The Mail Car

Issue no. 25 - September 2003

St. Lawrence Division web site: www.cyberus.ca/~g_knowles/sld/sld_main.htm

From the Superintendents Desk

By Stanley Conley

Where to start. It has been an eventful four months since the last **Mail Car**, the May meet was held in Smiths Falls, I attended the MNRA National Convention in Toronto for a week, and the exec planned and hopefully set in motion the next year's SLD events. I hope to cover all that and a bit more in this message.

Reaching way back into the memory banks we have the May meet, well attended and we were graced with good weather for our BBQ lunch under the station canopy. There was a bit of missed communications in the planning that put our guest speaker and room arranger a week ahead of our schedule and as a result the first arrivals surprised the young woman in charge of opening up as we were a week late according to their schedule! Everything was taken care of and the bits fell into place for the morning, minus a speaker who could not make it that day. As a result we actually finished the morning session at almost the stroke of noon, possibly a first. A fine social hour or so was held as we consumed fresh BBQ'd dogs and sausages, chips and pop. The afternoon was spent lazily getting home, perhaps stopping to observe the Sperry car at the Smiths Falls station, perhaps drifting over to Merrickville for a short while.

Toronto was my first NMRA National Convention experience, and I must say, an experience it was. We (my wife Diane and I) arrived Sunday evening and left the following Sunday morning, 36+ clinics, one train show, many conversations, new acquaintances, a couple of awards (for Di!), several good meals and so much information crammed in the brain I'm not sure it fits. Overall a great time. The atmosphere was wonderful, relaxed and congenial, and despite 1400 or so in attendance only a couple of clinics spilling out of rooms too small for those interested. I concentrated on attending clinics instead of tours which I understand went well for the most part, the odd lost bus just part of the game so to speak.

Since one of the primary goals of the NMRA is to promote active participation, this year we are going to attempt to convene three hands on modelling workshops, the aim of which will be to construct and install a trestle bridge, please see Grant's announcement in this issue of the **Mail Car**. We would like to hold several work sessions and we realise that the time available in the afternoon of a meet is not enough to accomplish a lot, particularly when we rarely reconvene before 1:30pm, and most of us need to be out the door by 4:00pm. What we would like to do is plan work sessions held away from the meets, possibly late October/early November, early December and February. In order to do that we need locations that would provide the space without great expense as there will be no door revenue to offset a cost unlike the meets proper. The last time we did this a member volunteered his home and 8 to 10 people participated, and this was wonderful, but it does rely on gracious volunteers and accommodating spouses. Ideally we will get a higher participation rate and that means needing space for 12 to 16 individuals and their work. If you know of a suitable space (remember we need tables and chairs too) available at nominal expense please talk to Grant or any member of the executive.

The NMRA National Convention taught me at least one thing, there is no subject too obscure, specialised, simple, complex or all encompassing, that there can't be at least one clinic on it. All it takes is an interest, a bit of organization (not always, but it does help) and some visual reinforcement and a clinic is born. I saw clinics on Burro cranes, power hand brake assemblies for freight cars, scratchbuilding windows, single towns on a railroad, making scale working switchstands in HO and O, Fowler boxcars, micro module standards and a host of others. My point is that if you have an interest in anything, you can talk about it for 20 to 40 minutes, often without even working at it. Pick a topic, prototype based such as an entire railroad, class of locomotive, specific freight or

St. Lawrence Division

Executive Officers

Superintendent: Stanley Conley
2194 Valley Drive, Ottawa K1G2P8
Phone: (613) 523-8237
Email: stanley_conley@carleton.ca

Assistant Superintendent:
Grant Knowles
Phone (613) 825-5438
Email: g_knowles@cyberus.ca

Paymaster: Doug Cushman
Phone: (613) 837-0412
katdug@rogers.com

Clerk: Alex Binkley
Phone: (613) 749-7633
Email: alex.binkley@sympatico.ca

Dispatcher: David Steer
Phone: (613) 763-2901

Appointed Positions

Inspector: Grant Knowles
Phone (613) 825-5438
Email: g_knowles@cyberus.ca

The Mail Car
Editor: Stanley Conley
Phone: (613) 523-8237
Email: stanley_conley@carleton.ca

The Mail Car is published five times a year by the St. Lawrence Division – NMRA.

Opinions expressed are those of the editor (Dispatcher) or the individual authors and are not necessarily those of the St. Lawrence Division–NMRA

Copy Deadlines
November issue - October 15
January issue - December 15
March issue - February 15
May issue - April 15
September issue - August 15

Special thanks to Diane Dodds for proof-reading and general nit-picking

passenger car, structure or industry. Or model based such as available O scale narrow gauge locomotives, kitbashing a model to represent a specific prototype, casting resin parts, finishing techniques. Scribble down some notes, find or take pictures, and there you have it, a clinic to present at an SLD meet. If you read this far you knew there was a point. Yes, the SLD needs you. We need ordinary people to come forward and talk, to share their interests, passions and knowledge with the rest of us. The exec is actively soliciting clinics on as broad a basis as possible so if you have a clinic in you please talk to us. And if you have the desire to present a clinic but are intimidated in the technology of getting raw material into presentable format we can help develop it into a clinic.

RailFair 2003 is rapidly approaching, October 18th and 19th and as in the past the SLD will have a presence there with our module, interacting with the public, and encouraging a new generation of model railroaders. This does not happen without some effort and co-ordination on our part so I would ask that everyone think about what they can contribute, particularly asking for volunteers to man the module for a couple of hours at some time during the 2 days of the show. We have 12 to 14 hours of public time spread over the two days, if every member volunteered we would each be required for less than 30 minutes!

In the coming year there are the Kingston train show in March and the Prescott show in May where we have open invitations to attend as ambassadors of the NFR and NMRA. Those who have volunteered in the past know that it amounts to a pleasant work session with an inquisitive public asking questions about your project, model trains in general, and even occasionally about the NMRA! If enough members were interested the module could be included as in Ottawa.

I have one final item, my wife has relatively recently become a quilter. This has resulted in three things: she purchases large quantities of small pieces of fabric to use 'someday', she takes classes, and she goes on 'retreats'. A retreat is a gathering of quilters, generally over a weekend, at a location that allows them to all work on individual projects while being together, there is generally no formal classes or presentations, but always lots of encouragement and help when needed. One such retreat involved a hotel/conference center for accommodations and meals and sold out at 60 participants in under an hour. For under $200 each they had two nights accommodation, 5 meals, access to hotel facilities and occupancy of a room large enough for 60 quilters, their sewing machines and probably enough fabric to cover Ottawa, from Friday morning till Sunday afternoon.

So my question is, would anyone be interested in such an event? Does an unstructured group get together appeal to you? Do you want to work on your models for twelve hours straight? Finish off all those kits you started? Would potential participants be more inclined if there were formal elements such as hands on modelling workshop(s)? Other elements could be included such as informal slide shows for evening entertainment.

Canadian Pacific's Bridge over the Rideau at Merrickville

Display Report for the May SLD Meeting

By Alex Binkley

Anyone who has seen Stan Conley operating other people's layouts with great aplomb has given him the odd dig about building his own railway. As we know, Stan has undertaken home and garden renovation projects to try to divert attention away from his lack of progress on his pike. Well the three freight cars (and truck) that Stan had on display at the May meeting of the SLD should only encourage us to keep at Stan to build that layout. If he can make 40-foot boxcars and a hopper look that good, think what he will do with a layout. Stan had an HO 1929 seven panel single sheathed boxcar that he built from a Sylvan kit and modified to resemble a car that underwent a repainting and brake upgrade in the mid 1950s. The car was weathered for several years of service. As well, he displayed a 1929 single sheathed 40 foot box car built from a Kaslo kit, that was painted and weathered for a few years after a mid 1950s upgrade. He also had a 1951 Canada Car and Foundry slab side hopper that he constructed from a Funaro & Camerlengo kit and modified and weathered to display a few years of service and a simpler hatch lock system. Great looking freight cars. They were all painted with Polly Scale paint, a watercolour pencil and weathered with chalk. He also had a 1956 Fruehauf 22-foot trailer that he built from a resin kit and plans to paint and letter in a 1956 CNR scheme.

Peter Nesbitt came the closest to the display theme with his HO Eastern Ontario Railway boxcar. Peter notes that his Bonnechere & Braeside Railway interchanges with the EOR. (While many **Mail Car** readers will know this, it is worth noting that Peter has been awarded the 2003 McEwen Car Award from the Ottawa Valley Associated Railroaders for his many contributions to our hobby including helping to revive this Division of the NMRA).

Bill Meredith treated us to some more of his gorgeous brass models. The latest were Colorado & Southern No. 22 and 1005 in Sn3. Bill says No. 22 was built in 1884 and had several owners before arriving on the C&S in 1899. Bill has fitted it working marker lights and directional lighting. He sand blasted, ultrasonically cleaned, primed, painted and lettered it with CDS transfers. He says it runs nicely, as it should with all that attention.

NMRA Dates

SLD Meetings are held
on the last Saturday
of meeting month as listed below

September 27, 2003
November 29, 2003
January 31, 2004
March 27, 2004
May 29, 2004

NFR Spring Convention
Traxx to London

April 23-25 2004, London Ontario

Rolling Lift Bridge at Smiths Falls on the old Canadian Northern, later Canadian National Railway line.

Modelling Tips

from the machine shops of the

Bonnechere & Braeside Railway Company

Since I've handlaid all my track for the last many years it's questionable for me to be writing a piece about laying flex track. But here goes.

During the past six months I had to lay some flex track (Peco HO code 100 on top of cork) for other people. I had a few criteria. I wanted the track to be firmly in place. I realise that this will happen when the ballast goes down but that wouldn't be for a while. As well I didn't want something that set up too fast as I wanted to be able to move things around a bit in order to get the final alignment correct. Lastly I wanted to have the option of removing the track without damage if need be.

Of course the method had to be easy and not expensive.

Weldbond and poster pins were the answer. Using a small brush, Weldbond was spread full strength on the cork. The track was laid into place and moved around as need be to get an acceptable final alignment. Poster pins, the ones with the metal pin portion about 1/2 inch long and a big knob on top, were used to hold the track in place while the glue dried. These were pushed into the cork such that the head of the pin was on top of the railhead. While the pins don't have a lot of "bite" in the cork, there is plenty to hold the flex track and turnouts. The pins came from the dollar store at a dollar for 100.

Testing confirmed that if need be the track could be removed without damage. A one inch putty knife would lift the track off the cork. The plastic ties separated from the Weldbond which remained as a thin shiny quite smooth sealer on the cork.

Peter Nesbitt
General Manager

Bridging the Gap, One Stick at a Time

SLD Theme Workshops for 2003-04

By Grant Knowles

Another season is upon us and with it comes the opportunity to do great things with our model railroads. As announced last May, this year's SLD theme will be that of bridges and what better way to get started than to build the icon of Canadian bridges - a trestle! Over the next few months, we will not only learn about bridges and trestles, but scratch build and install one on our layout.

I have always found trestles to be fascinating structures, they appear complex yet are based on a couple of basic construction elements, they are spindly in appearance, yet very strong. Best of all they are simple to build and install.

We have planned three workshops centred around the construction and installation of a trestle. The first will cover building the basic structure (bents and deck), the second will pertain to the abutments at each end of the trestle, followed by installation in Mother Nature for the third.

Based on feed back from the membership, the workshops will be scheduled for non meet weekends and will extend for 3-4 hours thus allowing time for meaningful work to be achieved. The workshops will be led by a skilled member from our group who will guide you through the steps to build a scale trestle. Thus there is no need to worry about being lost or left on your own. Our objective is to complete each step in the overall trestle project during each of the three workshops!

There will be a nominal fee to help offset the materials cost (approximately $5-10) as the SLD Executive has chosen to help defer the costs for this project.

If you are interested in building a trestle in a friendly environment, there will be a sign up sheet at the September meet. We will also be requesting payment at that time in order that we can source the building materials. More details will be provided at the meet regarding these workshops.

Financial Report for the Season 2002-03

By Doug Cushman, SLD Paymaster

The financial picture for the SLD remains on target for the stated objectives of the organisation, that being to cover ongoing expenses arising from the meets such as facilities, clinics and refreshments, and communications via the **Mail Car** and train show handouts from ongoing revenues such as membership fees and meet admissions. The monies raised from other activities such as regional conventions are used to finance activities for the group as a whole as was the case of the subsidised bus trip to Syracuse last November.

Balance as of September 2002 was $3990.00
Balance as of August 2003 was $2420.00
The net drop in reserves was $1570.00

The majority of the net drop was due to the Syracuse bus trip at close to $900.00 with the signal and power improvements to the Module second at about $200.00 The remainder would be normal variances in our meeting revenues versus ongoing expenses.

The Paymaster would like to remind all participants that annual dues for Members and Supporters are to be collected in September. The rates remain the same as last year, $5.00 for NMRA members, $10.00 for non-NMRA supporters.

As always the meet admission cost remains at $5.00 per person at the door.

Rusty Metal and Weathered Wood; Scratch-building a Carson and Colorado Flat Car in On3

By Chris Butler
Photographs and Illustrations by the author

Part 1 – Why Were Narrow Gauge Freight Cars Built That Way?

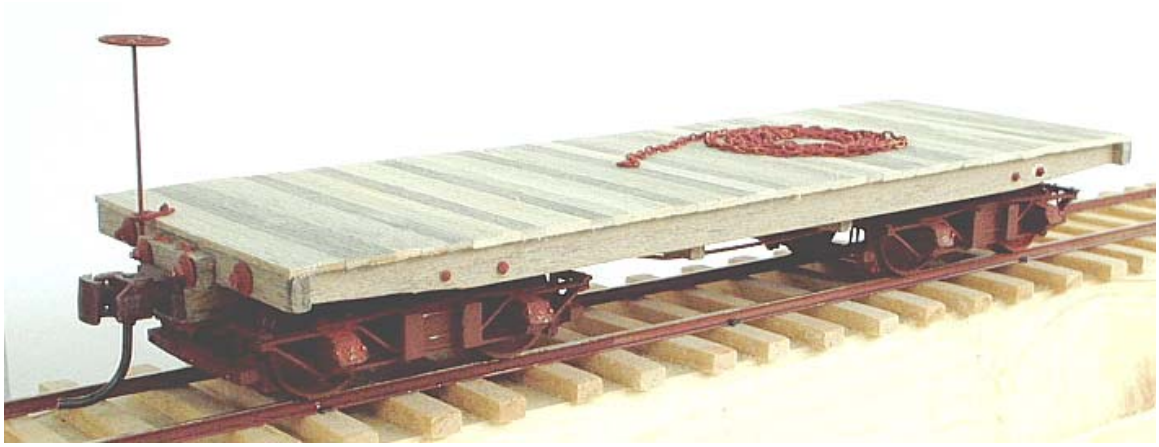

Fig. 1. The author's completed 22' On3 flat car.

Some while ago, I decided that it would not be too difficult to scratch-build a simple narrow gauge flat car in O-Scale and be a really interesting project to boot. A few pieces of strip basswood, commercial trucks and I might even install the brake rigging - hey, what could be easier and simpler? Well, this is a story about a little project that grew and grew. Sound familiar?

Scale Plans

I model small prototypes and so I based my design on the 1/32nd scale plans of the circa 1875 Carson & Colorado 22' long, 3' gauge flat car (which ran originally between Carson City, Nevada and Keeler, California) that appeared in the Dec 1999 / Jan 2000 issue of Finescale Railroader. This is published free of charge and available openly for download on the Internet at http://www.finescalerr.com/. The problem was that I wanted to model it in O-Scale.

A few days later (Well OK, weeks later) and I had finished redrawing the plans for the car but this time in O-Scale using CorelDraw 9. It's not until one goes through an exercise such as this, that the all important (and often missing) details become all too apparent. In retrospect, the original 1/32nd plans were quite scant in terms of details. Fortunately, some plans and renovation photos in two issues of the NGSL Gazette - the Nov/Dec 2001 (North Shore Railroad 3' gauge flat car) and the May/June 2002 (Diamond and Caldor 3' gauge flat car) helped fill in most of the missing information. Where would we be without back issues of the NGSL Gazette, eh?

Although re-drawing the plans was a lot of work, it was well worth it in terms of a "learning" experience and, I was really happy with the end result. It was around this time, I realized that I had to make a decision – either stick with my original vision and build a quick and simple piece of On3 rolling stock or build something better. I picked the latter option.

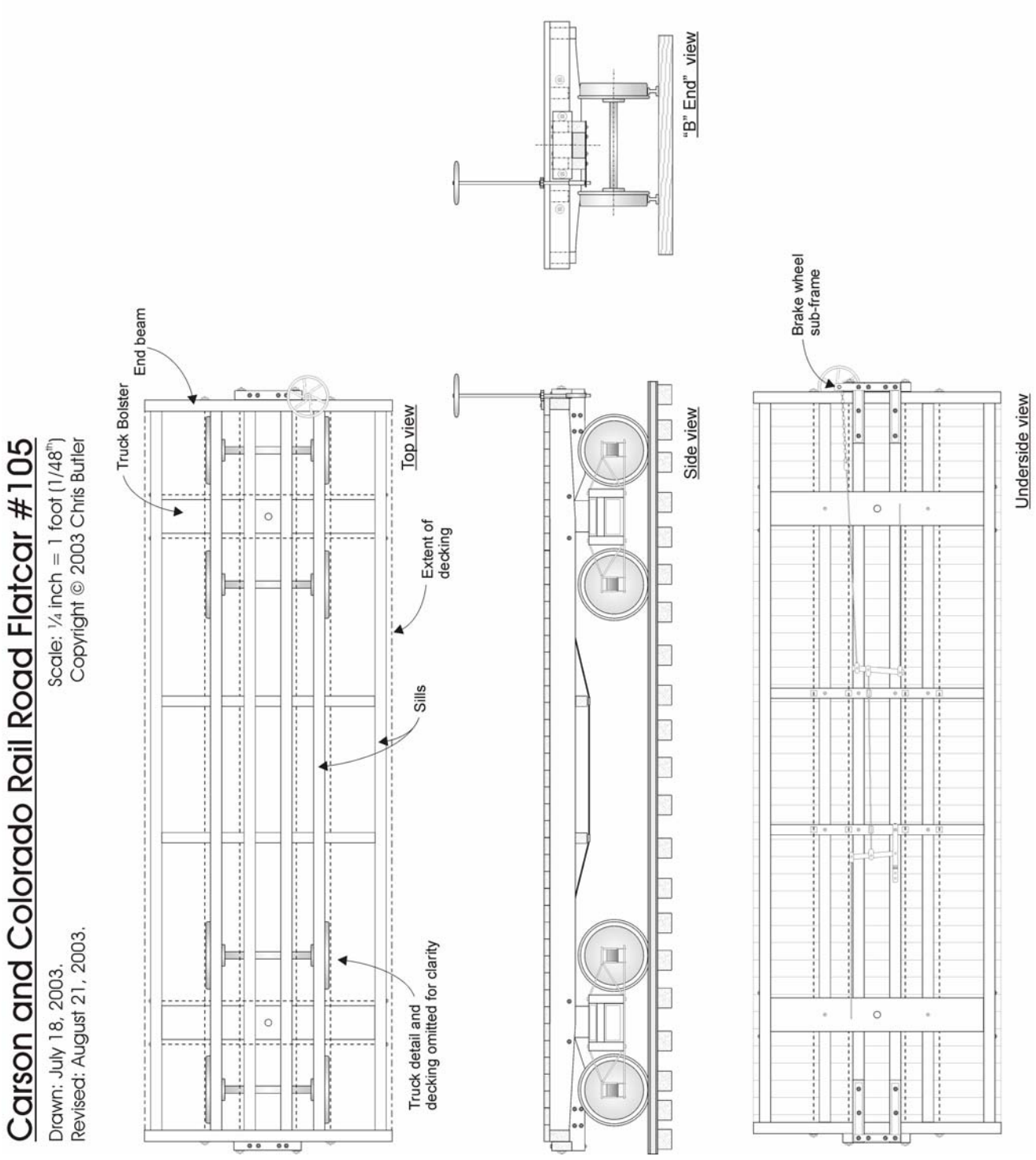

Fig. 2. The completed drawings – I will make these freely available upon request. Just send an e-mail to me at cjbutler@igs.net

Truss Rods

As I studied the drawings of a few flat cars, it became clear to me that the truss rods that run from end-to-end (lengthwise) perform multiple roles. The prototype connected the sill sections into the end beams with simple mortise joints. No yellow glue here because once tensioned, the truss rods hold the car together and prevent the end beams from becoming detached. The clever parts are the needle beams. These lateral beams create an open triangulated girder and force any weight that's placed in between the trucks out toward the end beams. The un-sung hero's here are those massive washers and nuts that are threaded on to the ends of the rods. Don't believe me? All of this can be proved by applying simple trigonometry. In mechanical structures, triangles really rule… Right, Stan?

The other important role that the lateral truss rods perform is to effectively transfer any pulling or pushing forces from one coupler to its counterpart at the other end of the car.

The side-to-side or Transverse rods form a similar triangulated girder but they strengthen the side sills by deflecting any side load toward the two truck pivot points.

Brake rigging

After installing the truss rods, I decided to go back to my reference books and settle on a simple approach to the problem of the brake rigging. Since my car is supposed to be an early prototype, I decided that I'd not include air brakes and just go with a typical early mechanical linkage. I'm fairly certain the prototype didn't use them either.

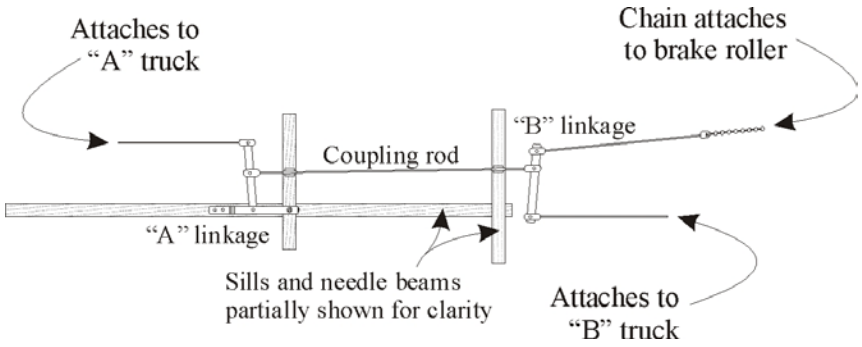

Fig. 3. The brake rigging arrangement the author used on his 22' C&C flat car. Note that the "B" truck is located at the "B" or brake wheel end of the car.

The brake rigging arrangement that these old cars used was truly ingenious; incredibly simple and easy to maintain. When the brake wheel is turned, the chain tightens which applies the brakes to the "B" truck via the "B" linkage. Since the coupling rod cannot be stretched, the "A" linkage starts to move in a clockwise direction (because it's fixed to the chassis at one end) which applies the brakes to the "A" truck. Notice that this rigging arrangement even takes into account the clockwise / anti-clockwise movement of the trucks when the car goes around a curve… The other thing that's apparent here is that it's quite feasible to repair this arrangement with minimal tools, even if you were stuck miles from a repair facility.

Adding an airbrake to this system would simply require a third linkage system, air hoses and a brake cylinder.

As an aside, I noticed that at least the one of the standard gauge wooden Cabooses at the Smiths Falls Railway museum had a similar (but alas, not identical) brake roller arrangement.

Shiplap decking

I've built a few wooden decks in my time (you know, the usual 2x12" joists on 16" centers with 2x6" decking either nailed or screwed to it) and it's always puzzled me how the under frames on freight cars could ever provide adequate support. For example, on the C&C narrow gauge prototype car, there's a gap of approximately 22" between the outer sill and the closest center sill. How can this work? We'd never build a deck with joists on 22" centers because the decking would sag.

The answer to this is in the way the decking sections are shaped. Unlike our residential decks, the freight car builders used shiplap decking. Due to its shape, each freight car decking section overlaps its neighbour on its edges.

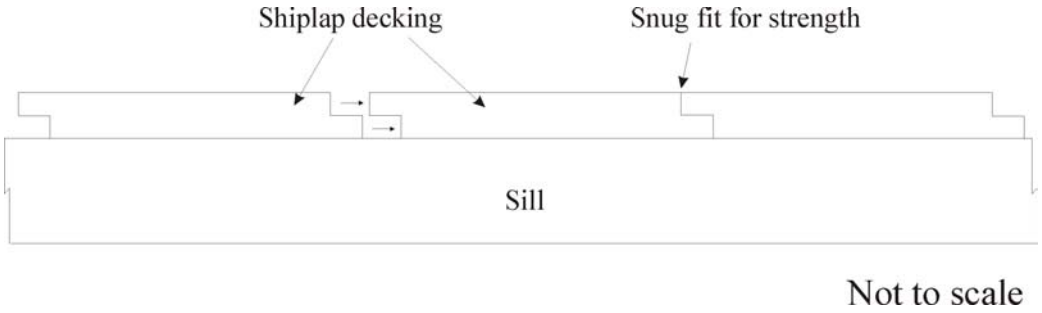

Fig. 4. The Shiplap decking

The Shiplap design provides greater strength because once the decking sections are installed it effectively makes them one big continuous sheet – in our case, 22'x7'.

If you think about it, older houses employ a similar arrangement with tongue and groove flooring.

If you'd like to construct this flat car (or something similar), please send me an email at cjbutler@igs.net and I'll respond with scale drawings in CorelDraw 9 format and also un-scaled drawings in hi-resolution, 600 DPI JPEG format.

In the next instalment, I'll describe how I scratch-built my 22' Carson and Colorado Flat Car. Until next time…

More From the May Display Table

Alex Binkley displayed two S scale covered hoppers in Canada Southern Railway paint, the intended service for these cars is readily identifiable from the yellow grain symbol prominently displayed on their sides.

September display
Summer Projects!

Next Division Meet

St Lawrence Division – NMRA

When:

Saturday, September 27th, 2003

Where:

Carleton Heights Community Centre
1665 Apeldoorn Avenue
Ottawa

Doors open at 9:15am -- Admission $5.00

What's on:

Morning:

Division Business
- Welcome from Division Superintendent

Clinics
- Introduction to Bridge Theme
- Workshop description and planning
- Crossing the gap

Display
- Summer Projects

Door Prizes
- You never know what to expect!

Afternoon:

Tour
- Virtual, self guided, or layout?