## 4 Wheel Box Wagon

This project was inspired by a 1963 photograph (see next page) of a pair of 4 wheel wagons belonging to CSR's SPSM mill at Lautoka, Fiji. The photographer's notes indicate they are 'M of W cars' (navvy wagons), but my only roster for the era lists two ice-box wagons of roughly the right size.

I scaled the wagon from John Treichmoeller's photo and adapt the resulting dimensions to a 4 wheel wholestick truck (Moreton Mill, RJ models). The conceptual design (above right) was the result.

The proportions aren't exactly the same as the SPSM wagon and my model isn't insulated but the design is reasonable for a box on a wholestick truck. Hopefully it will give you some ideas on building an 'inspired by' model.
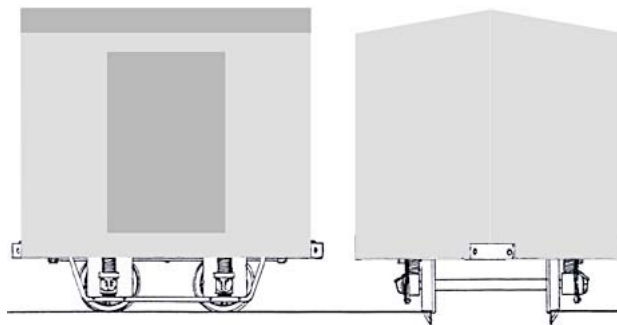

Conceptual design for a wooden box adapted to On30 using a Moreton Mill wholestick truck as the chassis. Dimensions 'guestimated' from John Teichmoeller's 1963 photograph. Side: 6' 6" x 5'; door: 4' x 2' 6", bottom of door even with floor; end: 6' x 5', 5' 6" to peak. Drawing not to scale.

The RJ wholestick truck was assembled as normal, except that the wooden uprights were removed and the deck filed smooth, removing cast-on bolt heads, etc., to assist in fitting the superstructure.

The deck was filled in with dimension lumber so that the floor was continuous, albeit with gaps between the boards. The truck was hand painted with acrylics and weathered lightly with MAC make-up powders.

The walls were framed with *Mt Albert* O scale dimension lumber (4x2s, 1" wall boards, etc.) using standard house framing techniques and white glue. Nail holes and gouges were added with a sharp point and/or blade. The hinges and door handle (brass wire) were attached with superglue.
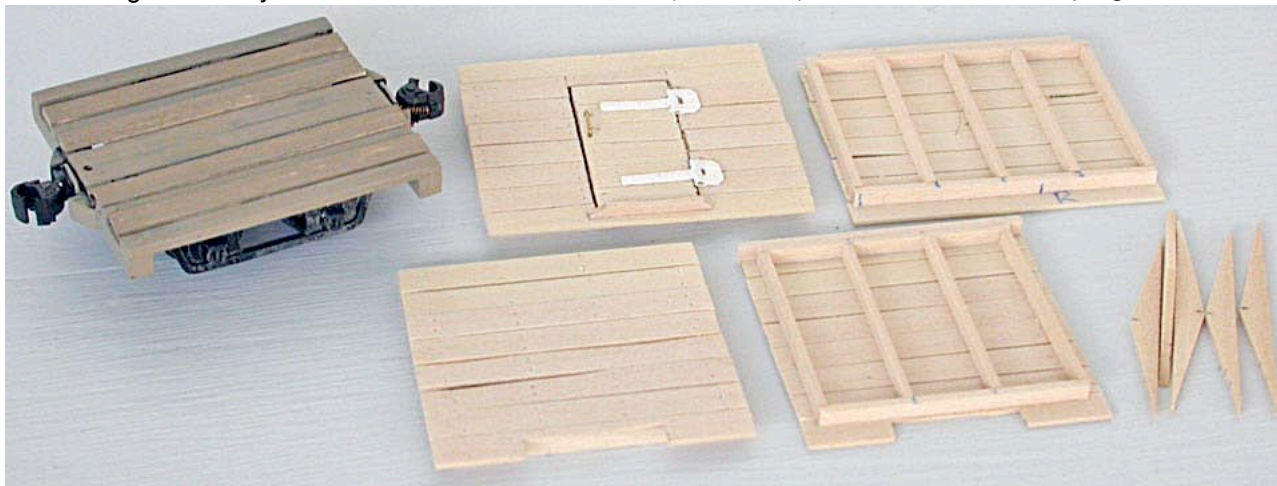
The roof formers will be aligned with the studs on the long walls and covered with loosely spaced 1" boards (photo next page). The roof was then covered with a single layer of tissue and painted to represent a weathered canvas top.

The hinges started with a 50mm wide piece of .005 sheet styrene rolled around a length of fine wire and glued. When the solvent set, the wire was removed and the hinges cut to shape. A hinge pin (wire) was SuperGlued into one side of the hinge so that it remained operational. While not obvious in all the photos, bolt heads were impressed in the styrene from the back before fixing to the wagon.

Overlapping studs, wall boards and top plates lock the corners, just as on a framed house or garage. The outside corners and wall top were finished with dimension lumber (see top photo previous page). The box was painted with thinned acrylic paints and weathered with MAC powders before it was fixed to the deck with contact cement.

After completing the wagon as shown I found some additional information on the ice box wagons in Dyer (p 138) which will be useful for the next 4 wheel wagon I build.

> They carried meat, butter and fruit for CSR officers. Their dimensions were: length over buffers 7ft 10 1/2in; length and width of superstructure 6ft 3in and 4ft 3in; overall height of 6ft 5in; wheel diameter 1ft 3in; and wheelbase 2ft 9in. The ice box had double walls, the outer of one-inch timber and the inner of sheet metal. The space between was filled with insulating material. The interior was 4ft 9in long, 2ft 9in wide and 3ft 6in high. On one side there was a door measuring 2ft 3in across and 3ft 3in high.

In the meantime I've got a unique On30 wagon for my layout that looks great with my other sugar cane and shire tramway inspired models.

References

Dyer, Peter and Hodge, Peter (1988). **Cane Train: The sugar-cane railways of Fiji**, Wellington: The New Zealand Railway and Locomotive Society.
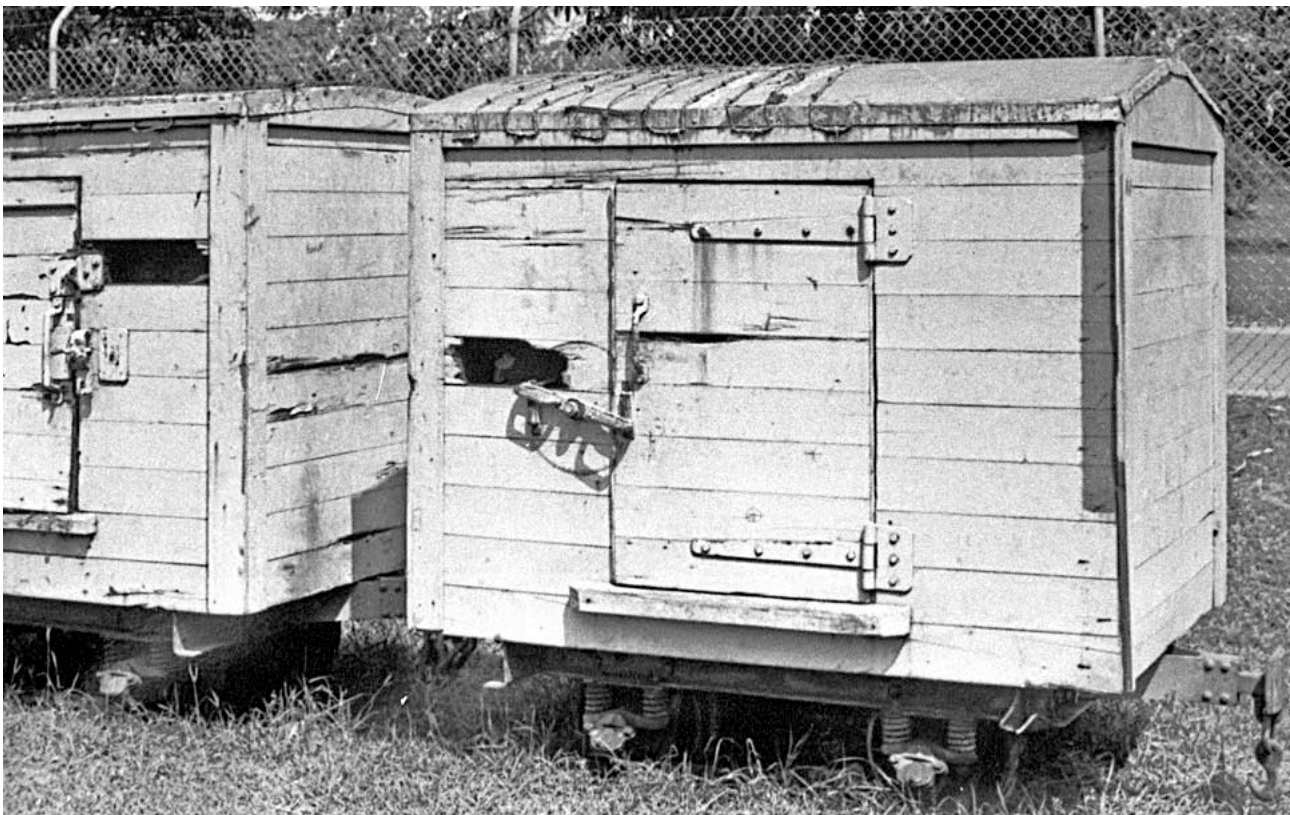
Two 4 wheel wagons at Lautoka Mill, 6 November 1963. While described in the photographer's notes as navvy wagons, they are likely ice-box wagons from the bi-weekly *Free Train* which ran from Lautoka to Rarawai. Note the different roof and door styles and the obvious lack of insulation material in the holes in the wagon walls. John Teichmoeller photo.