



Punchbowl Hobby Centre Pty. Ltd.

545 Chapel Road, Bankstown, N.S.W.
Australia 2200
Telephone: (02) 709 5082

LOCOMOTIVES and ROLLING STOCK

ATLAS, STEWART, KATO, ATHEARN, ROUNDHOUSE, RIVAROSSO, BRASS LOCOMOTIVES, POWERLINE, AR KITS, IAN LINDSAY KITS, MAIN WEST MODELS, LIMA, CONCOR, IBERTREN, BACHMANN, LILIPUT, JOUEF, FLEISCHMAN, ROCO.

BUILDINGS and SCENIC ACCESSORIES

ATLAS, WOODLAND SCENICS, DESIGN PRESERVATION, EVERGREEN, CAMPBELLS, FOX CASTINGS, LJ MODELS, POLA, HEKI, FALLER, HELJAN, VOLLMER, PREISER, WIKING, KIBRI, BREKINA, HERPA, ROCO.

ACCESSORIES and TOOLS

ATLAS TRACK and ACCESSORIES, PECO, SHINOHARA, NORTHYARD WHEELS, ROMFORD, DETAIL ASSOCIATES, WHEEL WORKS, SENTINEL, CAL SCALE, KADEE, MITRONICS, LABELLE LUBRICANTS, MICROSCALE DECALS, KERROB MODELS, AMRI SIGNALS, J&C MODELS, FRONT RANGE, BRAWA, EDA, FLOQUIL, DREMEL, PRO EDGE KNIVES, DRILLS and TAPS, K&S METAL, FULLER PLIERS, JEWELLERS SCREWDRIVER SET, 1 INCH 'G' CLAMPS.

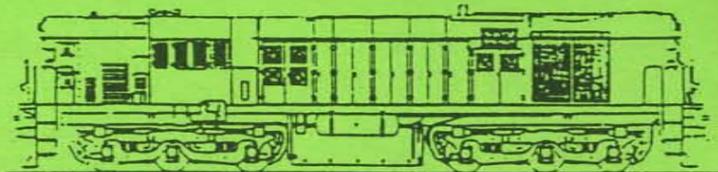
MAGAZINES and VIDEOS

AUSTRALIAN, AMERICAN, NEW ZEALAND, BRITISH VIDEOS.
N-GAUGE MAGAZINE, MODEL RAILROADER, RAIL MODEL JOURNAL, PACIFIC RAIL NEWS, TRAINS, NARROW GAUGE GAZETTE, AUSTRALIAN RAILWAYS, ROUNDHOUSE, BULLETIN, AUSTRALIAN MODEL RAILWAY MAGAZINE, PACIFIC RAILWAY, RAIL AUSTRALIA, RAILWAY DIGEST, MAINLINE MODELLER, RAILWAY MODELLER, CONTINENTAL MODELLER.

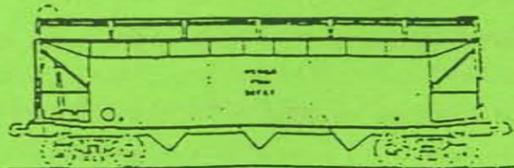
SNOW PLOWS



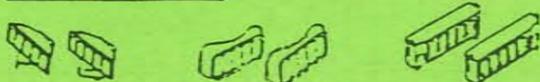
AIR HORNS



COOLING FANS



NUMBER BOARDS



Main Line

National Model Railroad Association Inc.

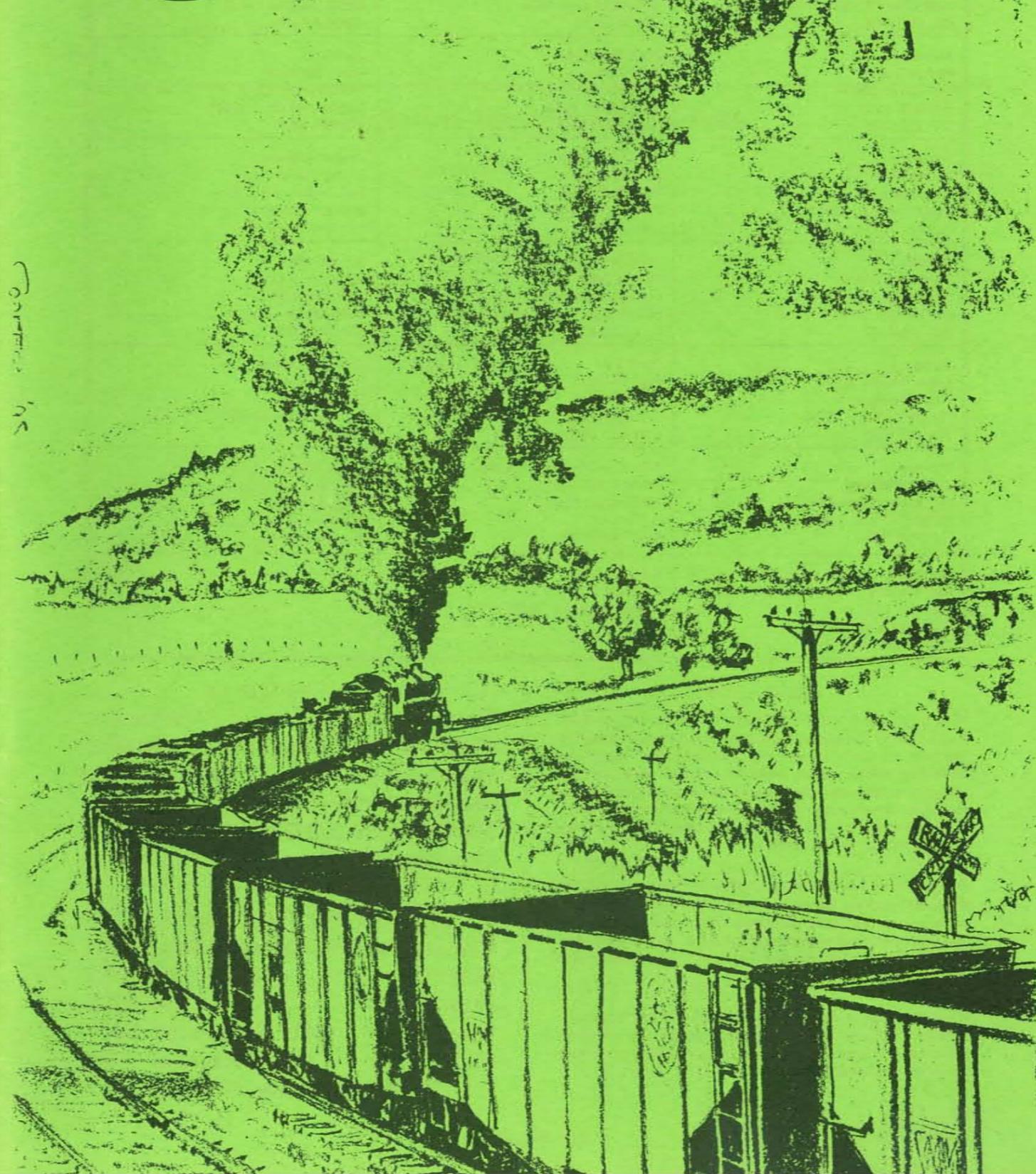
Australasian Region

Volume 12 Number 1

January, February, March 1995

Registered By Australia Post

Publication PP241613/00080



Australasian Region Directory

EXECUTIVE	SUPERINTENDENTS	COMMITTEE
President Kevin Brown 5 Afternoon Court ST. CLAIR 2759 (02) 670 5370	Div 1 Queensland A44086 WOFF Glen Stephens AUP Resident Production Office RAAF Base AMBERLEY 4306 (07) 280 2265	A.P. Chairman Fred Gill MMR P.O. Box 155 BAULKHAM HILLS 2153 (02) 639 4158
Vice President Sowerby Smith 174 Fullers Road CHATSWOOD 2067 (02) 411 5726	Div 2 NSW / ACT Peter Weller-Lewis 2 Haley Close QUEANBEYAN 2620 (06) 297 8232	Membership Jack MacMicking 247 Eastern Valley Way MIDDLE COVE 2068 (02) 958 5988
Secretary Michael Flack 14 Dawson Street EPPING 2121 (02) 868 1723	Div 3 Vic / Tas Paul Richie 28 Ascot Street South BALLARAT 3350 (053) 32 1138	Librarian Bruce Ballment 14 Kooranga Place NORMANHURST 2076 (02) 489 3836
Treasurer Andrew Wells 5 Ivy Street CHATSWOOD 2067 (02) 411 7471	Div 4 NT / WA Richard Percy 8 Perriam Close PARMELIA 6167 (09) 419 4476	Company Store Shirley MacMicking 247 Eastern Valley Way MIDDLE COVE 2068 (02) 958 5988
Trustee John Saxon MMR 37 Beatrice Street CLONTARF 2093 (02) 949 4767	Div 5 New Zealand Ted Hodgkinson 11 Grantham Street HAMILTON New Zealand (071) 390 332	Member Aid Laurie McLean 25 Griffin Road CURL CURL (02) 905 1582
Member Gerry Hopkins MMR 7 Booralie Road TERREY HILLS 2084 (02) 450 1033	Div 6 S.A. Paul Tilden 3 Manx Court HALLET COVE (08) 387 2952	Contest Chairman Fred Gill MMR P.O. Box 155 Baulkham Hills 2153 (02) 639 4158
Member Jack MacMicking 247 Eastern Valley Way MIDDLE COVE 2068 (02) 958 5988	A.P. Vice-Chairman, Victoria Laurie Green MMR 20 Nambour Drive SUNBURY (03) 744 5188	Editor "Main Line" Gerry Hopkins MMR 7 Booralie Road TERREY HILLS 2084 Tel (02) 450 1033 Fax 61-2-450-1033
Member Fred Gill MMR P.O. Box 155 BAULKHAM HILLS 2153 (02) 639 4158	N.M.R.A. Inc. P.O. Box 714 Willoughby NSW 2068	

Main Line

Main Line is the official journal of the Australasian Region of the National Model Railroad Association Incorporated. It is published four times per year in approximately February, May, August, and November. Articles, letters, members classified advertisements and club notices are solicited from the membership and are considered to be donated free for the benefit of the hobby. They should be mailed to:- THE EDITOR, Main Line, 7 Booralie Road, TERREY HILLS. N.S.W. 2084.

Articles can be submitted on a computer disk (IBM) 3.5" or 5.25". Most WP packages can be read at this time. This magazine is prepared on a 386DX(40) computer (105M & 40M HD's) running under DOS 6.2 and prepared on a BJ10ex Bubble Jet printer using Wordperfect For Windows 5.2. Adobe Font Manager and Drawperfect 1.1.

Paid advertising is welcomed. Current rates for four issues are \$130 for a full page, \$70 for a half page, \$40 for a quarter page and \$150 for the back cover. All enquiries regarding advertising should be directed to the Editor.

On The Cover

Back to the mines.....Westbound #802 works through Helmstetter's Curve, just west of Cumberland, Maryland in 1952 Western Maryland H9 2-8-0 #802 presiding. Drawn by Bill Cooper.

Deadlines For The "Main Line"

Closing dates for the next issues are:
 May. 30th March 1995
 Aug. 30th June 1995
 Nov. 30th September 1995
 Feb. 31st December 1995

These dates are Absolute!

SWITCH LIST

4	Meeting Reports Toni Saxon & Ian Hopkins	11	Computers In Model Railroading A C Lynn Zelmer	17	Backdrops Laurie Green MMR
6	Achievment Program Fred Gill MMR	13	Scenery For Beginners Ken Scales	19	Structure Tips & Techniques Gavin Hince
8	Modelling Poured Concrete Geo Paxon	16	A Small Station In 'S' Paul Richie	21	Names ? Fred Gill MMR
10	Convention '95 Gary Spencer-Salt			22	Kennebec County Railroad Gerry Hopkins MMR

Regional Meeting Schedule

18th February Kevin Brown 2.00pm	NSW St Clair 5 Afternoon Court (02) 670 5370	20th May Ken Scales 2.00 pm	NSW Winston Hills 19 Goliath Ave (off Rebecca Ave) (02) 674 1563
18th February Paul Richie 11.30 am	VIC Ballarat 28 Ascott Street South (052) 32 1138 BBQ	20th May John McClure 2.00 pm	VIC Camberwell 19 Brynmawr Road (03) 809 2419
11th March Girl Guide Hall, 1.00 pm Non - Silent Auction	NSW Winston Hills Lot 20 Eddison Road Behind Netball Court (02) 450 1033	10,11,12 June Sydney -- NSW -- Australia	
Come along to this fun (& profitable) day. A 'live' auctioneer will accept your bids for each lot. Bidding will start at 2.00pm no items will be accepted after 1.45 pm. Auction forms are in this issue of Main Line. At the end of the auction, we will hold our AGM, there are NO elections at this time.		15th July Peter Burrows 2.00 pm	NSW Hornsby 175 Pretoria Ave (02) 987 4608
		August Richard Roth 2.00 pm	NSW Helensburgh 1 The Crescent (042) 94 2133 A map will be included in the Main Line
18th March Gavin Hince 11.30 am	VIC Hopper's Crossing 16 "The Glades" Johnston Ave BBQ (03) 749 6974	September Mike Hallinan All day	NSW Rankin Park 15 Cheshire Close Also visit Newcastle Expo
15th April Grant McAdam 2.00pm	VIC Glenhuntly 194 Booran Road	21st October Bob Best	NSW Blaxland 34 Winnicoopa Road
22nd April	NSW Goulburn Wollondilly Steam Museum Fitzroy Street	November John Baker	NSW Kellyville 12 Roseberry Road
Visit the steam museum and call in to Dave Watkins' Shop upstairs in the Huntley Arcade in the main street. Take the first Goulburn exit from the Expressway - down the hill towards the city (pass McDonalds - do not stop!) as you enter the main street the sign for the museum is on the right. You can also visit Australia's oldest brewery. 10.00 am to 5.00 pm		December Sowerby Smith	NSW Chatswood 174 Fullers Road
		April '96 Bill Kerr	Minchinbury
		May '96 Ray Walter	Toongabbie
		June '96 Mini Convention	Sydney ?????
		Dec '96 George Paxon	Wentworth Falls

Notice Of Annual General Meeting

The AGM of the Association
will be held on
Saturday 11th March 1995
at 4.00pm in the Girl Guide Hall,
Lot 20 Eddison Road,
Winston Hills, NSW 2153

AGENDA

1. Regional Activity Reports
2. Financial Statements for the year
3. To approve minutes of this AGM to be adopted at next Board of Directors meeting.

Please note, only agenda business can be discussed at the AGM as outlined in the Articles of Association. Other items should be referred to monthly Board of Directors meetings for discussion.

Michael Flack
Secretary.

PRESIDENT TIES THE KNOT

Great excitement when our President Kevin Brown married Jan Joyce on 21st January in the Woodriff Gardens at Penrith NSW. There is no truth in the rumour that the large edifice recently built in Kevin's back yard was not for his Great Northern layout, but for his extended family! Congratulations to you both from your many NMRA friends.

Meeting Reports

By Ian Hopkins

On **October 15th** I headed south to the Wollongong suburb of Figtree to the home of Lyndon and Marie Spence. The main attraction for the the vist was to see Lyndon's layout, the Pacific Seaboard Railway (PSR).

It is situated in a basement (somewhat 'L' shaped) approximately 8.5 by 3.7 meters in size. The PSR has connections to the Santa fe in San Francisco Bay Area and also in the Sacramento River delta area. The PSR then travels over the Sierra Nevadas, through Reno, to coal fields in Idaho and connecting to the Union Pacific. The time modelled is the early 50's with both steam and diesel locomotives operated.

So far the Pacific Seaboard has taken 13 years to reach the stage exhibited. The first stage, which

was represented by a 1/10th scale model on display (a track plan also appeared on page 18 of the April '92 issue of Main Line), took 11 years to reach some degree of completeness and stage 2 which has take the last 2 years. Stage 2 contains some yards and some holding sidings.

There are several innovative items on the PSR that took my eye. The first of these is Lyndon's switch machines. These are made up from Dick Smith relays which he modifies to to actuate the switch itself and also control power for track or signalling (Lyndon, I think there is another article for the Main Line here).

Next is the scenery. It was described in the April '92 Main Line but, to summarise how it is done. Lyndon uses styrofoam as the basis for the scenery coated with a sand and plaster mixture. To allow for access several sections of the scenery are removable and to disguise where the fixed and movable portion meet he uses No More Gaps which is detailed the same way as the other scenery and makes the joints almost invisible.

Another item was a Warren Truss bridge which Lyndon built upon a base of wood using AMRI sides and a removable superstructure from Vollmer. The bridge rests upon pillars cast in plaster and detailed.

Later, afternoon tea was served and so, after a most pleasurable and thought provoking day I want to thank Lyndon and Marie for the enthusiasts trip on the Pacific Seaboard Railway.

The **12th November** was a double header, two layouts in the one meeting, both narrow gauge. This was an opportunity to see Gerry Hopkins' Kennebec County in its natural surroundings and later in the day to see the Durango roundhouse of Laurie McLean installed at Durango.

I won't say too much about Kennebec County because there is another installment in this issue of Gerry's article on his work. The Kennebec County when it is not gallivanting around lives in a garage about 7 by 4 meters. The three sections of Kennebec County that are seen at the various shows are slotted into the rest of the layout with an ingenious system of wedging to make sure that they are secure and the scenery dose not get damaged.

Kennebec County is point to point, with branches that go offstage to feed additional traffic to the mainline, and allows for timetable operation. At present the touring sections are the highly scened, the other parts of the layout have little or no scenery. Notable features are the hand laid wye which worked perfectly all the time that I was there and

also the eye level control panels. Gerry explained that this was to allow all people to operate without fear of accidently changing a switch or worse by knocking it with one's stomach.

Then it was to Laurie McLean. Laurie's D&RGW line based about Durango is housed in a purpose built shed at the bottom of the garden, again 7m x 4m. Durango is in front of you on a peninsula as you enter the building and the line loops around Durango climbing as it goes to a loop along the back wall which comes back to the front of Durango. There are plans to extend along the end wall to a logging scene and to add additional industries along the line that is already there. Scenery, when built, will be representing the mountainous terrain that is found near Durango.

Laurie is building a selectively compressed model of the main street in Durango. The buildings along this street are under construction, including the famous Strater Hotel, using Design Preservation components which are modified to represent particular features.

The locomotives running that afternoon were fitted with a PFM sound system and sounded very effective climbing the steep grade out of Durango. Laurie is also experimenting with a locomotive whistle through a fixed speaker. Currently the speaker is in a plastic pipe which can direct the whistle sound into the room but whose position can be changed to achieve the best effect.

I want to thank Lauris and Gerry Hopkins and Laurie McLean for a narrow (track width, not ideas) afternoon and for demonstrating that you don't have to be into 'broad gauge' for locomotives and rolling stock to run well.

Christmas Meeting By Toni Saxon

Who would have ever believed, as the rain poured down on the Friday, that Saturday 10th December would dawn fine and clear for the annual Sydney sausage sizzle.

Toad Hall, the Thirlmere home of our hosts Ian Hopkins and Peter Bone, again proved a delightful setting. Their expansive tree shaded lawns, the tables, chairs, sun lounges, bar and barbecue created a lovely atmosphere thoroughly enjoyed by the 96 members and families who travelled from Canberra, Sydney, Wollongong, the Blue Mountains and Newcastle for the event.

As usual, we enjoyed the famous barbecued gourmet sausages served with the great salads prepared by Peter Bone. Many of the ladies brought sweets and cakes and judging by the speed at which they disappeared, it seems many attending had a

sweet tooth.

It is two years since we were at Toad Hall and we noticed hew the garden had continued to mature in that time. Maybe it is the local climate, the green fingers of Peter and Ian or perhaps a combination.

Ian has made some progress on his layout and many members were observed running trains and trying their skills at switching. There was no shortage of advice offered to Ian for the future of his interesting railway by the *EXPERTS*. Some members even visited the rail Transport Museum which was only a short walk away.

It was great to mingle and catch up with old friends, some of whom had babies and grand children to show off, some with new addresses, news of renovations and the usual talk. Some members were even overheard talking about trains!

We met our President's fiancée' Jan and family Nicholas and Samantha and we are all looking forward to getting to know them more in the future. The speeches were kept to a minimum which added to the informality. Kevin also extended our thanks to both Ian and Peter for their great hospitality.

After lunch everybody helped clear the tables and a willing crew in the kitchen (including a well *trained* member from Canberra) soon had the washing up out of the way.

Everybody agreed the trip from afar for many was well worth it. We are looking forward to seeing everybody again at the meeting this year and particularly at the next Christmas meeting at the home of Sowerby and Jennie Smith in Chatswood.

Division 3 Report

by Paul Richie

On 26th November there was a gathering of members at my home in Ballarat. A fine day was "ordered" and was the case.

The home layout was running both standard and narrow gauge. The RhB and Sn3 were set up in the garage but not running.

Over a barbeque lunch, discussion covered the usual range of subjects: the latest models under construction, colouring scenery, layout construction as well as inspecting the latest models for display, "O" as well as "HO".

An enjoyable afternoon running trains was had by all. Thanks to those who attended.

Welcome Aboard

Please welcome the following new members to the NMRA.:-

WARD, Paul
5 Holden Court
WARNIASSA ACT 2903
HOn3 RGS

SCHERFF, Peter
137 Victoria Road
PUNCHBOWL NSW 2196
HO ATSF-SP-UP

SHIELDS, Philip
8 Reserve Road
GROVEDALE VIC 3216
HOn3 RGS

SEMPLE, Richard
Shop 8 152 High Street
BELMONT VIC 3216

CASLAKE, Bruce
P.O. Box 1183
PORTLAND VIC 3305
HO US from 1960

TRUMAN, Geoff
12 Goodwin Close
HOPPERS CROSSING VIC
HO Victorian Rwy's

HERBERT, Warren
P.O. Box 740
GLEN INNES NSW 2370
HO,HOn3 NSWGR & D&RGW

VANDEREL, Andrew
13 Main Street
TAILEM BEND SA 5260
HO US & Aust

MORRIS, Greg
22 Genevieve Rd
BULLABURRA NSW 2784
HO BN

Achievement Program

By Fred Gill

CURRENT CERTIFICATE HOLDERS ARE AS FOLLOWS

<p>1 Master Builder - Motive Power Phil Knife MMR Don Turnbull (D) Fred Gill MMR Phil Badger Roger Horde</p>	<p>7 Chief Dispatcher Phil Knife MMR Ken Scales Bob Kollwyn Piet Hamersma Ray Parr Don Davis Fred Gill MMR</p>
<p>2 Master Builder - Cars Hal Saxon Gerry Hopkins MMR Fred Gill MMR John Saxon MMR Roger Horde Laurie Green MMR</p>	<p>8 Association Official John Saxon MMR Garry Wheatly Bruce Lovett Peter Burrows Phil Knife MMR Sowerby Smith Fred Gill MMR Ray Brownbill Glen Coventry Graeme Nitz Keith Oman Kerry McPherson Paul Richie</p>
<p>3 Master Builder - Structures Gerry Hopkins MMR Fred Gill MMR Ted Hodgkinson (NZ) John Saxon MMR Laurie Green MMR Laurie McLean Phil Badger</p>	<p>9 Association Volunteer Phil Knife MMR Bill Cooper Jack McMicking Keith Oman (NZ) Clive Riley John Saxon MMR Gerry Hopkins MMR Richard Roth Peter Weller-Lewis Fred Gill MMR Shirley McMicking</p>
<p>4 Master Builder - Scenery Phil Knife MMR Gerry Hopkins MMR Fred Gill MMR John Saxon MMR Laurie Green MMR Ken Scales Roger Horde Phil Badger John Baker Gavin Hince Lawrence Nagy</p>	<p>10 Model Railroad Author Phil Knife MMR Bill Cooper John Saxon MMR Gerry Hopkins MMR Fred Gill MMR Laurie Green MMR Lynn Zelmer</p>
<p>4A Master Builder - Prototype Models Gerry Hopkins MMR Laurie Green MMR</p>	<p>11 Master Model Railroader Phil Knife Gerry Hopkins Fred Gill John Saxon Laurie Green</p>
<p>5 Model Railroad Engineer - Civil Phil Knife MMR Gerry Hopkins MMR Laurie Green MMR Fred Gill MMR Ken Scales Phil Badger Gavin Hince</p>	
<p>6 Model Railroad Engineer - Electrical Phil Knife MMR Gerry Hopkins MMR John Saxon MMR Fred Gill MMR Laurie Green MMR Ken Scales Phil Badger</p>	

Golden Spike Awards

Peter Webb Gordon Farnsworth (2)
Laurie McLean Gerry Hopkins MMR (2)
Geoff Knott Sowerby Smith
Lawrence Nagy Robert Benson
Frans Persson Colin Brettle
Bill Cooper Ted Hodgkinson
John Saxon MMR Paul Richie
Bruce Sedden Kevin Brown
Peter Weller-Lewis Bruce Ballment

Fred Gill MMR Michael Bartlett
John Gordon (D) Phil Knife MMR
Laurie Green MMR John Baker
John Gaffey Phillip Moore
Graham Lamour Roger Horde
Michael Flack Ray Walter
Ken Scales Warren Wormold
Phil Badger Don Davis
Piet Hamersma Gavin Hince
Bob Best Keith Pratt

Bruce Ballment and Our Library

Our new librarian has come up smiling after his recent operations to his legs and now welcomes your requests for Videos, books and tape slide clinics. The conversion to PAL of the Valley Forge tapes has been completed and are now available.

Note that the listing of Bill Cooper as Tape/Slide Dispatcher in the December Bulletin is incorrect.

Bruce's telephone number is (02) 489 3836.

THE RAILCAR

Model Railroad Supplies

Suppliers of Craftsman Kits, Scratchbuilding Items, Freight Cars, Detail Parts
We stock the following lines

Alamosa Car Shops
Builders in Scale
C.C. Crow
Design-Tech
Foothill Model Works
JD Innovations
Mainline and Siding
Micro Engineering
Rail Line Co
Russian River
Scenery Line of the West
Vintage Reproductions

American Model Builders
Building & Structure Company
Chris Cardinal
Durango Press
Grandt Line
K & S Scenery
Master Creations
Rail Craft
Rio Grande Models
Scale Works
ThinFilm Decals
Western Scale Models

Call or write for a Catalogue

THE RAILCAR - 5 HOLDEN CRESCENT WANNIASSA ACT 2903 PH: (06) 231 7376

By Geo Paxon

I entered a model of a builder's supply yard in the modelling contest at the Australasian Regional Convention held last year. That model included a number of piers supporting the elevated track which serviced the industry, and those piers were modelled to represent poured concrete. The poured concrete piers included detail to depict the imprint of the form work that is almost always present in poured concrete. Several people at the convention, and later when visiting my layout, questioned the method employed to model the form work detail. As others may be interested, the following explanation is provided.

When concrete is used in construction, forms are constructed of wood to define the shape of the finished concrete. The concrete is poured into the forms and when the concrete is set, the forms are stripped from the concrete and the concrete allowed to cure. For visible surfaces of flash commercial and residential buildings, great care is taken to ensure the resulting finish is pleasing to the eye. For industrial buildings, such aesthetics is usually overlooked. The result is often that the finished concrete reflects a random pattern caused by the varying thickness of the form work.

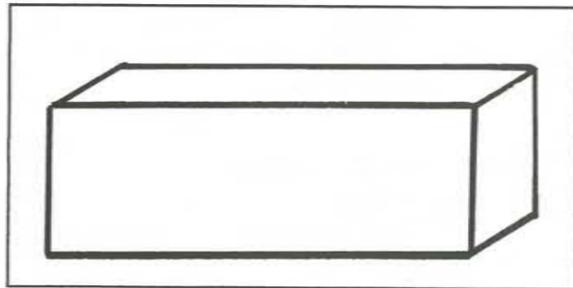


Fig 1 Cut Customwood or wood to shape of "concrete"

Today's construction technology uses plywood sheets, called form ply, for constructing the form work. In the past, say before the 1960s, such form work would have been constructed using sawn boards. As my model was of a 1920 era building, I modelled the formwork imprint assuming sawn boards were used. If you model the current day, the same technique described here could be applied, but the shape

of the form work units would be 1220 X 2440 millimetres or 4 X 8 feet.

First I cut the "concrete" to be modelled to shape. Several materials could be used.

One I like is called Customwood. It comes in 1220 X 2440 mm sheets and in thicknesses of from about 3 to 32 mm. It is a common material used in furniture, shelving, stairs, cabinets, etc. It is similar to pine board but instead of being made of wood chips it has wood particles ground to a size smaller than normal sawdust. This means that when cut the edge is very clean and smooth. Pine board leaves a coarse, rough edge and no amount of sanding will provide a smooth surface as the sanding tends to tear loose more chips.

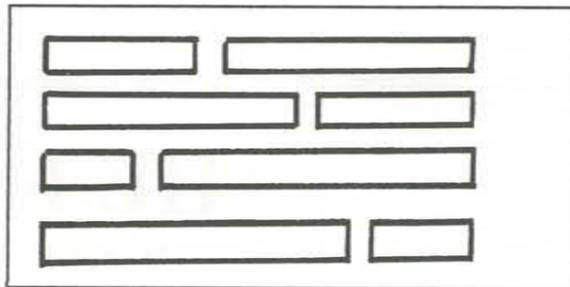


Fig 2 Cut paper to "board" width then cut to 8 - 20 foot lengths.

I do not recommend pine board for modelling concrete. Customwood can be sanded to as fine a finish as wood. The primary advantage to Customwood over wood is that Customwood does not have a wood grain that requires sanding to eliminate. Whole sheets can be purchased at almost any building supply firm. However, scrap pieces of Customwood suitable for structures can be obtained for the asking or at minimal costs from carpenters, building sites, some factories, cabinet makers, kitchen installers, etc.

Wood can also be used to model concrete. The only requirement is to sand the surface to remove any sign of grain.

For both wood and Customwood, it is essential to sand until any saw marks are eliminated.

Although I have not tried it, styrene might be useable. Instead of the paper used below, thin styrene sheets could be used to add the form work detail. I fear that the thinnest sheet of styrene, which I believe is 0.005 inches, would be too thick for the smaller scales, however.

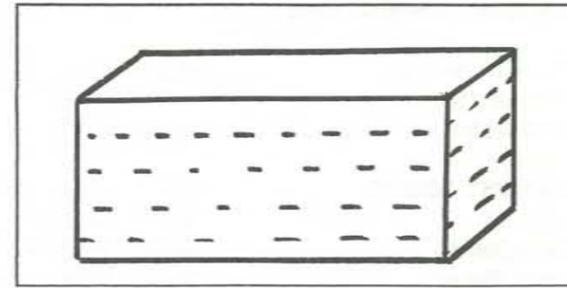


Fig 3 Scribe guide lines on faces of "concrete" where formwork detail is desired.

To add the form work detail to the Customwood or wood "concrete" structure, I cut thin paper into strips the width of the boards, say a scale of 12 inches. Typing paper of good quality with a hard finish is recommended as it has a smooth even surface. The strips I then cut to lengths of from 8 to 20 feet. Most boards were supplied in length increments of 2 feet in days gone by, so the lengths should be 8, 10, 12 etc., would be appropriate.

I then lightly draw lines on the Customwood or wood "concrete", the spacing of those lines the same as the width of the paper strips.

The strips of paper are then glued to the "concrete" in a random fashion with white glue using the guide lines to keep them parallel. Ensure the vertical form boards/joints are at two foot intervals and align with other vertical joints. Carefully clean any excess glue from the face of the "concrete". The results reflects the uneven surface of the finished concrete caused by using form boards of varying thickness. See the sketch.

The last step is to paint the "concrete". Several coats of a light or medium grey will assist in sealing any grain that remains visible after the sanding. I rub the "concrete" lightly with steel wool after each coat dries to smooth out any unnatural textures resulting from painting. Rub lightly so as to not rub through the paint a roughen the paper surfaces. If the paint brush strokes are in the direction of the

form boards, the brush marks look like the wood grain that can sometimes also be seen in the finished concrete. You can then add some weathering using contrasting shades of grey to highlight the effects of the form work.

Painting the entire "boards" darker or lighter shades of grey results in a convincing effect. Then dust or dirt can be added around the base where rain would have splashed dirt onto the concrete. This can be done with a light spray of the ground colour. Chalks could also be rubbed into the painted surface to represent the dirt that splashes onto the concrete near the ground level.

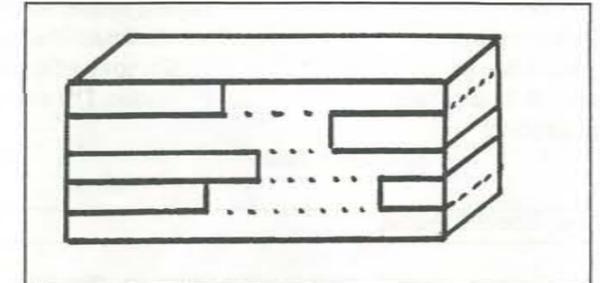


Fig 4 Randomly apply paper strips to provide 3 dimensional effect of formwork on "concrete".

Super-detailed concrete modelled in this fashion could be used for bridge abutments, tunnel portals, building foundations, the walls of turntable pits, foundations for signals, and a host of applications on your model railroad. I am about to tackle a bulk oil supply depot which has a series of oil tanks mounted on concrete supports. I will use this technique to model the concrete for it as well. Give it a go on your model railway!

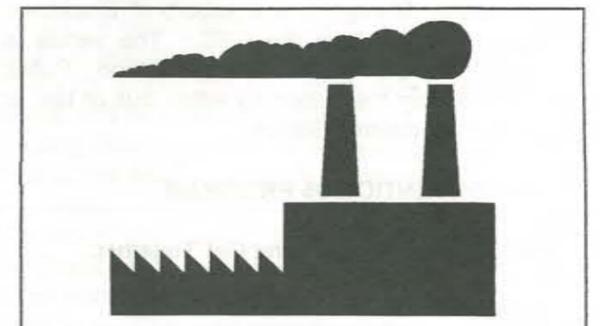


Fig 5 Colour completed "concrete" structure.

Convention 95

9 - 12th June 1995
The Queens Birthday Weekend

Allan McClelland
Builder of the Virginian & Ohio.
Master Model Railroader

Author of the V&O story and many articles on the construction and operation of the modern model railroad.

Silent Auction	Model Contest
Model Display	Clinics - 28 hours
Symposium on Command Control	
Sunday evening dinner	
with Allen McClelland our guest speaker.	
Layout Tours	Layout Inspections
Non -Rail Program	Non-Railroad Tours
Commercial Shops	Company Store
Souvenirs & Tour Video	Video Theatre
Display Layouts	
and much more !	

About our Special Guest.

Allen McClelland started model railroading in the 50's, these early attempts lead to the creation of one of the G Great Model Railroads - "The Virginian & Ohio".

With the V&O Alan initiated the concept of structuring the model railroad as a believable transportation system. Allen, in constructing the road, developed his concepts of time management in construction and started the use of command control from the early 1960's. In recent years he has added 500 sq. ft of extension to create 1500 sq. ft of miniature transportation system.

Allen's clinics will give powerful insight's into the current thinking of this famous Model Railroader as well as many practical tips that will help the attendee build a better system.

Venue.

The Convention is to be held at **John Paul II Senior High School in Marayong**. Marayong is a suburb of Blacktown which is approx. 38 km from the CBD. The venue is approx. 2 km from Blacktown Railway Station. Public transport available from the station by either bus or taxi or you can walk from Marayong Station.

CONVENTION 95 PROGRAM

Friday Evening Pre -registration and Get Together.

Saturday Theatre.

A big screen presentation of selected Model and Prototype videos will be run in the Convention Centre Theatre.

Sunday Dinner with Allen McClelland.

A sit down, under cover, roast dinner. After dinner Allen will

give an informative presentation of the V&O.

General

There will be a number of selected commercial stands to find those special items. Finger Ridge and a new layout from Gerry Hopkins MMR will also be on display.

LAYOUT INSPECTIONS

Gary Norwood -	RGS HOn3 (circa 1942)
Brex Butler -	NSW Cowara N
Phil Moore -	AT&SF Cajon Pass HO(circa 1955)

LAYOUT TOURS.

Don Davis -	[HO SP - AT&SF]
John Baker -	[HO SP - AT&SF]
Gary Norwood -	[HOn3 RGS]
Phil Moore -	[HO AT&SF]
Bill Cooper -	Fern Valley [HO Freelance]

Michael Flack -	South Pacific Lines [HOn3 Freelance]
Bob Kollwyn -	[HO NSW]
Sowerby Smith -	[HO SP]
John Saxon MMR -	Cedar Valley Lines [HO Free Lance]
Gerry Hopkins MMR -	Kennebec County [HOn30]
Laurie McLean -	[HOn3 DRG&W]

Non - Rail Tours

The Mountain Tour
The Windsor Tour

CLINIC PROGRAM

Allen McClelland -	The V&O - an Overview.
Allen McClelland -	Conception and Design of the Modern Model Railroad.
Allen McClelland -	Operating the Modern Model Railroad.
Geoff Nott -	Putting it all Together

Bill Kerr -	Collectibles in N scale
Michael Flack -	In search of the Ultimate Tree.
Peter Gibbons -	Trees from the Base Up
Bob O'Connor & Bob Best-	Finger Ridge Logging on a Budget.

Phil Badger -	Soldering Tips and Techniques.
Phil Morrow -	Casting Plaster Buildings.
Ken Scales -	Aspects of Wiring.
Paul Richie -	Creating Scenery Tips & Techniques
Paul Richie -	Scratch Building in Styrene.

John Saxon MMR -	Foam Core rock walls
Gerry Hopkins MMR -	Constructing a Model Railroad with Little Time or Money.
Ray Walters -	Streetscape of the 50's
Digitrax -	Digital Command Control Overview
Digitrax -	DCC - The Product



Computers in Model Railroading

A C Lynn Zelmer

Digital snapshots for the model builder...

As most readers of this series will have realised, I spend much more time on computer-related activities than I do on model railroading. However, the same work which requires me to use the computers also gives me the opportunity to experiment with some of the latest technology for model railroad applications.

This article briefly looks at one such technology—the Apple QuickTake™ digital colour camera—and its potential for model builders.

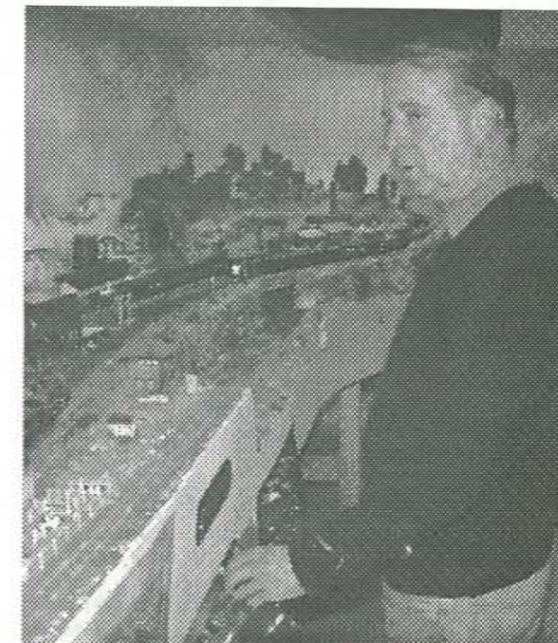
Digital Camera Technology: This snapshot-type camera uses an array of tiny electronic sensors which are capable of differentiating between light and dark. After a scene has been photographed software in the camera compresses the image and stores it in RAM (Random Access Memory) inside the camera. The image must then be transferred to a computer for viewing, storage, or printing.

QuickTake™ images can be viewed on any Macintosh computer, although one with a colour display is best, and the images can be manipulated with any of the software tools which are used for photographic images.

The QuickTake™ camera is very basic and results in a relatively low resolution image. Similar technologies are, however, available for 35mm or larger format professional cameras, enabling a medical illustrator, for example, to work through a microscope to obtain high resolution images.

Practical details: Apple has reduced the cost of the digital camera to under \$1,000. Other costs include the computer, the photo manipulation software, storage media for the images (diskettes, hard drive, etc.), and a printer if required. Obviously a colour printer would be desirable but is not essential.

I've used the camera quite satisfactorily with several Macintosh computers, including my notebook style PowerBook. I then use Photoshop software to convert the colour images to shades of gray,

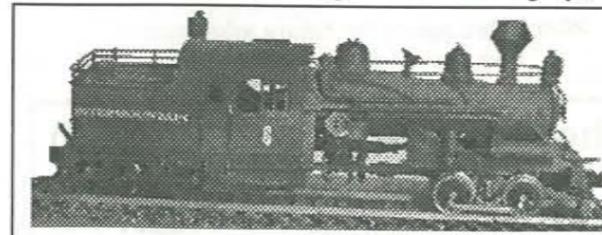


John Saxon at the controls of his Sydney, Australia based Cedar Valley Short Lines

optimise for printing and print them out on a laser printer. Printing directly from a laser printer (Apple Photograde) or even an Apple colour inkjet printer produces a much higher resolution image than is shown here; a normal resolution monochrome dot matrix printer does not give an acceptable image.

Other products are available which provide similar results with greater or lesser ease of use.

So far I've used the camera during a layout visit and I've taken it on a train-watching expedition. I've also used a simple close-up lens to adapt the camera for taking model photos. All in all, I think it has good potential for photographing prototype details for model building, especially when the photos will be used to generate computer-drawn working drawings, and for recording model construction details for the Achievement Program.



The model photograph to the left was taken with the QuickTake™ camera and a +3 close-up lens under normal room lights and less than optimal conditions. The supplementary lens was attached to the front of the camera with 'bluetac' adhesive.

Intermountain Railways Heisler #8, a late fifties Japanese-built brass import into Canada. Owned by the author.

This Listing represents the lines you can inspect at the Railroad Model Craftsman
 The MRC can access to most lines listed in the Walthers catalogue and many not seen in this country before.
 We have direct accounts with suppliers plus connection's with excellent distributor's in the USA. & Australia
 Ring for help during store hours of fax , we have a current knowledge of what is available.
 [s] - denotes selected range [c] - denotes comprehensive range [Scale HO unless noted]

Woodland Scenics
 Timber Products
 Detail Assoc. Rail Scene
 Vintage Reproductions
 Grandt Line

Small Town USA
 M.R.C. Whitmetal
 Precision Scale
 Detail Associates
 Detail West
 M.V. Len's
 Kadee Industries
 Utah Pacific
 Railcraft Rail

Precision Scale
 Grandt
 Detail West
 Caboose Industries
 Rix Products
 M.R.C. Stall Motor
 Rix Products

Clover House
 Atlas
 Railway Engineering
 Micro-Engineering
 Plastruct
 Builder in Scale

Clover House
 Northeastern Lumber
 Dyna Models
 Evergreen Styrene
 Guts,Gravel & Glory
 Williams Brothers

M.R.C. Lumber
 Dyna Model
 Pacer
 FX - Pre-Size
 Mr. Plaster
 Labelle
 Robert's
 A-West
 Poly S
 Foquil
 Tamyia
 Acculflex
 Micro Scale

Testors
 Stoney Valley

S.S.E.
 M.R.C.
 X-Acto
 Bachman
 Mascot
 Hodgkison
 C.T.T.
 Accurail
 Athern
 Roundhouse
 Mr. Plaster
 Gregs Garage
 MRC Plaster
 Rix Products
 A.M. Models
 Champ , C.D.S. or Micro Scale

Scenery Products [c]
 Scenery Products [c]
 Backdrops HO/N [c]
 Snow,Grasses,Rope,Wire ,Signs [s]
 Detail Parts HO/N [c]
 Loco , Structure , Rolling Stock
 O/HO/HOn3 [s]
 Detail Parts HO [c]
 Detail Parts HO/N [c]
 Detail Parts [s]
 Detail Parts [c]
 Detail Parts [c]
 Locomotive Len's [c]
 Couplers & Access. [c]
 Detail Parts [s]
 Code 70/55/40 Track and
 Access. HO/HOn3/N [c]
 Switchstands
 Switchstands
 Switchstands
 Groundthrow HO/N [c]
 Switch Machines
 Switch Machine
 Rix Rax I , II , Flat Switch Mach
 mounts, Rerailer HO/N [c]
 P.C.B. Ties HO/N [c]
 Code 83 Rail & Points [c]
 Code 70/55/40 Points HO/HOn3/N
 Turnout Sleepers
 Brick/Stone/Tile/etc Sheet [c]
 Shingles,Chain Link Fence,Metal
 Roofing [c]
 Poles N/HO/S/O [c]
 Stripwood & Sheet [c]
 Build Kits [c]
 Strip,Sheet & Shapes [c]
 Corrugated Roof HO [c]
 Corrugated ,Tile ,Crimped Roofing
 Vehicles HO [c]
 Odd Size Stripwood [c]
 Shingle Roofing HO
 A.C.C. & Rail Zip [c]
 Weathering Paints
 Painted Accessories
 Lubricants, Figures [c]
 Brick Mortar
 Blackin-it, Weather-it
 Paints [c]
 Flo- Stain [c]
 Paints & Accessories. [c]
 Paints RR Colour's [s]
 Flat & Gloss Finish, Foil Adhesive
 Mask, Kristal Clear, Microsol
 Microset
 Plastic Cement,Decal Set, Dull Coat
 Weathering Pigments & Fiber Optic
 Cable [c]
 River Resin , Latex Scenery Paints
 #61 - #80 Drills [c]
 Tools & Accessories [s]
 Locomotive's [s]
 Pin Vice & Tools [s]
 Trip Pin Adjuster
 Scale Rules O/S/HO/N [c]
 Rolling Stock [c]
 Rolling Stock [s]
 Rolling Stock [c]
 Car Loads HO/N [c]
 Cars & Trucks of the 30's to 50's [c]
 Retaining walls & Accessories
 Road Bridges HO/N [c]
 Lineside Structures.[c]
 Decals & Dry Transfers

Titchy
 C.M.A.
 Small Town USA
 A.I.M.
 Mr. Plaster
 N.W.S.L.
 N.W.S.L.
 Pre-Size
 Guts,Gravel & Glory
 Life Like
 Atlas
 Rix Products
 Korber
 I.H.C..
 Bachman Plus
 Micro Engineering
 Tichy
 America Limited
 Badger
 Pikestuff
 Morse Productions
 Master Creations
 Clover House
 Vintage Reproductions
 Russian River
 Classic Signs Ltd.
 Woodland Scenics
 Kalmbach
 Mainline Modeler & N Scale
 Narrow Gauge & Shortline Gazettes
 Railmodel Journal
 Branchline Modeler
 Model Railroader
 Radio Control Systems
 Rail Vision
 Keroboy
 Plaster Craft
 Preiser Figures
 Run 8
 Westfield
 A-Line
 B & H Industries
 Corner Stone
 Shinoharra

Jib Crane, Water Column & Detail
 Parts HO [s]
 Telltales, Mail Catcher, Oil Crane
 Buildings [c]
 Tunnel Portals , Walls & Abutments
 HO/N [c]
 Tunnel Portals , Walls & Abutments
 HO [c]
 Chopper, Duplicator, TrueSander
 Sanding Sticks, Motors & Acces. [s]
 Culverts assorted HO [c]
 Foundations & Steps [c]
 Structures [s]
 Engine House
 Structures [c]
 Houses , Telegraph Poles , Cross
 Arms HO [c]
 4 Styles of Water Tanks , Engine
 House, Tfr. Company HO [c]
 Church , Interlocking Twr , School
 House , Barn Sanding Tower [s]
 Diesel Servicing or Sanding Facility
 Coaling Tower Frankford Junction
 Texaco Garage circa 1930 [s]
 Structures False Front & Modern [c]
 125,000 gal Water Tower , Hand car
 Shed , Assorted Handcars HO [c]
 Diaphragms Athern & Stewart
 F7's Pass. Cars Diaphragms &
 Trucks Bulkainers [c]
 Air Brush & Accessories. [s]
 Detail Parts HO [s]
 Plaster Buildings , AccessHO/N [c]
 Poster's & Signs [c]
 Dry Tfr Building Signs [c]
 Signs [s]
 Poster & Billboard Signs [c]
 Building & Billboard Signs [c]
 Building Signs , Model Graphics [c]
 MR's How To Books
 Magazine
 Magazine
 Magazine
 Magazine
 Magazine
 Electronic Throttle's [s]
 Videos [c]
 Painted Figures & Accessories [c]
 Rock Castings [c]
 Unpainted Sets [s]
 Loco. & Caboose Windows HO [c]
 Grab Irons & Rolling Stock [s]
 Stirrups [c]
 Tanks , Butler Bins ,Grain Elevators
 Building Kits [s]
 Track & Points

Watch this space for future additions !!
 See you all at Convention 95

The Model Railroad Craftsman
 Unit 4 / 47 Bedford Road , Blacktown
 Office Tele ; 02-622-1916 Fax : 02-831-4132
 Showroom opens - Thursday 5 p.m. - 9 p.m.
 Saturday 9.30 a.m. - 4.30 p.m.
 Tele : 02-831-8217
 MasterCard - Visa - Bankcard

Scenery For Beginners

By Ken Scales

One of the most daunting prospects to many modellers particularly those new to the hobby is scenery. There are two major obstacles to overcome if the task is to be enjoyable. The first is acquiring the materials. The second is getting to where we, as individuals, want to be in the first stage of scenery construction.

Acquiring the materials is not easy when you look at the enormous range of materials stocked by hobby shops. Because we are members of the NMRA I have aimed this article at colours and textures to suit American layouts. The most important point to make here is that you must have all the basic materials before you start or the job will become a series of frustrations. Scenery requires a lot of mixing, gluing, and cleaning. If you do not have all the basic materials to complete a stage it will simply take too long and become frustrating. So, what do we need ?

The Basic Tools

- * A good spray bottle
- * Two soft plastic sauce bottles
- * 3 plastic ice cream containers
- * An old spoon for mixing
- * A pair of scissors
- * A small sharp knife
- * A staple gun
- * Several small house paint brushes (10 -40 cm.)
- * A small coarse sieve
- * Several artists brushes (mixed sizes)
- * A cartridge gun
- * 10 small containers for storing powdered sandstone

The Materials - -

- - that do not come from the hobby shop.

- * Casting Plaster
- * "No name" chux type wipe cloths
- * Several pieces of soft coloured sandstone
- * Selleys Aquadhere
- * Selleys No More Gaps
- * Dishwashing Liquid
- * Quickgrip contact glue
- * Cardboard such as that from old grocery

boxes.
 * Fine dead twigs

The Basic List - -

- - materials sold by the hobby shop

Ground foam.

Woodlands Scenics Course Turf (recommended colours light green T63, medium green T64 and dark green T65.)

Woodlands Scenics Turf (colour T45).

Timber Products Fine Foliage/Ground Cover (recommended colours moss green 101-11, meadow green 101-12, and spring green 101-9).

The next thing to consider is how to prepare our materials and tools for use. The spray bottle should be filled with water with a tablespoon of dishwashing liquid added. The sauce bottles are for the glue. The first bottle should be filled with straight *Selleys Aquadhere*. The second bottle should be filled with a mixture of 50% *Selleys Aquadhere*, 50% water and a teaspoon of dishwashing liquid. The *No more gaps* should be loaded into the cartridge gun and a large nail or screw used to plug the nozzle.

The sandstone needs to be crushed up into a mixture of powder and small rocks from 2mm to about 20mm. These are then separated by shaking in an ice cream container until the rocks come to the top. These are removed by hand and the powder broken into two grades by using the sieve. The materials are then put into separate containers. The twigs are cut into small pieces using a knife or pliers.

Now comes the second part of the equation which is how do I get where I want to be with a minimum of fuss ?

The first rule is try to allow for scenery when laying the track. Always try and build the lowest part of the layout at the front with the higher tracks at the rear. Tunnels are usually best placed over the curved ends of the layout. This has two benefits. Firstly it hides the tight curves which we all find it difficult to make look realistic. Secondly it allows us to place our switches on the straight or gently curved sections of the layout. Avoid large flat sections on smaller layouts. Large flat yards and industrial areas look good on

large layouts but are difficult to make look realistic on a small layout. Do not place elevated tracks too close to those below or it becomes difficult to make hills and embankments look realistic.

Walls alongside tracks are usually expensive to build and difficult to make look realistic. Simple embankments with slopes less than 70 degrees are easy to build and scenic. Remember none of this advice is absolute. I have seen many examples of what I have said not to do that look great but they were all built by extremely talented and experienced modellers.

There are two very simple ways to build mountains and hills. Stiff Cardboard and a light staple gun can replace chicken wire, messy paper towels, complex formwork etc to form hills and mountains. Form the basic shape from cardboard strips stapled to the base of the layout and the backdrop or whatever you use to support the back of your hills. It is simply covered with plaster which is smoothed with a paintbrush to form a base for what is to follow. It is easy to change and quick to build.

The other method is to make a light framework using cardboard stapled to the layout and covering it in *Chux* type superwipes dipped in a watery mixture of plaster. "No name" superwipes are the cheapest but any of these wipecloths will do. The hold plaster better than paper are stronger and can be moved around without tearing when you are attaching them to the layout.

General scenery is usually stuck down with *Aquadhere*. Ground cover, flock, dirt, crushed stone and ballast can all be attached with *Aquadhere*. Always mix it with detergent and water. The best way to start is to squeeze some straight *Aquadhere* onto the layout and spread it with a paintbrush. Spray this with a light cover of water and detergent as you are brushing to make it easy to spread. Sprinkle on sandstone fine twigs and *Woodlands Scenics* ground foam using the sieve for the fine material and your fingers for the coarser material. If the glue does not look sufficient to hold everything down squeeze on some of the diluted *Aquadhere*. When it looks right give it a gentle spray with water to ensure that it is all glued down. Larger rocks and similar items can be stuck down with *Selleys No More Gaps*. When all the glue holding the ground materials has dried you can attach small items such as people relay boxes and the like with *Quickgrip*.

In addition to the basic materials I referred to

above there are many other free or inexpensive materials you can use to scenic your layout. The following is a guide to inexpensive ground cover.

Fine dirty sand, sandy topsoil washed into gutters or drains, any rock dust. These are all best heated in an old pot to remove bugs and moisture.

Crushed sandstone can be also be fine screened into different powders for roads, paths, tennis courts etc.

The spoil from large ant hills, making sure you remove the ants and don't get bitten.

Kitty Litter can be crushed coloured or used as is. Colour and size varies according to the brand. One of the best uses for Kitty Litter is as Mine Tailings.

Course bush sand used for laying pavers. Again this needs heating to remove bugs and moisture.

Out of scale ballast can be used for special effects in another scale. O scale ballast can be used to represent mine tailings or rocks in HO. Very fine N gauge ballast makes excellent roads paths etc in HO or even larger scales.

SIMPLE WATER

One of the simplest ways to represent water is to paint the bottom of the lake, river, or creek with artists colours then cover this, when dry, with either gloss medium (from an art shop) or Clear gloss oil paint from the hardware store.

BACKGROUNDS

Backgrounds may be painted first (recommended on flat sections of the layout) or last (recommended on steep sections of the layout).

Use *Chromacryl* students colours (\$2-00 large tube from newsagents) or *Marie* artists sets (\$8-00 for 12 small tubes from Big W). Basic colours needed are White, Black, Deep Green, Burnt Sienna, Warm Blue, Yellow Oxide. Extra colours Burnt Umber, Light Green, Red Oxide and Warm Red.

Simple rules for simple backgrounds

* Basic blue may be mixed by tinting white house paint with artists acrylic. Streak sky by mixing wet paint on the background board.

* Keep the bottom of the background a colour which merges with the scenery in front of it where it joins.

* Scenery can be placed with a gap to the background or joined and running in to it.

* Paint the front hills greens, yellows, and browns merging colours as an artist does on an oil painting.

* Paint the hills pinks, greys, purples, blues and soft hazy colours. Use white mixed with the other colours to blend and soften hills.

SIMPLE ROADS

* Bitumen...use fine black or dark grey ballast
* Muddy road ...use painted plaster with ruts

* Clay....use

- (i) Tile Grout
- (ii) Fine crushed sandstone and PVA glue
- (iii) Fine crushed sandstone and white no more gaps

TENNIS COURTS

* Loam.....use

- (i) Fine crushed sandstone and white no more gaps
- (ii) Fine crushed sandstone and PVA glue.

* Flexipave.... use coloured cardboard with white paper sidelines.

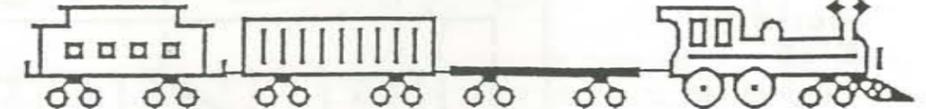
ZIP TEXTURING

A full range of colours can be made from coloured tile grout. You need green, brown, yellow, and grey. Lighten colours by mixing with dry white plaster. Can be used over temporary scenery on large layouts during early stages of construction.

RAILWAY BOOKS

Do railways hold a special fascination for YOU!

For Sydney's best and cheapest range of Australian and overseas railway books visit the ARHS Sales Centre.



Conveniently located close to Central Station, the ARHS Sales Centre is operated by Australian Railway Historical Society New South Wales Division, a "non - profit" company dedicated to the publication of books and magazines on the railways of Australia. A large range of video tapes are also available.

ARHS SALES CENTRE
67 Renwick Street, REDFERN NSW 2016
Telephone and Fax (02) 699 1714

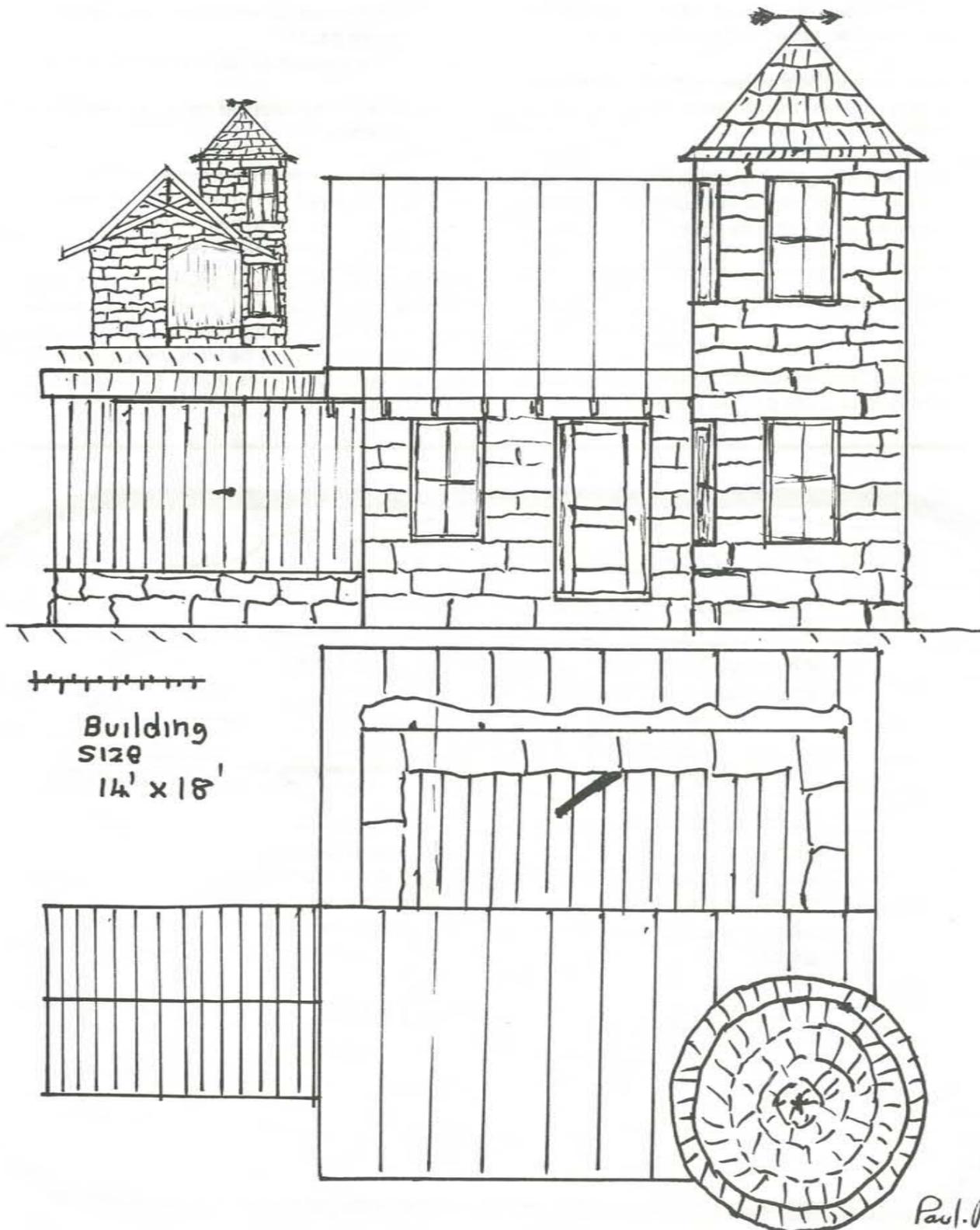
OPEN
MONDAYS TO FRIDAYS
12.00 TO 17.30
SATURDAYS
9.00 TO 16.00

Mail Order enquires most welcome
Write for a booklist.

A Small Station In "S"

By Paul Richie

The walls are built up using individual stones. The windows are Grandt Line parts but the doors are scratch built using styrene. The main roof can be either tar paper, ribbed metal or shingles, the tower roof is shingled. The freightroom "extension" is either a kit bashed or scratch built boxcar. A complete interior will be fitted along with dim lights.



BACKDROPS

By Laurie Green MMR

From a clinic given by Laurie Green MMR at the NMRA Convention in Melbourne '94

All layouts and dioramas are greatly enhanced by having a backdrop added to them. Even just a blue painted board is better than nothing. However, when you add haze, clouds, hills, mountains etc., your layout comes to life. You can even locate your scene by having the prototype background and even date your scene by having the correct background for the era you are modelling. Does all this sound so difficult? Well its not. Even if you haven't held a paint brush in your hand, you can achieve reasonable backdrops for your layout. Try the methods I have described below on a small test backdrop and see how easy it is.

Backdrops can be divided into two distinct sections;

Sky & Clouds
Background

idea to make the clouds in the distance much smaller than the closest clouds. All of these combine to give your sky tremendous depth and make your layout appear much bigger than it really is.

You will need six jars to mix the colours required. Firstly, put some pure white in one jar (for the nearest clouds), in the

second jar, put in some white plus an equal amount of the sky blue (for the mid-distant clouds) and in the third jar put in some white paint plus about twice as sky blue as you put in the second jar (for the most distant clouds).

We use the other three jars to mix the shadow colours. In the first of these jars put in some mid-gray for the shadow under the nearest clouds. In the next jar put some of the mid-gray and add a small amount of white and the sky blue (for shadow of the mid-distant clouds) and in the last jar put in the same amount of mid gray as in the previous jar and then add twice as much white and sky blue as you did in the previous jar (for shadow under the most distant clouds).

All we need now is a way of applying the paint easily onto our blue sky. This is done with a foam applicator.

Using a piece of foam about 2" square by about 4" long (similar to that found in loco boxes), using a sharp knife cut a slot in the bottom of the foam and insert a piece of dowel or wood to form the handle. On the other end of the foam, pick off pieces of foam to achieve a rough irregular surface. You are now ready to start making your clouds.

When starting to paint the clouds, always begin with the most distant clouds, as the closer ones will over lap them. with the foam applicator, dip it into the bluest white paint and dab it on in a cloud shape close to the horizon. Dab on as many as you wish. Once these most distant clouds are completed, dab the applicator into the slight white/blue and dab on

SKY AND CLOUDS

After you have painted your backdrop with sky blue and allowed it to dry, mark, with a soft pencil, the approximate horizon line ie. where the hills or mountains meet the sky. Using a spray can of matt white, holding it about 12" [300mm] from the horizon line and on about a 10° to 15° angle to the backdrop, start spraying about 6" [150mm] off the board, and spray across the backdrop. Repeat until the desired haze effect is achieved.

We could leave the sky here and represent a cloudless summer day, however, clouds really enhance the feeling of depth in our backdrop and are really easy to do.

If you have a close look at the clouds, you will notice that the closer they are to the horizon the bluer they become. Also, and more importantly, the shadow under the cloud in the far distances only a thin strip on the bottom of the cloud as we are seeing it from side on, however, as the clouds get closer to us we see more of their under side and thus the shadow area is much greater, until all you will see of a cloud directly above is the underneath shadow. Also, the further away the cloud the bluer and lighter is the colour of the shadow. It is a good

some larger mid-distance clouds. Repeat with the pure white larger close clouds. When this is completed, using a 1" flat brush, and using the blues light gray, dab a thin shadow on the bottom of the most distant clouds. Move onto the mid-distant clouds and dab a thicker shadow with the mid gray. Repeat with the gray by painting about a third of the bottom of the close clouds. By now you should have some reasonable looking clouds that create a feeling of great depth to your backscene.

Often the shadow under the clouds will reflect the colour of the ground over which the cloud is passing i.e. if the cloud is passing over green fields it may have a slight green tinge to the gray. Likewise if it is passing over bare desert, there may be a brown or red tinge to the shadow.

Often the shadow under the clouds will reflect the colour of the ground over which the cloud is passing.

Using the methods described above, you can make any type of cloud you will see in the sky. It is a good idea to have a good look at the clouds, taking note of the various shapes and colours. You can even take a series of photographs to use as reference.

To achieve those long streaky high altitude clouds you can make a specially

shaped foam applicator and drag it across the sky.

For those misty thin clouds try using the spray can of matt white we used to create the haze along the horizon.

The most important thing is to study the clouds, and even create your own methods and tools to achieve the type of clouds you want to have on your backdrop.

STRUCTURE TIPS & TECHNIQUES

By Gavin Hince

Unless you model the plains of Kansas, your model railroad is going to need lots of structures. There are hundreds of different kits, using styrene, plaster, wood and other materials, or you can create your own design from kit parts or basic materials.

In any case, good results can be achieved with a little patience, the usual hobby tools, and a basic set of techniques. The clinic presents techniques I have used (by no means exhaustive - there are innumerable other ideas you might want to try - if it works, share it!), and some "low tech" tools to make the job easier.

THEORY

A little planing goes a long way! When designing a structure or considering changes to a kit, think about what you see most - the roof, interesting roof lines; details such as chimneys and drainpipes, and a mix of roofing materials add interest and character to any structure.

Mixing materials can also apply to walls - many stone structures have later additions of wood or brick. This helps build in a "history" of the structure - viewers can see the original design has been added to, adapted, and so on. Boarded-up windows and doorways add further to this atmosphere.

Foundations are important - don't have your buildings sitting on top of scenery, "bed" them in. Foundations can be brick or stone; again, use a different material to that of the building. Sloping foundations add character and are required for uneven ground.

Start by assembling and painting plastic kits, then progressing to "kit-bashing" your own designs from kit parts. "Craftsman" style kits are mostly wood and are suitable for more experienced builders to produce contest-class models. Good kits for your first craftsman kit are supplied by Builders In Scale - these are US prototype, and come with detailed assembly and painting instructions.

STRUCTURE TECHNIQUES - Brick Structures

Plastic brick sheet is the usual choice, although

printed paper or card sheets are fine for structures further from the viewer. Add mortar lines to plastic sheet by brushing or wiping thinned paint (usually light grey or tan) over red-painted sheet. Or, paint the sheet grey and "dry-brush" red over it. To finish the colouring, pastel chalks are ideal for adding subtle shadings and weathering. Other common brick colours are yellow and dark grey - just don't make all your structures the same colours!

TURN THEM TO STONE

I like foam sheet - mine came from Train World, to represent stone. This sheet is 3 mm thick and is readily bun-joined with white glue. Additional stones can be drawn on the exposed wall end with a pencil, and the join hidden with a drain pipe.

Rather than adding lintels & sills in separate pieces, impress them around window and door cut-outs, with a small screwdriver - when painted, they look fine. Don't forget to only use acrylic-based paints on foam sheet! I use cheap artist colours, dabbing various brown and tan shades on individual stones. It's laborious, but good work for in front of the TV.

WOOD STRUCTURES

Most plastic kits have little grain or contrast. Scratch wood grain parallel with the boards, paint with the base colour then dry-brush sparingly with brown and white paints. To give the effect of peeling colour with bare wood showing through in patches.

Nothing looks more like wood than wood... I use both commercial basswood and balsa sheets with success. Working with wood is much like any other material, but the colouring techniques (to me) allow greater realism.

My favourite colouring technique is brown and black shoe dye (from local supermarket) copiously diluted in rubbing alcohol from the chemist. The two colours are brushed on with the direction of the grain in random fashion. The brushing action blends and streaks the shades together to good effect.

BERG'S HOBBIES

Have on hand:
Affordable 2nd hand U.S. outline HO Brass Locomotives
of Several Roadnames.

As well as:
A good selection of Passenger Cars- Freight Cars.

Also many pre-read books and magazines.
Come in and browse

Berg's Hobbies Pty Ltd. A.C.N. 000 558 618
181 Church Street, Parramatta NSW 2150 AUSTRALIA
P.O. Box 527 Parramatta NSW 2124

Telephone: (02) 635 8618

Fax: 61-2- 689 1840

Wall colour is added before the base stain is dry. Using small amounts of Acrylic paints, streak the colour with the grain. Allow some "bare wood" to show through, with the grey/brown also blending into the wall colour. It's much harder to describe, than to do - the only difficult thing is starting at all. Most older wood buildings suffer "dry-rot" in the bottom of the wooden walls. Represent this with dark brown streaks up from the bottom of the wall, easily done by brushing thinned paint along the bottom edge of each wall. The paint soaks up the grain for a realistic result.

It's quicker and neater to paint trim colour items such as windows, corner posts and doors, prior to adding them. I prefer Grandt Line windows (mail ordered from US suppliers), adding plastic glazing with white glue. White woodworking glue dries clear and won't fog the window "glass".

Other useful painting techniques are:-

"Weather-It" from A-West This is available at larger hobby shops, and gives lovely grey-silver tones. One point - structures finished in Weather-It seem to darken over time.

Floquil Driftwood. If you painted your car with this stuff, it would look like wood! Driftwood everything, then streak on some darker browns and black for instant realism. Artist Textas such as Pentel pens are also useful. Some modellers use these both for bare wood and for colouring painted walls. The fumes are strong, so you'll want to use them only in well-ventilated areas.

GOING FURTHER...

Don't be afraid to change kit structures, try new techniques for assembly and painting. Often the hardest part is deciding to start at all. Concentrate on those things you can see, such as roofs, rather than interior detail.

Be guided by what you see in real life - start a "photo file" of buildings or details you'd like to model some day. Modelling magazines have a wealth of information and ideas. For further reading, try "222 Tips for Building Model Railroad Structures" by Dave Frary (published by Kalmbach and on sale in most hobby shops). It's full of good ideas.

If all else fails, drill caves in your scenery and backdate your layout to the Stone Age!

BULLETIN MAILING LABELS

Terry Bacus, the BULLETIN Editor, is investigating why the October issue was mailed without the usual envelope in accordance with US domestic practice (and which applies to most US magazines). He has assured us that the magazines mailed after he was advised about this unauthorised change will revert to being enveloped for overseas mailings. In the meantime, it is possible that issues up to and including January '95 may be on their way without envelopes.

VALE

Long term members will be sorry to hear that Mark De Havilland's health had deteriorated further and that he had been re-admitted to Rock Lea Nursing Home, Whilst there he passed away on the morning of 18th January 1995.

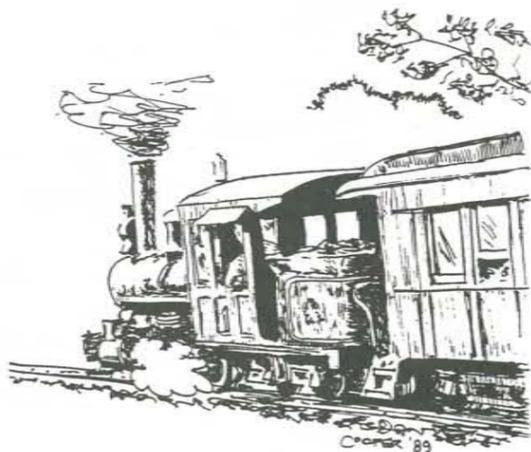
VALE

One of our members, Boyd Whitfield of 7 Jenkins Rd, Carlingford 2118, passed away in July 1994.

FOR SALE

Various HO brass locos, freight cars, and misc. magazines, binders etc. Predominately Chesapeake & Ohio / Baltimore & Ohio prototype. SAE/Phone for list.

Clive Riley, 16 Wisteria Crescent,
Cherrybrook NSW 2126
(02) 875-2135



INDUSTRIAL AND TOWN BUILDING NAMES by Fred Gill MMR

Visitors to my Diamond Valley Line HOn3 layout are often amused by the names that are illustrated on the walls of some of the town and industrial buildings. As we are always being told, Model Railroading is fun, then why not add 'fun' names to your industries and town buildings.

Below is a list of 'fun' names that you may like to place on your layout buildings.

ALPHABET PRINTING CO
BACHS & KRAITS WAREHOUSE
BAWLAND & CHAIN CO
BULGEE WAREHOUSE
COUYLE SPRINGS CO

DEWBEEUS INDUSTRIES
DREGGS WINE CELLARS
FLATZ BEER BREWERY
FULLER & FULLER WAREHOUSE
GREENWOOD LUMBER CO

HARDLEY ABLE
HUNKA CHEES CO
ITSTINKS & HOWE (FISH CANNERY)
JUSTIN CASE HAND TOOLS
KHANT RESISTOR CORP

KRAMDIN WAREHOUSE
LAYUM STRATE - UNDERTAKER
MALCON TENT & CANVAS CO
MENDEN THREAD & YARN WORKS
MISSON FORM PRINTERS

NOTT SAFE CO
OHL & WHARNOUT EQUIPMENT CO
OWEN KPLENTY MFG CO
PASTURE PRIME BEEF
PEARLEY GATES & DOORS

PHADEN PAINTS
PITTS & CORR PACKERS
RUFF & GREEN LUMBER
SHARP METAL PRODUCTS
SLUMBERLOST MATTRESS CO

STRINGY BEEF CO
TESS TEA CO
THE HAAS BIN CO
TILTIN DESK & CHAIR CO
TRYIN-HARDER MFG CO

UPSENS DOWNS MINING CO
WHITE INK CO
WHYNING MACHINE CO
WINCHCRAFT
WRIGHT SHOE CO

ARROWMATIC CHEES CO
BAIRLEIGH SOLVENT FINANCE CO
BERNS & FRYE COOKWARE
BURPS BREWERY
DAIN-JERIS CHEMICALS

DIMWOTT ELECTRICITY CO
E NORMIS PRODUCTS
FRAID & WEEK ROPE & TWINE CO
GAMBOL WAITE & HOPE CO
GRYDEN GEAR CO

HOELINDA CHEESE CO
HYDE & CEEK WINDOW
SCREEN & BLIND CO
KERLEY LOCKS CO
KONTRA-VERESHAL SIGN CO

LAWSTANE FOUNDRY
M T WAREHOUSE
MELTIN ICE CO
MISEN GEAR CO
NEITLINKS SAUSAGE CO

OHDELLOTT FINANCE CO
OLDAN & NEW CO
P LINN PAINT CO
PASTURE PRIME BEEF
PERRY SHINNLE FRUIT & PRODUCE

PHAINT PAINTS
R SNICK CHEMICALS
SENDEM PACKING CO
SKIDMORE WAX CO
STIK-KING GLUE CO

TERM OIL CO
THE ALLCOTT HOTEL
THE HACKER TOOL CO
TRIPTON RUG & CARPET CO
TUFF MEAT PACKING CO

WETTWOOD LUMBER CO
WHUN & OWNLEY MFG CO
WIDOWMAKER CHEMICALS
WOBLIN FURNITURE CO
YORE PLACOR MINE

KENNEBEC COUNTY RAILROAD

BY GERRY HOPKINS MMR

Having ridden on the Franklin County section of the two foot gauge Franklin, Somerset & Kennebec Railroad in Maine in '42, three years later I had the good fortune to ride on the Kennebec County section. The following is my account of that trip.

It was a bright August morning in '45 when I arrived at the wharf in Crab Apple Cove. The steamer was again the Rainbow. I walked down Main St. to the depot, as well as the usual vacationers there were a large number of servicemen returning from the war in the Pacific. I purchased my ticket, but this time I was to travel in the opposite direction to my earlier trip. This trip would take me to the coast at Rubble's Inlet, which is only a few miles past Thatcher's Inlet.

My train soon arrived, it was hauled by No.18 a 2-6-2 Baldwin tender loco. This loco did not appear to have the character of the 2-4-4 Fomey No. 10 which had hauled the train on my last visit, but she was still quite capable of doing her task.

The whistle sounded and we gathered speed from the depot, back towards the town but turning and passing behind Main St. We passed under the high trestle but I could not see the Shay that had hauled the tourist train on my last trip. We travelled in a south easterly direction, past rolling hills, through the stands of the hardwoods on which the area prospered.

The train sounded her whistle as we passed through a cutting. As we cleared the cutting we began to slow down. I could see, to my right, the Kennebec River winding its way to the coast. We stopped at Hardy's Landing, this is a popular stop for those people who are going up river for hunting and water sports. It is also possible to catch a small steamer and visit a few hard to reach places along the river bank.

On the left is a busy road that leads into Rubbles inlet. The driving of a young lady has attracted the attention of a police officer, the red lights are still flashing on his Harley Davidson.

We are waiting at a signal for a train of pulp racks to leave town and go up the branch line to the paper mill. The train comes towards us turns northward on the far bank of a river that feeds into the Kennebec River. The train is hauled by

No.2, one of the Baldwin 2-6-0's. This particular loco was originally built for a logging line in North Carolina, the Laurel River and Hot Springs, but they never took delivery so it was bought by the Sandy River & Ranglely Lakes Railroad.

We eventually crossed over the small river and head, passed the lighthouse, into the fishing port of Rubbles Inlet. It is like most of the New England coastal towns, all buildings look out across the sea, as though they were looking for some long lost sailor. We came to a stop at the depot which right in the middle of the main wharf. The town was here long before railroads were ever dreamt of, so the only place for the railroad was along the wharf.

The wharf had been widened by six feet to allow enough room for the trains, a standard gauge line was out of the question! A 50 ft long pier was also built to act as a head shunt to access the small yard behind the depot.

Main Street gradually climbed away from the wharf and then crossed over the railroad as the tracks led away on the far side of town. The Vintage Tuna Cannery sits at the western end of the wharf while at the eastern end there is the massive building of the New England Creamery. The unusual features of this building are the two elevator shafts which stand like the twin peaks of a cathedral!

At the end of the yard is the Wiggett Cheese Factory with a small platform for loading the barrels of cheese onto flat cars or trucks.

As is the norm in these New England port towns, there is a abundance of cafes and restraunts in the main street all serving their own version of lobster chowder.

The train whistle sounds and we started to pull away from the depot. The little stone station with its two storey tower was left behind to guard this section of track from whatever ventured from the sea!

Due to a shortage of space in this issue (and because of my lack of time) the rest of this trip will be related in the next issue of Main Line.

THE SIGNAL BOX MODEL RAILWAYS



Shop 3, 457 Great Western Highway, Faulconbridge 2777
P.O. Box 76, Springwood 2777

Phone (047) 51 2088
Fax (047) 51 4503

SHOP FRONT & PARKING COOMASSIE AVENUE

E & C SHOPS HO ROLLING STOCK HOURS: Monday-Friday 10-00am-5-00pm
62' WOODCHIP GONDOLA \$14-95 Saturday 9-00am-1-30pm
WOODCHIP LOADS \$7-75 Other times by appointment
50' PS-1 BOXCARS \$13-50

52'6" GENERAL PURPOSE MILL GONDOLA \$15-95
"COALPORTER" ALUMINIUM COAL GONDOLA \$15-95
NOW ALL IN STOCK !!

ACCURAIL ROLLING STOCK

40' DOUBLE DOOR STEEL BOXCAR \$12-95
40' AAR SINGLE DOOR BOXCAR \$12-95
40' ALL WOOD BOXCAR \$14-50
NEW ACF 3 BAY COVERED HOPPERS \$15-95

ACCUFLEX PAINTS from BADGER \$6-50 per jar
FLOQUIL PAINTSWIDE RANGE OF RAILROAD COLOURS \$3-95 jar

TORTOISE SLOW MOTION POINT MOTORS \$21-95

KADEE COUPLERS & ACCESSORIES

Kadee #5 \$4-50 per pack
NEW & MADE IN AUSTRALIA "STEAM ERA COUPLERS"
fully compatable with Kadees \$3-25 pack or 10 for \$30-00

ENORMOUS SELECTION OF YE OLDE HUFF N PUFF
MICRO ENGINEERING VEHICLES & KITS

AMERICA LIMITED MODELS

9000 Streamlined Pass Car Diaphragms \$7-00
9800 Athearn F7 Diaphragms \$7-60
7510/20 Tanktainers (UP & Alaska West) \$8-95

RUN 8 FLUSH GLAZE WINDOWS from \$4-95

CANNON CO DETAILING PARTS from \$3-60

WIDE RANGE OF PAINTS-GLUES-BRUSHES-FINISHING PRODUCTS
Faller Super Expert \$5-95 Zap & Zap a Gap 1oz \$10-75
After Run Lubrication \$7-95 Tamiya Putty \$5-95

MAJOR STOCKIST OF VIDEOS BY ALL THE MAJOR US COMPANIES
(Thru Series 567 Rail Video)

THE FULL RANGE OF WOODLANDS SCENICS-PLASTRUCT-
EVERGREEN STYRENE- K & S METALS IN STORE

DISCOUNTS FOR ALL NMRA MEMBERS WHEN CARD SHOWN OR MEMBERSHIP
NUMBER QUOTED FOR MAIL/PHONE ORDERS

OPEN SIX DAYS PER WEEK FOR YOUR CONVENIENCE

MAIL ORDER, PHONE, FAX ORDERS WELCOME - CHEQUE BANKCARD MASTERCARD VISA AMEX LAY-BY

.... where your hobby dollar goes further

SHOP WITH US TO SAVE-
GET GREAT SERVICE AS WELL

IF IT'S IN A
WALTHER'S CATALOGUE
IT'S AVAILABLE FROM US !!!

For your next **WALTHERS** order try us first!



NUMBER DRILLS
51-80 \$3.00ea.

WALTHERS™

1995 HO Catalogues
\$27.00 plus P&P

CHECK OUR LARGE RANGE OF
WALTHERS™
ROLLINGSTOCK & STRUCTURES

