg Bradley, who operates a mill near Wyong Creek with his sons. His father, Tom, was an early pioneer and mill owner in the district.
2. Late Mrs Jean Deaves, who was housekeeper for the Carson's in the 1920s.

Notes

1. George Smith is uncle of Keith Smith, owner of the present-day Brush Creek mill.
2. R Bradley, pers com, 1982.
3. J Deaves, pers com.
4. Fred Carson had two sons and two daughters. Edward (the eldest) was killed in World War I. Eric later ran the mill with his sister Mavis, after her husband, Jack Schfleet was killed in an accident. The other daughter, Dorothy, married Stan Greentree.



LETTERS

WEST MELBOURNE GASWORKS TRAMWAY, LR. 90, 92, 93, 95 The letter from WL Wilson on the operation of the West Melbourne gasworks railway offers some interesting and valuable information based on first hand experience. However, his information on the Decauville locomotives used requires some correction.

The Decauville catalogue at the Melbourne Public Library is one of the few in existence outside France. This catalogue contains a locomotive list which differs from the official list. I suspect this list was produced in the Paris sales office as orders were received, while the official list was produced elsewhere, probably in the works when the locomotives were shipped.

Decauville had standard classes designated by their empty and operating weights. The weights in both cases were nominal only. All early Decauville locomotives were constructed by Couillet, whose list is a far better guide in terms of accuracy. For instance, Decauville No. 26 is shown in the catalogue for Indo China when it actually went to a French customer, while there are locomotives on the Couillet list shown for Decauville which do not appear on the Decauville list. In short, one has to be quite careful when using the catalogue list not to perpetuate erroneous Decauville data. The two Metropolitan Gas Company 0-4-0T's are shown on my list as identical at 5 tonnes empty weight and for 761 mm gauge.

Mr Wilsom also makes the point that the second Decauville locomotive may have been ordered for the South Melbourne works. I'm sure this is not correct because (a) the Decauville official list shows it for the West Melbourne Works and (b) the South Melbourne plant came on stream much later, as stated by John Buckland in his article.

Charles Small,
Honolulu, USA

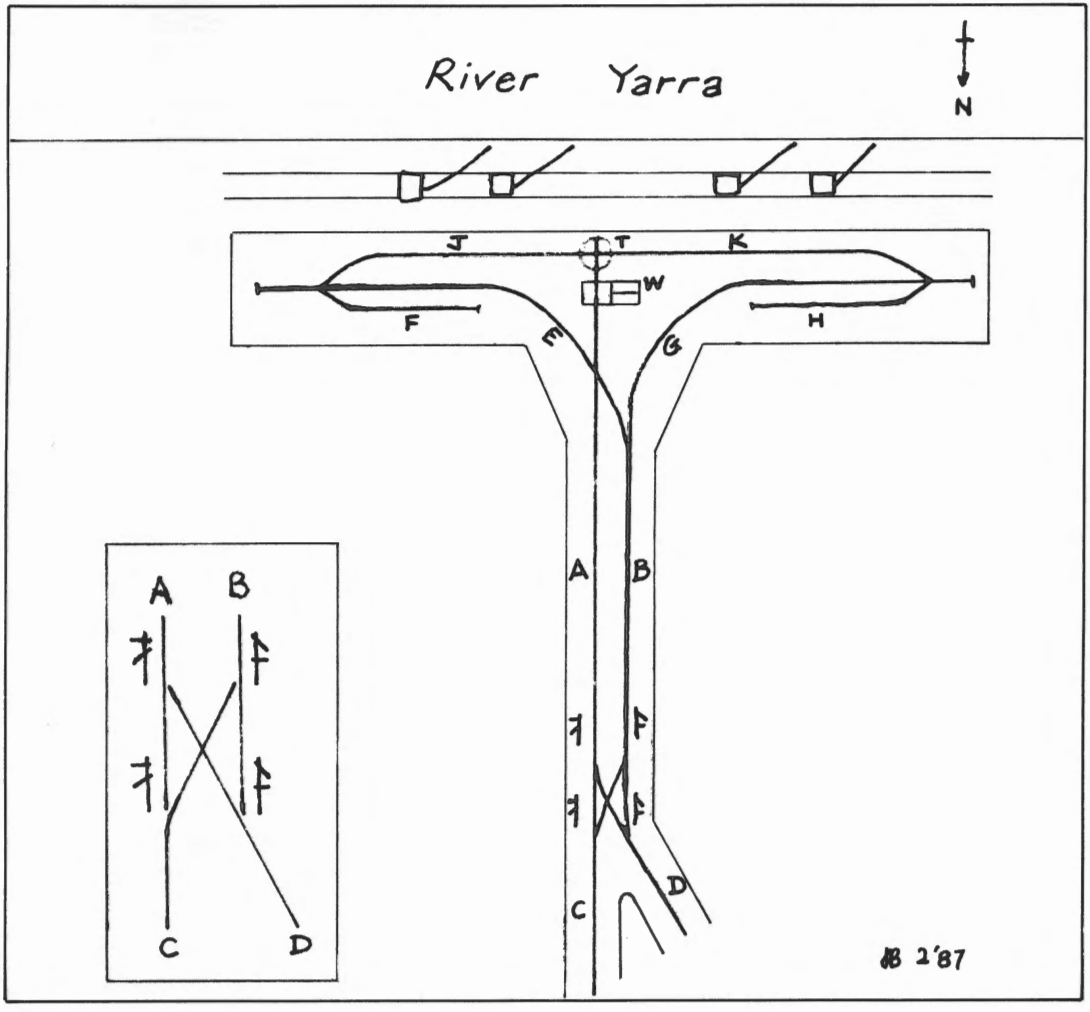
It was gratifying to see on p. 24 of *LR. 95* WL Wilson's track layout for the West Melbourne Gas Works, for, unlike previous layouts shown in both *LR* and *The Industrial Railway Record,* they agree with the incontrovertible photographic evidence. However, the suggestion that *JOHN BENN* and *CARBON* may not have been identical is not borne out by Decauville's locomotive register, of which I have a photostat copy from the original. It is not infrequently at variance with catalogue information, but both the West Melbourne locos (B/Nos 43 and 90) are shown as 5 tonne weight and 761 mm gauge.

Richard Horne
South Croydon, Surrey, UK

A careful examination of the various photographs published in *LR. 90* and *92,* has I believe enabled me to make a plausible interpretation of the original track layout on the elevated wharf, working methods, and the purpose of the signals. Previous correspondence on this matter was published in *The Industrial Railway Record* (UK) in 1981, but did not provide the complete answer. I hope I can also improve on Charles Small's suggestions published in *LR. 93.*

As far as the loading operations are concerned, it would appear that empty wagons from the works would be propelled from track B to tracks E and G. Tracks F and H are storage tracks — it is unclear if there were others parallel to them to the north. From tracks E and G, the wagons would be hand trammed to tracks J and K. I am not sure if loading from the ship by means of the travelling cranes running along the true River Yarra Wharf would be into wagons on tracks E and G or J and K, although I suspect the latter.

It will be noted from p. 13 of *LR. 90* that there is an elevated staging between these tracks, either not present when the photo on p. 14 was taken, or quite



possibly painted out for clarity's sake, along with the superstructure of any vessel which was at the wharf. The turntable (T) would be used to place the wagons on track A, and they would be weighed at the weighbridge (W) before being made up into rakes for haulage to the works.

The "signals" at the scissors crossover appear to be point indicators which show the point setting. Using the hypothesis that the top signal indicates the left hand direction and the bottom signal the right, it is possible to see how one locomotive could handle the full and empty wagons without a need to change these points. It is assumed that the signal lowered from the horizontal indicates the direction of travel. Note that the signals visible on p. 14 of *LR. 90* and p. 29 of *LR. 92* all show the same aspect, and that some of the point positions can be determined from the photographs. These point positions lead me to believe that on the occasions when the photographs were taken, full wagons were being unloaded at the east of the works (track C).

The locomotive would propel the empties from track C to B and on to G and E. The locomotive would then run light from track B to D and thence to track A. A loaded rake would be picked up from track A and hauled to C for unloading. From C the empties would be propelled back to B and so on.

It can be seen that if the position of each point on the scissors crossover is changed, then the same operation can be carried out with the loaded trucks

going to track D and the empties returning from there. In neither case do I believe that the loco ran right around the loop, and there would thus be no need for any complicated turning operations to keep the loco chimney first towards the works as shown in the photographs.

Although the system would depend on strenuous manual operations at the end of the wharf, and no doubt at the coal stockpiles at the works, I would suggest that the haulage to and from the works was largely "automatic" in operation as I have outlined, using the simple but ingenious track layout shown in the accompanying diagram.

John Browning
Mackay, Qld

LOCOMOTIVES ON NAURU ISLAND, LR.88 I have been advised by Bob Gormley of the Nauru Phosphate Corporation that the remains of an old steam locomotive are still to be found on the island. It is situated in a mined-out area, surrounded by coral pinnacles not accessible by road. The tubes have been removed from the boiler, as have the smoke stack, builders plates and other means of identification. There appears to be shrapnel damage to the cab — the area was heavily bombed during World War II. From some markings on the wheels, Bob Gormley estimates that the loco was built about 1928.

John Kramer
Woolgoolga, NSW

0-4-0WT locomotive on Nauru Island. Photo: Bob Gormley