To qualify for the Master Builder - Cars certificate, you must:
1. Build eight operable scale models of railroad cars. (Models made of LEGO bricks and similar materials are not considered scale trains and are not eligible for AP evaluation.) There must be at least four different types of cars represented in the total of eight. One of these must be a passenger car and at least four must be scratch-built. The remainder, if other than scratch-built, must be superdetailed as defined in the "DEFINITIONS" section.

Notes for Modelling

Rollingstock MMR

Peter Jensen
20th March 2026

Contents

The Mapleton Tramway (1914 to 1944)

The Mapleton Tramway was an 18 km long 2 ft gauge railway, which climbed the Ranges, west of Nambour to Mapleton. The initial part of the line was built by the Moreton Central Sugar Mill Company of Nambour between 1897 and 1904 to tap sugar growing lands west of Nambour.

In 1914, the line was purchased by the Maroochy Shire Council who extended the line to the top of the Blackall range at Mapleton. In many places, the line was located on shelves in the mountainsides with magnificent views over the coastal lands to the sea. It used steep gradients and very sharp curves, reaching 380 metres (1247 ft) altitude.

Shay geared locomotives were obtained to operate the line. The line as extended was used to haul sugar cane, logs and sawn timber, fruit, cream, small livestock and supplies, as well as passengers and mails. With its poor track alignment, the very slow speed of the geared engines, and the stops en route, the journey took about two hours.

It had to be supported financially by ratepayers. The Council kept it running only while revenue paid the working expenses, something which was prolonged a little by the shortages of World War II. It was closed at the end of 1944.

Rolling Stock

All of the rollingstock came from the mill with the line. There was 11 goods and livestock wagons. Their builders are unknown, but they were probably built locally by Mill carpenters during the slack seasons. Two cane trucks and a 4 wheel tank wagon were included with the remainder of the vehicles riding on two 4 wheel bogies.

All rollingstock was of timber construction. A vertical hand brake lever at one end of each vehicle operated on the wheels of the bogie at that end (often just one of the two wheels). This brake was only used when parked.

Mapleton Line

The Mapleton line hauled logs and sawn timber, fruit, cream, small livestock and supplies, as well as passengers and mail.

The station at Mapleton was very simple indeed. An engine shed housed one loco, usually *Mapleton*.

A short spur line ran up to the general store's private siding where goods were unloaded directly onto the store verandah.

Perwillowen Branch

This branch line serviced the cane fields, with normal traffic going to the sugar mill in Nambour. The secondary commodity was timber, in particular logs. *Dulong* was housed in Nambour and usually operated this branch.

The locomotives always travelled with their chimney end facing Mapleton, as the steepest descents were encountered on the down trip.

Carriages and Wagons Modelled

The following information relies on photographs and previously published material, as none of the vehicles now exists.

It is important to note, that no rolling stock had any writing on them with one exception. One of the Brake Vanes had *Mapleton Tramway* on the side for the first 2-3 years. There were no car numbers. The rollingstock was always referred to by its name, eg *Small Fruit Van*.

A lot of research was undertaken for these cars. It was impossible to find an Fn2 bogie with 13 inch wheels. It was also impossible to find a suitable, cost effective truck that could be kitbashed to suit. Therefore, the decision was made to use 3 ft trucks.

The most cost effective solution was to use Bachmann 3ft Fn3 trucks. The cars all ride a little higher than they should.

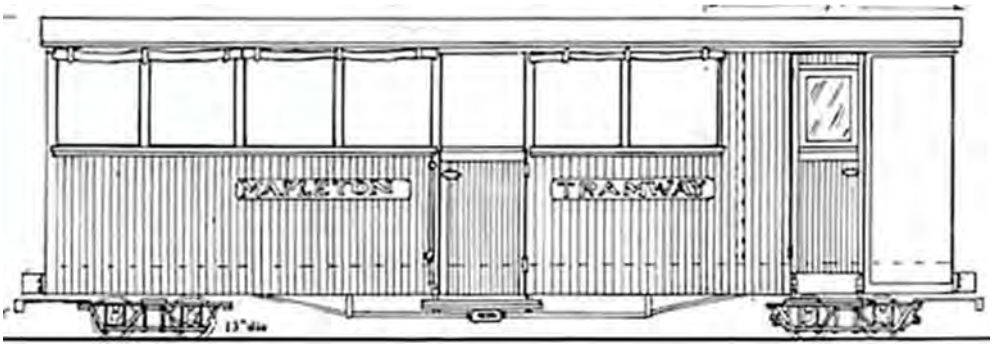
All Mapleton Cars were scratch built using Styrene. All the prototype equipment used a Link and Pin coupler. A commercial 1/24 scale Link and Pin coupler was used.

Passenger/Brake Vans

Cream cans and general goods were carried in the two passenger brake vans. It appears that one, and probably both, were converted to flat wagons by the late 1930's

Passenger/Brake Van 1 – Not modelled

The first brake van was fully enclosed. It was 25 feet 8 inches long, 6 feet 4 inches wide and 8 feet 3 inches high. It rode on two tiny bogies, each of 2 feet wheelbase and with 13 inch wheels.

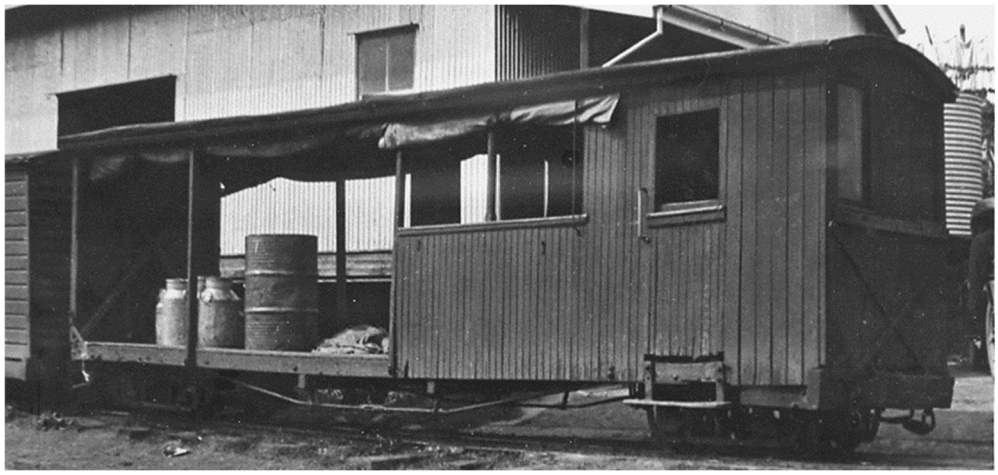


At one end, there was a guard's compartment, with a curved ducket (lookout) on each side, at the extreme end of the carriage. Canvas rolls were used to close the windows during inclement weather.

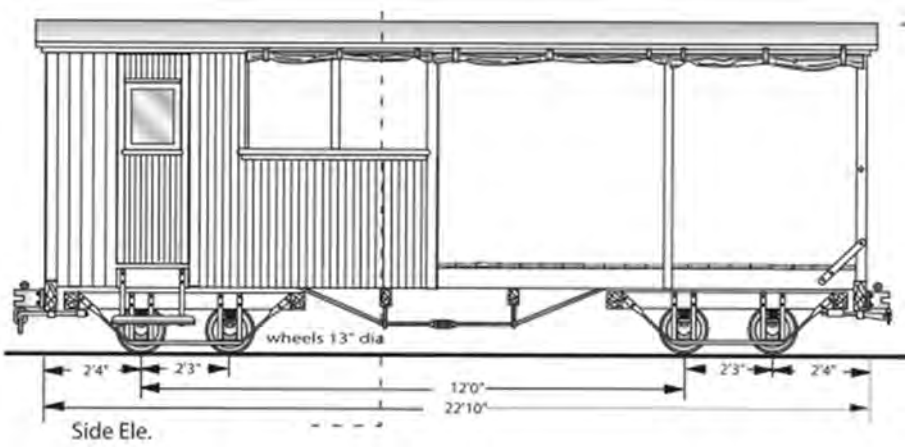
As there was no provision on the railway for turning either locomotives or rolling stock, the guard's end of the carriage always faced Nambour.

Passenger/Brake Van 2 – Not modelled

The second brake van was a little shorter, being 22 feet 10 inches long. It was 8 feet 7 inches high, but the overall width was a little less at 5 feet 6 inches across the body. It had a guard's compartment at the Mapleton end, but there were no duckets.



It rode on slightly longer bogies, but with the same 13 inch wheels. Half of the car was open with a small passenger area. Passenger entry was thru the Guards area. Again, canvass blinds were used.



Couplers and 4 Wheel Journals

All Mapleton Tramway rolling stock used link and pin couplers. All cane and timber trucks were 4 wheel stock with a different link and pin coupler.

Searching the internet for suitable large scale items (especially at a reasonable cost) was difficult. However, an internet shop in Sri Lanka (**pasidump)** came to the rescue. They supplied the following Couplers and Journals

Link and Pin Couplers

This coupler was used on all Mapleton Tramway equipment.



Journals

The 4 wheel stock (cane cars and Log cars) required a suitable Journal.


These journals were used as is or modified to look more like the originals as follows …

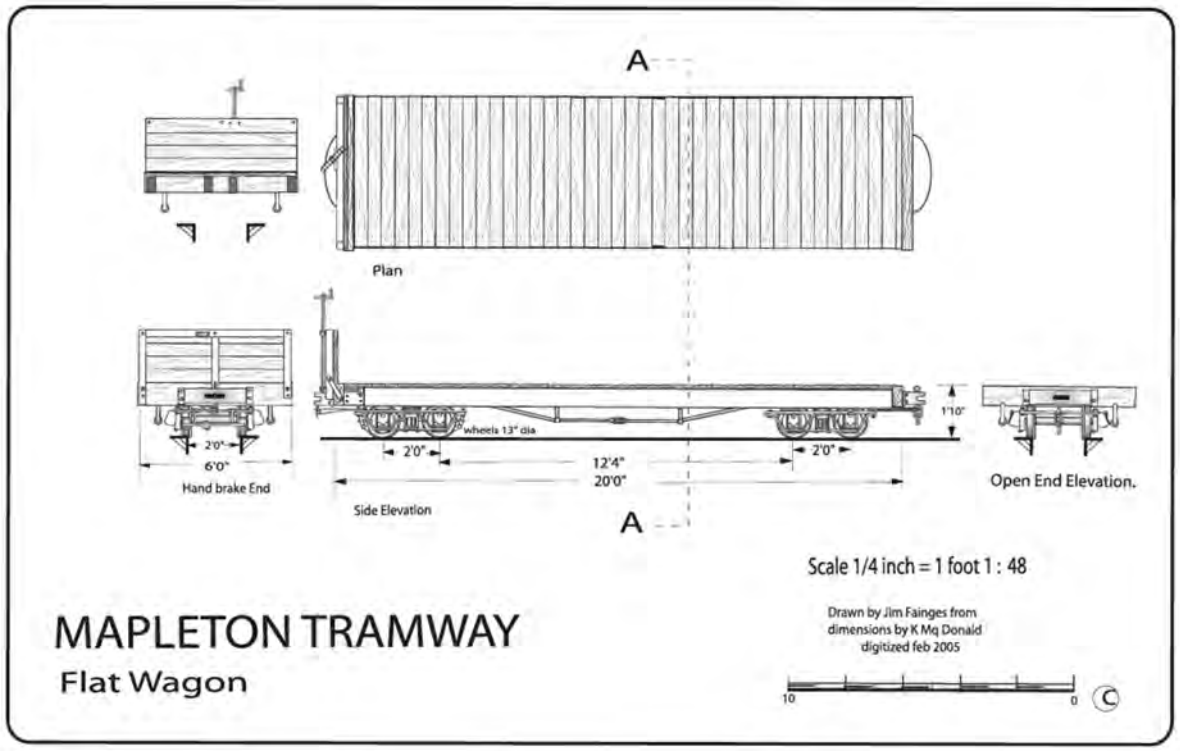
Flat Wagons

There were 7 flat wagons 20ft long and 5’ 5” wide. (8 after one of the covered wagons was converted). Bogies had 13 inch wheels and a 24 inch wheel base. Again, there were no commercial bogies, at any price, that could be used, converted, or modified. The bogies used on all models are from Bachmann’s Fn3 range.

Bolster and chain sets for carrying timber could be placed anywhere on these wagons and/or pinned into the floor. Some of the cars had stake pockets. The stake pockets could be used to add a side wall to create an open wagon to carry ballast, or other loose materials.

Some of the flat wagons had a wall, three or four planks high on one end with the hand brake lever attached. Photographs suggest that this was always at the Nambour end.

An apparatus for steaming grass and weeds was fitted to one of these cars periodically. It would be pushed in front of the loco.



Model: Standard Flat Car

This is a standard flat car with a load of sawn timber.

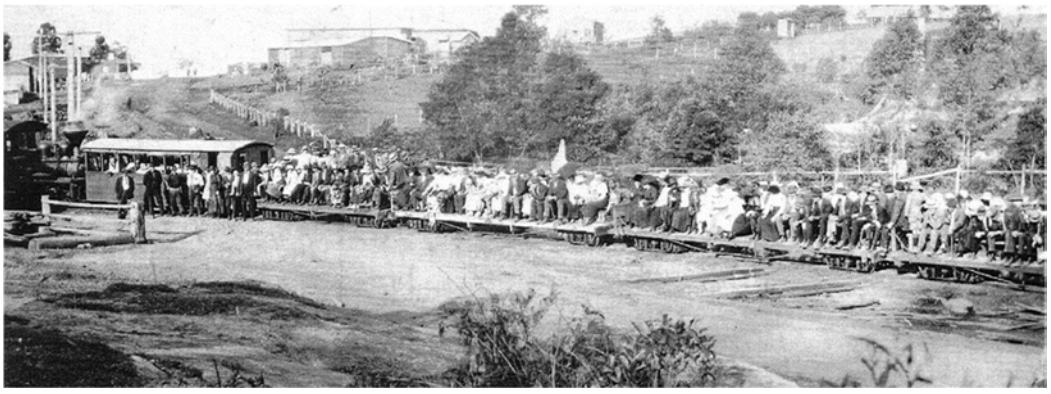
SOQ - Parts Used for this model

1. The frame, floor, end wall are made with styrene strips
2. Timber load from commercial timber strips
3. Bachmann 1:20.3 trucks with brake shoe added
4. Link and pin couplers (as discussed above)
5. Commercial Stake pockets and hand brake brackets
6. Various sizes of nuts and bolts

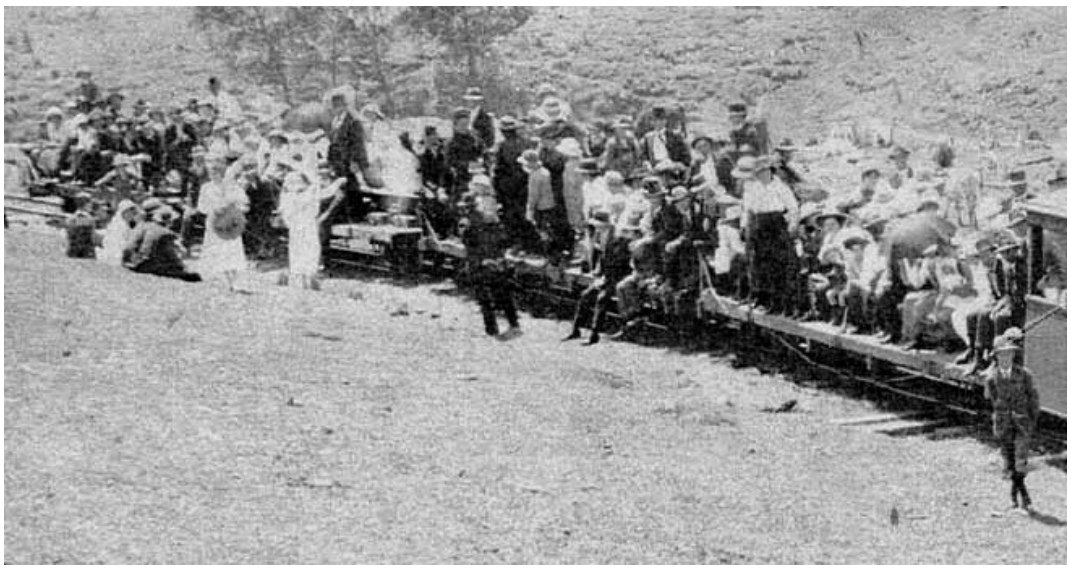
Excursion Car

Removeable, longitudinal seating (actually, wood planks on blocks of wood), outwards facing were fitted and nailed to the floor along the centre line of the cars for use on excursions. Temporary canvas rooves were sometimes added.

One vehicle could be fitted with a canvas roof and sides that ran as a supplemental covered wagon at busy times.



Seating has been added to the flatcars.



Standard Flat Car modelled as an Excursion Car

Side 1, People 1-10

Side 2, People 1-10

SOQ - Parts Used for this model

1. All construction details as per the flat car
2. The seats are constructed from styrene strips
3. Large scale people bought online from various manufactures

The people models were cleaned, some arms and legs were adjusted and painted. My wife did some of the detailed painting on these models.

General view of the Passengers

Will her Mother object if I hold her hand. I hope she liked the flowers.

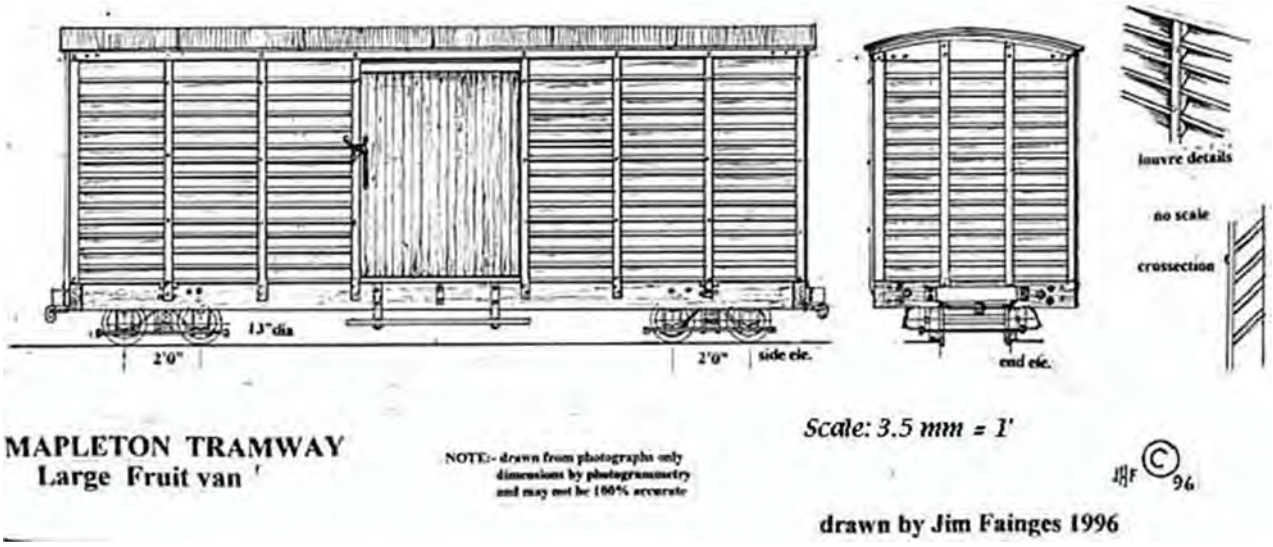
Here we see Bobby chatting up his brother Tom's girl friend. Tom is not very happy.

Here is Bill, the Union Rep with his wife Mabel. He is not happy as he didn't get seats on the executive car.

Large Fruit Van - Closed Cream and Fruit Van

The large fruit van was 20ft long and louvers on all sides. It had a sliding (on the inside) door and was locked with a padlock and chain.

There was not a lot of information about this car. It was later converted to a flat car.

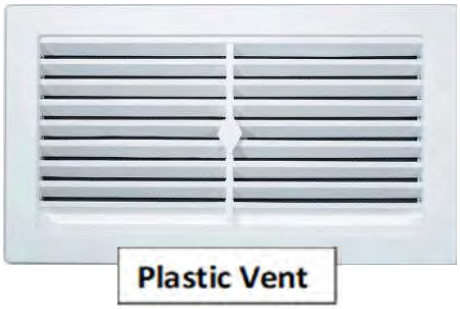


Model: Large Fruit Van

Ventilation shaft covers from Bunnings were used to create the louvers.

SOQ - Parts Used for this model

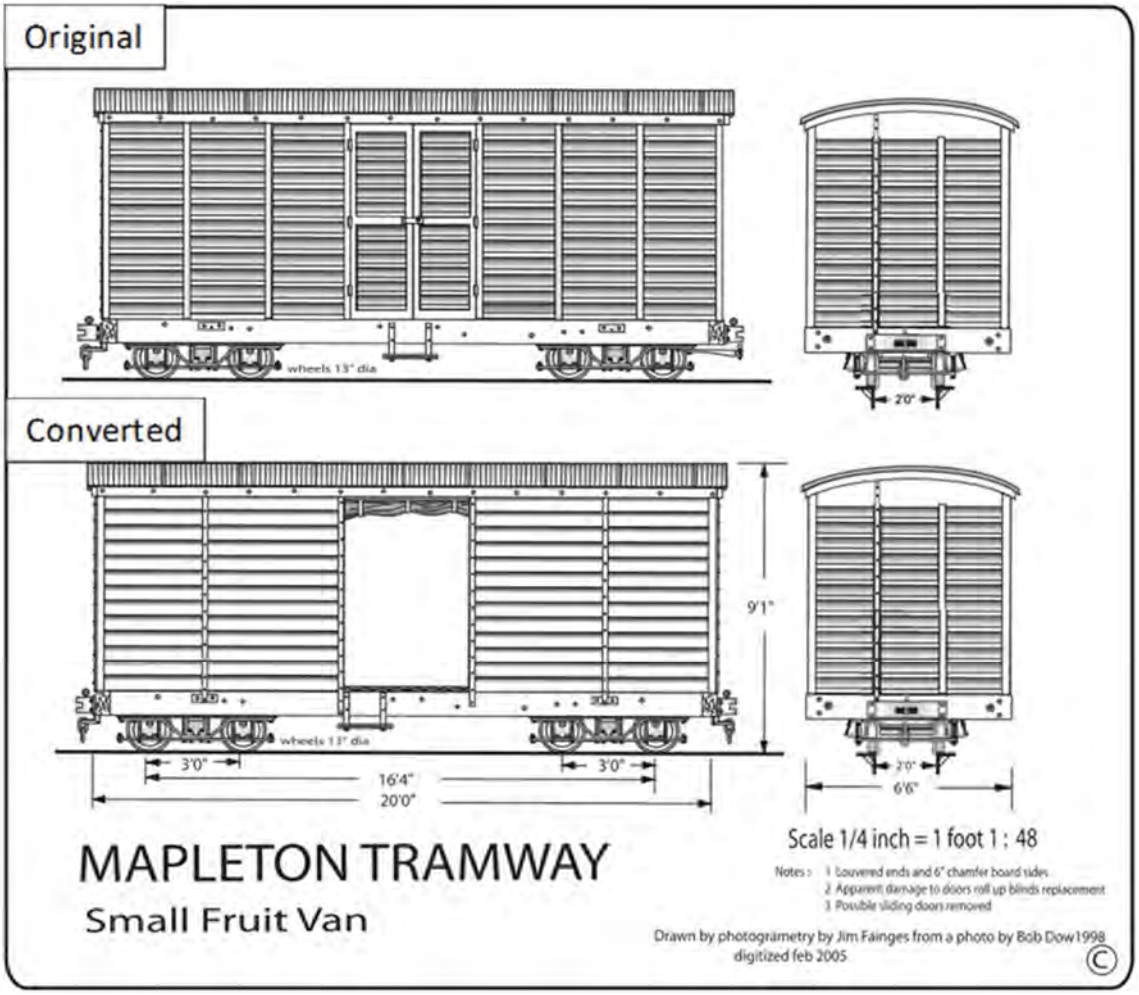
1. The frame and all struts made with styrene strips
2. The floor was made from scribed styrene sheets
3. The roof was made from Corrugated styrene sheets
4. Bachmann 1:20.3 Trucks with brake shoe added
5. Large scale Link and pin couplers (as discussed above)
6. Louvers are plastic strips cut from a plastic vent from Bunnings
7. Various sizes of nuts, bolts and chain



Small Fruit Van - Closed Cream and Fruit Van

Originally, it was a 20ft long covered wagon with central doors and louvred sides and ends. The doors were split in half vertically and opened outwards.

It was partially rebuilt, probably following an accident, with weatherboards sides replacing the louvres. The doors were replaced by a canvas roll up door.



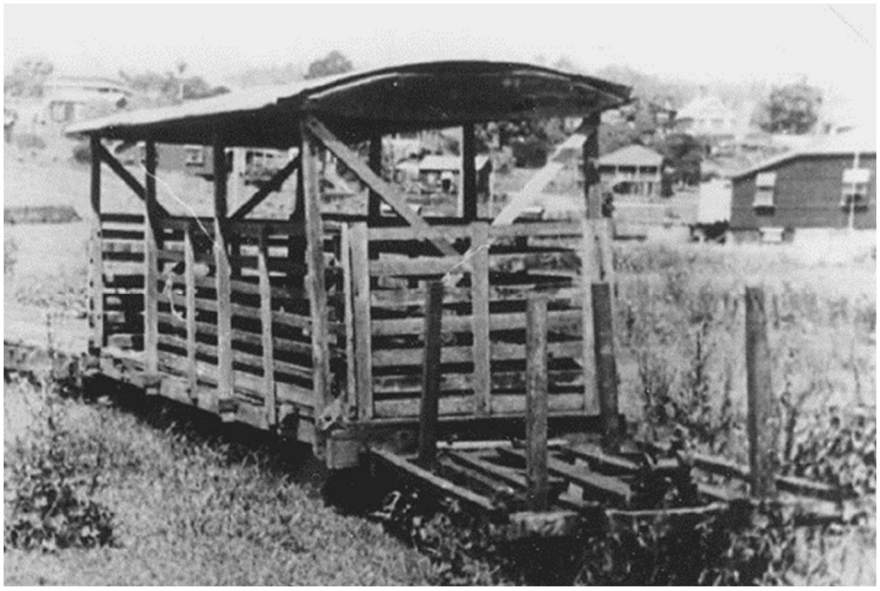
Model: Small Fruit Van

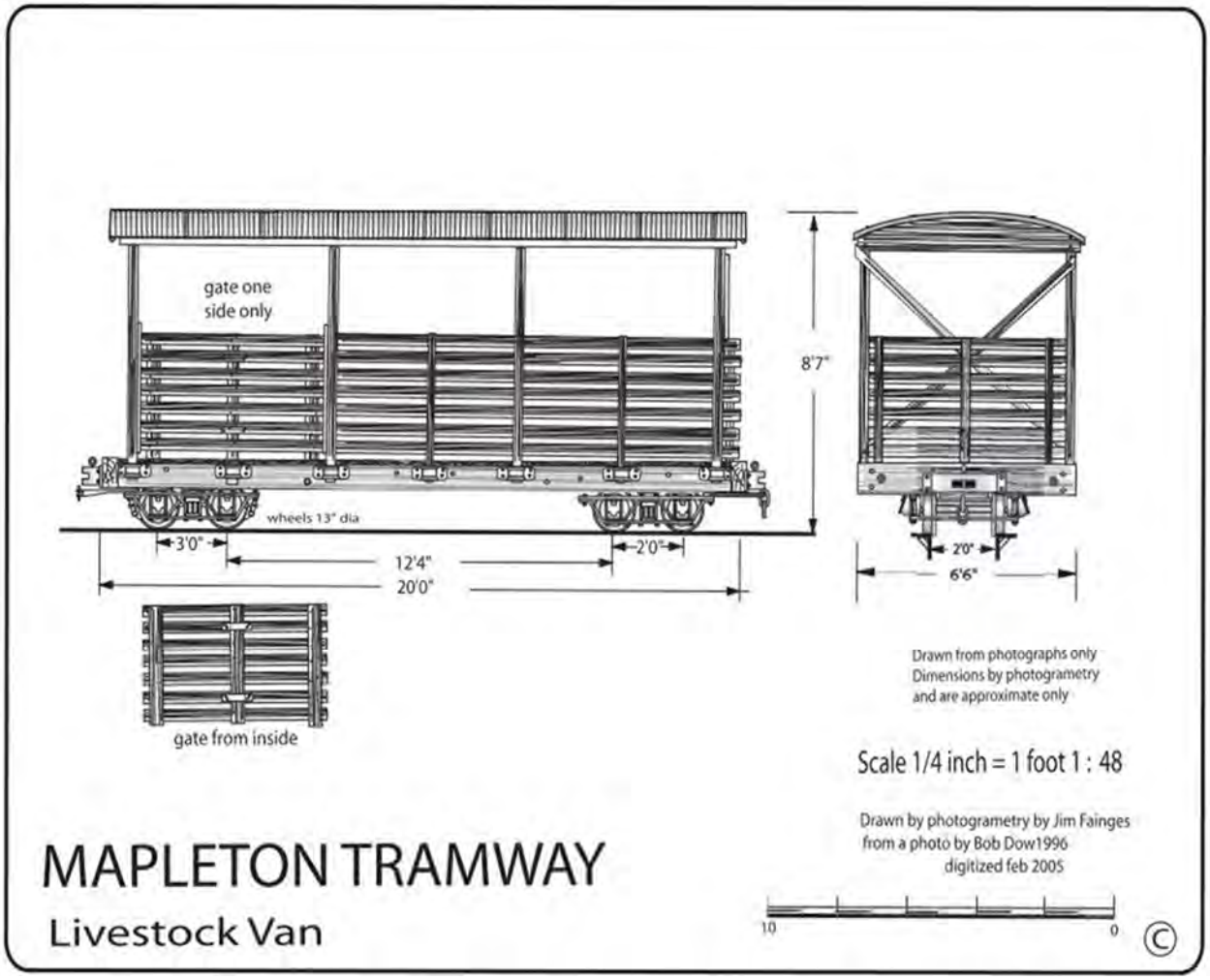
SOQ - Parts Used for this model

1. The frame was made with styrene strips
2. The floor was made from scribed styrene sheets
3. The sides walls were made with scribed styrene sheets
4. The roof was made from Corrugated styrene sheets
5. Bachmann 1:20.3 Trucks with brake shoe added
6. Link and pin couplers (as discussed above)
7. End louvers are plastic strips cut from a plastic vent from Bunnings
8. Figure from online shop (Cleaned, reposed, painted), final detail painting by my wife
9. Various sizes of Nuts and chain, door step

Pig and Calf Wagon

A single livestock wagon, with a galvanised iron roof, half height slatted sides and a wide gate at one end was used for the transport of small animals, such as pigs, calves, goats, etc.




gate one
side only
8'7"
wheels 13" dia
3'0"
12'4"
20'0"
2'0"
2'0"
6'6"
gate from inside
Drawn from photographs only
Dimensions by photogrametry
and are approximate only
Scale 1/4 inch = 1 foot 1 : 48
Drawn by photogrametry by Jim Fainges
from a photo by Bob Dow1996
digitized feb 2005
10
0
©
MAPLETON TRAMWAY
Livestock Van

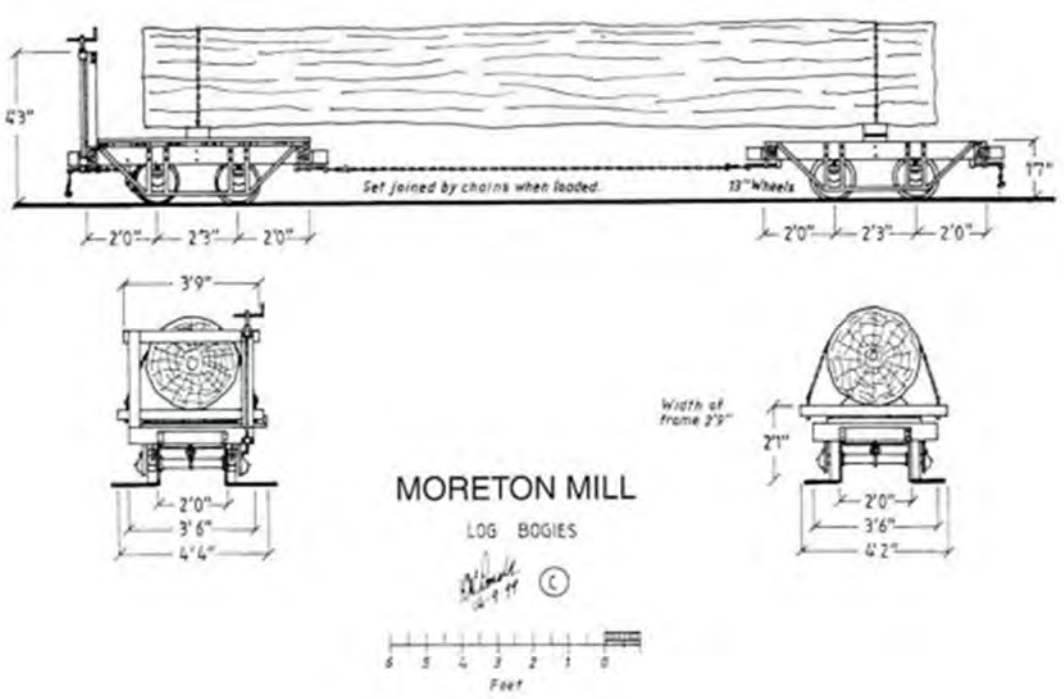
Model: Pig and Calf Wagon

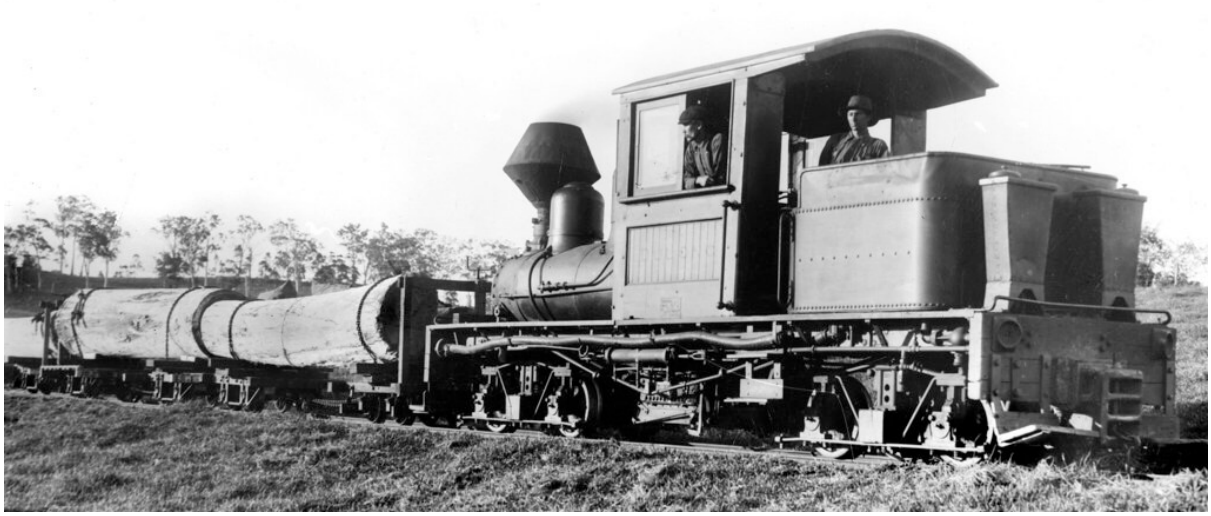
SOQ - Parts Used for this model

1. The frame, floor, all walls, gate, are made with styrene strips
2. Corrugated styrene sheets for roof
3. Bachmann 1:20.3 Trucks with brake shoe added
4. Link and pin couplers (as discussed above)
5. Various goat models from the internet (cleaned and painted)
6. Various sizes of nuts, bolts, and chain

Log Car

Could not locate any good photos of this car. The plans come from *The Mapleton Tramway,* page 16.

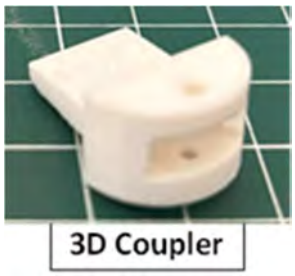




Model: Log Car

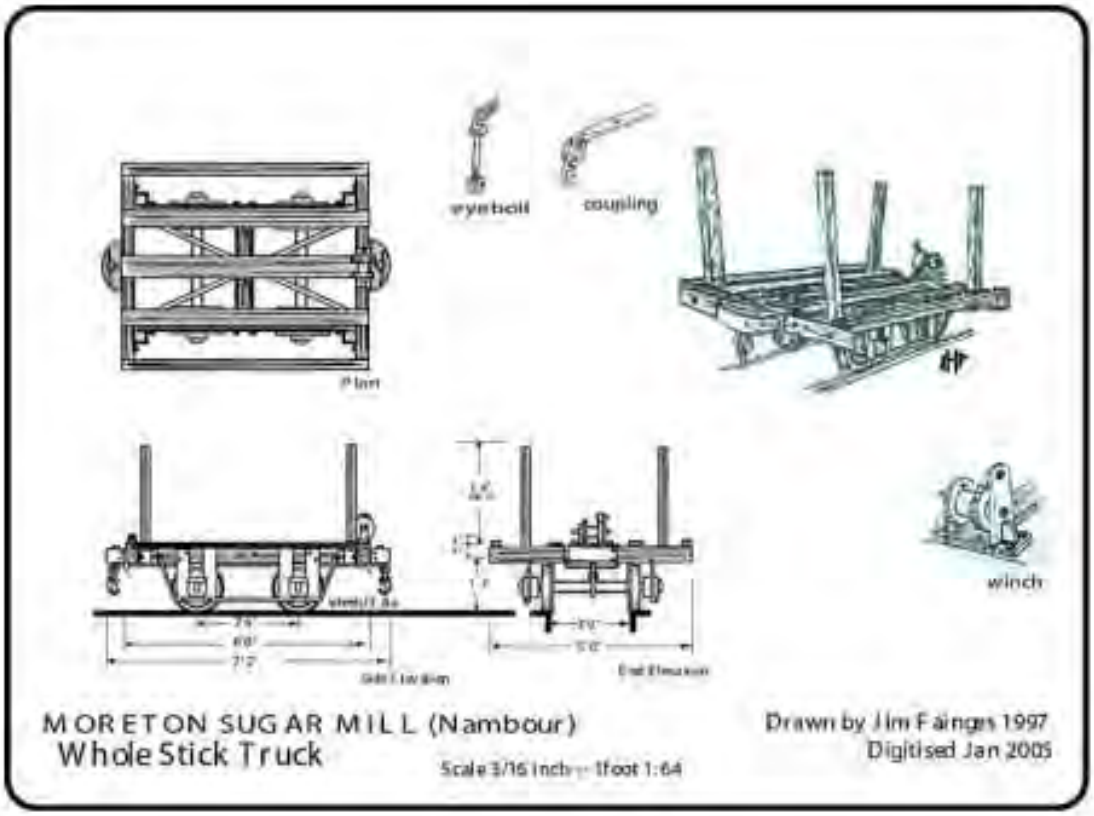
SOQ - Parts Used for both models

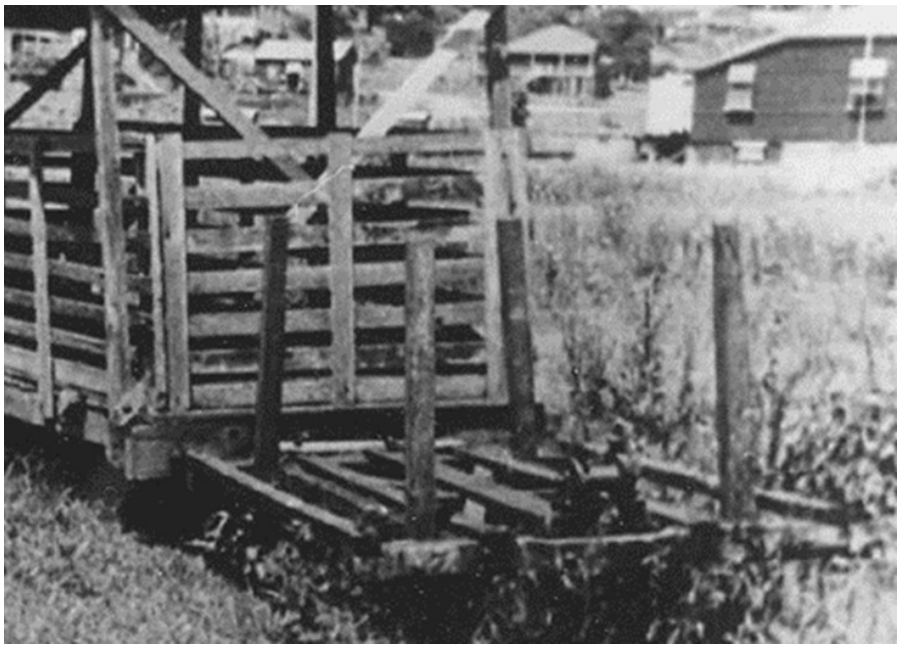
1. The frame, floor and ends made with styrene strips
2. The log bolsters are made with styrene strips
3. 1.20.3 small Bachmann wheels
4. Modified commercial wheel Journals (as discussed above)
5. LGB Link and pin couplers with brace between cars
6. 3D printed Link and Pin couplers
7. Various sizes of nuts, bolts and chain
8. Log … from the Aussie bush



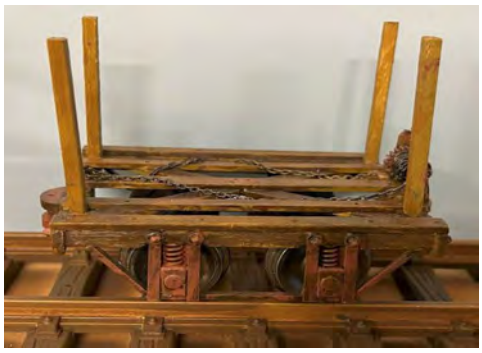
Small Cane Truck

Photos and Plans from the CaneSig web site.





Model: Small Cane Trucks

Both cane trucks are the same. (except for the load of cane)

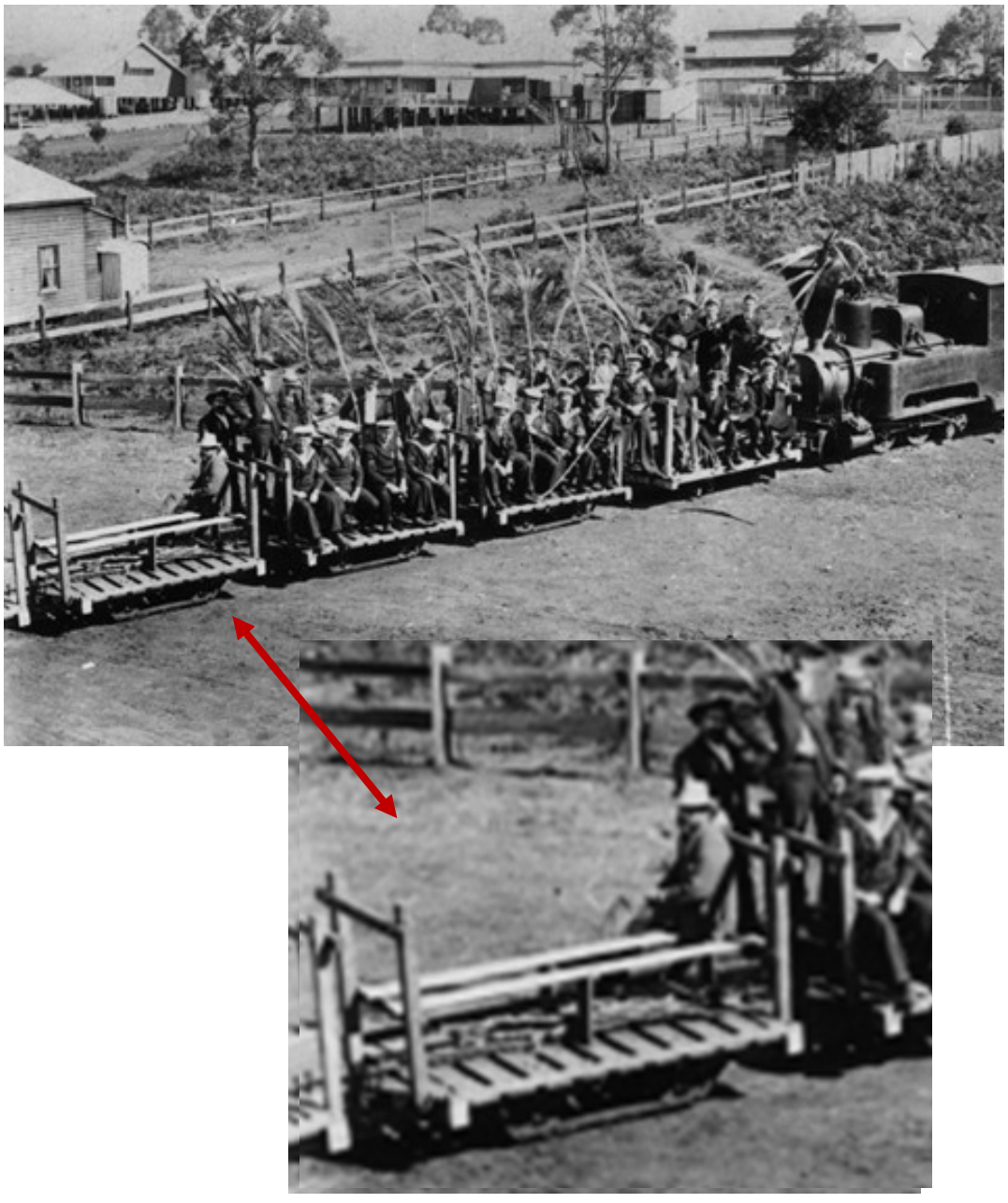

Cars loaded with cane and the chain deployed

SOQ - Parts Used for both models

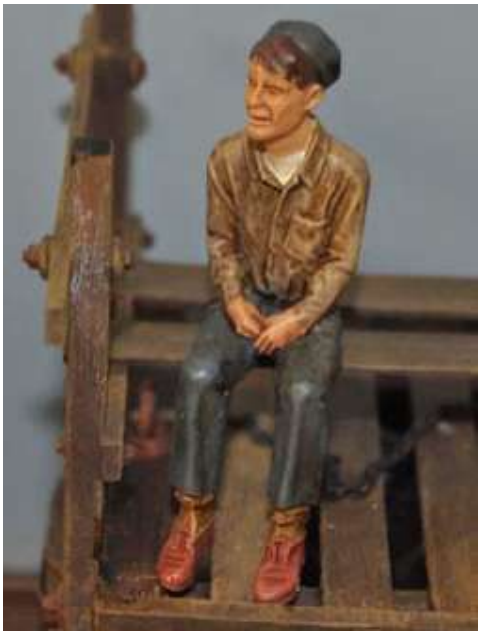
1. The frame and stakes were made with styrene strips
2. Chain winch made from styrene, with a nylon gear wheels from the scrap box
3. 1.20.3 small Bachmann wheels
4. Modified commercial axel journals (as discussed earlier)
5. Link and Pin coupler (3D printed)
6. Various sizes of nuts, bolts and chains
7. Cane from a straw broom

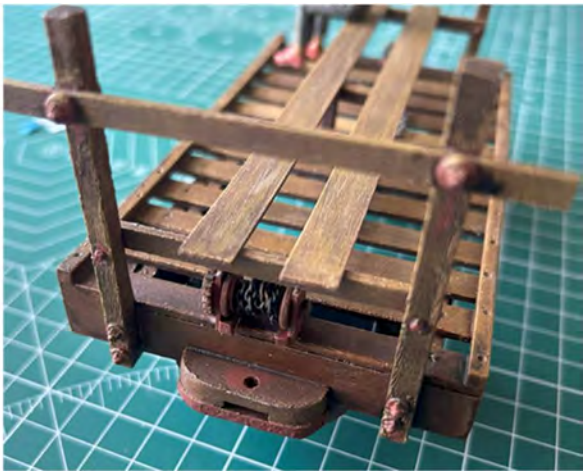
Large Cane Truck

I could not locate any plans for this car, so the model was built from the following photos. The size was determined from the number of people sitting on the car.



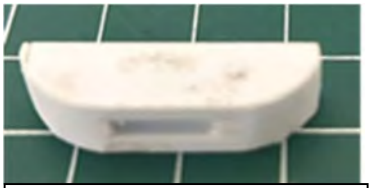
Model: Large Cane Truck





Scratchbuilt Coupler

This coupler was made from Styrene strips.



Scratch built coupler

SOQ - Parts Used for this model

1. The frame and stakes were made with styrene strips
2. The seating was made from styrene strips
3. Coupler made with strip Styrene
4. Chain winch made from styrene, with a nylon gear wheels from the scrap box
5. 1.20.3 small Bachmann wheels
6. Commercial axle journals
7. Various sizes of nuts, bolts and chains
8. Figure from online shop (Cleaned, reposed, painted), final detail painting by my wife

Scratch Built and Kit bashed non-Prototype Cars

These cars were built to add additional cars to the range and were done with "a tongue in one's cheek". These cars add extra interest to the collection.

Kitbashed Water Car

KITBASH A WATER CAR

INEXPENSIVE AND REALISTIC

BY CHRIS ROGERSON
PHOTOS BY JOHN O'BRIEN
1:20.3 SCALE

SOMETIMES THE LEAST likely subject may result in a surprisingly good model. You just need enough imagination to realize it. For example, I found a very inexpensive Hartland Locomotive Works "Mini Series" large scale kit, with a few modifications, easily converts to a

This car was scratch built following an article in the June 2004 issue of Finescale Railroader. The model was built to align with the Hartland Locomotive Works (HLW) G Scale flat cars used for the “Special Guests” Tour Cars.

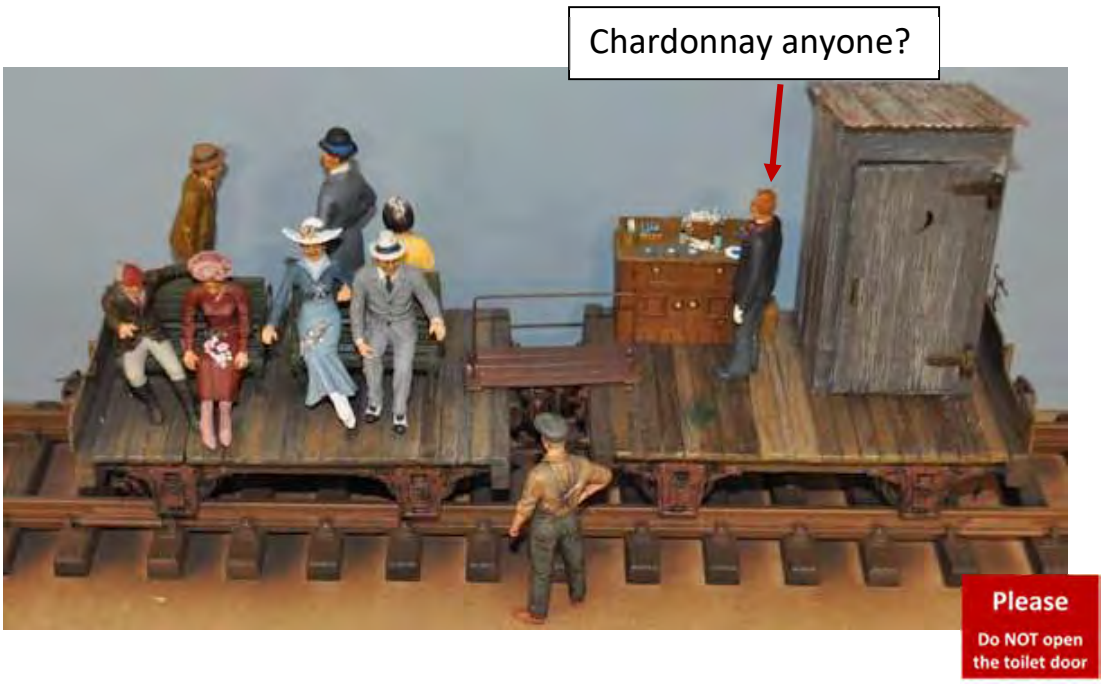
SOQ - Parts Used for this model

1. The frame, deck, stakes were made with styrene strips
2. Tank and lid were made from a plastic pipe covered with styrene strips
3. Water tray from Styrene
4. 1.20.3 small Bachmann wheels
5. Commercial axle journals, wheel brake and brake handle supports
6. Hinges, taps, pipe were commercial
7. Various sizes of nuts, bolts and chains

Kitbashed "Special Guests" Tour Cars

These two connected 4wh flat cars were kitbashed from Hartland Locomotive Works (HLW) G Scale flat cars (Hartland are no longer in business). The cars were kitbashed to resemble a 4 wheel version of the Mapleton flat cars.

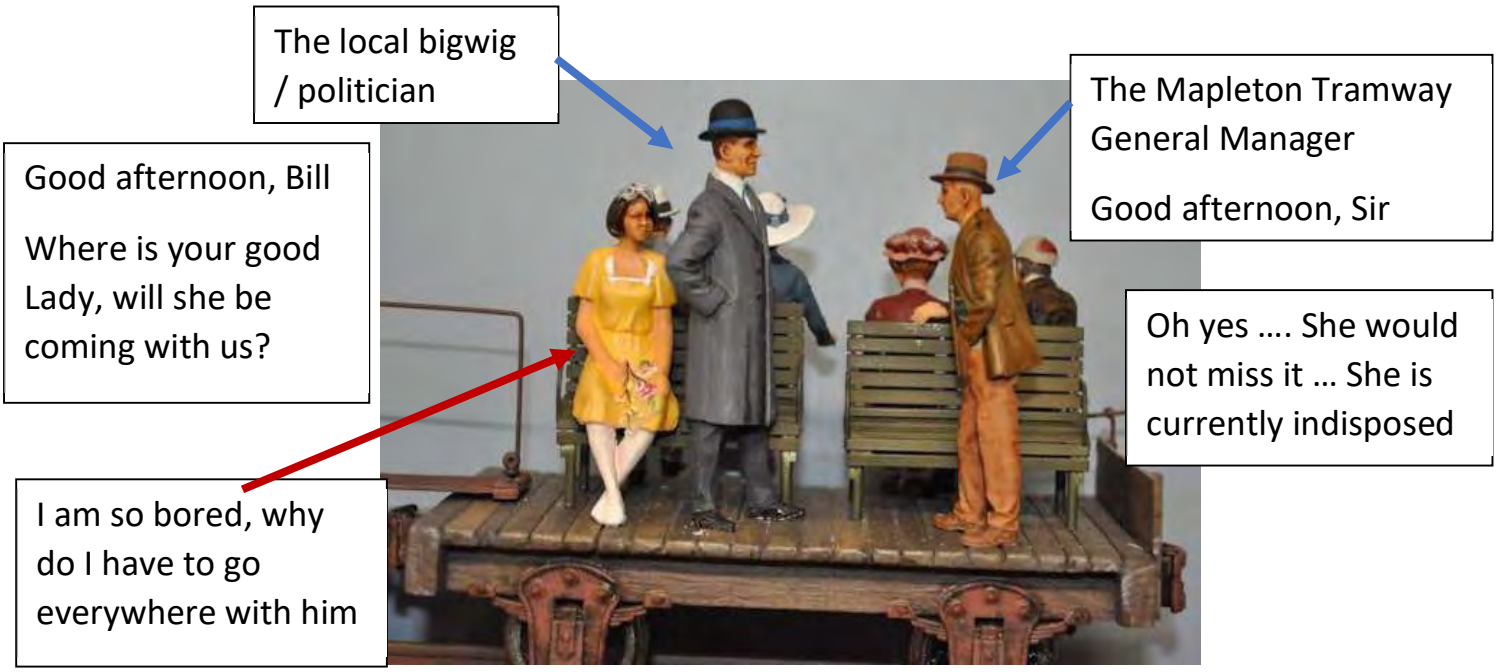
These cars provide an "elite" passenger service on the days when the special picnic day trains run. These cars come with a Butler and Toilet.



How nice is this, I will have a chardonnay please

Me too

Look at those poor people


The local bigwig / politician
The Mapleton Tramway General Manager
Good afternoon, Bill
Where is your good Lady, will she be coming with us?
Good afternoon, Sir
Oh yes …. She would not miss it … She is currently indisposed
I am so bored, why do I have to go everywhere with him


You were not supposed to open that door
OOOps
How embarrassing!

SOQ - Parts Used for these models

1. The frame, deck and wheel journals of both cars are Hartland Locomotive Works (HLW) G Scale flat cars
2. 1.20.3 small Bachmann wheels
3. The walls at each end are constructed from Styrene strips
4. The bridge is styrene with a wire safety rail
5. The butler's cupboard is crafted from styrene sheets, strips and shapes
6. The toilet building came from some very old, unknown kit
7. Toilet roof from corrugated styrene sheet
8. Toilet details added include internal details (shelf with hand wash etc)
9. Commercial parts are wheel brakes and brake handle supports
10. Various sizes of nuts, bolts and chains
11. All people are large scale people sourced from various web sites. They have been shaped, some arms and legs repositioned, cleaned and painted. My wife did the final detailed painting

Bibliography

1. *The Mapleton Tramway* by John Knowles (an absolutely amazing booki)
2. Most plans and drawings come from the CaneSig Special Interest Group website, by Lynn Zelmere. An absolutely interesting site with a wealth detail and knowledge.