

The Gentle Annie Tramway

By F. H. E. King

Based on research by R. Hepburn and P. E. Dyer

BACK in 1908 the Gisborne Borough Council was having trouble in obtaining stone for its roading requirements. Contemporary reports of Council meetings show that this trouble had persisted for years, but councillors had now resolved that at last something definite must be done, along the lines of the Council's striking out for itself rather than continuing to rely on outside contractors. The moving spirits in this resolution were Councillor Williams and the Mayor, W. J. Townley. Their ideas were that the Council should have a quarry and/or a tramway of its own.

Councillors were informed of various sources of supply of both stone and gravel, and made several visits of inspection. The quality of rock in the various sites handy to Gisborne proved disappointing, so the Council resolved to obtain supplies of gravel from the Waipaoa River at Kaiteratahi, 13 miles from town on the railway line, and to continue to look further afield for stone.

At this point it is perhaps desirable to explain that, while gravel was used for the base course of roads, it was necessary to top this with crushed stone, or road metal, as it is called in New Zealand, to provide a compacted surface.

The Cook County Council owned a stone quarry at Patutahi, some 13 miles west of Gisborne, and the two Councils discussed the feasibility of their jointly constructing

a tramway from the quarry to Gisborne. Meanwhile the Borough Council entered into an agreement with the County Council to purchase stone from Patutahi. To haul this stone, a Straker Waggon (a steam motor wagon) was purchased for £810, and a trailer to hold 4 cubic yards was built by Borough Council staff.

Estimated costs of operating the wagon make interesting reading nowadays, the weekly figures being: Driver's wages, £4; fuel and oil, £1 9s.; repairs, 10s.; depreciation at 10 percent, £1 14s.; and interest on capital at 5 percent, 17s.—a total of £8 10s. per week.

The Straker Waggon was duly delivered on 26 September 1908, but some little delay was experienced in getting it into the council yard, by the blowing of one of the joints. However, this was put right, and a



Photograph: Mrs Macdonald (courtesy R. Hepburn)

The Gisborne Borough Council's Straker Steam Waggon No. 1 with a trailer crossing the Roebuck Road bridge over the Taruheru River. The lifting span on the bridge was to permit a tug and barges to pass to and from meat freezing works upstream.

trial of the machine was given in town, followed by a couple of trips to the quarry. On the second trip, the up journey took 2½ hours and the down journey 3 hours. This was by the wagon only, without trailer.

By the following month, the Straker Waggon was on the road every day, sometimes making two return trips in a day. It continued working for some time, apparently fairly satisfactorily, hauling about four cubic yards per trip, and causing a certain amount of damage to the county roads and other property in the process. There was, for example, a claim in January 1909 that the claimant's horse had taken fright at the wagon, bolted, and completely broken his express and harness.

This steam wagon operation was considered expensive by comparison with tramway operation. In fact, the wagon was finding difficulty in hauling 4 yards of stone per trip, let alone 20 yards per day as the Council had been so readily assured it would. In addition, the trailer's tyres were coming off.

Meanwhile, during 1909, the Borough Council was opening up a quarry at Gentle

Annie, some distance to the south-west of the Patutahi Quarry, and on 21 October it was resolved to negotiate with the Cook County Council regarding the joint construction of a roadside tramway between Gisborne and the new quarry. However, it was not until the following June that the County Council received an application from the Borough Council for a licence to lay a tramway on the county roads from the quarry to the boundary of the Gisborne Borough near the Stanley Road railway crossing. After advertising its intention to issue a licence, the County Council considered a protest lodged by ratepayers after a meeting at Patutahi on 3 September. The Council, however, issued the licence a few days after its meeting on 16 September, for a term of five years. By this time the Gentle Annie Quarry was in operation, and metal was being carted into Gisborne by the Straker Waggon and horse-drawn wagons.

The Borough Engineer, Mr. A. J. Patterson, had prepared a report on the relative costs and merits of operating the proposed tramway with horse traction and one-yard trucks on 14 lb. rails, or with



Photograph: R. Hepburn, January 1964
Site of the Gentle Annie quarry showing
the worked face and the site of the incline
down to the valley floor.



Photograph: P. F. Dyer, 1959
A view of the tramway formation leading away from the foot of the incline.



Photograph: P. F. Dyer, 1959
Looking down the site of the incline from the quarry towards the site of the sidings at the foot where trains were made up for haulage to Gisborne.

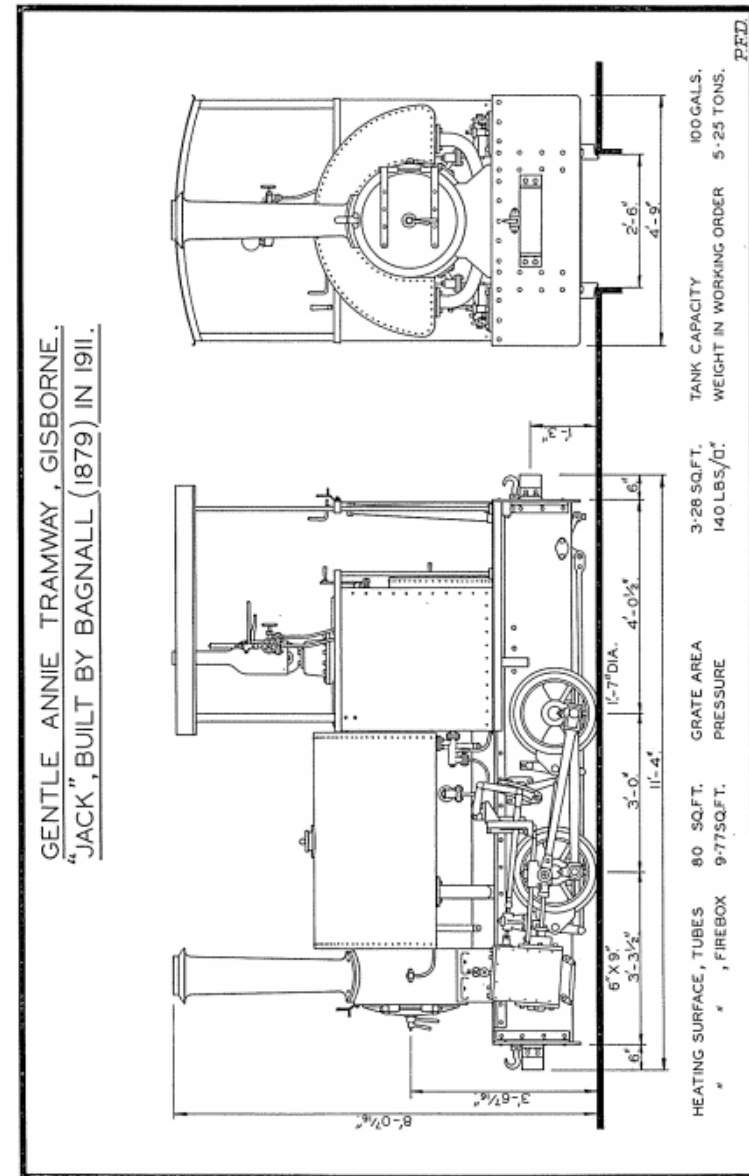
arrived; broken driving springs, for example, not to mention derailments.

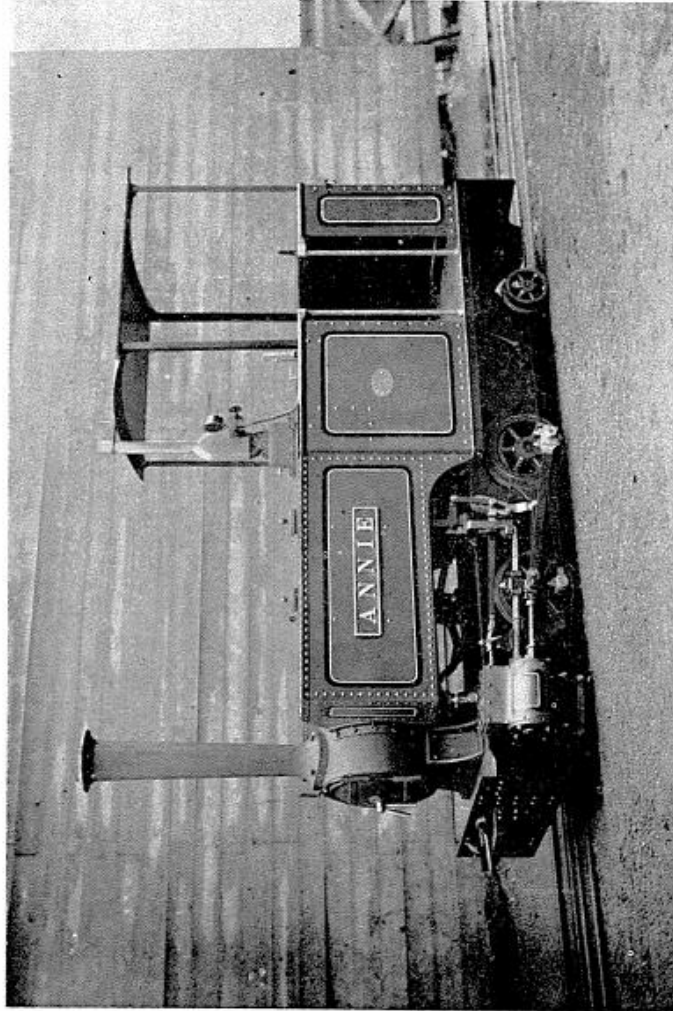
The tramway from the quarry was originally built as far as Stanley Road in Gisborne, but in September 1911 the NZR laid down a crossing over the railway line. A further three-quarters of a mile of track was then laid to the Council yard, the first complete journey from quarry to yard being run on Thursday 14 September. Installation of the crossing was subject to a number of conditions. The Council was required to pay the cost of construction and maintenance, and a rental of £1 per annum. Stop blocks were to be provided and kept locked except when the crossing was in use, and the crossing was not to be worked by steam unless signalled at the Council's expense, the Railways Department reserving the right to appoint a signaller, whose wages were to be paid by the Council.

In the metal distribution yard at Gisborne, an electric crane was installed, power being provided by two Mirreles diesel engines. It is reported that these engines, although operating on diesel fuel oil, could be operated on crude oil, as it was hoped that oil would be found during the drilling operations at Whatatutu. The Gisborne Oil Company's well there had produced several barrels of oil a day in 1886, but since then oil in payable quantities has not been found.

Following the installation of a second crusher at the quarry, and the laying of several sidings along the line—at Te Arai Road, Hall's at Patutahi, Dawson's on the Patutahi Road, and at a gravel pit on the Waipaoa River—traffic increased considerably. The acquisition of a third locomotive was contemplated, but instead one of the two Straker Waggon's that the Council now owned was altered to fit the 2ft. 6in. gauge of the tramway. Judging by photographs of this machine taken during its road service, it must have had considerable overhang each side of the track after conversion.

Operation of the line proceeded satisfactorily, so far as we know, being marred or interrupted only by occasional breakdowns, derailments, and overhauls. To a layman, some of the breakdowns sound rather alarming. For example, *Jack's* main steam pipes gave out in March 1912, the main steam pipe casting broke in August 1912, causing three day's delay, and *Annie*,

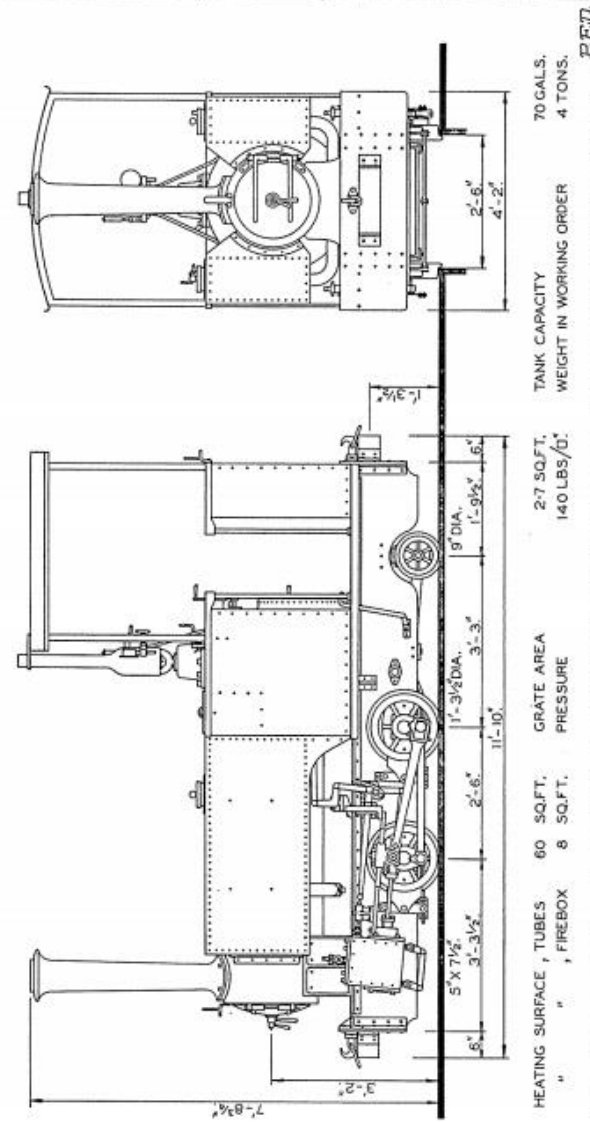


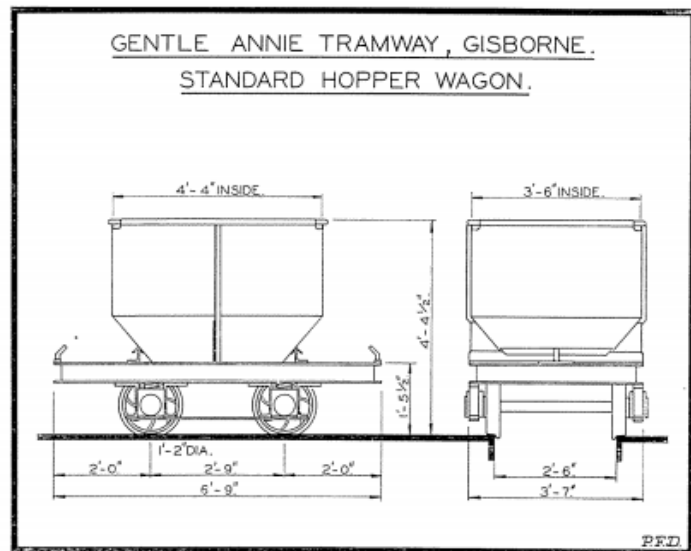


From the maker's photograph courtesy P. F. Dyer

The 0-4-2 side-tank locomotive "Annie" built for the Gisborne Borough Council's 2ft. 6in. gauge Gentle Annie Tramway by W. G. Bagnall Ltd., Stafford, England, in 1912. This was the second locomotive for this tramway.

GENTLE ANNIE TRAMWAY, GISBORNE.
"ANNIE" BUILT BY BAGNALL (1922) IN 1912.





the second locomotive, collapsed in March 1915, the front portion of its boiler having "become perished".

Working of the lineside tramway caused a certain amount of upset in other ways on occasions. A complaint was made at the Borough Council meeting in November 1912 that the engine crews made a practice of blowing the whistles unnecessarily when country people in traps were encountered, and that one man had thereby been put in the ditch twice. Good clean fun, no doubt, depending on the point of view!

Both the steam locomotives were built by W. G. Bagnall & Co. Ltd., England. Here are some of their particulars. No. 1 was an 0-4-0 saddle-tank built in 1911 and named *Jack*. With an overall length of 11ft. 9in. and a height of 8ft. 0½in., it weighed 5½ tons in working order. The driving wheels measured 19 inches in diameter, and the cylinders were 6 inches in diameter by 9 inches stroke. Other details are shown on the drawing.

No. 2 was a smaller locomotive weighing only 4 tons ready for service. Built in 1912, it had the 0-4-2 wheel arrangement and side tanks, and was named *Annie*. Its

driving wheels were a diminutive 15½ inches in diameter. Overall length was 11ft. 10in. and height was 7ft. 8½in. Both locomotives worked at 150 lb. per sq. in. boiler pressure.

The converted Straker Waggon became locomotive No. 3, and was given the name *Flirt*.

In July/August 1912, *Jack* was converted by Borough Council staff to an 0-4-2 saddle-tank locomotive with a small tender. The new trailing wheels were 12 inches in diameter, and the tender, which had the same wheelbase and wheel diameter as the hopper trucks, was presumably built on the frame of one of these. A steam pump was fitted a few months later.

Flirt was withdrawn from tramway service in December 1913, consequent upon the quarry being reduced to one crusher, and about the middle of 1915 the quarry was closed, the tramway subsequently being used only between the gravel pit at Matawhero and Gisborne. In October that year the Cook County Council asked the Borough Council to remove the rails from the road bridge over the Waipaoa River and to repair the planking, but the reply

was that the trains had to shunt over the bridge to get to the gravel pit siding.

At the end of 1916, the Borough Council decided to dismantle the Gentle Annie quarry plant and dispose of it. This operation, which involved temporary repairs to the line to allow the passage of locomotives and trucks, was duly carried out, in the face of the protests of those who maintained that there was still good stone in the locality. However, the Council was still in urgent need of stone for roading, along with the Cook and Waikohu Counties, so arrangements were entered into with the embryonic Motuhora Stone Quarries Company, then about to be formed, to sell the Company sufficient rails for three miles of track, together with the locomotives *Jack* and *Annie* and the hopper trucks. The Company was planning to open up a quarry about two miles from the NZR railhead at Motuhora, to which station the Gisborne-Matawai railway was extended in 1917.

So, off went the little engines and trucks to work for another five or six years. Some information about this period of their lives is contained in the article *Rails to Motuhora* by R. Hepburn in NZRO No. 81, Volume 16, No. 3 (1959). Although the locomotives are believed to have burned coal during their service on the Gentle Annie tramway, they were wood-burners on the Motuhora line. They ended their lives at Motuhora, where their rusting remains may still be seen, lying derelict in the wilderness.

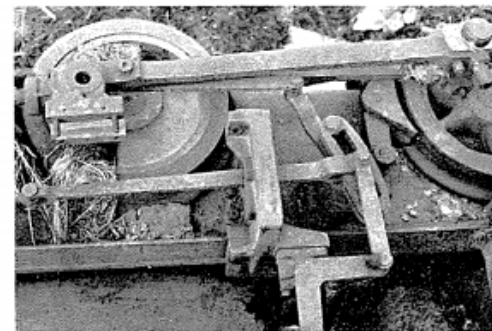
The writer is indebted to Messrs R. Hepburn and P. F. Dyer for the large quantity of detailed information and notes from which this article has been compiled.



Photograph: R. Hepburn, 1959
One of the Robert Hudson bogies with longitudinal roller bearings and coil springs, abandoned at Motuhora.



Photograph: R. Hepburn, 1959
Remains of the locomotives "Annie" (foreground) and "Jack" abandoned at the Motuhora quarry.



Photograph: R. Hepburn, January 1964
Valve gear of the locomotive "Jack" lying abandoned at Motuhora.



Photograph: R. Hepburn, 1959
Upturned metal hopper wagon at Motuhora, as used on the Gentle Annie line. The trap-door handle is in the "open" position.