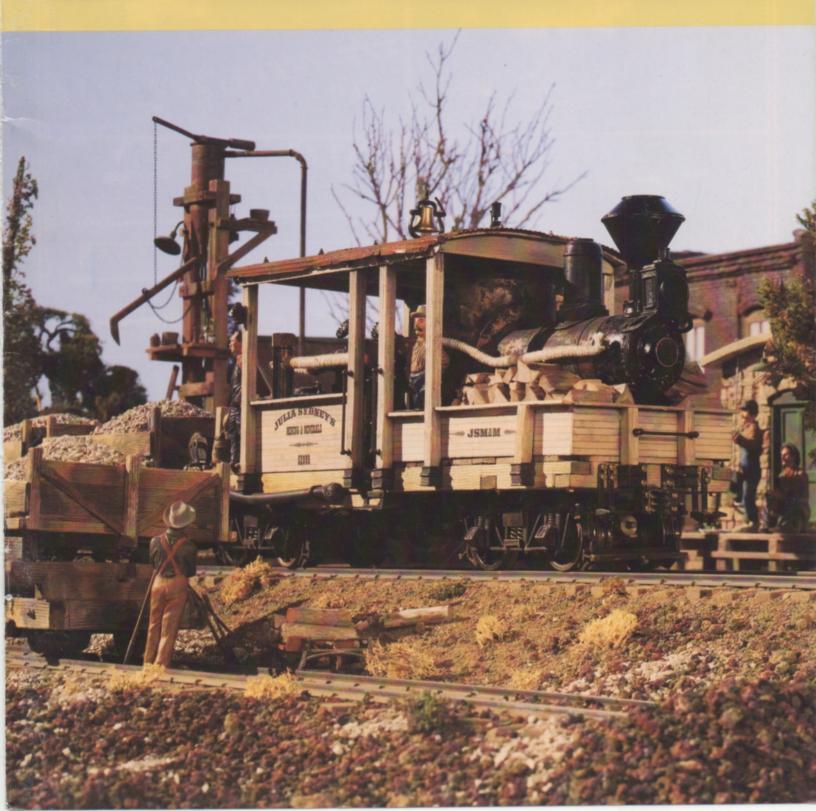
Nº 60 4.95 U.S. \$5.95 Canada

SIEAN INTEGARDEN



WORLD'S FINEST GAUGE 1 LIVE STEAM



KITS & RTR

BEAUTY * INVESTMENT * A PLEASURE TO OWN



ASTER HOBBY

QUICK DELIVERY ON ALL MODELS

ASTER HOBBY





THE VERY AFFORDABLE LIVERPOOL & MANCHESTER LION

THUNDERBOLT



NEW

GERMAN

LOCOS







JUMBOS.. LIVERIES AVAILABLE















CATALOG & MANUAL \$15

U.S. REPRESENTATIVE & DISTRIBUTOR

DIAMONDHEAD 2-HOUR STEAMUP VIDEO \$29

HYDE-OUT MOUNTAIN LIVE STEAM 89060 CALL US FOR INFORMATION



NEW RUMLEY ROAD JEWETT, OH 43986 740-946-6611 * www.steamup.com/aster

AVAILABLE FROM THESE DEALERS

Sunset Valley Railroad Issaquah, Washington 425-255-2453

S.T.E.A.M. Windsor, California 707-838-8135 www.steam4me.com

West Lawn Locomotive Works 608-231-2521

Rio Pecos Garden Railroad Co. **Bonita Springs, Florida** 941-495-0491

www.steamup.com/riopecos

IN CANADA

Bear Creek Railroad Surrey, BC 604-594-8695

Gauge 1 Lines Stittsville, Ontario 613-836-6455

www3.telus.net/pantages

Dallas, Texas 972-247-1208 www.gaugeone.com

Sulphur Springs Steam Models 314-527-8326 www.crescentmodels.com

Crescent Models 888-838-0315

Cross Creek Engineering Spencer, Ohio 800-664-3226

Southern Steam Trains Travelers Rest, South Carolina 864-834-3954

North Jersey Gauge 1 Co. Park Ridge, New Jersey 201-391-1493

www.southernsteamtrains.com

Doubleheader Productions

Chesterfield, Missouri

STEAM IN THE GARDEN

Vol. 11, Nº 6 Issue Nº 60

with Steam on the Pond

Articles

- 9 Houston Small Scale Steamers Steamup Report Steam is alive and well in Texas by Jim Crabb
- 10 Ten Originals by Isamu Takagi -- Remarkable work by a Japanese craftsman by Kattchan Tanabe
- 17 First Look at Roundhouse Forney & Steamup Report -- Killing two birds with one stone...so to speak by David A. Young
- 22 The Gauge One Shop Hearth -- Heating things up...part two of a series by Kevin O'Connor
- 26 The Alcohol Vapourising Burner -- Classic steamer improvements by Murray Wilson
- 31 Measuring Scale Speed & Distance -- Interesting workshop project by John Thomson
- 39 Steam Loco Kit Review D.J.B. Engineering's Class A Climax by Sonny Wizelman
- 44 Steam on the Mad River Short Line Steamup Report from the zanies on the Left Coast by Richard Heisler

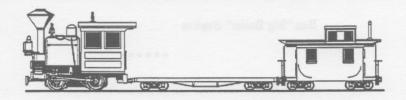
Departments

- 4 RPO -- Letters Our readers write...with fire, wit and enthusiasm
- 6 What's New? -- Latest and greatest goodies for our hobby
- 8 Calendar of Events -- Who, What, When & Where
- 19 Weedwood RR -- An offbeat look at our hobby
- 48 Swap Shop -- One man's surplus is another man's treasure
- 50 End of the Line -- Highly intelligent discourses on a variety of subjects...
- 50 Advertiser Index -- Wish List...

FRONT COVER:

It's just another workday on Julia Sydney's Mining and Minerals line, and the crew is hard at it, sweltering and sweating in the noonday sun. Spectacular modeling by Sonny Wizelman, with assistance on setting up the scene by Steve Crise and Rick Runyon. For more information about the Class A Climax, see Sonny's review in this issue.

photo by Steve Crise



Publisher/Editor Ron Brown

Lovely Assistant Marie Brown

CAD & Other Drawings in This Issue
John Thomson ● Murray Wilson ● Isamu Takagi

Regular Contributors

Keith Bucklitch England
Jim Crabb Texas
Crankpin The South
Joe Lecesse Massachussett
Kevin O'Connor California
Ken Parkinson Florida
John Thomson Texas
Harry Wade Tennessee

Steam in the Garden (USPS 011-885, ISSN 1078-859x) is published bimonthly for \$27.00 (\$34.00 Canadian, \$35.00 overseas) per year (6 issues) by Steam in the Garden Inc., PO Box 335, 6629 SR 38, Newark Valley NY 13811. New subscriptions please allow 6 - 8 weeks for delivery (overseas via surface mail may take longer). Direct correspondence to PO Box 335, Newark Valley NY 13811. Periodicals postage paid at Newark Valley, NY and additional mailing offices.

POSTMASTER: send form 3579 to Steam in the Garden Inc., P0 Box 335, Newark Valley, NY 13811. Printed in USA. Copyright 1998 Steam in the Garden Inc.. All rights reserved. The contents of this publication may not be reproduced in whole or in part by any means without the express written consent of the publisher.

USA, Canadian and overseas subscriptions may be sent to **Steam in the Garden Inc.**, **PO Box 335**, **Newark Valley NY 13811.** Phone, fax and e-mail subscriptions gladly accepted. We accept VISA, Discover and MasterCard.

In the U.K., contact Brandbright Ltd., The Old School, Cromer Road, Bodham, Near Holt, Norfolk NR25 6QG — phone 01263 588 755 FAX 01263 588 424

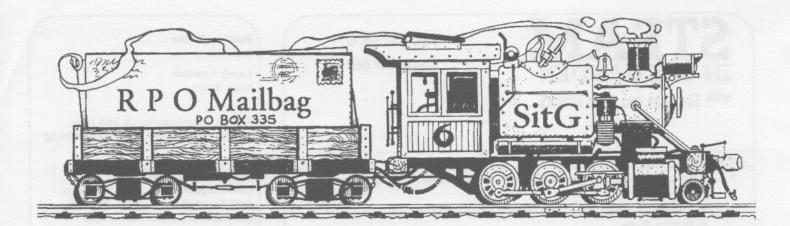
In Australia, contact RCS, PO Box 1118, Bayswater, Victoria 3153 AUSTRALIA phone/fax (03) 97 62 77 85

Items for review may be mailed to PO Box 335, Newark Valley NY 13811—or sent via UPS or FEDEX to the same address

Questions or comments? Phone us (Mon. - Thurs. - before 8:00 p.m. Eastern time, please) - or FAX us any time at 607-687-8119. e-mail address: docsteam@steaminthegarden.com

Check out *Steam in the Garden Online*, located at: http://www.steamup.com>.





Letters from readers are welcomed and encouraged. Offer advice, encouragement, suggestions or constructive criticism. Tell us about your current project (and don't forget the photos!) or just share live steam experiences. But please keep your letters to a reasonable length so everyone has a chance to use this forum. Letters may be edited for length or clarity. Send your letters & photos to: SitG, Dept. RPO, P.O. Box 335, Newark Valley, NY 13811, USA.

Dear Ron,

Wales, UK

via e-mail

Hi Ron,

I received issue No 59 yesterday, and I love the photo on the front cover. As I pulled the magazine from its envelope, my eyes were drawn to the little engine sitting on a narrow gauge spur in the early morning light. Sitting there with the sun coming from behind, the eye does not pick up the reality that you are actually looking at a model. The shadow that falls across the cylinder, cab and boiler top mask the fact that the engine is not a full size steam engine. The shadow on top of the engine boiler hides the other items that betray the fact that the engine is a model. As the eye travels up the cover, the oversized flowers break the illusion that one is looking at a little contractors work engine, waiting to start a days work. I think this is one of your best covers yet.

Hank Bloch

California, USA via the internet

New Jersey

via e-mail

Bestest. Peter Jones

Marie and Ron, Dears:

You call yourself a garden magazine? When you don't even have any pansies, petunias, portulacas, poinsettias, posies, primroses, peonies, piccalillies or pinkies? I have so much trouble with my peavines getting into my pussywillows!

Cancel my subscription today!

Percy "Pain in the Posterior" Periwinkle

I enjoyed the recent article by Jeff Young about toolboxes: this is the sort of practical article that helps so many. Could I offer a couple of extra thoughts?

Instead of using a thin oil for oscillators, use the thickest genuine steam oil you can get. It has more body and is more effective at lubricating them. Indeed, if you don't have a lubricator, a blob of thick, treacly stuff placed on the join between fixed and wobbling portions will give effective lubrication for, perhaps, 15 minutes.

Such toolboxes can get oily and dirty - unless you are one of those wretched people who are always neat and tidy. So it isn't always a good idea to make a habit of keeping your transmitter in a dirty area. I tried to divide my steaming boxes into 'clean' and 'dirty' - but I always ended up with 'dirty' and 'dirty'. It's a gift I have - comes with years of practice.....

Tinting clear alcohol (in the UK we usually have our beloved purple meths anyway) is a superb idea. I have seen someone trying to extinguish a flaming loco with water - but using alcohol by mistake. My, how we laughed

On a similar topic, I have just been overhauling an old steamer which was a gasoline fuelled pot boiler! It works very well but the possibilities are frightening.

> California, USA via e-mail

HEY RON!

Here's my check. Keep those little lokies comin' my way. I especially like the Grasshoppers, Crickets, Janes, homebuilts, etc.

Ben "Big Boiler" Bupkes

Dear Ron,

I received your latest copy of *Steam in the Garden* and I loved every minute of reading it. I like to build small steam engines in my spare time, nothing fancy but with enough detail to look good.

There are a few questions that I would like to ask you. Where can I get denatured alcohol at a reasonable price? The drugstores are not restocking their shelves becasue they say there isn't a big enough demand for it. I just paid \$4.25 for a 16 oz. bottle. There must be a cheaper way to run some of my small steam engines. Maybe your readers can come up with some ideas.

I noticed that in SitG N° 56, at the bottom of page 16, there is a vertical boilered engine with some really neat sprockets and chain drive mechanisms. Could you tell me where I can get some of these? I have been using old brass slot car gears and am almost out.

Thanks,

Richard Rose

Richard, I've found that Stock Drive and Small Parts Inc. both carry an excellent assortment of gears, chains, sprockets and other essential parts for the scratchbuilder. Both companies have very useful web sites, with online catalogs and plenty of good information. They also have paper catalogs for those who don't have access to the internet. Here's the contact info for both firms...

SMALL PARTS, Inc., 13980 N.W. 58th Court, P.O. Box 4650, Miami Lakes, FL 33014-0650. 1.800.220.4242---M-F, 8:00am-6:30pm (ET). http://www.smallparts.com/

Stock Drive Products, 2101 Jericho Tpke, Box 5416, New Hyde Park, NY 11042-5416. Phone: (516) 328-3300. http://www.sdpsi.com/contact.htm

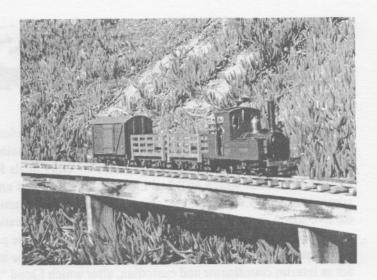
As for alcohol fuel, I get mine at the hardware store. Can't recall what I paid last time, but it was reasonable.

How about it, readers? Any suggestions for Richard? - ed.

California, USA

Dear Sir,

I have just read through the latest issue of SitG and it is, as usual, superb. I have enclosed a picture of a train on my backyard railway. The cars are scratchbuilt and the engine is a kitbashed Steamlines Aileen. I built a new extended frame to turn her into an 0-4-2 with all new superstructure and details, keeping the original 3/4" = 1' scale. I think it all turned out pretty good. Please keep up the good work, and especially the construction articles.



Sincerely yours,

Daniel V. Herrscher

Oregon, USA

Dear Ron,

Glad to see the addition of m odel steam boats in the magazine. After all, why not?

I am reminded of some experimental work done by a Mr. J. A. Bamford of England, where he was trying for a speedboat across a small, somewhat shallow lake. His model was a little larger than some of the ones shown in SitG.

What was so amazine about this boat was the boiler, the pressure, and the engine. The boiler was what Bamford termed a "flash" boiler, and consisted of a single length of 5/16" steel tubing wound in a helix. The boiler pressure was an astounding 2000 psi, entering into an experimental turbine, and also, get this, a piston driven engine geared down to a 2" propellor.

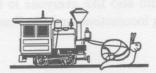
After several tries in which the boat managed to sink, he finally got it up to 55 mph actual land speed. The turbine experiment used his homemade "Stumpf" type of turbine, which is super easy to machine up. It was 3" in diameter.

The piston engine was of the bump valve type, and produced 1.2 hp at 8,000 rpm. He built a special lubricator for it. The engine was of about 35cc capacity.

What boggles me is the very high pressure, for which he had to look around for a gauge that would fit. This was written up in The Model Engineer for April 7, 1955. Bamford should have been given a reward for his research, having spent 1,000 hours on it over time.

Best wishes.

James C. Newton



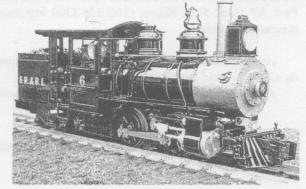


March 15th - Nashville, Tennessee -- Some years ago, before a tragic fire destroyed it's contents, members of the large scale live steam hobby in the United States organized and maintained what was known as the "Live Steam Pattern Pool". The Pool was a repository for donated patterns made by individuals for their own live steam projects and which once used were no longer needed but which still had lots of life. Organized and operated as a nonprofit, noncommercial cooperative, it was administered by a volunteer custodian who made the collection available on a lending library basis to anyone in need within the live steam community. I would like to announce the creation of the Small Scale Pattern Pool, created for the same purpose as its predecessor, and to be operated in the same way. The principle focus will be on patterns for lost wax casting, although other patterns will be accepted, and will be limited to those intended for use in the garden gauges. For a period of time I will act as interim coordinator and custodian, after which Lloyd "Salty" Foglequist (Portland OR) will assume the role of permanent custodian. We already have several patterns in the collection and a few more are promised in the near future so we have a good start. Although many details are yet to be worked out the operation of the pool is simple. A pattern donated to the Pool may be checked out by a private individual upon the payment of the cost of insured shipping both ways, a small handling fee, and a nominal, refundable security deposit. The Pool will not be the owner of the patterns but rather a custodian, and at any time the owner can withdraw a pattern from the pool, either permanently or temporarily. A few of the goals are to develop an electronic catalogue, to make available technical resources on lost wax pattern making, and develop guidelines to help the prospective pattern maker with materials and techniques. Further details will appear in these pages as they become available but to offer help, resources, or ask questions contact me (Harry Wade) at <hww@edge.net> or PO Box 150581, Nashville TN 37215.

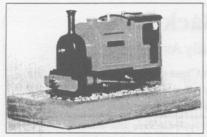
Paul Forsyth Models, 78 Laburnum Crescent, Northampton NN3 2LF, England, U.K., phone: 011 44 1604 494995, has introduced a range of detailed construction drawings for gauge one, spirit fired locomotives. These drawings are all for British outline, 10mm = 1' scale (approximately 1:32). The sample drawings we received are dimensioned, neat, clear, easy to read, and include helpful notations. Check out their ad in this issue for the wide variety of locomotives for which these construction drawings are available.

Roundhouse Engineering and their network of dealers around the world announce the latest addition to the Roundhouse 'Classic Series' of steam locomotives, an 0-4-4 Forney. The Forney design was used by a number of American locomotive

builders, as it offered a compact engine with integral water tank that could be used on small lines. They were particularly common on the many narrow gauge railways where size was important, but a hard working loco with a good operating range was required. The Roundhouse Forney is based on locomotives built by the Portland Company around the turn of the century (20th, that is), and found on many of the enarrow gauge railways in Maine. An unusual feature of the model is the use of an articulated front power bogie, which enables this relatively long engine to operate on curves as tight as 2 foot radius with minimum overhang. Check the ads in this issue for contact infomation for Roundhouse or their dealers.



Bob Osterhoudt, Rio-Pecos (see their ad in this issue) announces that the new Roundhouse Forney includes with the locomotive a nice package that consists of a wiping cloth, cotton gloves, bottle of steam oil, package of gaskets and O-rings, gas jet, gas filler valve and extra tubing for steam and exhaust lines. Full instructions and a two year warranty. You can't beat that! Bob would also like everyone to know that contrary to the rumors going around, Pearse Locomotives Ltd. is still manufacturing locomotives and Rio Pecos are still taking orders for these fine engines.



Here's something unusual...009 scale Live Steam 0-4-0 Saddle Tank Locomotive. These are believed to be the only live steam 009 locomotives in the world. Handmade, steel, brass and copper construction. Spirit fired, silver soldered boiler with superheater (!) and safety valve. Runs continuously at a sensible scale speed with good hauling power. For more info and pricing, contact Brian M. Caton, Selby, North Yorkshire, UK. Phone 01757-708244.

Co-authored by Dick Moger and Barry Applegate and published by the Gauge 1 Model Railway Association, The DEE Book is an excellent new step-by-step guide on "How to construct a twin inside cylinder methylated spirit or butane gas fired 4-4-0 locomotive in 10mm=1 foot in Gauge "1". This is an impressive 96 page publication, filled with dimensioned drawings, photos and plenty of "how-to" text. A step up the evolutionary scale from the G1MRA "Project



Loco", the DEE is still a fine model for beginners. It is suggested that those with no previous model building experience will want to use this book in conjunction with the G1MRA Project Loco book, as some procedures may be more fully described in that publication. In The DEE Book, the authors lead the reader gently along through all the necessary steps to produce a model of the Wainwright 'D' Class loco (seen in the photo above), described by the authors as a "classic of Edwardian"

Engineering...elegant, speedy, reliable, and yet adorned with one of the most complex liveries ever to grace a piece of moving machinery." This is a beautiful and interesting book to have in your library, even if you do not now contemplate building your own steam loco. For more info, check out the G1MRA web site at www.gaugeone.org. The DEE Book will be available to U.S. readers through Bob Paule at Sulphur Springs Steam Models. Please mention that you read about it in SitG.

Pete Thorp of Trackside Details, 1331 Avalon St., San Luis Obispo CA 93405, has joined forces with Carlo Spirito to produce a line of unpainted 1:20 scale figures for our modeling pleasure. Cast cleanly in resin and showing no flash on our samples, these are well detailed, realistic figures that will fit right into your railroad empire. The first figures out in this series include: F-3 "Engineer Dana", modeled from a portrait of Dana Andrews of the Sandy Rive & Rangely Lakes RR. Dana was the usual engineer on #24 - F-4 "Fireman Ed", modeled after a portrait of Ed West, who fired on the SR&RL #24 - F-1 "Andy", a standing (or leaning) character - F-2 "Bud", a man sitting with legs crossed - F-5 "Spunky", a sitting Scotty dog. We like the realistic poses of these figures. They don't look as stiff or uncomfortable as many we've seen. Instructions for painting or modifying figures are included. Painting with acrylic is easy, quick and simple to clean up. Contact Trackside Details for more information, or to order their catalog of excellent detail parts.





Argyle Locomotive Works, 241 Belgrave-Gembrook Rd., Clematis, 3782 Australia - phone/fax 61-359-686573 announces their new SR&RL 2-4-4T Forney. Minimum radius 6' 6", length 520mm, weight 8kg, scale 1:19. Limited edition, only 20 units will be built. Fittings include: hand/axle feed pumps, sprung drivers, gas/alcohol firing, Walschaerts valve gear, brake gear (non-workikng, sight glass, pressuge gauge, brass & bronze lost wax details. Contact Argyle or their dealers for details and pricing.



2001 CALENDAR OF EVENTS

May 25-27, 2001 - Pennsylania Live Steamers Memorial Day Steamup, Rt 29, 1/2 mile north of Rt. 133, Rahns, PA. Come run with us on one of the northeast's finest Gauge 1 tracks. Larger scales are also operating on our new extension. Food is available on site, lodging nearby. For info contact Harry or Paul Quirk, PO Box 215, Springtown, PA 18081 or phone 610-346-

June 3, 2001 - South Orange Seaport 11th Annual "STEAMBOATS ONLY", a radio controlled model steam boat meet. Meadowland Park Pond, off South Orange Avenue, South Orange, New Jersey. For further informatio contact: Charles Roth: (908) 638-8341 or Ron Hermann: (201) 891-3020. Sponsored by the South Orange Department of Recreation and

June 15 - 17, 2001 - 2nd Annual Powder Puff Steam-up. This is ladies day all day each day. Come watch Bob P., Ernie N., Erv M. & Pete O. cook for the ladies. Location; DeSoto, Missouri (50 miles south of St.Louis off of Hy 55) Dawn to dusk both days. For map / hotel / information call Carol Herget at 636-586-2483 after 5pm central time or E-MAIL <ozmin@jcn1.com> or FAX 636-586-2480.

June 23, 2001 - 9 AM to 6 PM, Third Annual Steamup on the Pine Ridge Lumber Co., 7450 21st Ave., Jenison Michigan 49428. 250' of raised gauge one track with 16 foot radius curves. For more info call Robb (616) 667-1260 or email <steamlogger@geocities.com>

July 7 & 8, 2001 - Garden Railway Weekend in Syracuse, New York, presented by the Central New York Large-Scale Railway Society. Garden layout tours, live steam clinics & demonstrations, modular layout, dealers, custom builders, manufacturers and lots more. For information packet contact CNY Large-Scale Railway Society, 315 Viking Place, Liverpool NY 13008 • e-mail <gdavis4@twcny.rr.com>

July 27-29, 2001 - Pacific Coast Live Steamers Small-Scale \$49'er Steamup in Sacramento, California. 45mm & 32mm tracks available around the clock. Air conditioned comfort of the Canterbury Inn & Convention Center. Daily workshops, souvenirs, poolside barbecue dinner. For registration forms or more info: PCLS, PO Box 161631, Sacramento, CA 95816 e-mail <49ER@P-C-L-S.COM> - web site WWW.P-C-L-S.COM - Event General Superintendent: Kevin O'Connor (916) 447-5433

August 31 thru September 2, 2001 - Pennsylvania Live Steamers Labor Day Steamup. Rt. 29, 1/2 mile north of Rt. 113, Rahns, PA. Celebrate the 5th anniversary of our Gauge 1 track and ride the larger scales. Food is available on site, lodging nearby. For more info contact Harry or Paul Quirk, PO Box 215, Springtown, PA 18081 or call 610-346-8073.

September 2, 2001 - Valley Forge Model Ship Society's Steamboats Only Meet at Gotwall's Pond off PA Rt. 113 in Pennsylvania. Ground-based R/C frequencies required. Starting time 10:00 a.m. For more info, contact Ernest Morris, 929 Sprng City Rd., Phoenixville PA 19460 phone: 610-948-8107.

Sept 14 thru 16, 2001 - 2nd Annual fall steam up at The Herget's, DeSoto, MO. (50 miles south of St. Louis off of Hy 55) Dawn to dusk and later all days. There are two circuits of track, 172' long and elevated to waist height. One is Gauge 1 and the other is dual gauge, O and 1. There may be a 2nd dual gauge elevated track. For map / hotel / information call Carol Herget at 636-586-2483 after 5pm Central time, E-Mail <ozmin@jcn1.com> or FAX 636-586-2480.

Because of publication lead time, please send info for Calendar of Events well in advance. Include name of host and location of event, with address and/or phone number to contact for complete information. Some basic info about the site is also useful (i.e., ground level or elevated, minimum curve radius, ruling grade, etc.)

SitG Back Issues

Currently Available

Prices shown include 1st Class postage and handling for North American addresses -- all others please add .75 per copy for overseas surface mail.

> SAVE! When you order five or more back issues, deduct \$1.00 per copy from the price shown here.

#16	\$5.50	ea.
#20 - #22	\$5.50	ea.
#23 thru #30	\$5.75	ea.
#31 thru #52	\$6.75	ea.
#54 thru current issue	\$6.75	ea.

Sold out issues are available as reprints from Sulphur Springs Steam Models. See their ad in this issue for contact information.

Send a list of issues requested with your check or money order to:

Steam in the Garden Magazine PO Box 335 Newark Valley, NY 13811

Credit cards are cheerfully accepted. Orders may be phoned/faxed to us at 863-471-6061.

You can also contact us via e-mail at: <docsteam@mpinet.net>





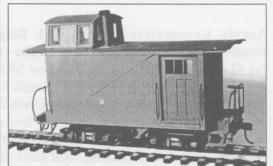


For reprints of sold out back issues, contact: Sulphur Springs Steam Models, Ltd. Dept. RB PO Box 6165 Chesterfield, MO 63006 Phone/FAX 636-527-8326



HARTFORD PRODUCTS

Our complete line of kits is also available custom built, ready to run.



Hobart Estates Caboose

1:20.3 scale, #1 gauge 8-wheel kit \$159.95 - \$8 shipping Custom built \$325 - \$10 shipping 4-wheel kit \$149.95 - \$6 shipping Custom built \$315 - \$8 shipping

Kit includes: mortised frame, laser cut sheetwood, steel wheels, Carter Bros. trucks (8-wheel version) & metal detail parts

This and 12 other kits, parts and trucks are available for immediate delivery. Send \$2.00 for our illustrated catalog of kits, parts and custom built ready-to-run cars to:

HARTFORD PRODUCTS ● 18 Ranch Road ● Cedar Crest, NM 87008 ● (505) 286-2200

Home page w/order form: www.abqmall.com/HartfordPr.htm ● e-mail: HartfordPr@aol.com ● FAX: (505) 586-2141

Houston Small Scale Live Steamers Monthly Steamup

by Jim Crabb

Will miracles never cease! The Dallas branch of the HSSLS met in Mesquite, Texas this past weekend under clear Texas skies.

Anumber of interesting folks were there, including "Trotfox" with his diminishing Ruby and Lego stationary steam engine. There were about a dozen steamers (folks) and about 16 steamers (engines). As usual there had to be at least one engine which was field stripped -- Caleb never got his new Aster Reno to run at Diamondhead, BUT under the watchful eyes and hands of several interested parties it perked up and ran like a champ. AL-COHOL (yep, the stuff Kevin O preaches about regularly) was the problem. You just can't get a high quality engine to run on low test alcohol. (Thanks to Dan Fuller for sharing his good stuff!)

An AWNUTS train pulled by Jim Crabb's SAMMIE and Bill C's coal fired Roundhouse SR&RL #24 are staples at these events, as well as several Roundhouse engines owned by Rob Cooley and a super Aster kit built by Ed Hume. But what really took the prize was --

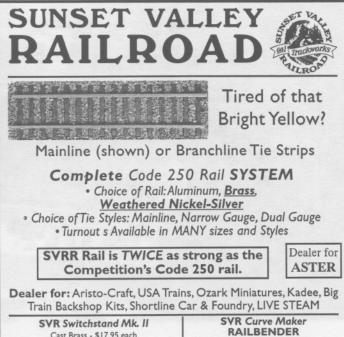
(drum roll please) -----

John Thomson's COAL FIRED BAGRS engine. As you know if you read SitG, John has published over 25 mods for this modest little engine. Saturday he showed off his greatest accomplishment with his normal modesty. This little vertical-boiler engine built up a head of steam (using the recently purchased Welsh coal imported from the UK) and moved around the track in a highly dignified manner. There was great applause!

The only challenge remaining is to keep enough water in the boiler. Any coal firing steamer will attest to the fact -- they use lots of water.







Catalog & Rail Sample \$1.50 or

Catalog available from the Internet

13428 209th SE, Issaquah, WA 98027

Phone/Fax (425) 255-2453 • E-mail: svrrted@sprynet.com

Internet: www.svrronline.com

\$82.95 postpaid (Continental U.S.) Specify 250 or 332 Rollers

Cast Brass - \$17.95 each

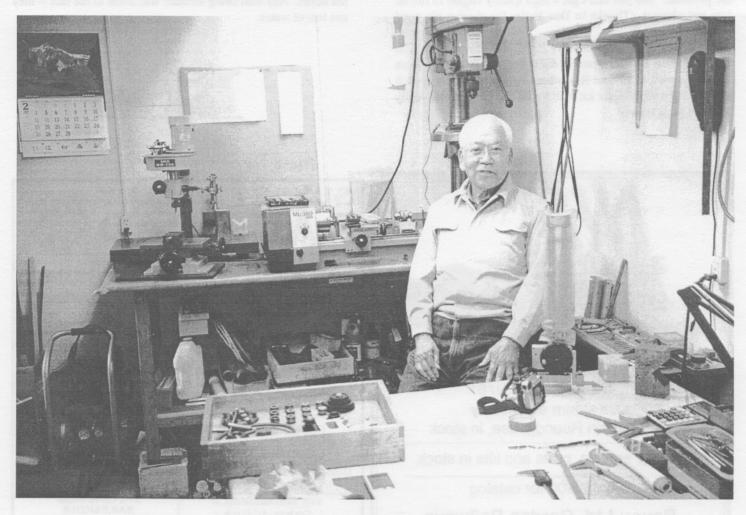
Cast Pewter Base w/ Brass Target -\$12.00 each + Shipping

Ten Originals by Isamu Takagi of the Yokohama Live Steam Club

article & photos by Kattchan Tanabe drawings by Isamu Takagi

Always keeping a hearty laugh, picking up his original scratchbuilt steam locos from a big box and running them one after another on the YLSC railways, that is ISAMU TAKAGI.

inside or outside of a chassis, Shay, Cricket and rear engine type with geared drive.



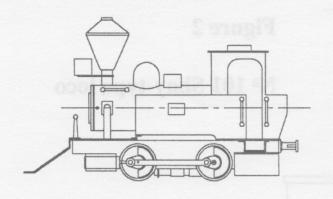
ISAMU TAKAGI in his workshop

Driving systems in his locos

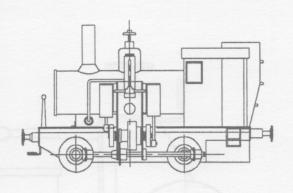
There are so many systems, such as a rod type with oscillating cylinders, a rod type with reciprocating cylinders mounted

Figure 1 shows 5 types of his locos

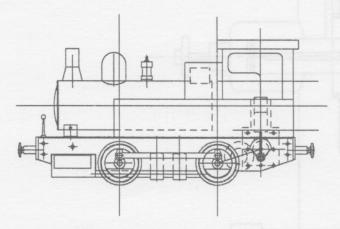
*Nº 100 Shay with single acting oscillating cylinders



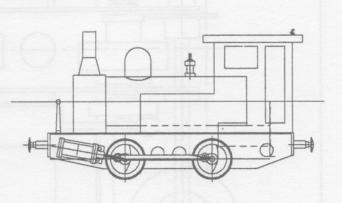
単動首振りエンジン型 NO. 400



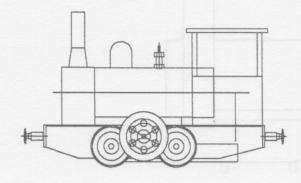
単動首振りエンジン シエイ型 NO. 100



単動後部首振りエンジン型 NO. 200



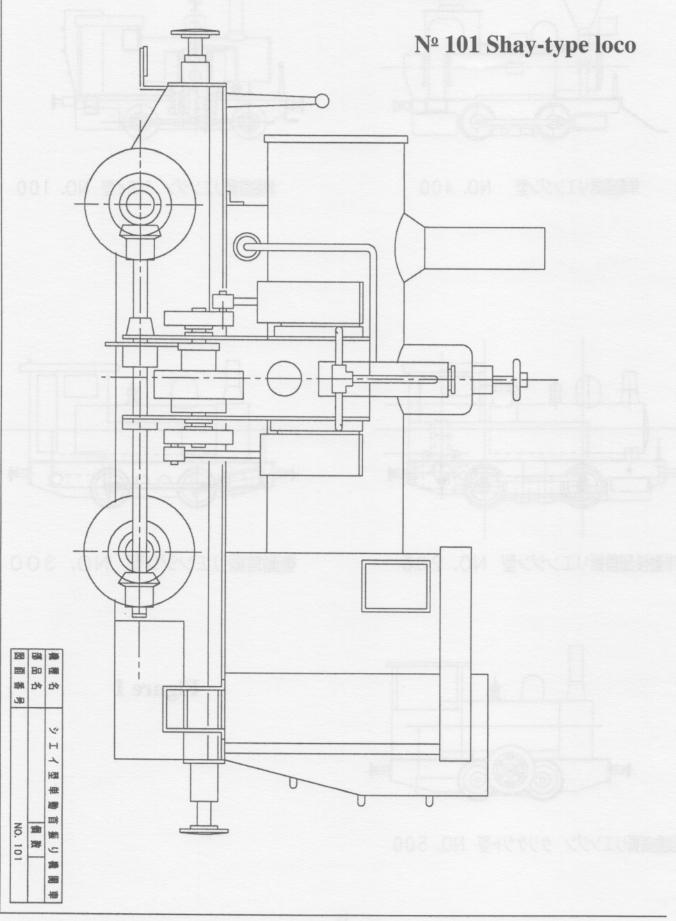
復動首振りエンジン型 NO. 300

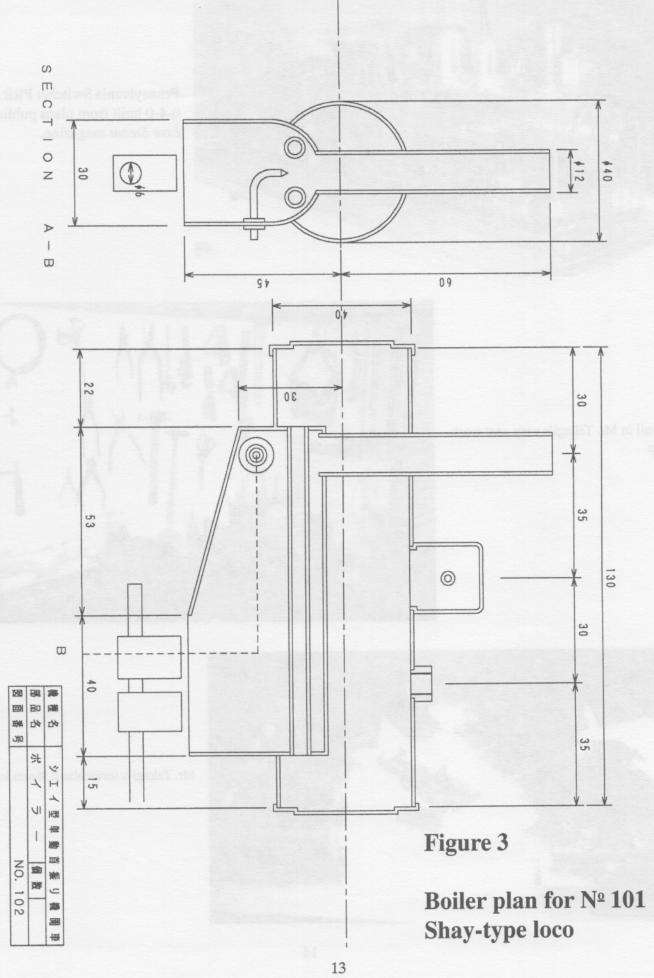


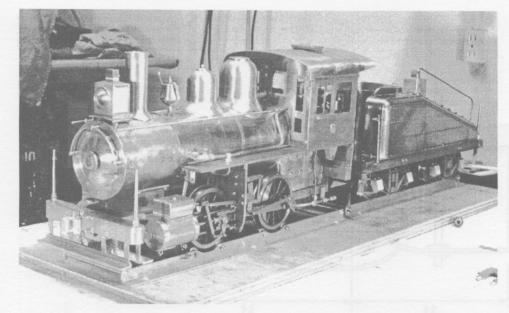
復動首振りエンジン クリケツト型 NO. 500



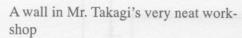
Figure 2

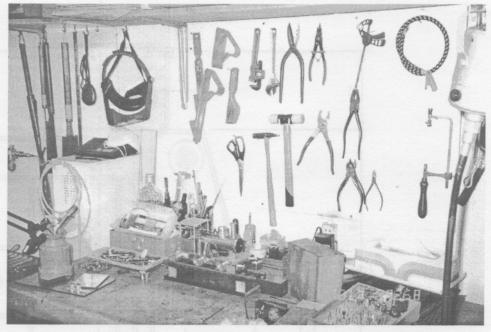






Pennsylvania Switcher PRR A-3, an 0-4-0 built from plans published in *Live Steam* magazine.

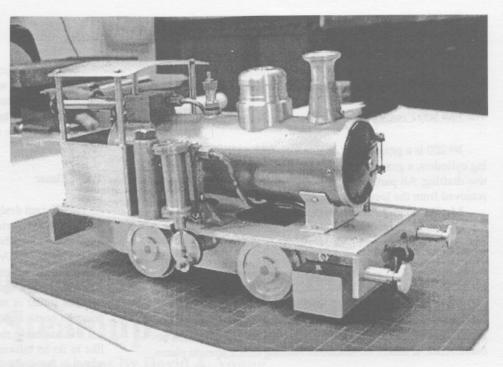


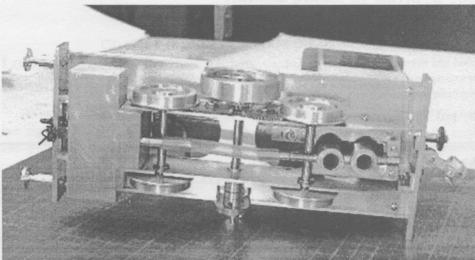




Mr. Takagi's scratchbuilt steam locos.

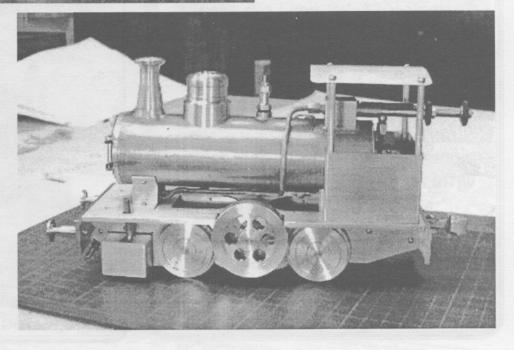
 N° 500, Cricket, seen from the right side.





Bottom view of the Cricket, showing the alcohol tank and burner. Also note the driving gears between the flywheel and frame side.

 N^{Ω} 500, Cricket, seen from the left side.



*Nº 200 single action, oscillating rear cylinders

*Nº 300 Rod type, double action, oscillating cylinders

*Nº 400 Rod type, single action, oscillating cylinders

*Nº 500 Cricket, double action, oscillating cylinders

 N° 200 is a geared, rear engine loco with two single oscillating cylinders, a gear ratio of 2:1, and it runs very well with effective drafting. All parts of the driving system, with engine, can be removed from the loco. It is convenient for maintenance.

Mr. Takagi makes the loco plans, and stores and manages all the dimensions, drawings and photos in his computer. (See Fig. 2 and Fig. 3 for drawings of his Nº 101 Shay and boiler)

Engines

The steam engines feature single or double action oscillating cylinders. The diameter of the pistons is 8 - 10mm. The pistons have no piston rings, but a groove is turned around the piston circumference. It makes for smoother running than a straight piston.

Combustion (alcohol burner only)

A doughnut type burner is a new idea recently, with air passed up through an inner pipe. The burner makes a good and beautiful blue fire. A point for future consideration is how to determine the ratio between outer diameter and inner one, taking boiler capacity and fire power into consideration.

HARD TO FIND

small fasteners for the live steam hobbyist at reasonable prices.

Examples: Socket head cap screws, 4-40 x 3/4 alloy - \$4.75/100, stainless \$6.95/100. Hex head machine screws, 2-56 x 3/8 stainless \$7.25/100, 2-56 x 1/2 brass \$5.75/100.

Sizes 0-80 thru 10-32 in brass, alloy, aluminum & stainless. Call, fax or write for FREE CATALOG.

MICRO FASTENERS

110 Hillcrest Road Flemington, NJ 08822 Phone (800) 892-6917 FAX (908) 788-2607 e-mail: microf@blast.net

visit our web site: http://microfasteners.com

Boilers

There are 3 types: a straight boiler, C-type boiler with 5 smoke tubes and a boiler with 3 curved smoke tubes. An intake port of the curved smoke tube is on the bottom side of the boiler, coming upon a fire of the burner. An outlet of it is the front plate of the boiler to the smoke box. It makes for a smooth smokeway and is very effective.

Track Timer

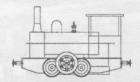
Mr. Takagi designed and built a timer for the Yokohama Live Steamers track. It rings a bell every 30 minutes, and also gives a 5-minute warning bell.

ISAMU TAKAGI is 80 years young now. As he had worked for a machine tool company and an optical lens company, he has a profound knowledge of machine tools and cameras.

His career in miniature models has consisted of gas engine powered boats, airplanes, helicopters and steam locomotives.

He has made many kinds of steam locos, and now he would like to do an information exchange with steam enthusiasts anywhere in the world.

Please contact him at: ISAMU TAKAGI, Phone/Fax 81-3-3991-023



SIERRA VALLEY

ENTERPRISES

SUPPLIERS OF ACCURATE, CUSTOM BUILT, READY-TO-RUN 1:20.3 & 7/8" SCALE ROLLING STOCK & METAL WHEEL SETS FOR GAUGE 1 & GAUGE 0



SEND \$2.00 FOR
PRODUCT SPECIFICATION SHEETS
WITH PRICING TO:

SIERRA VALLEY ENTERPRISES
2755 SARATOGA AVENUE, MERCED CA 95340

Roundhouse Engineering's Forney & Steamup in Texas

text and photos by David A. Young

Looks like another winner from Roundhouse Engineering...

What a great day to go to a steamup. The weather was just right, around 70 degrees, and clear sky. The drive to and from the steamup through the Texas hill country accented the nice weather. The pastures were all a beautiful green and the wild flowers were in full bloom. A treat on the way home was to see a Union Pacific train cross a trestle

over the freeway. The timing on this was perfect for observing the engines and then the cars they were pulling.

Our hosts for this event were Marvin and Lemma Nite of San Marcos, Texas. As always, Lemma Nite was a gracious hostess even though she is recovering from a hip injury. Marvin made sure that everything was available





Marvin Nite strolls across his back yard in San Marcos, Texas during his recent steamup.

for steam engine operation. He had steam oil, water, butane, and alcohol for those who needed these items, and the tracks were in perfect condition.

The tracks at the Nite's place are as good as they get for operating live steamers. In fact, their tracks are my favorites for the operation of my engines (including my own track in Santa Fe, Texas). Marvin has two separate layouts, each with two track loops and plenty of area to service the engines. The tracks were in service when I arrived at 10:00 am and continued in service until the end of the steamup at around 5:30 pm.

Approximately twenty-five steam enthusiasts were in attendance, along with many engines and consists. Guests were from as far away as England. As always at these steamups, the engines and cars were everything from completely scratch built to commercial-off-the-shelf, including some of the fun Aw-Nuts stuff.

There were two engines making their maiden runs at this steamup. One was an Accucraft 2-8-0 (AKA bumblebee) C-16 Consolidation and the other was my new Roundhouse Forney. Both of the new engines ran well. Below I discuss my Forney. We shall leave it to someone who owns an Accucraft engine to discuss her operation. There is a detailed report on the Accucraft engine in the February 2001 issue of *Garden Railways*.

For me, the big item for the steam up was the chance to introduce the new Roundhouse Forney to the group and to make her maiden run. I had ordered the new, manually operated engine from Bob Paule back in December 2000, and it arrived safely from Sulphur Springs Steam Models, Ltd. on the Thursday before the San Marcos steamup.

I immediately unpacked the Forney (I sure liked what I saw) and took her out to my home loop for a picture taking session. Here is an extract from an email message I sent to Bob Paule on Friday:

"The Forney arrived in Santa Fe, Texas yesterday. I am all set to take her to the steamup in San Marcos, Texas tomorrow for her debut here in Texas.

"I really like her looks. The valve gear and steam flow, along with the articulated drive gear, is a very interesting piece of engineering. The Roundhouse folks did a great job of developing an American style engine with the wheels outside the frame. I trust she will run as well as my three other Roundhouse engines."

The Roundhouse literature and tool kit packed with the Forney provide several improvements over previous engine packages. First are the very useful additions to the tool kit. New items in the tool kit include an adaptor for fuel containers to use when fueling the engine, a spare filler valve and a spare burner nozzle. These are items I needed to purchase separately for my other engines.

In reading the literature one finds that Roundhouse Engineering states that it is acceptable to burn butane/propane mixtures in the engine. The literature with my three previous Roundhouse engines specifically stated butane only for fuel.

The next welcome change is an improvement in the design of the steam oil drain. No longer is it necessary to completely remove the drain plug. Now you just need to unscrew three turns and the water comes out of the steam oil tank.

There is also an improvement to the operation of the reversing gear on the manual engine. The quadrant has three positive notches one for forward, one for neutral, and one for reverse.

My trains all use LGB hook and eye couplers. The new Forney comes with American style knuckle couplers. For an adaptor I placed a knuckle coupler on one end of one of my boxcars so I would be able to pull the cars that travel with me to steamups. Needless to say, by the next steamup I will have a complete consist with knuckle couplers.

My Forney has the water top-off system. I do not use the top-off system to make long duration runs. What I like the top-off system for is to be sure the pressure is at zero when removing the filler cap to make preparations for a new run. I use several squirts of cold water through the top off system to cool down the water in the boiler below steam temperature. I like to start each run with a refill of water, fuel and steam oil. Of course, a major feature of the top-off system is the sight glass allowing one to keep an eye on the water level. This is a useful feature all by itself.

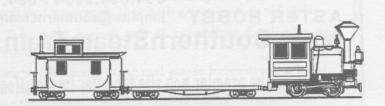
All of the runs with the new engine went smooth as silk. Just raise steam, put her in gear, open the steam valve, wait a few seconds while the system heats up and the liquid clears, then off she goes. For the first run she was operated without cars, running light. The second run was with the coupler adapter boxcar, and for the rest of the steamup she pulled an eight car consist.

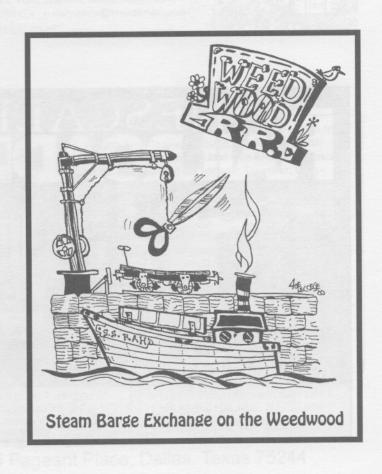
The total run time for the Forney, on Saturday, was about three hours. The last run of the day she was in motion for twenty minutes. This was with the eight car consist and just a normal (for me) fuel and throttle setting.

As you surely have figured out by now, the new Roundhouse Forney is a great steamer. And yes, the Forney runs at least as well as my other three Roundhouse engines.

We are hoping to be invited back to Lemma and Marvin Nite's place in the fall for another steamup.

Now we look forward to the next Texas steamup where we will see John Thompson's continuing project fueled with coal.





SOUTHERN STEAM TRAINS



Jim Pitts 201 Grandview Circle Travelers Rest, SC 29690 864.834.3954 / 834.7625(fax) jimpitts@southernsteamtrains.com

www.SouthernSteamTrains.com

"the premier web site for Aster information"

VBS boiler set \$425 + shipping. Includes:

Cheddar custom boiler, sight glass, pressure gauge, Roundhouse throttle, Goodall valve, check valve, ceramic burner, gas tank, gas line & lubricator.

Shay truck set \$350 + shipping. Includes:

Sierra Valley 26" wheels and axles (4), SDP 4:1 gear set (4), left journal castings (4), right journal castings (4), bolster end caps castings (4) & u-joint castings (8).

The Frame set \$100 + shipping. Includes:

frame, deck, Johnson bar, couplers, stake pocket (to support roof).

Michael Zemek 1908 Edgewater Drive Friendswood, Texas 77546 (281) 993-0302 ● mzemek@wtez.net



Les lecteurs francophones peuvent contacter Guy Ozanne pour obtenir, gratuitement, une traduction sur un élément de texte paru dans SitG .41 rue Jeanne d'Arc, 94.500 Champigny, France; tél (33) 01-48-83-62-86; e-mail <Guy.0zanne@wanadoo.fr>

Build All These Engines and More!



In the new book *Home Made Steam Engines — Vol- ume 1, The Wobblers*, by Edward G. Warren. Eight simple steam engines, a generator, a camp stove-fired boiler, tips and ideas. 40 pages plus cover. \$24.95 + \$2.00 P&H. *Visa, MasterCard and Discover accepted.*

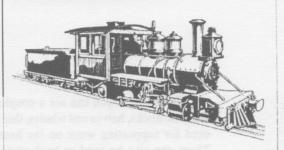
CAMILIBACK BOOKS

P. O. Box 1226, Dept. S - St. Cloud, MN 56302

(320) 654-0815 • Fax (320) 240-8690

Brandbright







We know the picture isn't the Forney, but the new Forney is similarly styled to and as superbly detailed as the popular Liberty Belle. With its Roundhouse chassis and boiler, Liberty Belle is the first production steam engine to be fitted with the new, totally 'glitch' free RCS radio control which not only reliably controls the engine, it also gives you radio control of the optional whistle and bell sounds!

Not only do both locomotives perform excellently, Liberty Belle and the Forney look exceptional! With their large lamp, fancy domes, Liberty Belle's real wood framing and pilot beam and lots of polished brasswork, they both give a century old style.

In fact they make a great pair of locomotives for display and hard work!

Brandbright offer many other real steam locomotives, a lot of bits and pieces for the steam locomotive builder and all the other things that a garden railway needs:- Track, Coaches, Wagons, Passengers, Bridges, Stations, Station Lamps - and a whole lot more!



To get a copy of the Brandbright Catalogue for supply direct from the UK, at keen prices, send \$5 to:

Brandbright Ltd

The Old School, Cromer Rd, Bodham, Holt, Norfolk, NR25 6QG, U.K. Telephone: 01263 588755 Fax: 01263 588424 e-mail: steam@brandbright.co.uk www.brandbright.co.uk





Always Whimsical, Not Usually To Scale



The FUNNEST Model Railroad Magazine!

Most of the time you're serious about modeling, but sometimes you just gotta have fun! At A.W. N.U.T.S., we look at the lighter side of modeling.



VISA \$22 US / \$32 International



A.W. N.U.T.S. Magazine P.O. Box 8523, Red Bluff, CA 96080

800-830-2234 www.awnuts.com

LIONS ARE COMING!



First Class Coach to run behind Aster's Lion from Wagon and Carriage Works. Resin body with nickel silver frame and lost was and white metal parts. Available in six names: Traveller, Greyhound, Experience, The Lark, The Times, and Huskisson, Available NOW, \$295.00 plus shipping.



Second Class Coach to run behind Aster's Lion from Wagon and Carriage Works. Resin body with nickel silver frame and lost wax and white metal parts. Available NOW, \$239.00 plus shipping.



Aster's Lion. Kit and Ready-to-Run. Taking orders NOW. Call or e-mail us for pricing!!

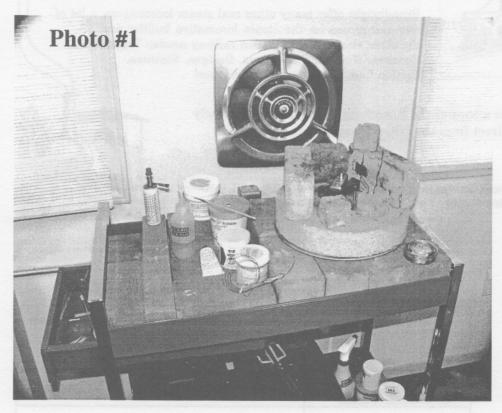
Doubleheader

sales@gaugeone.com 972-247-1208 3725 Pageant Place, Dallas, Texas 75244

The Gauge One Shop Hearth

text and photos by Kevin O'Connor

Part two of a series...



COMMON AIDS, TOOLS AND SUPPLIES USED WITH THE PORTABLE GAUGE ONE HEARTH

Photograph #1 shows several items arranged on the worktop of the portable hearth. The little concrete blocks on top of the 8 inch diameter paver, with the wires sticking out of them, are used in the construction trade to support rebar or wire mesh off the soil prior to and during the pouring of concrete for slabs, driveways and sidewalks. The block itself keeps the wire/bar above grade and the wire, when twisted, keeps the assembly in place. I use these blocks in very much the same way for location and holding things except that I solder what they hold as opposed to drowning them in aggregate. Their use will become clearer in a future segment of this series.

Behind them you can see a couple of concrete bricks, halves and wholes, that are used for supporting work on the hearth. These can also be used as back stops or walls behind work lying on the round paver or the base work area to keep heat from a torch from being dissipated. I will revisit their use another time as well.

In the foreground is a pin vice with a loop of 1/32" diameter silver braze filler metal passed through it. The pin vice is a handle for the application of filler metal to a prepared joint. Using the pin vice in this fashion prevents heat traveling back to your hand as you feed the filler metal into the hot flame of the torch. To the right of the pin vice is a coil of 1/16" diameter silver braze filler metal. I use a leather glove when applying this size solder to a hot joint.

Behind the pin is a small white jar containing ordinary brazing flux. The next jar back contains a high temperature brazing flux. The pint ice cream container has a small hole bored in its lid. The container is about 1/3rd full of plain tap water. On top

of the container is a small artist's paint brush that I use to apply small amounts of flux to silver solder joints prior to heating them up.

After I use the flux brush I rinse it off in the tap water in the ice cream container by inserting it through the small hole in the top and swishing it around. I draw the bristles across the edge of the hole to 'wring them out' prior to letting them dry. This ensures that I have a clean, flexible brush tip each time that I need to apply flux. I will address the preparation of silver braze fluxes in a later segment.

Just behind the first flux jar is a second jar that contains high temperature flux. Its purpose is to protect joints that will see excessive heating in the brazing process from surface oxidation. I rarely use it.

Along side of the high heat flux is a tube of No-Corrode

low temperature flux intended for soldering use. This tube contains petroleum based rosin flux which is a must for use in any kind of electrical application. Rosin based fluxes will not cause residual corrosion of the joint; acid based fluxes will.

The larger bottle with the eye dropper stuffed in it is a container of *Stay Bright* acid flux. This acid flux is called an active flux in the trades because of its aggressive nature in both removing surface contaminants and in the prevention of their reoccurrence during soldering operations.

I need to add a strong safety note at this point concerning the use of acid as a flux material. Acid fluxes are intended for use in soldering applications only! They are not intended for use in high heat situations, and are of no use in brazing operations. The fumes given off by acid fluxes in soldering operations are deadly and, if inhaled, will easily cause first degree burns to your internal breathing apparatus. Proper ventilation is a requirement for their use. Please notice the kitchen type, exterior venting, wall exhaust fan right behind the hearth. I use this fan every time I solder or braze in order to draw off the fumes of combustion.

Another benefit of proper ventilation when using acid fluxes is that the potential for corrosion on exposed metal such as lathe and mill ways and tables as well as hand tools and measuring instruments is minimized. The large jar at the back of the hearth contains a substance commonly called 'heat dam'. It is a semi-rigid paste that can block heat away from surfaces to

which it is applied. I use it to hold small parts during joining operations.

Also at the back of the hearth is a small butane fueled torch that I use to solder and braze tiny components together as well as heat up Loctited parts prior to disassembly.

TORCH AND GAS BOTTLES

The gauge one shop hearth is but a prop without the means to heat metals to the temperatures at which they can be worked. Photograph #2 shows the two torches that I normally use to solder/braze assemblies on my hearth. The black bottle, to the left, contains acetylene gas and is connected to a Turbo Torch hand-piece that accepts different size torch tips so that you can tailor the amount of heat output (btu) to the job at hand. The right hand green bottle contains oxygen gas.

You will notice that I have duct taped a small propane bottle to it and that I have connected a small handpiece with a nonchangeable torch tip to both the regulator on the oxygen bottle,



and the discharge valve on the propane bottle. This smaller torch is what I use for very high temperature work that does not require much heat to accomplish. It started off its life as a Benz O Matic light duty oxy-butane torch kit that I bought in a hardware store. I use it very infrequently. The Turbo Torch is my main hot wrench because of its ability to accept torch tips of various sizes, each of which will produce different btu outputs. In a later installment of this piece I will enlarge upon torches and their tips as I show you how to go about building a custom butane tank and small boiler.





STEAM STUFF CATALOG #5 \$4.00

CHEDDAR MODELS
CATALOG #6.00

MAXITRAK CATALOG %.00

(We are the USA agent for Argyle Steam Locomotives!)

We've got those GOTTAHAVIT items for scratchbuilders, kitbashers and everyone who owns a small-scale live steam loco. BA fasteners, taps, dies, valves, pressure gauges, wick packing, teflon packing, gas filler adapters, fibre washers, copper washers, Sievert propane silver soldering outfits, silver soldering supplies, wick material, boiler insulation, center drills, check valves, cylinder castings, machined cylinders, dowel pins, gaskets, gauges of all kinds, Taig and Sherline lathes and mills, locomotive wheels, locomotive test stands, Steam in the Garden back issues, thread locking compound, syphons, silicone tubing, servo smoothers, R/C goodies, water glass tubing, water injection valves, screws & nuts & washers, safety valves, brass, bronze, steel cast iron....and much more...in stock!

Sulphur Springs Steam Models, Ltd.



P.O. Box 6165 Dept. RB Chesterfield, MO 63006



Tel/FAX 636-52STEAM (636-527-8326) e-mail: SSSMODELS@aol.com

THIS MONTH'S FEATURED PRODUCTS

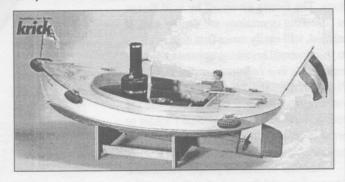
. NEW ITEMS!

Cheddar Models Ltd.

We are an agent for Cheddar Models Ltd., purveyors of the finest in marine steam plants. Cheddar steam engines and boilers are available in factory built or kit form. Check the review of Cheddar's PIPPIT marine steam plant in this issue, and then call us to order your Cheddar catalog today!

Krick Boats

You'll need a boat for that new Cheddar steam plant, and Krick features a wide range of boat kits...there's something for every taste and skill level. The Krick ANNA, shown below, is broad-beamed and stable, even in rough waters.

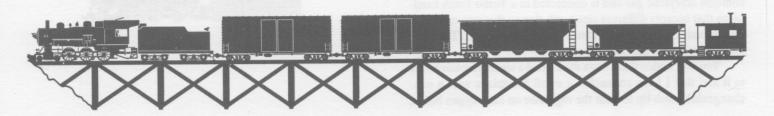


Maxitrak

SSSM is now the North American agent for Maxitrak locomotives and accessories! Available in steam, electric and gas mechanical, as kits or factory built, and in all the popular ride-on gauges. Maxitrak kits can be purchased in sections, making them affordable for just about every budget. Shown below are SWALLOW and Li'L JO, just two of the beautiful and exciting locomotives in the Maxitrak catalog. Contact SSSM for your copy, and see how easy it can be to own a steam loco in 3.1/2", 4.3/4" or 7.1/2" (7.1/4") gauge.



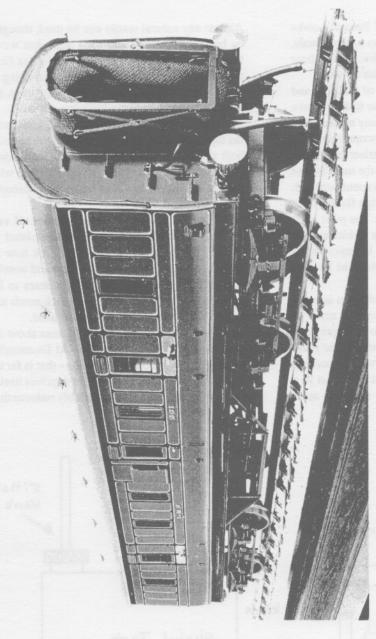




L. M. S. Period Piece...

D. 1778 Gangwayed Passenger Full Brake in Period I livery.

Beautifully presented in 1:32 scale (GAUGE 1)



(LMS) the Corridor Full Brake built to plan D. 1778 design and construction practice down to the sumptuous Some cars entered British Railways ownership in 1947. Our model is available in three paint schemes; LMS Period I (shown), LMS Period II (simplified lining), and B.R. maroon. If you need a parcels or luggage van of distinctive design this uilt in the 1920's by the London Midland Scottish Ry was almost a pure extension of Midland Railway coach livery of Black, Gold, and Crimson Lake. Full Brake is for you.

At a glance specification summary: Length over buffers:

• Finish:

April 1997 Availability:

Wheels: steel insulated finescale

Price:

hand painted and lined Material: Weight:

95% brass, including roof £ 660 plus shipping

THE FINESCALE LOCOMOTIVE COMPANY MARLBOROUGH, WILTSHIRE, ENGLAND

Purcellville, VA 20132-2927 I E & W Railway Supply 38200 Charles Town Pike **Exclusive US Representative:**

The Alcohol Vapourising Burner

text and drawing by Murray Wilson

At Diamondhead 2001 quite a number of Bassett Lowke gauge 0 Moguls, both the new Corgi production and originals, were being run and it seems timely to write a few words about how to get the best performance out of the burner they use.

The Moguls, Super Enterprises and many of the Bing and Carette steam locomotives used a burner similar to that shown in the illustration. It is simple and reliable, but may need adjusting to get the best performance out of it or its locomotive.

The pilot flame's job is to heat the vapouriser head. The pilot flame does not need to be a big one as once the main burner lights, some of its heat is conducted back to the vapouriser head. Too large a pilot flame will cause excessively high flames once the burner is heated up to running temperature. The pilot wick usually should be only just protruding from its holder and be perhaps a little difficult to light when cold. It is important to have a fairly tightly packed wick here as it is below the level of the top of the fuel tank.

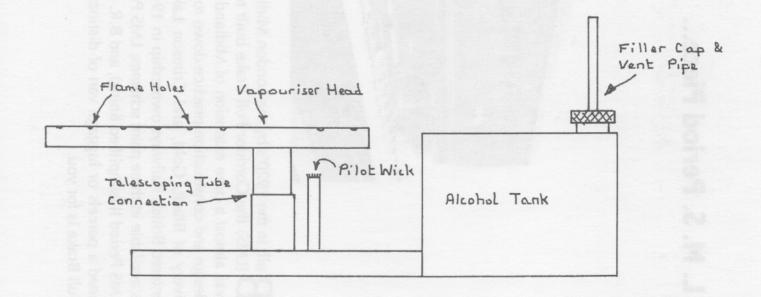
Alcohol is brought up to the vapouriser head by an internal wick. This wick does not carry a flame and usually is made of cotton. The wick has two jobs; to bring alcohol to the vapouriser head and to minimise blowback of alcohol vapour to the tank. So the nature of the wick and its tightness are very important. The original wicks, which were parallel strands of cotton in a braided cotton jacket, probably are not easily available now.

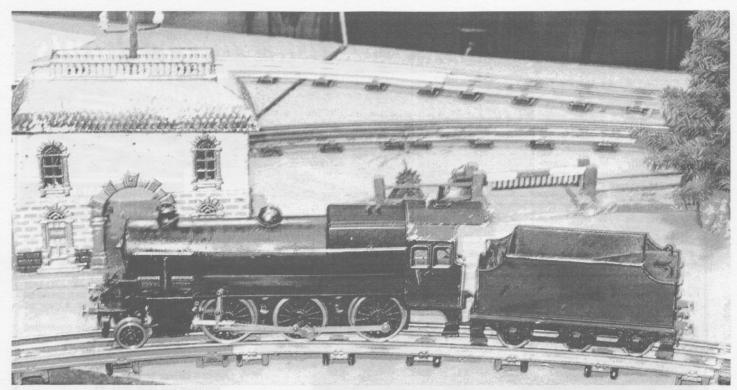
Almost any natural textile can be tried, though cotton seems to be best. Ideally cotton in rope form, but woven will do. Certainly not cotton wool. Asbestos and glass fibre will work, but don't use metal screen. The important thing is to have many small interstices rather than a few large ones, so that the vapour is impeded from blowing back into the tank.

Usually it is best not to have the main wick going right to the top of the tube, so the pressure of the vapour can equalise on both sides of the wick. Larger flames one side of the wick than the other indicate the wick is too high. The wick is accessed by pulling the vapouriser head off at the telescoping tube connection.

There is inevitably *some* blowback of vapour to the tank and it is important to have the vent isolated from the flames. Usually it is led into the cab. To check how much blow back there is, place a finger over the vent and watch the flames. Excessive blow back will cause the flames to leap up, possibly only momentarily. If they do, the wick needs to be packed more tightly, or a different wick material used.

The aim is to have a row of flames about 3/8"/9.5mm high. This should be an adequate fire. At Diamondhead we saw engines with red hot boiler handrails - that is far too much fire and probably self defeating as the fire deprives itself of oxygen, generates offensive fumes and probably reduces the heat output due





Paul Quirk's Basset-Lowke Mogul.

photo by Mike Moore

to incomplete combustion. It also discolours the paint.

If there is leakage at the telescoping joint due to a loose fit then maybe the smaller tube can be expanded to make it tight again. Sometimes a smearing of HMP grease is sufficient to stop the leak. I use automobile disc brake grease. In the worst cases one or both tubes must be replaced, or a solder seal may be made once the wick is properly packed.

It may take an hour of fiddling to get a burner working properly, but it is time well spent. Do not use Methanol in this type of

burner - a fuel tank fire will almost certainly result due to Methanol's low boiling point.

One last note. Owners of a Bassett Lowke Enterprise might consider making a vapouriser to replace the original wick burner. It improves these already fine runners.



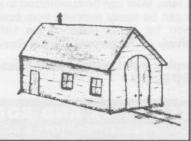


O.S. KOPPEL 4-3/4 inch Kit or RTR

Information on O.S. Engines live steam locomotives in 3-1/2" to 7-1/2" gauges available from David Hamilton at:

THE ENGINE SHED

#2 - 793 Queen Street, Kincardine, Ontario, Canada. N2Z 2Y2 (519) 396-3443 dhamilton@bmts.com Http://www.bmts.com/~dhamilton



"The Kit That Doesn't Quit" **JigStones**



Silicon rubber molds for building garden railway structures. Catalog and color photos, send \$3 (refundable) Sticks & Stones, PO Box 211, Elbridge, NY 13060 (315)689-3402

Model Boat Kits & Steam Power Plants

steam boat became popular. It was fashionable to own a steam boat, either as a private yacht, working boat or for passenger transportation. The model Victoria (circa 1905) has been created for the true friend of old steam engines. As was the case around the turn of the century, engine and boiler are fully visible. The hull of the Victoria is from ABS. The plywood parts have been laser cut for precision. Decking strips are Mahogany and teak. Puffin engine can be easily controlled by R/C 2 channel (R/C & fittings not included)



MODEL BOAT KIT &

The Alexandra is a typical steam launch from the beginning of the century (circa 1900). All wooden parts are laser cut. Hull constructed from ABS. Shaft,

PINTAIL VERTICAL propeller and accessory pack included in kit. Boat powered by Cheddar Pintail Vertical Steam Engine that has powerful Vee Twin engine. Copper boiler equipped w/water gauge, pressure gauge and gas burner. Pintail engine can be easily controlled by R/C 2 channel (R/C & fittings not included).

- ☐ ALEXANDRA Steam Boat Kit and Accessory Pack \$399.90
- PINTAIL Deluxe Vertical Kit with Refillable Gas Tank \$656.85
- Combination Package ALEXANDRA with PINTAIL Deluxe \$951.07

BORKUM TECHNICAL DATA: Scale: 1:10 Length: 35 1/2 " (904 mm) Beam: 13" (330 mm)

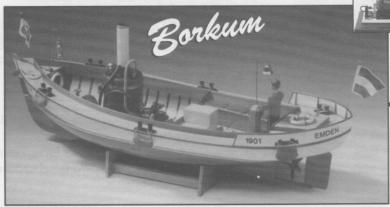
- ☐ BORKUM Steam Boat Kit without steam engine \$369.95
- ☐ BORKUM Accessory Pack \$149.95
- Puffin Deluxe Vertical Machined Kit with Refillable Gas Tank \$789.90
- ☐ COMBINATION PACKAGE BORKUM, ACCESSORY

& PUFFIN VERTICAL ENGINE \$1178.82 Accessory Pack for BORKUM Contains: 3 pair of side fenders, 1 bow fender, 1 storm lantern & stand, 1 bell stand, 2 safety belts & accessories, 6 double bollards, 2 flags, masts & accessories, 1 doll operator)

□ VICTORIA Steam Boat Kit & Accessory Pack \$449.90

☐ PUFFIN Deluxe Vertical Machined Kit w/Refillable Gas Tank \$789.90

☐ Combination Package VICTORIA with PUFFIN VERTICAL \$1115.82



7ith the steam launch Borkum, we are introducing a new boat capable of using the larger Cheddar Puffin Steam Plant. Launches like the Borkum (circa 1901) supplied goods and transport to the North Sea islands of Scandinavia. The stable hull is 2 mm ABS and already molded. All plywood parts are laser cut. The rudder is solid brass. All transfers (included) are water resistant. Construction time for this kit is approximately 200 hours. The recommended steam engine is the Cheddar Puffin Vertical.

NEW! American FanTail Assembled Steam Launch S.L. Claire



his beautiful running high quality Cheddar Launch "Claire" is fully assembled & ready to operate. Recapture the "Golden Age of Steam" heat is converted into mechanical energy via water (steam). The boiler soon reaches working pressure (30 psi) & you quickly experience the joys of steam in action. This Steam Launch is constructed from high quality ABS. The roof is easily detached from the boat to work on steam engine. Running

time 30 min. Engine is self starting and reversible. 2 channel radio included. Boat is powered by Cheddar Pintail Vertical Steam Engine, that has powerful Vee Twin engine. Copper Boiler equipped with water gauge, pressure gauge & gas burner & gas tank. Boat can be customized to your own specifications. Complete engine and boiler can be easily removed from boat. A boat powered by a Cheddar marine engine won 1st, in it's class, at the 1999 World Championship Naviga. Distributed exclusively by Yesteryear Toys & Books Inc.

STUNNING COLOR STEAM CATALOG \$6.95 Refundable with Order, 160 Different Models; Marine, Model Boat Kits, Stationary Engines, Trains, Cars, Tractors, Accessories & Parts.

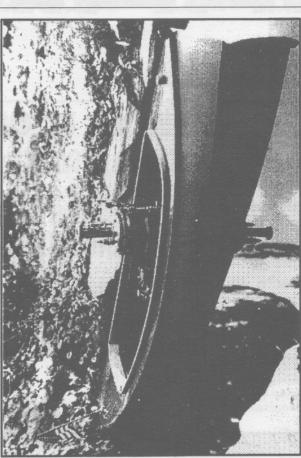
Steam Launch S.L. Claire assembled complete with Cheddar Pintail Deluxe Engine & 2 Channel Radio ready-to-run \$1395.00

DIAMOND ENTERPRISES AND BOOK PUBLISHERS

DIVISION OF YESTERYEARTOYS & BOOKS INC.

DEPT. SIG2 BOX 537 ALEX. BAY NY 13607 • TOLL-FREE PHONE: 1-800-481-1353 • TOLL-FREE FAX: 1-800-305-5138 Shipping & Handling \$12.00 • MASTERCARD / VISA / CHECK • www.yesteryeartoys.com

Diana Steam Launch



Famed marine architect Weston Farmer designed this graceful and beautiful steamboat polyester resin. The hull is gloss white, and the deck is Boston Buff. The planking, in the style of the Gay '90s. Diana is impecably modelled in fiberglass-reinforced drawings and material for the shaft alley and nudder tube. We guarantee its safe boot-top and deck seams are clearly incised. Supplied are hull, deck, complete delivery to your home. \$276.00 plus \$24.00 shipping and handling.

Full Size 4,188 lbs

.9.9

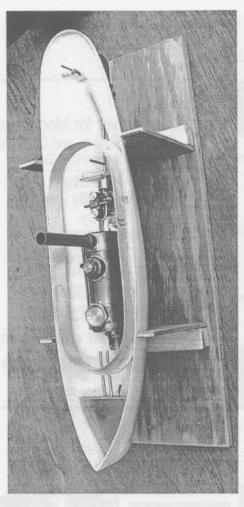
Model

LO.A. Beam CANOPY

featured on the cover of Live Steam magazine in 1981. The canopy is also Boston Buff Diana's canopy has been designed by Tom Lexow, whose radio-controlled Diana was colored and makes a lovely addition to the overall looks of your launch. \$85.00 plus \$12.00 shipping and handling.

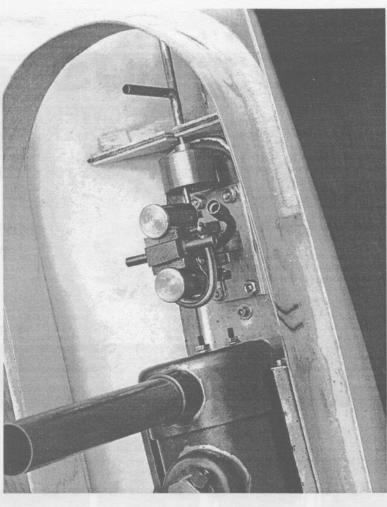
Bay-Com

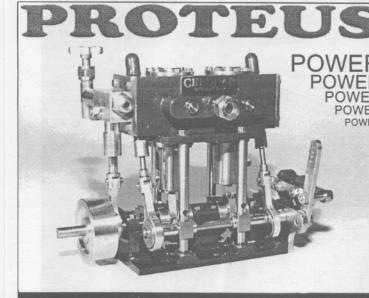
VISA Toll free (888) 452-6947 - Phone/fax: (616) 276-7194 P.O. Box 322, Interlochen, Michigan 49643 http://www.bay-com.com



Top: Mini steamboat under construction by Carl Berg.

Bottom: Scratchbuilt steam plant installation in mini steamboat, all by Carl photos this page Ron Brown Berg.





CHEDDAR MODELS LTD

SUITABLE FOR:-

CRUISER BOSTON TYPHOON MARIE FELLING IMARA

EASY PAYMENT PLAN AVAILABLE CATALOGUE £5.00

CHEDDAR MODELS LTD SHARPHAM ROAD, CHEDDAR, SOMERSET, BS27 3DR TEL: 01934 744634 FAX: 01934 744733 WWW.modelsteam.co.uk



Steam Power for Model Boats Engines, Boilers, and Controls Refillable Fuel Tanks

Featuring
Special Quality Boat Kits
By
John Hemmens

The Steam Works Inc
Tel 831 338 2848
Fax: 831 338 1322
e-mail rbell@ cruzers.com
www.thesteamworks.com





Argyle Locomotive Works

Gauge One Steam Locomotive Engineers

Production Schedule - 2001 American Locomotives

• S.R & R.L 10 2-4-4T Gas/Alcohol Fired, 45/32mm, G Scale: 1-19

• Philadelphia 0-4-2T Gas Fired, 45/32mm,G Scale: 1-20

• Hawaii Fowler 2-4-0T Gas Fired, 45mm,G Scale:7/8"-1ft

• 'Bantam' 0-4-0T Gas Fired, 45/32mm,G Scale: 1-19

Quality, hand built live steam models for live steam railways. Enquires and reservations welcome: 8am-6pm Mon-Fri.

Ph/Fax Intl: 61-359-686573. Natl: 0359-686573. E.Mail. argyleloco@mail.fhills.hotkey.net.au 241 Belgrave-Gembrook Rd. Clematis. 3782 Australia www.argyleloco.com.au

In the USA... Sulphur Springs Steam Models phone/fax: 636-527-8326 e-mail: SSSMODELS@aol.com

CHECK IT OUT!

Steam in the Garden Online at

www.steamup.com

Swap Shop, Articles, Photos, Steam Chat, Message Board...and lots more!



MEASURE SCALE SPEED & DISTANCE ON YOUR MODEL RAILROAD

by John Thomson

For under \$20 and a few minutes of your time, you can install a scale speedometer on your model train. By using an inexpensive digital bicycle speedometer, almost any model railroad car can be set up to measure scale speed, including maximum and average speeds. See how far (in scale miles) and long (elapsed time) your steam or battery loco can travel per run. Or, measure the length of your track in scale miles. You can choose the Quick Installation to get "up and running" as soon as possible, or, you can take the time to do a more permanent installation.

Materials list:

Equus brand Cyclocomputer, Model 810 270 VENUS (\$17.99) available from K Mart bicycle department. Note: A less expensive version of the Cyclocomputer is also available. It is the Model 810 230 ACE, (\$11.99), which will measure speed and distance only.

Rare Earth Magnets, Catalog # 64-1895, package of 2 (\$1.59) available from Radio Shack.

Double-sided foam tape, Catalog # 64-2361, package of four 1 x 3" strips (\$1.99) available from Radio Shack.

2-- # 64 rubber bands

Almost any type of un-sprung 4-wheel model flat car.

Optional (for permanent installation):

1-#6-32 x 1 ½" machine screw, 2 nuts, and 3 to 5 spacer washers, as needed, to install wheel sensor and bracket band to car platform.

1/2" nut (used as a spacer) spray painted black

Drill with 9/64" bit

Electrical solder (60-40) and small soldering iron

Two, 1 inch pieces of heat shrink tubing, small diameter, Catalog #278-1627, package of 12 assorted diameters (\$1.99)

Quick Construction:

Although almost any model railroad car could be used, a flat car is probably the best choice for ease of installation. It also allows the best accessibility to, and visibility for, the speedometer readout. The flat car used in this construction article is a Northeast Narrow Gauge 4-Wheel Flat Car Kit # 261, (\$19.95 at the time it was purchased). This flat car is 1:20.3 scale, has a wooden frame/deck with metal wheels, and can be built as "0" or "1" gauge.

The Cyclocomputer is about the same size as a large digital watch. It has two buttons and a digital display on the face. This main unit slides into a bracket band, which would normally be attached to the handlebars on a bicycle. The bracket band is attached by a length of wire to the wheel sensor. The sensor mounting band and magnet will not be used, and can be discarded.

Remove the two rare earth magnets from the package (leave them stuck together), and attach them to the center of a wheel axle (see Figures 1 and 2). These magnets are very powerful, so magnetic attraction is sufficient to hold them to a steel axle. Also, the small size of these magnets will prevent the wheel/axle assembly from being thrown out of balance. Use silicone glue to attach them to a plastic axle.

Figure 1
Speedometer car end view

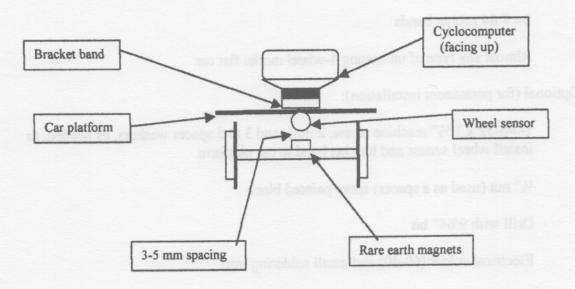
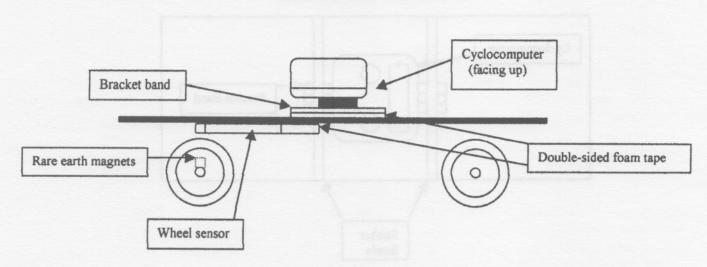


Figure 2 Speedometer car side view



NOTE: Using alcohol and a rag, clean the mounting surface for the foam tape, to insure it will stick. Using appropriate thicknesses of double-sided foam tape, mount the wheel sensor under the car platform such that the spacing between sensor and magnets is 3-5 mm (Refer to Figures 1, 2, & 3). Note that the groove on the round-nosed end of the sensor should be directly above, and within 3-5 mm of, the axle with the magnets attached.

Figure 3 Wheel sensor mounting--underside of car platform

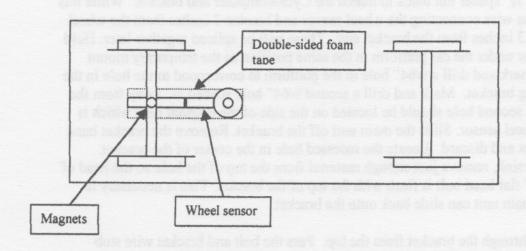
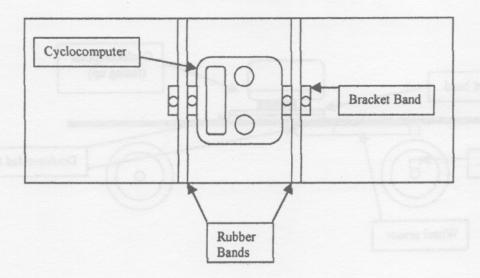


Figure 4
Bracket band mounting--Top of car platform



Cut both ends of the bracket band down to ¾ inch. This will leave two mounting stubs, each with two holes, which can be used to mount the bracket to your speedometer car platform top (Refer to Figure 4). Use double-sided foam tape and/or rubber bands to hold the bracket band in place on the platform of the car. Loop the excess wire, tie, and place on the top of the platform. Now, proceed to Calibration.

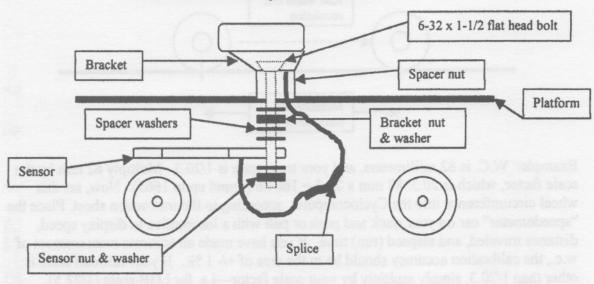
Optional permanent installation (refer to Figure 5):

Spray paint the ½" spacer nut black to match the Cyclocomputer and bracket. While this is drying, cut the wire connecting the wheel sensor and bracket 3 inches from the wheel sensor end and 3 inches from the bracket end. These will be spliced together later. Hold the wheel sensor under the car platform in the same position as the temporary mount above. Then, mark and drill a 9/64" hole in the platform to correspond to the hole in the sensor mounting bracket. Mark and drill a second 9/64" hole spaced ¼" away from the first hole. This second hole should be located on the side of the original hole which is opposite the wheel sensor. Slide the main unit off the bracket. Remove the bracket band from the bracket and discard. Locate the recessed hole in the center of the bracket. Using a countersink, remove just enough material from the top of the hole so the head of the 6-32 x 1 ½" flat head bolt is flush with the top of the bracket. This is necessary in order that the main unit can slide back onto the bracket.

Insert the bolt through the bracket from the top. Pass the bolt and bracket wire stub through the ½" spacer nut. While holding the bracket and nut together, pass the bolt and wire stub through the holes previously drilled in the car platform. The bolt should pass through the first hole. The wire stub should pass through the second hole. Place a flat

washer and 6-32 nut on the bolt from the underside of the car platform and finger tighten the nut.

Figure 5
Permanent mount expanded side view



Center the bracket and spacer nut on the car platform top. Snug the 6-32 nut to hold the bracket and spacer nut in place.

Mount the wheel sensor bracket on the bolt stub, using flat washers to get the correct 3-5 mm magnet spacing. Install another flat washer and nut to hold the sensor in place. Snug this second nut, making sure the wheel sensor is properly centered and spaced above the axle magnets.

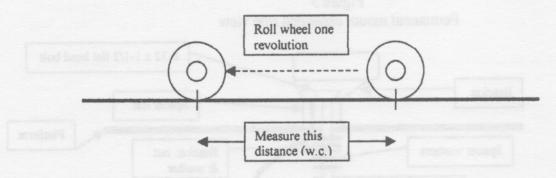
Finally, strip insulation from the wire stubs and install heat shrink tubing. Use the smallest diameter tubing that will easily slide onto the wire ends. Splice and solder both conductors of the wire with electrical (60-40) solder. Use a heat gun to shrink the insulation tubing around the solder joints. If you would rather have a splice that can be easily removed, twist the wire ends together and attach small wire nuts.

Slide the main unit onto the bracket until it clicks into place.

Calibration:

Measure the circumference of a car wheel (Refer to Figure 6). Do this by placing the car on the track, and marking the point on the bottom of the wheel where it is in contact with the track. Extend this mark to the track. Now, roll the car until the wheel has traveled exactly one revolution. Make another mark on the track to coincide with the mark on the wheel. Using a metric ruler, measure the distance between the two marks on the track. This distance is wheel circumference (w.c.). Now, multiply the w.c. in millimeters by the scale factor.

Figure 6
Measuring wheel circumference



Example: W.C. is 82 millimeters, and your train scale is 1/20.3. Multiply 82 mm by the scale factor, which is 20.3: 82 mm x 20.3 = 1664.6 (round up to 1665). Now, set this wheel circumference into the Cyclocomputer, according to the instruction sheet. Place the "speedometer" car on your track and push or pull with a locomotive to display speed, distance traveled, and elapsed (run) time. If you have made an accurate measurement of w.c., the calibration accuracy should be in the area of +/- 1 %.. If your railroad scale is other than 1/20.3, simply multiply by your scale factor—i.e. for LGB scale (1/22.5), multiply w.c. by 22.5. For Aristocraft scale (1/29), multiply w.c. by 29, etc.

How and why does this work?

The Cyclocomputer calculates speed/distance based on wheel circumference, or distance traveled per wheel revolution. The computer doesn't care whether it is calculating speed/distance of a bicycle wheel or a model train wheel. The only difference between the two is scale. Speed and distance scale linearly according to the scale factor. To calibrate for the bicycle, the wheel circumference (in mm) is entered into the computer directly. To calibrate for the model train wheel, the w.c. is multiplied by the scale factor and then entered into the computer.

Here is how distance scales down: There are 5280 feet in a full-scale mile. To find the number of feet in a 1/20.3 scale mile, divide 5280 ft. by your scale factor: 5280 / 20.3 = 260 ft. At 1/22.5 scale, a mile would be 235 ft., etc.

You can use this calculation to check the calibration on the Cyclocomputer. To do this, you will have to accurately measure the length of your track. Since most model tracks are a continuous loop, mark a starting point, and figure out how many times around the loop will total up to 260 ft. Mark the 260 ft. point on your track.

Set the Cyclocomputer distance register to zero. Using a locomotive, push or pull the speedometer car from the starting point on your track to the 260 ft. point. The distance readout should be very close to 1.00 mile. If you want to "fine tune" the calibration, it will be necessary to reset the wheel circumference value in the Cyclocomputer by trial and error. NOTE: A higher w.c. setting will cause the readout to increment faster. A lower w.c. setting will cause the readout to increment slower.

Example: At the 1665 w.c. setting, your speedometer car ends up past the 260 ft. point on your track before it reads 1.00 mile. In this case the readout is incrementing too slowly. It will be necessary to reset the w.c. to a slightly higher arbitrary value, say 1685. Reset the distance register to zero and re-run the scale mile. The 1.00 scale mile readout should occur a bit sooner, perhaps even before the car gets to the 260 ft. point. Now, you will need to reset the w.c. to a slightly lower value, say 1675, and re-run the scale mile. Run and reset as many times as necessary to get the 1.00 mile readout to occur at exactly the 260 ft. mark on your track.

At this point, your speedometer has been calibrated as accurately as it can be. Remember to re-calculate the w.c. setting for different scales. Now, you have no excuse to run your trains faster than scale speed!

Acknowledgement: Clark Lord for his help with scale speed and distance.



Paul Forsyth Models

Tel 011 44 1604 494995

£21.00

£21.00

78 Laburnum Crescent, Northampton NN3 2LF, England, U.K.

Original Detailed Construction Drawings for Gauge One (British Outline - 10mm = 1' Scale) Spirit Fired Locomotives.

Single	Incida	Cylinder	Locos.
Siliule	IIISIUE	Ovilliael	LUCUS.

Single Inside Cylinder Locos:	
C. R. McIntosh 4-6-0 918 class.	£17.00
G.C.R. Robinson 2-6-4T Coal Tank.	£17.00
G.C.R. Robinson 4-6-2T "Empire Maid".	£17.00
G.C.R. Robinson 4-4-0 Director Class with equalised suspension	£17.00
M.R. Johnson "Belpaire" 4-4-0 with Bogie Tender.	£17.00
M.R. Johnson 0-4-4 Tank with equalised suspension & vertical hand pump.	£18.50
SE&CR Wainwright Class C 0-6-0 tender loco.	£18.50
Twin Outside Cylinder Locos, fully sprung:	
G.C.R. Ronbinson 4-4-2 Atlantic – Jersey Lillie.	£17.00
L.T.S.R. 4-4-2T Tilbury Tank, with side tank hand pump.	£18.50

Highland Railway Castle Class 4-6-0, with axle & hand pumps, bogie tender.

BR Peppercorn K1 2-6-0. Slip eccentric inside valve gear, dummy outside gear,

tender hand pump, etc.

Twin Inside Cylinder Locos:	
NER Worsdell Class R1 4-4-0 Tender loco.	£21.00
LNWR 4-6-2T "Prince of Wales" Tank, with vertical hand pump in cab.	£21.00

* U.S. Customers Send \$30 for any set. Includes Air Mail Post.



For the finest quality in live steam, we offer products from ASTER, FINESCALE LOCOMOTIVE COMPANY, Accucraft, Roundhouse and O.S.











These and other fine Live Steam Locomotives and accessories are available from:

Live Steam Locomotive Information:

ASTER Latest Catalog & Price List \$15 O.S. Latest Catalog & Price List O.S. 30 minute Video (NTSC ONLY)

\$5 \$20 S.T.E.A.M.

Steam Trains, Engines, And Models PO Box 123, Windsor, CA 95492, USA Tel / Fax 707-838-8135, e-mail: steam4me@metro.net

Visit our web site at: www.steam4me.com

ACCUCRAFT TRAINS



New Release:

Ida 0-4-0 Saddle Tank

2-4-2 w/ Tender

C16 D&RG #42 C16 D&RG #268 "Bee" C16 D&RG #268 Black C16 D&RG #278



MUSEUM QUALITY LIVE STEAM MODEL TRAINS

(1:20.3 Scale, 45MM GAUGE)

SEE YOUR ACCUCRAFT DEALER TODAY, COLOR CATALOG \$5

1785 TIMOTHY DRIVE #3, SAN LEANDRO, CA 94577 * Tel: 510-483-6900 FAX: 510-483-9100

W W W . A C C U C R A F T . C O M

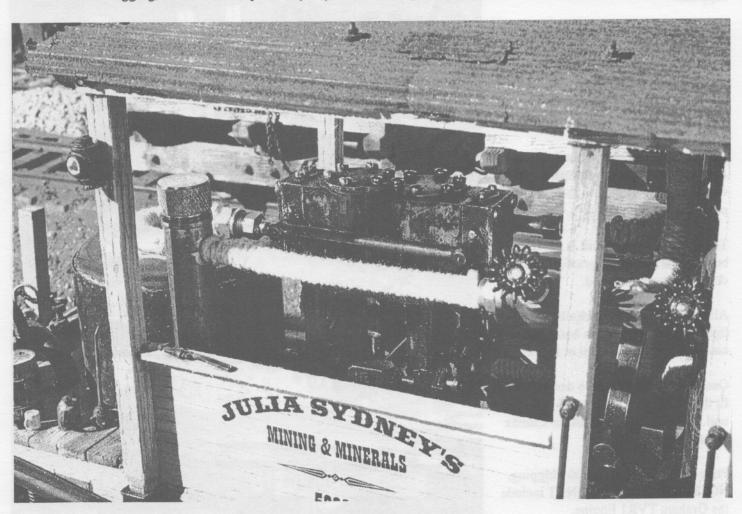
D. J. B. Engineering's Climax Class A Logging Loco Kit

by Sonny Wizelman photos by Steve Crise

I became aware of this locomotive at Diamondhead 2000, where it was being shown for the first time.

The locomotive appealed to me for two reasons. First, it was American logging, which makes up the majority of

The locomotive had to be ordered from England. The recommended engine is the TVRIA by Graham Industries. The engine is not included in the locomotive kit. It had to be purchased separately. It was relatively easy to assemble



my rail empire. Secondly, it was a model that had to be built from a kit. I could see the potential for making it look "backwoodsy" as well as getting the satisfaction that comes with building it myself. as the instructions are clear with all the parts identified. Only hand tools are required. It takes several hours to assemble. I ran it on air first, as recommended, and the longer it ran, the smoother it became.

Specifications:

15 ton Class A Climax Logging Locomotive Kit in 1:20.3 scale for 32mm or 45mm track gauge.

The kit is based on a typical 15-ton Class A Climax locomotive, and can be assembled with the usual hand tools. No machining required.

Pipe fittings are supplied to fit the TVR1 steam motor unit. Lost was cast driving trucks with brake gear and gear drive are supplied assembled and ready to run in 32mm or 45mm gauge.

Wooden frames and body...all wood supplied.

Copper boiler assembled and tested, butane fired with ceramic block burner. The boiler is fitted with: Water gauge, regulator takeoff fitting, blower valve, safety valve, pressure gauge, water fill valve & sandpot.

Cast brass smokebox with all fittings & headlamp. Round water tank with vacuum filling system. Lubricator and pipework all supplied.

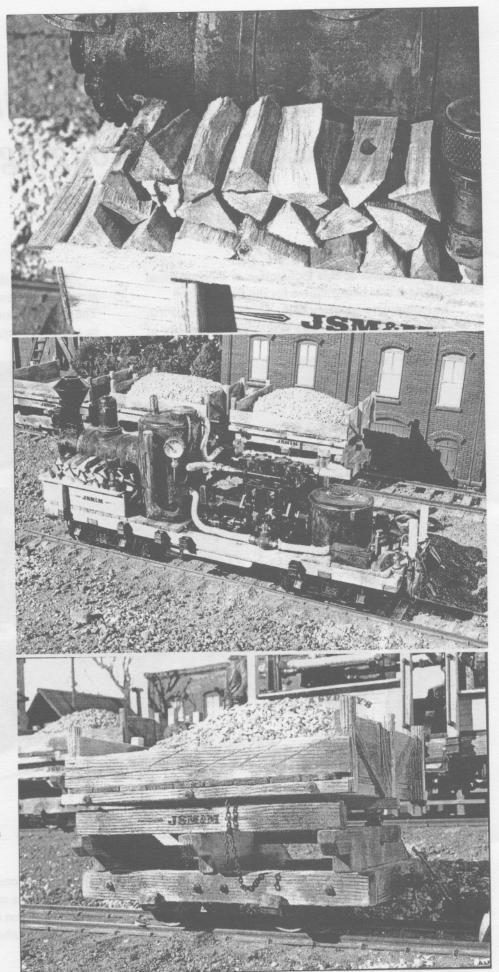
The choice of power unit is left to the builder, but a 2-speed gearbox and drive shafts are supplied.

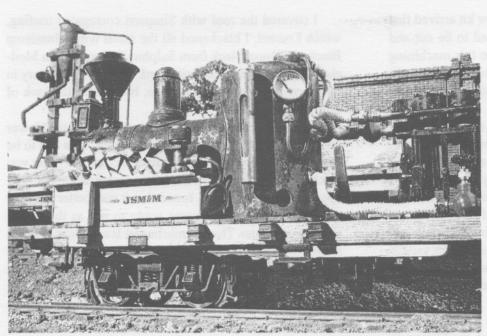
All fittings such as: handrails, headlight, etc. are supplied in brass. All nuts and bolts are in steel or brass.

Gearbox and bedplate are designed to fit the "GAGE" TVR1 steam motor unit. This is available with the Climax kit at extra cost.

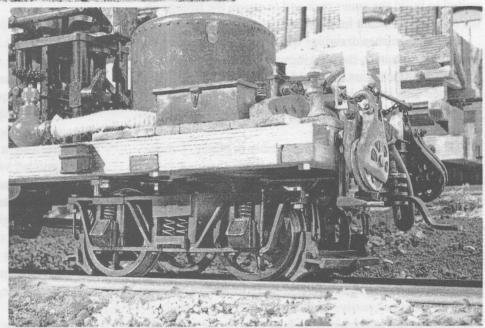
Price \$1650.00 plus \$15.00 Shipping. NOTE: This price DOES NOT include the Graham TVR1 Engine.

Available in the USA from Sulphur Springs Steam Models (see ad in this issue for contact information).





This page and facing page: Detail, detail, detail! Beautiful work by the Author. If it wasn't for the oversized gauge in the photo above, anyone would be hard pressed to tell that this is a model, and not the real thing. Even the hand split wood load looks authentic.





I did not find out until the locomotive kit arrived that the crankshaft on the Graham engine had to be cut and milled to fit a spur gear. It is better to do this machining when the engine is unassembled. However, with the help of a skilled machinist, we were able to mill the crankshaft without disassembling the engine.

The kit arrived and, as I always do, I studied the parts and the instructions. The instructions were vague in several areas. For instance, there is a reference to a dummy gear box which I was unable to identify on the plans. I hoped to be able to review the instructions with David Bailey of D.J.B. Engineering at Diamond Head 2001.

I e-mailed Bob Paule of Sulphur Springs Steam Models (I purchased the locomotive from him - please see his ad in this issue) and he forwarded my questions to David Bailey. With their help, I was able to get my questions answered and begin construction.

The boiler comes assembled. There is soldering required to build the water tank and to attach the fittings on the ends of the steam inlet and exhaust pipes.

D.J.B. furnishes drawings with dimensions printed on them. Unfortunately, the drawings are not exactly the same size as the dimensions. It would have been better if some reference was made to this discrepancy and the builder was informed as to which to use, the drawings or the printed dimensions.

The suggested method of assembly is gluing. I chose to bolt everything together as this allows the loco to be disassembled if service is necessary.

There are references in the written instructions which would have been much clearer if the same terms were printed on the drawings with arrows to make it easier to understand.

One bogie drive shaft came bent and the handrail rod was missing. These were promptly sent to me.

You must be creative in the assembly. There is no explanation in the instructions on how to affix the gas tank. A wood load is suggested to cover the gas tank, but there are no suggestions as to how to do this. The boiler needed shimming under the forward mounting plate to make it level because I misunderstood the plans and placed the boiler up too high.

Assembly of the piping requires trial and error to get everything to line up. D.J.B. recommends that the roof and sides be one piece. I separated the front sides at the forward roof support. I thought it would make it easier to take the roof on and off. I left off the rod on the rear section completely.

I did not use the step material furnished. I replaced these with Trackside Detail steps. I also used Trackside Details couplers, a hatch on the water tank, a bell, whistle and marker lights. I added some additional clutter from Trackside Details and Ozark Miniatures.

I covered the roof with Simpson corrugated roofing, which I rusted. I blackened all the metal with Aluminum Black and Brass Black from Sulphur Springs Steam Models. I wrapped the piping with cord. This isn't necessary in the warmer climate of California, but I liked the look of authenticity.

At the first firing, we found the exhaust and the blower pipes were not aimed straight up the stack. This had to be corrected. The engine is fired with a suction fan. After you reach approximately 10 PSI, it is recommended that you open the steam blower. I found that it was better to leave the fan on until the loco was ready to run as this raises steam much faster. The ceramic burner is excellent. It raises steam very quickly. I am still working on the adjustment of the gas valve. If it is open too wide, the blower cannot keep the flame from leaking out of the boiler and burning the wood structure. This happens when the locomotive is not moving.

The valves for the blower, steam valve and water filling line are both attractive and functional. I had to re-pack the steam valve with graphite to keep it from opening by itself during operation. The boiler refills on a vacuum system and works quite well. This is done as the boiler cools.

The gas tank takes advantage of all the space available under the boiler and allows for a good long run. The boiler has a sight glass and pressure gauge and is equipped with a goodall valve for easy refilling.

The loco has a 2-speed gearing system which works well. When steam pressure has been raised and you start running the engine, the gearbox is in neutral. When the condensate has cleared, you engage the gearbox and the Climax trundles off down the track. The Graham engine has a forward and reverse as well as a second position to increase operating efficiency. The engine runs well at about 20 PSI.

Once all the kinks were worked out, the engine performed well and I am very pleased with both its visual appearance and its performance.



Mason Bogie

Live Steam Model by Rishon Locomotives



Basic features:

Scale 1:20.3

Gauge 1 (45mm)

Constructed as per the prototype with a pivoting front bogie

Butane gas fired

Electronic water level gauge drives a blinking LED on the tender tank

Minimum radius 3 feet

Radio control is standard

Condon & Nesmith stacks optional

AVAILABLE FROM:

Sulphur Springs Steam Models, PO Box 6165, Chesterfield, MO 63006 Tel/Fax 636-527-8326 • e-mail: SSSMODELS @aol.com

Rishon Locomotives 8 Ewandale Cl. Clunes NSW Australia 2480

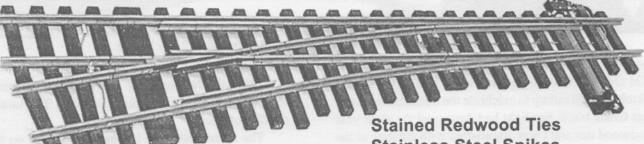
Tel: 61266291115

e-mail: rishon@dingoblue.net.au

For info, send LSASE to:

CODE 332 RAIL

the PARKER Co, P.O. Box 1546 • Camarillo, CA 93011 • FAX: (805) 987-6432



WIDE RADIUS TURNOUTS

Stainless Steel Spikes **Brass or Nickle Silver Rail** Tenmille or Del-Aire throw Included

100% Compatible With LGB & ARISTO Track Available Electric or Non Electric





We accept Mastercard & VISA

Visit our Website at: www.coparker.com or e-mail us at: coparker@msn.com

Steam on the Mad River Short Line

report & photos by Richard Heisler

No one has more fun with the hobby than this bunch!!



Kevin Schindler's Roundhouse JACK crossing the Mad River bridge.

On October 1, 2000 the Mad River Short Line hosted its Oktoberfest Steamup to celebrate the installation of new Llagas Creek track. Sunlight had destroyed the eight year old redwood ties and I was dissatisfied with the look of the 332 rail in any case.

Seen devouring beer and sausages at this gala were: Kevin Schindler, CEO and gandy dancer from Ferrocarril Minas de Cielo Azul; Geoffrey Spenceley, president and chief mechanic of the Nonsensical Secret Garden Railway; and Larry Buerer, honcho of the Bayside & Western, along with his better half Jeannie - Prez of the Birdseed & Whatnot Railway.

This gala was hosted by your obedient servant and his long suffering wife and chef, Barbara. The turnout was small, but select.

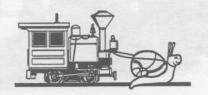
The aforementioned RR moguls arrived on time and in the festive spirit with goods, grits and sufficient tonsil lotion to while away the afternoon. All locus steamed satisfactorily, with the only miscue coming from the home team when the Mad River's Nº 2 found a loose rail joiner and came to rest on the station platform at Iaqua (pronounced like Iowa). No damage or injuries resulted and MRSL Nº 2 was soon back in action.

One feature of this GTG was the diversity of scales.

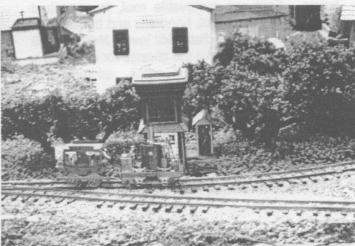
Operating on gauge one were: 1:25 (all MRSL equipment - it comes out to 45.1/2 "gauge, the same as the lost, lamented Arcata & Mad River RR); 1:13.7 in the form of Kevin's seven eighths rolling stock; 1:32 in Geoffrey's B&O Aster "Grasshopper"; and last but not least Larry Buerer's 1:1 human with videocam. No banana slugs were harmed in the filming of this movie. Informed sources also indicate that the household cats and the goldfish resident in the Mad River had a wonderful time as well.

Soon the rains will be upon Humboldt County and amateurs of boiling water will have to dodge everything from annoying drizzle to genuine frog-stranglers. We'll send you the new news, weather authorities permitting.

See more of the Author's Mad River Short Line in color on the outside rear cover...ed.









Clockwise from upper left: Kevin Schindler and his CRICKET, as seen looking down Main St. in Iaqua.

Geoff Spenceley's Aster Grasshopper at Tuxedo Junction.

Larry Buerer of the Bayside & Western videotapes the action at the 2000 Oktoberfest Steamup on the Mad River Short Line in Northern California.

Forney!



Our latest kit turns your *Ruby* into a Forney type with a minimum of effort. The wood and metal kit is ready to assemble and goes together in a few hours. Features removable roof, laser-scribed paneling, metal trucks, handrails and bunker with rivet detail. Intermediate skill level. Negotiates 6 ft radius curves. Make the change for **only \$95** + \$5 postage. Send your name, address and payment to

FH&PB Railroad Supply 6933 Cherry Hills Loop NE Albuquerque NM 87111

http://www.nmia.com/~vrbass/fhpb/

Wood cowcatcher kit available separately!





SMALL-SCALE \$49 ER STEAMUP SACRAMENTO JULY 27-29 2001 45mm & 32mm TRACKS AVAILABLE AROUND CLOCK \$49 EACH: HOTEL ROOM/NIGHT; REGISTRATION AIR-CONDITIONED COMFORT OF CANTERBURY INN & CONVENTION CENTER. BOOK EARLY: (916) 927-0927 HOBBY'S TIPS AND TRICKS IN DAILY WORKSHOPS SOUVENIRS: APRONS, CAPS, BUTTON-DOWN SHIRTS SATURDAY NIGHT POOLSIDE BARBEQUE DINNER REGISTRATION FORMS AVAILABLE ONLINE OR MAIL WRITE: PCLS, P.O. BOX 161631, SACRAMENTO 95816 E-MAIL: 49ER@P-C-L-S.COM. WEB: WWW.P-C-L-S.COM EYENT GENERAL SUPERINTENDENT: KEVIN O'CONNOR (916) 447-5433



Aster's Magnificent Mikado

CROSS CREEK ENGINEERING

P.O. BOX 191 SPENCER, OH 44275 PHONE 1-800-664-3226 FAX 1-330-667-2047

e-mail: crosscreektrains@juno.com







ASTER C&S Mogul



- ASTER LOCOMOTIVES
- HARTFORD CAR KITS
- DELTON CARS
- ACCUCRAFT DEALER
- KADEE COUPLERS & GAUGES
- DEAN LOWE STEEL WHEELS
- DEL-AIRE PRODUCTS
- WADA WORKS LOCOMOTIVES
- 70%/30% Butane/Propane, 15.9 oz.
 (800ML), \$5.50 each in boxes of 12.
 Twice the gas per can a 27% savings!

W TrainWeb.com

Trains on the web? TrainWeb.com!



Free web hosting for rail enthusiasts & non-profit rail organizations!

Rail Travel, Model Railroading, Railfanning & Rail Industry

RAILsearch most comprehensive rail search engine!

360x360 Photos virtual tours of many trains and stations!

RAILcams live video coverage of action along the rails!

50,000+ Photos of trains & train travel!

Rail Travelogues of many rail travels from several authors!

Also featuring schedules, fares, forums & live chat!

SWAP SHOP

For Sale or Trade: Gauge 1 live steam British loco & tender - LMS Fowler 4F 0-6-0. Well constructed, carrying case included. \$1250.00. Satisfaction guaranteed! Dan Callaghan, (517) 625-7527. (59)

Wanted: Irish NG 4-4-0T spirit-fired potboiler, O gauge, 10mm/ft scale, manufactured by (I think) HB Models of the UK in 1970s. Even pics or info would be welcome. Peter Watson, 20 Talbot Ave, Balwyn, Vic. 3103, Australia. Tel +61 3 9836 4355, fax +61 3 9836 5470, e-mail watfam@tpgi.com.au (59)

For Sale: Little Engines, 1 inch scale, 4-3/4 inch gauge, 0-6-0 Switcher, gas fired - Little Engines Gondola Car included. Runs excellent. Locomotive weighs approximately 120 pounds and tender about 40 pounds. Very powerful. \$5500.00. Machined parts alone cost \$10,000. ● O.S. Krauss 0-4-0, 3-1/2 inch gauge, gas fired, runs excellent. Locomotive weighs 38 pounds. \$3000.00. Call Bob at 941-495-0491. (59)

For Sale: Mamod gauge 1 live steam locomotive, runs on alcohol or heat tablets ● 2 new Mamod cars, still in boxes, and a steamup stand. \$375.00 for all. John Sherman, 64 Eames Ave., Amhurst MA 01002 - tel. (413) 549-3860. (60)

For Sale: Roundhouse Sandy River #24, live steamer. Excellent condition, 2-channel R/C installed, comes with beautiful custom made brass clad wooden carrying case. Sell for \$2700.00. Hans Huwyler, 864-587-7999 (days) - e-mail: sadaplast@teleplex.net (60)

For Sale: Used G-gauge track. 50 straight sections 3 feet long & 34 curved sections 3 feet long (6 foot radius), LGB R3 manual turnouts, 4 left-hand and 3 right-hand. All rail joiners included. That's over 250 feet of track. Comes in original Aristo and LGB boxes. Sell for \$650.00. Hans Huwyler, 864-587-7999 (days) - e-mail: sadaplast@teleplex.net (60)

Swap Shop listings are offered at no charge as space permits. No dealers and no phone-in ads, please! Send your listings to SitG, P0 Box 335, Newark Valley NY 13811, or fax to 863-471-6061 (24 hours), or e-mail to <docsteam@mpinet.net>. Ads must contain sellers name, plus address and/or phone number. Ads will be run one time only unless previous arrangements are made.

1:20 Scale SR&RL Passenger Cars

SASE For Info



NEW!

1:20 Scale SR&RL Combine Full Interior Detail!

C. M. MODELS

20 TERRY LANE (EAST) WAREHAM, MA 02571-1723



3/8" scale Clerestory Roof stock

C-D-S Lettering Ltd.
Dry Transfer Lettering
3/8" scale (std. ga.) - 1/2" scale (n.g.)

Custom lettering a specialty

For latest list please send a #10 self - addressed envelope with an International Reply Coupon

MICROPROCESSOR RADIO CONTROL FROM REMOTE CONTROL SYSTEMS.



VE STEAM R/C

SD-1 FOR SINGLE SERVO LOCOS. # SD-2 FOR DUAL SERVO LOCOS. SERVO ACCESSORIES FOR WHISTLE, UNCOUPLE, BLOWER OF WATER PUMP. ELECTRONIC SOUND SYSTEM TRIGGERS FOR WHISTLE & BELL ETC. USE ANY 4.8 VOLT NI-CAD PACKS.

RCS PCM R/C FEATURES:

ULTRA SMALL TX HANDPIECE AND RX/DECODER.
RELIABLE "GLITCH FREE" OPERATION.
4 FREQUENCIES WITH 18 SIDE BANDS.
4 OR 8 FUNCTION TX HANDPIECE.
PROGRAMMABLE PERFORMANCE.
TWO SPEED BRAKES + FAILSAFE PANIC STOP.
AUTO REVERSING BATTERY LIGHTS.

P.O. BOX 1118, BAYSWATER, VIC 3153. AUSTRALIA. TEL/FAX +(61-3) 97 62 77 85 TOLL FREE 1 800 490 6945

WEBSITE: www.alphalink.com.au/~rcs/ E MAIL: rcs@alphalink.com.au

BATTERY R/C



MT8-G1 3AMP THROTTLE.
TOTALLY SOLID STATE. NO RELAYS.
OVERTEMP& OVERLOAD PROTECTION.
SIMPLIFIED INSTALLATION.
BATTERY OF TRACK POWER OF BOTH.
CONTROL WHISTLE/HORN, BELL,
UNCOUPLE PLUS LIGHTS ON-OFF.

DISTRIBUTED IN THE USA BY SSS MODELS (314) 527 8326 & NW RCS (425) 823 3507.

ALL ABOARD!



ROB STEAMING HIS O.S. SUPER SIX

- . Built from an O.S. Kit
- . About 80 hours to assemble
- . No machining required
- . Runs like a fine watch

Rio-Pecos celebrating 10th year!



GARDEN RAILROAD CO.

27136 Edenbridge Ct. Bonita Springs FL. 34135

Phone (941) 495-0491 Fax (941) 495-7264 E-MAIL: riopecosatsteamteam-com@msn.com

Visit our Web sites http://www.steamup.com/riopecos & http://www.steamup.com/os

Garden Railways

The premier magazine for the outdoor modeler since 1984



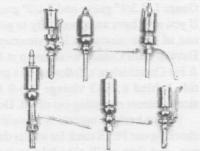
Garden railroading can be everything from finescale modeling to just plain fun in the garden. Get it all with Garden Railways.

Scratchbuilding
Kitbashing • Operation
Track and roadbed
Locomotives, rolling stock,
and structures • Realistic
use of plant materials

A year's subscription (6 issues): \$21 (US) • Foreign (including Canada): \$28 via surface, \$55 via air Sample copy: \$4.95 (US) or \$8.00 (foreign via air) • VISA & MasterCard welcome

Garden Railways Magazine
Box 61461 Dept. SitG ● Denver CO 80206 USA ● 303-733-4779

Illustrated Catalog \$3.00 plus SSAE



Need Any Whistles?

TRACKSIDE DETAILS

G-1/2" Scale Parts 1331 Avalon Street San Luis Obispo, CA 93405



NORTH JERSEY GAUGE ONE CO.

8 Spring Valley Rd., Park Ridge, NJ 07656

dealer for

ASTER HOBBY INC.

WADA WORKS CO. LTD live steam and internal combustion locomotives

ACCUCRAFT TRAINS museum quality live steam trains

201-391-1493 Bob Moser



ASTER HOBBY

LIVE STEAM AND ELECTRIC GAUGE 1 LOCOMOTIVES

also larger scale & gauge live steam locomotives

End of the Line

Travelogue...

Spring is here, and it's about time to head north as I write this. Faithful Assistant and I have had another wonderful winter in tropical Florida, and we thank all the steamers here for their friendship and hospitality.

Looking back over the past few months, some of the highlights include: an easy journey to Diamondhead 2001 - two trips to Larry & Joan Smith's steamups. Larry and some of his neighbors have combined resources to create a wonderland of railroading on 20 acres. Gauge 1, 4.3/4" gauge and 7.1/2" gauge. If you ever have an opportunity to get to one of these meets, do it! - steamup at Dave & Barb Conroy's - steamup at Bill & Pat Chamberlain's, followed by a great ride behind a 1913 vintage 2-6-0 full sized steamer operating out of Mt. Dora.

Once back in upstate NY, we'll be checking our PETS track for winter damage, and then we'll schedule as many steamups at our place as we can fit into our schedule.

We'll be getting out to various steamups and other events over the summer months as well. These will include trips to the Pennsylvania Live Steamers, South Orange Seaport in New Jersey, live steam demos with fellow steamer Tom

Bowdler for the Syracuse Garden Railway Society, Frank Ulman's annual steamup in Williamsport, Pennsylvania, and probably a few more that we don't even know about yet.

I know I've said it before (and hope I don't sound like a broken record!), but if you're new to the hobby, or if you're feeling jaded or burned out, host a steamup or get out to one of the many steamups held in many states and regions around the country....and world, for that matter. There's just nothing like meeting new friends, sharing steamup experiences, seeing the latest commercial offerings or examples of craftsmanship from a home workshop.

Hope to see you out there boiling water somewhere this summer, and until then.....

Happy Steaming!



Photo, opposite page top:

Long ago and far away...prototype Merlin Heidi on the Michaelmas line in England.

photo by David Pinniger

ADVERTISERS INDEX

ACCUCRAFT TRAINS38
Argyle Locomotive Works30
Aster Hobby Co., Inc 2
A.W.N.U.T.S21
Bay-Com 29
Bayou Ltd 9
Brandbright 21
C. M. Models 48
C & O C Ry 46
Camelback Books20
Cheddar Models 30
Cross Creek Engineering 47
Diamond Enterprises 28
Doubleheader Productions 21
The Engine Shed27
FH&PB Railroad Supply 46
Finescale Railroader 20
Garden Railways Magazine 49
Hartford Products 8
I E & W Railway Supply25
Micro Fasteners 16
Michael Zemek 20
North Jersey Gauge One Co50
Pacific Coast Live Steamers 46
the Parker Co 43
Paul Forsyth Models 37
Remote Control Systems 48
Rishon Locomotives 43
Rio Pecos 49
Roundhouse Engineering Co. Ltd 51
Sierra Valley Enterprises 16
SitG Back Issues 8
Southern Steam Trains 20
Steam in the Garden Online 30
S.T.E.A.M
Sticks & Stones
Sulphur Springs Steam Models24
Sunset Valley Railroad9
The Steam Works 30
Track 1 48
Trackside Details
TrainWeb.com 47

Please tell our advertisers, "I saw it in SitG!"





ROUNDHOUSE

Living Steam Railways for SM32/SM45 & 'G' scale

New for 2001 'Forney'

The latest addition to our 'Classic Series' of locomotives is a detailed model of the well known American 'Forney' type locomotive. Available with full radio control and capable of negotiating curves down to 2' (600mm) radius (on 45mm gauge track), this powerful model is the perfect motive power for your garden railroad.

Available for either 32mm or 45mm gauge



Check out the full range of American, British and European outline locomotives and home builder parts in the latest ROUNDHOUSE colour catalogue, available from the following dealers

Bayou Ltd. Phone/Fax: 504-857-9464

Double Header Productions. Phone/Fax: 972-247-1208

Rio Pecos Garden RR Co. Tel: 941-495-0491 Fax 941-495-7264

West Lawn Locomotive Works. Phone: 608-231-2521 Sulphur Springs Steam Models Ltd. Phone/Fax: 636-527-8326 Ridge Road Station Inc. Phone Toll Free 1-877-477-2253

CANADA

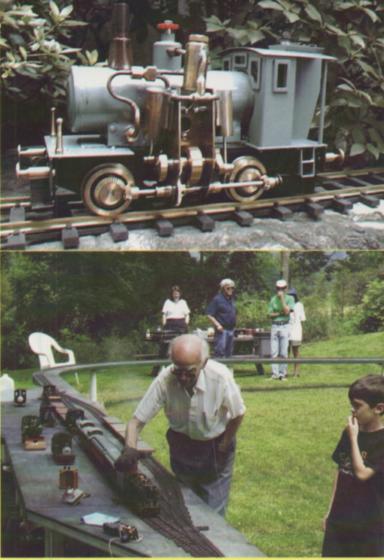
Miniature Power Products Tel: 519 539-9981 Fax: 519 539-8303

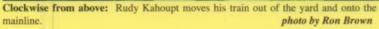
Meg Steam Inc. Tel 250 479-8575

Roundhouse Engineering Co. Ltd. Units 6-7, Churchill Business Park, Churchill Road, Wheatley, Doncaster. ENGLAND. DN1 2TF
Tel: 011 44 1302 328035 - Fax: 011 44 1302 761312 - e-mail sales@roundhouse-eng.com

www.roundhouse-eng.com







One of Imasu Takagi's many wonderful scratchbuilt steam locos (see article in this issue).

photo by Kattchan Tanabe

Kevin Schindler guides his train via radio control on Richard Heisler's Mad River Short Line (see steamup report in this issue).

A tranquil scene on the Mad River Short Line. both MRSL photos by Richard Heisler

Rudy Kahoupt's scratchbuilt Prairie with a consist of scratchbuilt cars on Ron & Marie Brown's line in upstate NY.

photo by Ron Brown

Norm Saley's scratchbuilt Shay, a work in progress. photo by Dlanor Nworb





