

\$3.75

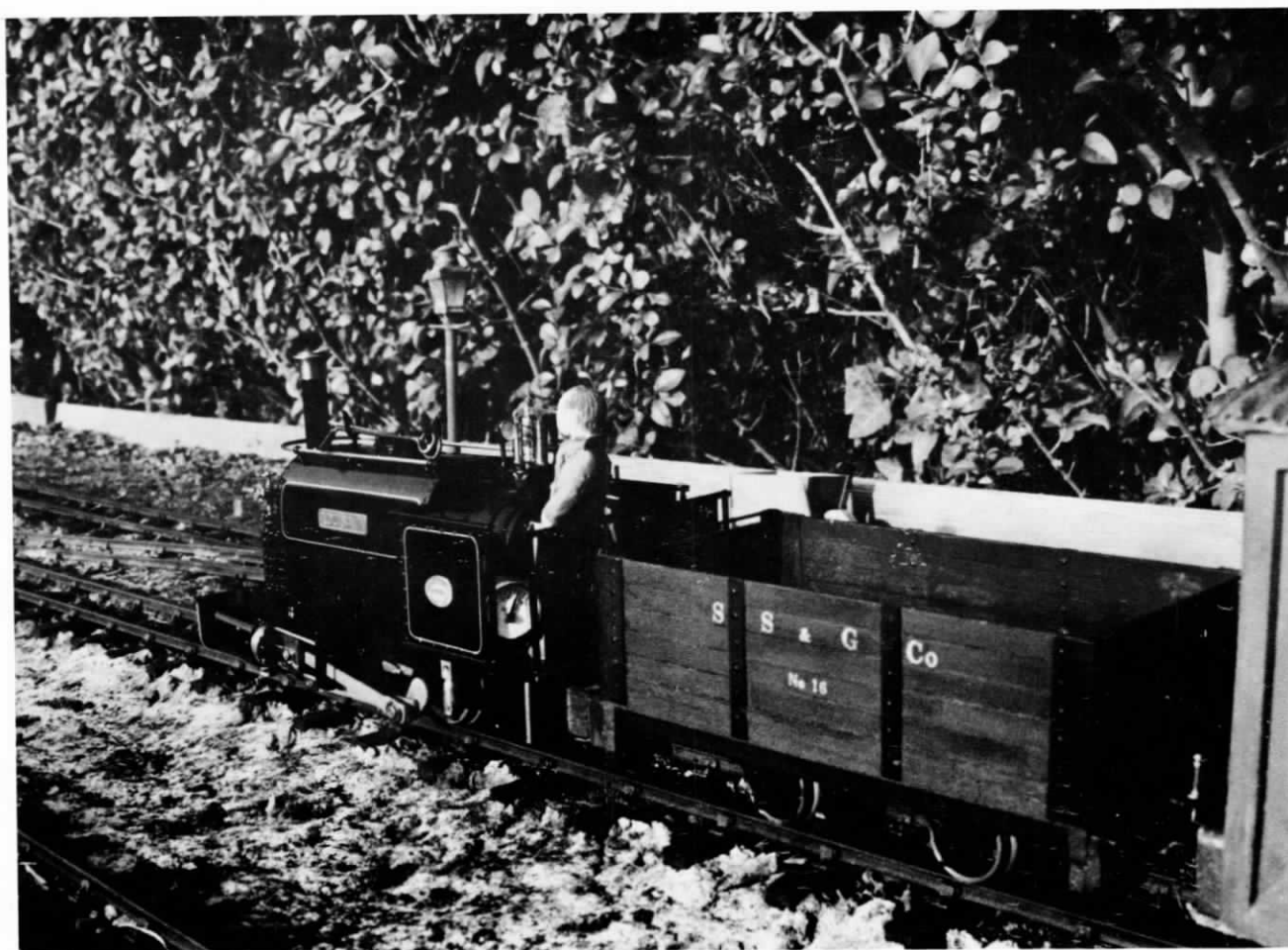
Steam in the Garden

Magazine

*Gather, friends, while we enquire,
into trains propelled by fire.....*

Volume Two Number Six

April/May 1992



INSIDE.....

Finescale Engineering QUARRY HUNSLET Review

Grover Devine's South Pacific Coast Railroad

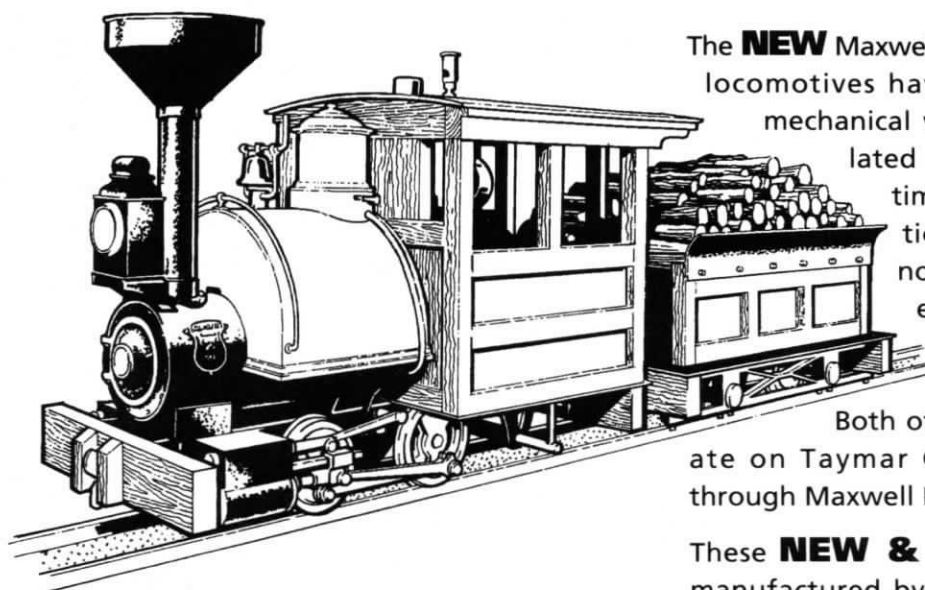
Steaming Up in Japan

News, Opinion and Commentary on the Live Steam Scene

And Lots More.....

HOT AIR!

STEAM UP IN 4 MINUTES



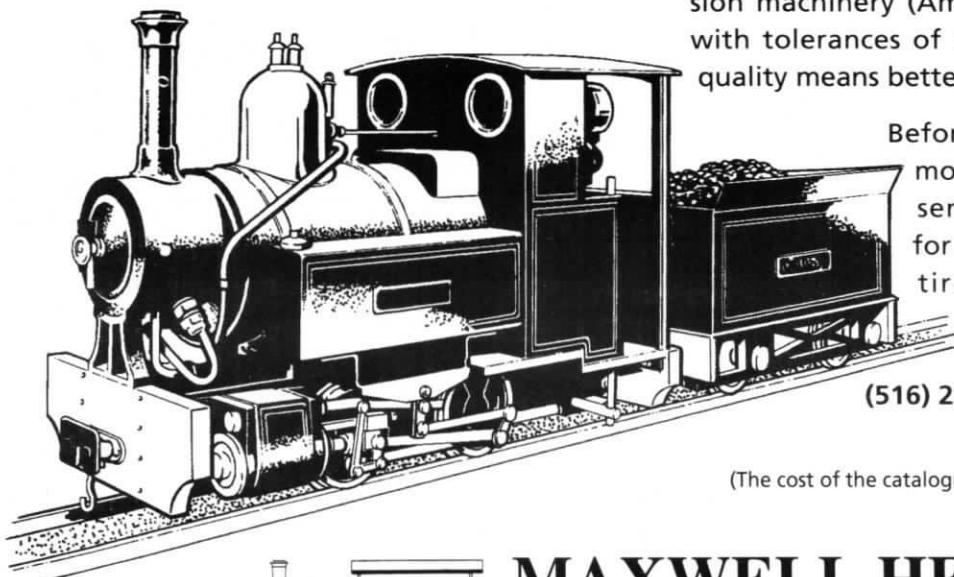
The **NEW** Maxwell Hemmens **Porter & Ogwen** locomotives have been improved to include a mechanical water pump system, which translated means they have longer running time & increased efficiency. In addition to advancements, the Ogwen now has a tender to hold your R/C equipment. The Ogwen will be available this May, and the Porter will be available in June.

Both of these engines are made to operate on Taymar Gas, "EPI GAS" now available through Maxwell Hemmens North America.

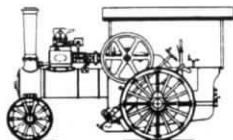
These **NEW & IMPROVED** locomotives are manufactured by new computer controlled precision machinery (American made), producing parts with tolerances of up to 2 microns. This precision quality means better performance and longer life.

Before you invest your hard earned money in a live steam locomotive send \$8.50 to Maxwell Hemmens for a catalogue describing our entire line of products. Maxwell Hemmens, 22 Stratford Ave., Greenlawn, New York 11740.

(516) 266-5056



(The cost of the catalogue will be reimbursed upon your first order).



MAXWELL HEMMENS
NORTH AMERICA
Precision Steam Models

(STEAM PLANTS FOR MARINE & STATIONARY APPLICATIONS & TRACTION ENGINES)

ON THE COVER:

"**Louisa II**", a Finescale Engineering quarry Hunslet by Tony Sant, leaving Bishop's Amble with a Sedimentary Sand and Gravel Co. train on Dave Pinniger's Ambledown Valley Railway. This loco is the subject of a review in this issue - be sure to read all about it!

Cover photo by David Pinniger

Editor's Choice

Can you believe it? This issue marks the end of our 2nd year of publication! The time has passed so quickly it doesn't seem possible, but maybe that just proves the old adage that "Time flies when you're having fun!"

We appreciate the support of all our readers - and especially those that contribute articles, photos and information.

Response to our upgrade and subscription rate increase announced in the last issue have been overwhelmingly positive, much to our relief. We hope that you'll find this issue filled with things that interest and motivate you, and we promise to keep working to make each issue better than the last.

Grover Devine recently wrote to tell us that he has been appointed Steamup Committee Chairman for the 1993 National Garden Railway Convention, which will be held in the Santa Clara Convention Center, Santa Clara, California.

The dealer's display hall will be enormous, and the ventilation system is so good and the ceiling so high that the live steam track will be indoors and will be operating whenever the dealer's display room is open.

Grover has some ideas of his own and would like very much to hear from us, the live steam community, with any hints, suggestions, comments and ideas that we may have that will help to make this


event truly remarkable. Let's respond to his request for help and show him that he has our support!

Here are the items that Grover has established as a starting point.

- *Track will be at table top level, and track minimum radius will be 15' to accomodate anything up to and including a Big Boy.*
- *Mainline will be double track. Inner track will be gauge 1, outer track will be gauge 0.*
- *Gauge 1 track will have steamup sidings with 10' radius turnouts so that large locos won't have to be handled while under steam.*
- *Dealers and private individuals will all be welcome to use the track - however, hosts will ensure that no one person monopolizes the facility.*
- *We will have at least one society member present to act as host. The host will assist guest engineers when necessary, will introduce the engines and their drivers and will generally run the event.*
- *Persons wanting to run a loco will be asked to fill out a brief questionnaire.*
- *A small public address system will be located at the track to that the host can introduce the engineer and give comments about the loco being run (from information provided on the questionnaire).*
- *Hosts will supply distilled water, alcohol and butane gas so guests will not have to try to ship their own or try and locate it locally after arriving at the Convention site.*
- *Runs will be limited to 15-20 minutes if there is a backlog of engines waiting to run.*
- *An announcement board (like the train schedule board seen at stations) will indicate approximate times that notable locos will be run.*

It looks to me like the 1993 Convention and Steamup are off to an excellent start with enthusiastic and experienced Committee Chairmen like Grover Devine working hard to make 1993 a GREAT Convention year! Write to Grover % SitG, P.O. Box 335, Newark Valley, NY 13811. We'll see that he gets your ideas, comments and suggestions.

Happy Steaming!



Steam in the Garden Magazine

Volume Two Number 6
Issue #12

Publisher/Editor

Ron Brown

Cherished Assistant

Marie Brown

Contributing Editors

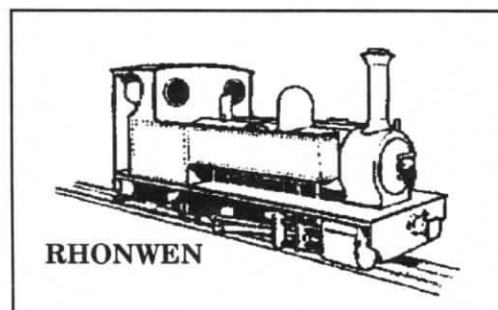
Grover Devine California
Rick Drescher Washington
Peter Jones Wales, U.K.
Scott McDonald Roving Reporter
Dave Pinniger U.K.

Steam in the Garden is published bimonthly for \$18.00 (\$24.00 foreign) per year (6 issues) by Steamchest Publications. 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. Domestic and Canadian subscriptions should be sent to **Steam in the Garden Magazine, P.O. Box 335, Newark Valley, NY 13811**. Foreign subscriptions should be sent to our agent in the U.K. - **Salem Steam Models, Brynglas, Salem, Llandeilo, Dyfed SA19 7HD, U.K.** Items for review should be mailed to our domestic address or sent via UPS to RD 3 Box 147, Newark Valley, NY 13811. Phone us at 607-642-8119 evenings or weekends - before 10 p.m. Eastern time, please.

What's New?

Garich Light Transport, 6101 Glenwood Drive, Huntington Beach, CA 92647 - phone 714-891-6450 (6 - 9 p.m. PST & Weekends) has sent us a sample of their **Ted's Pet switchstand**. All brass construction, machined, soldered and screwed together, this beautiful switchstand stands 3-3/4 inches tall (if you wanted it shorter you could easily relocate the target lower), has a one inch diameter round target and works just like the real thing, with an operating lever that lifts and rotates to operate the turnout throwbar and "bend the iron". A feature on this switchstand that we liked is the adjustable throw, making it suitable for any of the small gauges and completely "tuneable" so that it will work with any turnout. It can be painted, chemically blackened or just left to weather naturally. This quality item is priced quite reasonably at \$16.95 each or 6 for \$90.00. Add \$3.00 to each order for shipping. GLT also offers a line of flextrack and turnouts - send a LSSAE for more information.

FRIOG STEAM MODELS (available in the U.S. through **Brandbright/RGL - 4210 Bridge St. #5, Cambria, CA 93428 - phone 805-927-1194**), a company well known for their battery powered diesel outline locos, is launching their line of live steam locos during 1992. First out is the **RHONWEN 0-4-2T**, a side tank loco with slide valve cylinders that is adjustable for operation on gauge 0 or gauge 1 track, and is suitable for either manual control or R/C. Check with RGL for more info.



GEOFFBILT, Box 277, Salisbury, New Brunswick EOA

3EO, Canada, has some new live steam locomotives in the works. Following on the heels of the very successful (and very popularly priced) **SCORPION** are **FIREFLY**, **GRASSHOPPER** (do you detect a bias toward the insect kingdom here?) and a **GARRETT**. All three have been completed, tested, and are reported to run very well. We have no prices or other details at this time, but \$2 to GEOFFBILT at the address above will get you their catalog containing information on their locos and line of custom-built rolling stock.

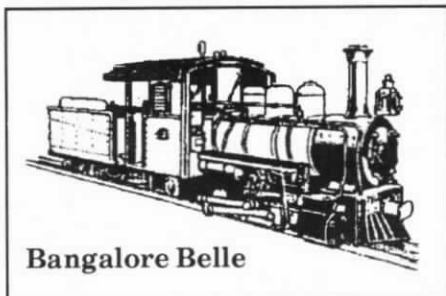
MAXWELL HEMMENS/NORTH AMERICA, 22 Stratford Ave., Greenlawn, NY 11740 - phone 800-257-8218 - now has available an excellent **fuel for gas-fired steam engines**. EPI Gas is a 60/40 blend of butane and propane, recommended by many loco manufacturers as the ideal mix for safety and performance. The addition of propane eliminates the problem found with straight butane gas, which is that it will not vaporize properly at temperatures below about 50 degrees F, thereby not providing adequate pressure to keep the burner going. The gas cannisters have a self-sealing screw-type head, which is the correct size for the fueling adapters provided by Maxwell Hemmens and Roundhouse Engineering. Cannisters come in two sizes, 3.5 and 7.5 fluid ounces. Both sizes are available in cases of 12 for \$47.40 or \$59.40 (depending on which size you order) plus UPS shipping, the 7.5 ounce size giving the most steam for your buck. Actual burn time depends on several variables, including ambient temperature and the setting of your gas control valve. Peter Martin of Maxwell Hemmens/North America tells us that he has used the larger size cannister to refill his Maxwell Hemmens Porter 5 times and still had gas to spare. Peter also notes that we should be sure to remind our readers that, like any other pressurized liquid, EPI Gas can cause frost burns if used improperly. Write to Peter at the address above - or call him on his toll-free number - to order your EPI Gas. I suggest that you also inquire about the high quality line of Maxwell Hemmens live steam locomotives, traction engines, stationary engines, steamboats, steam fittings and more. Great stuff!

More good news from **MAXWELL HEMMENS/NORTH AMERICA** (see previous paragraph for address). Peter Martin has mailed out the first issue of his new newsletter, **The Steam Journal**. Covering the latest items from Maxwell Hemmens, as well as other interesting steam-related bits and pieces, this 4 page newsletter is very professionally done and deserves a look by anyone interested in miniature live steam - and not just trains, as MH also builds stationary engines, traction engines, steamboat engines and more. This first issue contains articles about John Hemmens (head man at MH in England); prices, dealers and other matters; railway news; marine models; an article about the MH line for 1992; publications; hydrostatic testing;

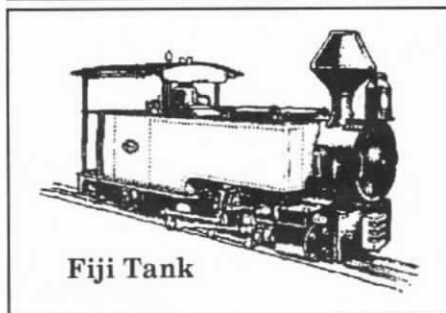
a classified section and more. Write or call Peter and tell him you'd like to be on his mailing list for *The Steam Journal*.

Samuel Muncy of Railway Garden Ltd., 4210 Bridge St. #5, Cambria, CA 93428 - phone 805-927-1194, has sent samples of some British mainline steam magazines he is now carrying as a convenience for his customers. *STEAM RAILWAY* proclaims that they are "Britain's best selling railway magazine - by far!". It's filled with excellent photos - both color and b&w - of British mainline steam, articles on many pertinent and interesting subjects and ads for railway tours, books, audio and video material, railway memorabilia and such. *STEAM WORLD*, with the motto "Just the way it was - every month", seems to contain pretty much the same mix of photos, articles and advertising. I found both magazines interesting because of the great steam-in-action photos - but since mainline steam isn't really my cup of tea, I would prefer a magazine with a strong bias toward the Welsh narrow gauge railways. But for all you gauge 1 mainline steam guys out there, these magazines could be just what you're looking for. Give Samuel a call or drop him a note to see about getting a sample copy or a subscription.

Brandbright and Roundhouse are working together to produce a range of exclusive locomotives. Available in the U.S. from Brandbright/RGL (see previous paragraph for address & phone number), two of these locos are enhancements to the popular Roundhouse Fowler tender loco. **BANGALORE BELLE**, an 0-6-2, has added detail to give the loco an Indian or African appearance. Additions include running boards,



Bangalore Belle

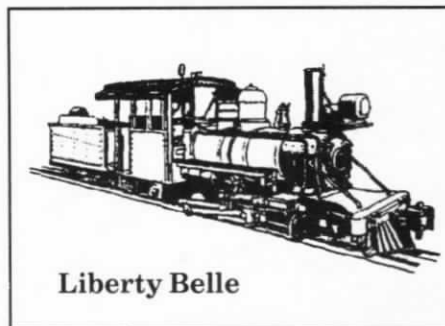


Fiji Tank

toobox, air pump and tank, additional sheeting on the cab with sliding louvred shutters, removeable lamps front and rear, extensions to the tender sides, different crossheads and a cowcatcher.

LIBERTY BELLE, a 2-6-2, is styled to represent an American locomotive. It has most of the additions found on the BANGALORE BELLE, but with an American style cab, leading truck with footplate and cowcatcher,

Baldwin-type cylinders, American style domes, brass bell and dummy electric lights with steam generator front and rear. Finally, the **FIJI TANK** 0-6-2T, based on a prototype loco built by Fowler in 1907 to work in the sugar cane fields in Fiji and Australia. Highly detailed with lots of rivets, sandboxes with full control linkages, dummy lubricators on the smokebox, dummy injectors with copper plumbing, wood lining in the cab roof, spark arrestor and lots more. Write or call RGL for more information.



Liberty Belle

Salem Steam Models, Brynglas, Salem, Llandeilo, Dyfed SA19 7HD, United Kingdom - phone 0558 822530 (when calling from the U.S., 01-44-558-822530) - also available in the U.S. through Railway Garden Ltd., 4210 Bridge St. #5, Cambria, CA 93428 - phone 805-927-1194 - announces a 16mm scale conversion kit for the Mamod locomotive. This kit includes a complete cab and side tank assy. to enlarge the Mamod up to 16mm scale, making it more compatible with other makes of locos and rolling stock. The style is of a more typical narrow gauge engine, the boiler now being in proportion to the cab. The Mamod chassis is retained, along with any proprietary improvements that may have been fitted, such as Mike Chaney meths burner. Also new from Salem Steam is a **Glider Kit** (no, we haven't added model airplanes to SitG - the term "glider" refers to an unpowered loco), a complete loco kit supplied without boiler, cylinders, reversing valve, coupling rods, etc., designed to accept the major components from a Mamod. Ideal for those who wish to upgrade their Mamod further than usual. A **Radio Control Linkage Kit** is now available from Salem Steam for stock Mamods and modified Mamods as announced above. This simple and straightforward linkage enables the front mounted reverser valve to be operated by a servo in the loco cab. This can be fitted to your loco by Salem Steam at extra cost, if desired. Last item from Salem Steam is an **Improved Safety Valve for Mamod locos by Deryck Goodall**. More positive pressure management due to the use of an O-ring seal. Write or call Salem Steam Models in the U.K. or Railway Garden Ltd. in the U.S.A. for more info on these and other Salem Steam Models products. When writing, please enclose a LSSAE.

R P O Mailbag

Letters from all over

Letters from readers are welcomed and encouraged. Offer advice, encouragement, suggestions, constructive criticism, tell us about your current project (and don't forget the photos!) - or just share live steam experiences. But please keep it to a reasonable length or I'll be forced to convert your letter to a full-length article! Send any contributions to this department to: SitG, Dept. RPO, P.O. Box 335, Newark Valley, NY 13811.

New Brunswick, Canada

Dear Editor & Cheerful Assistant,

"YEP, it's time to think about building a railroad in your backyard, sideyard, or even your frontyard."

This quote came from page 3 of the December/January issue of SitG. In January of '92 we didn't even have 1" of snow. The rails of the PBR would shine in the artificial evening light and gazing out at it from the window would leave us with a resolve that, if there was no snow by the weekend, we would get out there and steam up a loco or two. But our New Brunswick weather did not cooperate, and we had temperatures below normal for that time of year.

Then on February 2, the forecaster decided it was too easy to travel in our fair province and said it was time for a little snow. And snow, snow, snow it did, for approximately 48 hours. We were left with 186 cm or 6.45 feet - yes, FEET - of snow, with drifts up to 18 feet high. This translates to 153.6 feet of 1/2" scale snow over my track, with 1/2" scale drifts of up to 432 feet deep.

So, Mr. Editor, what a discouraging remark you made on page 3. I believe you should let your readers know that not all of us live in a climate where one can start working on the garden railway in January! Also, this might be the time to send out an SOS or MAYDAY for help. Anyone with snow plows, rotary plows, Jordan spreaders or any type of snow removal equipment (in 1/2" scale, of course) are urgently requested on the property of the Poorboy Railroad for snow cleanup duty. Pay is below average, but hospitality and fun are way above average.

Our compliments on an excellent magazine - please find enclosed a U.S. money order for my renewal. Even though we can't raise steam at the moment, we can read and dream of steam.

All the best from the PBR,
Ricky Morningstar

Niantic, Connecticut

Dear Ron,

Please excuse my late renewal. I do like SitG very much, even though so much is written about narrow gauge. I am a G-1er, 1/32nd scale, 3/8" to the foot. I have a small layout, a little more than 100'. A good bit of this is double track main on 12' radius. Plans for this Spring include completing the circuit so all main line will be double tracked; rebuilding an Aster Mogul so it appears American; rebuilding Roberts aluminum passenger car (to remove weight I have constructed an aluminum roof); and building a CV-style caboose.

Looking forward to another year of enjoyment of SitG.

Best wishes,
Warren Young

West Hartford, Connecticut

Dear Ron,

In regard to your upgrade to REAL halftone reproduction.....Yes, yes, terrific! A sight for sore eyes - I think I had to get new reading glasses after trying to discern details on those scanned non-images.

Best wishes,
Barry Bridges

Berkeley, California

Dear Ron,

Re: the letter from Gordon Jensen - the locomotive he is wondering about was the Bassett-Lowke Mogul. Gordon Rosekilly imported those during the 1950's. Mr. Rosekilly imported machine tools and the B-L steamers were a sideline. I met him at the California State Fair in 1956 or '57, where he had a booth and a Mogul, a 4-4-0 and a Super Enterprise on display. Naturally my heart was in my mouth and I spent most of my time at the fair mooning about the booth and asking questions.

Unfortunately, my dream was not to be. \$99.50 was big money in the Fifties, and even with odd jobs and paper routes I could not convince my parents that a matching funds grant would secure them a place in the parenting hall of fame.

It didn't help that I had insisted a year or two before that I be allowed to dump my Lionel (never did like that stuff) in favor of HO scale.

When I worked briefly at Polk's Hobbies in New York in 1962, there were two B-L live steamers on display there. During the late 1960's, Allen Levy & Company made an attempt to revive B-L under the name BASSETT-LOWKE (RLYS) LTD., and along with it, reissue the "**Maid of All Work**". I think few, if any, were produced, but anyone who has the Bassett-Lowke Commemorative Catalogue will find the whole story therein.

Mr. Rosekilly still lives in San Mateo, but unfortunately is an invalid and cannot take calls. Those B-L live steamers were the first small scale live steamers I'd ever seen, and perhaps my current pursuit of trains propelled by fire is an attempt to fulfill my childhood dream.

To address the letter of Rob Kuhlman of Norristown, PA in the Dr. Steam column in issue #11 - an alternative to miniature roller chain (expensive) is ladder chain. Steel and bronze ladder chain is available from:

Chicago Gear Works
1805 S. 55th Ave.
Chicago, IL 60650
phone 800-343-3652

Their #10 chain is appropriate for our work, and they have a range of gears useful to small scale live steamers. A catalog and price list is available on request. Their prices seem to be better than most.

Happy Steaming,
Michael O'Rourke

Hampton, New Hampshire

Dear Ron,

I was pleasantly surprised to see issue #11 in my mailbox. It prompted me to write and catch up

on some thoughts, ideas and a correction to my blower article.

I have been paper-designing a vertical boiler, single oscillating cylinder inspection locomotive based around the Midwest Products marine steam engine kit. I was wondering if anyone has successfully used this boiler/engine kit to power a similar loco. I would be real interested to learn of the gear ratios used and what, if any, throttle control they incorporated.

My math and geometry left me when I wrote about the small scale blower I designed. The correct length of the three spacer tubes which center the motor in the housing should be the diameter of the tin can housing minus the diameter of the motor sleeve divided by two.

I'm looking forward to both SitG steamups AND the National Convention this summer. It seems each year tops the previous one in activities, interest, excitement and fellowship. May it all continue!

Wayne Slaughter, fellow NH garden RR'er, had a work day at his house with the intent of sprucing up the Society's modules for an upcoming show. These modules were expertly fabricated by fellow member, boat builder and woodworker extraordinaire, Ken Basset. Two laps of track, one gauge 1 and the other dual gauge with a couple of passing sidings.....all hand laid code 250, turnouts and all. The overall length I estimate to be a 60' lap. The NH Garden Railway Society has an absolute blast setting these up at a couple of scale meets each year and running the little dragons, much to the amusement of the patrons and somewhat to the consternation of the show promoters and hall management. Wayne and I needed to lay some track and realign a switch. Well.....we had the modules set up.....and it was cold and snowy outside.....and we hadn't steamed up anything more exciting than frozen vegetables in a couple of months.....sooooo.....out came his gauge 0 Ogwen and the rest is history. What's the point if you can't

have a little fun? We have a show coming up in Northern NH in April. I'll send you pictures of a lot of otherwise serious middle-age men with childlike grins all over their faces. Enclosed is my eighteen bucks. Please renew my subscription to continue the most fun any mailbox is allowed to have.

Saturatedly yours,
Rich Chiodo

Ontario, Canada

Dear Ron,

Just a short note to let you know that I very much approve of paying a bit more to cover the cost of half-tone photos and extra pages in SitG. This last issue (#11) was the best ever, and I very much enjoyed Malcolm Wright's article on building engines.

Several years ago I saw an article written by Mr. Wright describing the gas burner used in his beautiful Kerr Stuart Wren. Any chance that he would write another burner article for SitG?

Keep up the good work, it is high time that a high quality North American publication such as SitG catered to the Live Steam Ferroequinologist on this side of the Atlantic.

Yours truly,
Frank D. Wear

Thanks for the kind words of support, Frank. To answer your question about a burner article from Malcolm Wright - the answer is yes. I wrote to Malcolm and asked him if he had the time and interest to do such an article, and he generously agreed.

I can appreciate your comment about our publication catering to live steamers on this side of the Atlantic - but I hope that SitG can serve the needs and interests of all live steam enthusiasts, no matter where they may live. We have a healthy number of subscribers in locations around the world, and we all share the same enthusiasm for miniature steam trains. We all speak a common language, no matter what our native tongue may be.....ed.



Gazing Into the Fire

by Peter Jones

Tinkering with reluctant dragons

In a recent issue of SitG, Matthew Labine commented on the fact that he needed to become a tinkerer because of poor response from the old Merlin Company. He suggested that articles on tinkering might be helpful. Speaking as someone who had a brief but unsuccessful connection with Merlin, I would like to offer sympathies. But such things don't get immobile steam engines mobile, so perhaps I could offer more practical advice. With America so big and the Atlantic so wide, it seems that there are readers out there who feel somewhat lonely. So rather than answer specific questions, which Dr. Steam will answer better than I, I would like to offer a basic guide to the concept of tinkering.

It starts with the engine sitting there, defiantly unmoving and unmoved. From now on we take a series of "either/or" steps. And this is the whole secret of how to avoid panic and terror of the beast. Hence we start off with: Either the engine is homemade or it is commercial. If commercial and of a reliable known make, then we can assume that it **SHOULD** work and that there is something gone wrong. Either the loco is new or it isn't. If it is new and hasn't been steamed, then there may be something wrong in the construction process. It is rare for this to happen, but it has been known - Merlin had a period of erratic pre-delivery inspection. If the engine is second hand, then let us assume that it worked once and doesn't now because something has gone out of adjustment. Whatever the cause, we start from a common point.

We fire the engine up. Within a period of 10 minutes at most, a 16mm engine should raise steam. If it is an ordinary pot boiler and it doesn't manage this simple task, then the water is not being boiled at a proper rate. The

first suspicion is that there isn't enough heat. Spirit fired engines can be sensitive about wick adjustment. Try increasing the wick area with more strands, and more widely splayed. This should produce an improvement. If it doesn't, then suspect that the feed tube may be partly blocked. If the burner is of the chicken hopper variety, likewise suspect a blocked tube somewhere. Remove the burner, extract the wicks and have a good poke with some soft wire. If the loco is home built, it is just possible that the holes in the feedpipe, down in the burner tubes, were drilled too small. Try **MODESTLY** enlarging the holes - just by a whisper (remember to clear out any swarf) - and try again.

The burner tubes may be set too high (i.e. - too close to the boiler). The flame will burn yellowy orange in protest. Try bending the pipe gently so that the row of tubes is set lower.

British engines are designed to run on purple methylated spirits - wood alcohol that has an evocative smell for some of us. Alcohol in the USA is what we in the U.K. call Methanol. A common ploy to improve the running of an engine here is to try it on Methanol. This burns hotter and thus should improve things (it also melts solder that little bit more easily).

If you are already on Methanol, then the next step up the molecular ladder is isopropyl alcohol. This is getting to the stage of being very hot burning. It should boil water quickly enough, but is not so kind to solder and paintwork. If the engine won't run on straight alcohol then something is wrong. There are some engines - particularly older designs - which didn't like running outdoors in a wind, but any loco should be able to raise pressure quickly enough.

If the loco is internally fired, then it will need a blower stuck on the chim-

ney. Make sure that the blower is a known performer, not some lashup sold with the engine. Make sure that you run it at the right voltage. Yes, I know it sounds obvious, but I have seen a loco transformed into a good steamraiser by running the blower on 12 volts instead of 9 volts. It goes without saying that this can easily be overdone! In these pages there has already been discussion about ensuring that all wicks are working properly - particularly the front ones on an Aster.

With a gas burner there are two things to go wrong. The first is for the pipe or nozzle to be blocked - usually the latter. You can buy tiny pricklers to clean out a nozzle from a camping gas store. The clue to a partially blocked nozzle is that the roar seems quieter than usual. The other problem is in the geometry of the nozzle to air passages around the jet. The position of these is critical, but is usually taken care of by the machining. If the engine is taking a long time to raise steam, then it is worth experimenting by just moving the jet in and out of the tube a fraction to find that optimum point where the combustion is at its best.

If we can assume that there is nothing wrong with the heat source, then slower boiling must be due to something getting between heat and water - or contamination of the latter. With a spirit fired boiler, the usual problem is that the underside of the boiler is gunged up - often caused by a yellow flame. At this point, I have been reminded that I really ought to mention one obvious point that has been overlooked. If the burning is poor, suspect contaminated alcohol or gas and try a different source - and/or try the suspect fuel on an engine of known capabilities. But if everything is in order in this department, then we may want to clean the underside of the

boiler. I do this by physically scraping with a sort of chisel made of hardwood. It isn't hard enough to damage the copper or brass of the boiler. If the engine is homemade, there is a chance that the boiler is made of material that is too thick. A thick copper boiler, exposed to the elements at the top, makes an excellent radiator. It loses heat at a phenomenal rate. One lesson that was learnt in Victorian times and, sadly, occasionally forgotten, is that the boiler works better when made of thin material. Note that this is only true about the small scales we are discussing here.

Contamination of boiler water can come from a variety of sources. Apologies here, but I will repeat the old warning about NEVER putting oil in boiler water because it supposedly makes the engine run smoother. It does, but it leaves a permanent film of oil inside which gets between boiler and water and slows heat transference. It can be rinsed out with a degreaser and rinsed afterwards. For a short period Mamods were soldered with a particular type of flux which, when left in the boiler, caused priming. The water would foam and thrash around but never generate proper steam. A clue to this condition is found in the fact that water will carry over into the cylinders until the boiler is all but empty. There are various remedies which all seem to work. My own is to use a drop of liquid stain remover, purchased at a dry cleaners, followed by vigorous rinsing in cold water (never be tempted to use washing up liquid - this makes the problem worse).

Let us assume then that we are happy that we have something in our hands that boils water up to pressure in a reasonable length of time. The next step is that the loco will either move or it won't. If it moves it will either keep moving or it won't. A common failing is an engine that will raise steam, then run for a minute or so and stop. You are way ahead of me I'm sure, but you can see that this means that it is using steam faster than it is making it. This may be due to inadequate steam generation for the reasons described above. If the loco is scratchbuilt it may be that we have got an engine which has got the magic formula wrong. This formula is at the basis of every steam engine ever made. In its most primitive

form it says that energy in should be just a fraction more than energy out, to allow for a bad day! Provided heat transference is satisfactory, this formula translates to more practical terms. I think this is so important that I'm going to use capital letters and hang the expense.....**THE GRATE AREA (OR HEATING SURFACES) SHOULD BE SUFFICIENT TO SUPPLY THE SWEEPED VOLUME OF THE CYLINDERS.** Many a tear has sprung from the eye on account of getting that wrong. Moreover, those heating surfaces have got to be big enough to cope with a cold, windy day when the rain lashes horizontally across the garden and sane folks should be indoors. A common failing of old Bassett-Lowke Potboilers, Piddlers and the like was that they would only run out of doors on a warm, windless day; a classic case of inadequate reserves. Incidentally, this is the main shortcoming of the Hornby 3-1/2" gauge Rocket that you may encounter - very pretty, but a poor runner.

You may be able to do something about it. There may be room to put in an extra wick tube or two, or replace the existing wick tubes with larger ones. You will use spirit much quicker, but at least you will have a runner on your hands. Sadly, if you have a gas burner that isn't up to the job, then you can't solve it by just drilling the hole larger. You need a bigger jet altogether. But if the loco is a commercial model then this shouldn't be a problem.

So far, a lot of what we have all discussed is obvious - painfully so. But if an engine fails to work properly, experience suggests that the cause of failure is often a humble one - so please forgive me for going over these basics in detail. Now.....assuming we find that we have an adequate supply of steam, let us then progress to the mechanics. Commonly we will find that the engine is sitting there, hissing steam, desperately keen to move but not moving. Continuing with our theme of taking things in logical order, either the steam is getting to the cylinders or it isn't. If it is getting there, then there's usually some sign of its presence.....like water weeping from glands or a change in noise as we rotate the wheels by hand. Perhaps the wheels will suddenly flip round half a turn and then stop. If none of these

vital signs are present, then suspect a blocked steam pipe. The easiest way to block a steam pipe is to bang it against something and this either squashes it or kinks it. If there have been repairs done then it's possible that solder may be gumming things up. To test, uncouple both ends of the steam pipe and try to blow through it - perhaps with the help of a bit of plastic tube if the pipe can't be removed altogether. A rare cause of blockage is carbon deposits caused by using automotive oil instead of the proper stuff. If you can blow down the pipe, take the opportunity to test the displacement lubricator if one is fitted to the pipe. If air isn't getting through the pipe to the far end, but comes out of the tiny hole in the lubricator, then the jam has to be "upstream" of the lubricator.

If the steam is getting to the cylinders in adequate quantities and still nothing happens, there can be a whole variety of causes. The trick is being able to isolate your particular difficulty. The first thing to do is to run the engine without coupling rods. If the engine works, then the problem had to be in quartering of wheels or the centres of the rods. But this is usually more easily tested by pushing the engine along the track by hand. There will be some compression stiffness, but there should be no particular sticky point. Removing the rods lets you find any other problem which may be in addition to quartering errors. These are often due to a wheel that has shifted on its axle - particularly if it hasn't been pinned. On a scratchbuilt loco, other causes are discrepancies in the throw of the crankpins, axles that aren't parallel and badly drilled rods. Any of these problems may be worsened by any springing, if fitted, which is jamming up.

When you run the engine up and down, although there is that compression load on, things should work smoothly. A bit of slop in the axles shouldn't cause a problem; Tool-makers Disease does. This is the name I give to a first-time loco that has been superbly built by an expert machinist. He has made all of the clearances so microscopic that everything is stiff and may lock solid as the metal gets warm. The cure is to ease the holes slightly - but only after you are sure that this is the only problem.

We are establishing which of the two causes is actually stopping the cylinders from doing their job; either jammed up motion or bad timing. Look to see that a twiglet isn't jammed in the motion or that nothing is seized. Where something is suspect, try and dismantle the joints either side of it to confirm the fact, even if it means drilling a rivet out. You can always replace it with a tiny nut and bolt. Assuming though that there is no obvious mechanical reason for immobility, including a gland that is too tightly packed, then we turn to the loco timing.

At first this seem frightening, but the trick is to treat the different factors in isolation. A slide valve cylinder is easy to check. The first thing to confirm is that the valves are opening and closing the right amount of port. You may have checked to see if one side of the engine is faulty by undoing the valve gear from the rod on the other side and running the engine. Propped up in mid-air, a loco should happily run on "one side only", albeit with a bit of jerkiness because you have lost the flywheel effect of the moving locomotive. But whether you check one side or both, the procedure is the same. Undo the nuts or screws on the valve chest cover, gently undoing diagonally opposites a bit at a time. Carefully prize up the cover - you want to re-use the existing gasket if you can. As you rotate the wheels you should see that the valve exposes a part or all of one port at each end of the stroke. It should expose an equal amount at both ends. If it doesn't, then this is often a cause of an engine running better in one direction than another. Should you need to make an adjustment, then you will usually find that the valve rod uncouples from the valve gear and is then able to screw in and out of the valve. This adjusts the length of the valve rod. Carefully replace the chest cover and do up those nuts, again diagonally opposite. DON'T try and screw the nuts up hard; the screws strip or snap easily when they are this small. Believe me, they are easy enough to snap on the real thing! I have painful memories of drilling out sheared studs.....but that's another story.....

What we have done is to check that the ports are being uncovered by an equal amount. The other action to review is how much the opening and

closing is retarded or how much in anticipation it is. Again, this is easy provided that we break it up into components. At this point I should add that timing adjustment error is more common on slip eccentric gear and the next few sentences apply to that.

With the engine turned upside down you will see some dirty rods wagging back and forward. Concentrate on just one side. Rotate the wheels and note that the most wobbly part of the eccentric is around 90° behind the rotation of the wheel. If you stop rotating the wheel in one direction and reverse it, you will see that the wheel revolves a full half turn before the valve gear starts moving again. Close examination shows that this is due to a shouldered half circle of metal of some pattern or other - the actual design can vary a great deal.

What you are aiming for is the state where the amount of "lead" in one direction equals the amount of lead in reverse. The shouldered stop is locked on the axle, usually with a grub screw. It is possible that this has moved. Undo the lock screw and move the bush around the axle until you think you have got equal lead in both directions. Lock it in place and try again. All of this sounds complicated but becomes virtually self explanatory when you have the underneath of an engine in front of you. You may care to try one side of the engine, newly adjusted, at this stage before moving on to the other. You are listening for an even rhythmic beat. With both cylinders going you should get a nice even four beats to the bar. In the days of open reel, multispeed tape recorders, it was very useful to record at high speed and slow it right down. Not only did it sound like the real thing but you could pick out all of the valve events nice and clearly.

Other things that may go wrong with cylinders are mostly based on steam being where it shouldn't. If your engine is in steam, doesn't run properly and keeps up a continuous roar, it is possible that you have either a valve stuck open or steam leaking past the piston. An open valve is usually caused by something which stops the natural steam pressure difference from holding it down on the port face. And that something is usually a bent valve spindle. This is hard to cure unless the

gods are with you - it is usually quicker to make a new one out of a piece of silver steel. Steam passing a piston is due to wear or failure of the packing. Needless to say, wear comes on slowly. Failed piston packing (I can't rid my mind of the phrase "piston packin' momma...") causes a sudden failure. You can take the back cylinder cover off and you can attend to the packing with the cover still on the spindle. In days of old we wound graphited yarn around a groove. A common practice now is to use an O-ring. I use yarn because I have some. When friends are coming to visit in a couple of hours time you can't send off for new rings. Get some yarn in - even unpicking something from a larger diameter into fine strands. Roll a suitable amount into the groove and try to cut off the excess so that the ends butt up. I then roll the piston across a hard, flat surface. You should j-u-s-t be able to enter the piston into the cylinder and pull it up and down with a silky feel. You don't want packing too tight or it will jam up.

Having covered the cylinders, all that is left is to make sure that the exhaust isn't choked up with bits of packing or whatever.

Piston valves usually behave themselves quite well. You can still adjust the valve travel by screwing the valve rod in or out, but you can't make any adjustment for wear. If valves are worn you will find that the engine still works, but steam leaks from the valve chest - in much the same way as the prototype often did.

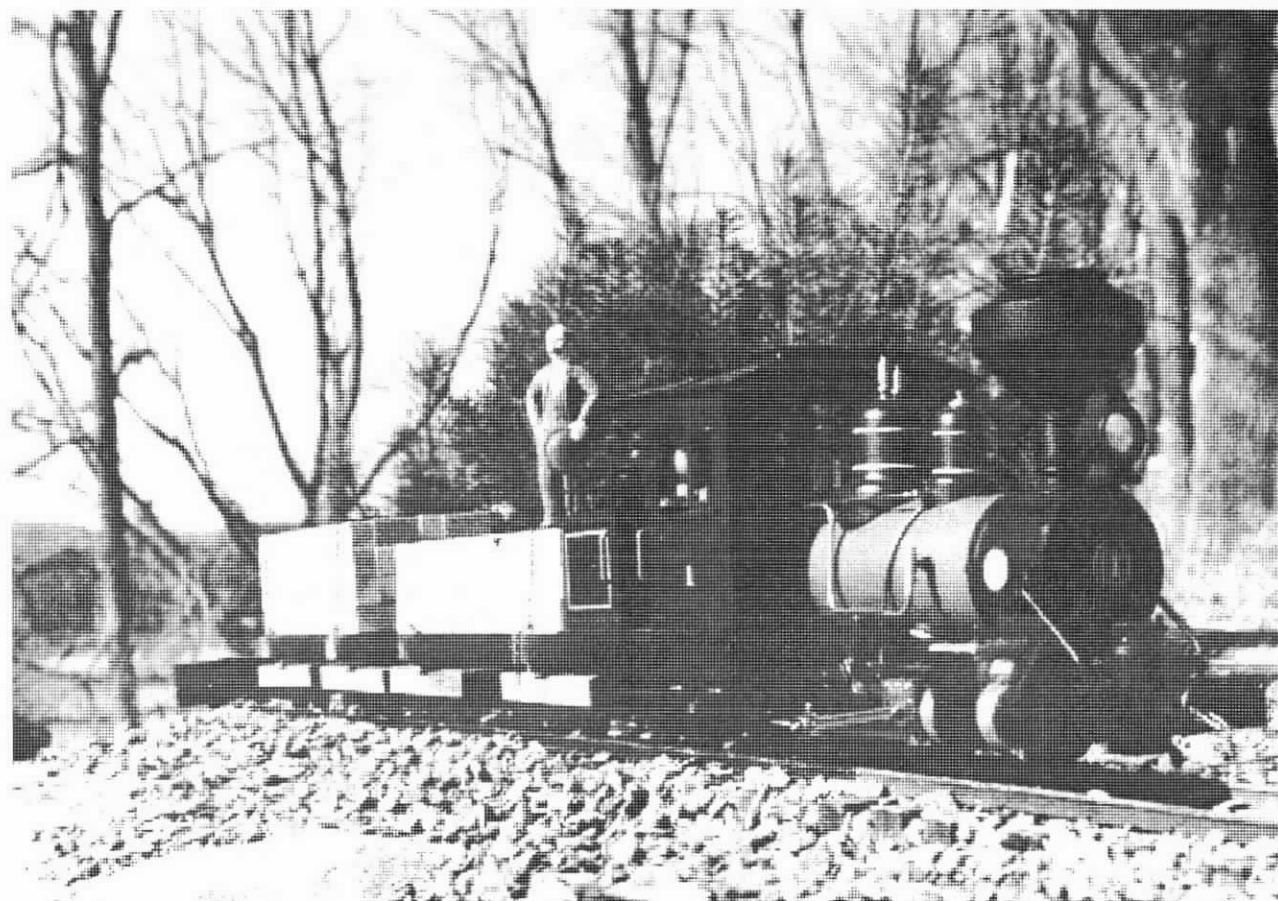
This has perforce been a fairly swift skate over the surface of the subject. At first reading, some of it may not be entirely clear. But it does clarify the subject with a bit of thought and a loco in your hands - honestly. The real core of the subject, the thing that I have tried to stress, is that most running problems can be sorted out if you can isolate them. By looking for just one fault at a time, you will go over some rather basic ground; things that seem obvious - but it usually works in the end.

May your tinkering arm grow ever stronger.....



LITTLE RAILWAYS

1621 Cherry Street
Williamsport, PA 17701



WHAT "G" WAS MEANT TO BE

1:20 Baldwin 0-4-2 T by *Aster*

1:20 Lumber Trucks by *Little Railways*

Catalog

\$1.50 ppd.

Locomotive Review - Finescale Engineering's Quarry Hunslet

by David Pinniger

- Description:** See "DETAILS OF THE PROTOTYPE...." at the end of this review
- Price:** Approximately \$950 at the time of writing - price will fluctuate with the exchange rate.
- Available from:** *In the U.K.* - Finescale Engineering Co., 117 Greenwood Ct., Upper Holly Walk, Leamington Spa, Warwickshire CV32 4JY, United Kingdom - (0926 335 123)
In the U.S. - Railway Garden Ltd., 4210 Bridge St. #5, Cambria, CA 93428 (805-927-1194)
- Technical Specifications:**
- Scale** - 16mm = 1' (1:19)
 - Gauge** - 32mm (gauge 0)
 - Length** - N/A
 - Width** - N/A
 - Height** - N/A
 - Weight** - N/A
 - Boiler** - silver soldered construction with water crosstubes, 45 - 50 lbs. operating pressure, fired by butane gas
 - Cylinders** - two double acting with slide valves
 - Bore & Stroke** - 3/8" x 5/8"
 - Valve gear** - slip eccentrics on driving axle
 - Lubrication** - displacement lubricator in cab
 - Duration** - 30-35 minutes (virtually unlimited with the boiler refilling valve)
 - Control** - manually controlled by easily accessible regulator in cab
 - Couplers** - Link & pin/hook & chain

When I first saw the very attractive little Cranmore Peckett saddle-tank locos produced by Finescale Engineering (as reviewed by Ron Brown in SitG #3), I was very tempted to try and buy one for my Ambledown Valley Railway. I am fortunate in having a lot of visiting engines run on my line, and Geoff Green with his Peckett was a regular and welcome visitor before he returned to the land of Oz. The smooth and slow performance of Geoff's Peckett even on quite heavy trains was very impressive and I

decided to put my name on the waiting list for Pecketts. However, the next time I saw Tony Sant he showed me the prototype for his next engine on the Finescale stand - this was a quarry Hunslet saddle-tank, which just happened to be one of my favourite locomotives. The success of the Pecketts had encouraged Tony to use the same cylinders and boiler as the basis for the Hunslet, and, assured that the Hunslet would be as good a runner as the Pecketts, I placed my name on the waiting list.

At last the great day came when I had a phone call from Tony Sant to say that the engine was being sent by carrier. I rushed home from work and carefully unpacked the wooden box. There was "**Louisa II**" in her very smart Penrhyn colours of black with blue lining. The engine is beautifully finished and the lost wax fittings (springs, water gauge, dummy whistle and lubricators) really set the engine off. Luckily it was a pleasant autumn evening and I decided to have a run straight away. I read the instruction

leaflet and then oiled around the bearings, opened the water hatch on the dummy tank and filled the boiler with distilled water and the lubricator with steam oil.

Now I have not previously

on the gauge and "Louisa" was ready to go. Many safety valves on the 16mm steam engines are overscale, but those on the Hunslets are very neat and true to prototype - and most importantly, they seem to

opened the regulator and with a satisfying chuff she set out from Bishops Amble and joined the mainline at Amble Junction. She slowed nearly to a halt when she hit the bank at Higher Buxton and I had



"Louisa II" with Boy Jones, relief driver, at the throttle on Dave Pinniger's Ambledown Valley Railway in the U.K.

Photo by David Pinniger

owned a gas-fired engine, and, although I have run a number of locos belonging to other people, I have never been entirely happy with gas. However, there were no problems filling the tank of "Louisa" with butane and I opened the smokebox door, turned on the gas valve which is cunningly disguised as the brake handle and applied a match. There was a pop as the gas lit and I then shut the smokebox door and opened up the gas valve a bit more. While I was waiting for the water to boil I swept a few stray leaves from the trackbed and saved a few snails and woodlice from a nasty fate. After about 7 minutes the safety valve started to lift with 40 lbs. pressure

work well!

As instructed, the brass disc supplied with the engine was placed in the chimney and I pushed "Louisa" up and down the steaming road a few times to clear the condensed water from the cylinders. This disc is a very civilized device which prevents the loco and owner from being showered with oily hot water. While some of you may think that this takes some of the masochistic fun out of running steam engines, I can assure you that for those of us who wear glasses, emulsified oil sprayed onto the spectacles can be a very obscuring experience. Having cleared the cylinders, "Louisa" was keen to go, so I gently

to open the regulator a crack more. Although the regulator is very small and near to scale size, the absence of a cab means that the Hunslet is very easy to drive, even on a ground level line like mine.

Despite being new and rather stiff and lumpy, she went up the bank and settled down to running regular circuits on the same regulator setting. I just sat back and for the next 10 minutes watched my new engine trundling around the track and producing a very nice exhaust steam plume. As the pressure started to drop I turned up the gas valve a little and she ran for another five minutes before the running started to be more jerky and she started slowing down, so I then turned off the gas. Both gas and water were low and although the sun

had gone down it was still a pleasant evening, so I decided to have another run.

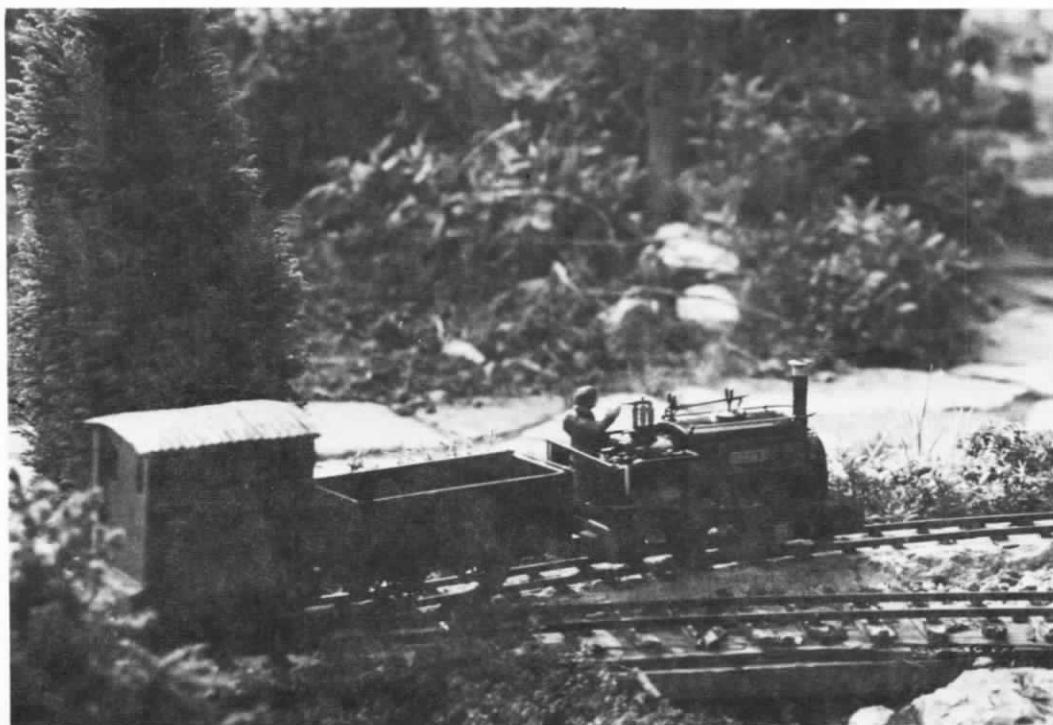
After a quick refill of water, gas and steam oil - and not forgetting that with a new, tight engine it is a good idea to put some more oil around the eccentrics, coupling and connecting rod bearings - "Louisa" was ready to go again. I forgot the brass disc but just managed to dodge the oily fountain as she set off, eager to be on the main line again. The second run was similar to the first and lasted about 20 minutes. As I cleaned down "Louisa" and made ready to put the engine away, I was well pleased that

this engine looked as though it would be a real winner.

Subsequent runs have proven this, although would-be owners

open truck and a brake van from the Sedimentary Sand and Gravel Company, for about 20 minutes before the water and gas levels ran

and does not vaporize properly. He advised switching to a propane/butane mix and although I had a little difficulty finding some,



First train out for "Louisa II" - a Sedimentary Sand and Gravel Co. extra at Higher Buxton.

Photo by David Pinniger

should be warned that the loco needs at least four hours running before it starts to be really run-in and will run smoothly on a heavy train. This is the price that you have to pay for having a precision engineered loco made with no in-built slop, but which once run-in will give years of satisfactory running if looked after and lubricated properly. "Louisa" suffered one tight spot on the connecting rod which became noticeable on the third run, being rather jerky. And so on a couple of wet evenings I ran the engine up on blocks in the shed and kept the bearing flooded with oil. The next run in the garden was much better, and "Louisa" pulled her first train, a modest 4-wheeled

low. The open cab means that the engine looks rather silly running without a driver at the controls, and the SS&G relief driver, Boy Jones, was placed in the cab until recently, when the regular driver of "Louisa", Taffy Walters, was made for me by my wife Becky.

On the next run I then hit a snag which probably would not have worried a more experienced gas man. It was a cold day, around 35°F, and the engine seemed to have problems raising steam and ran very badly. As I was rather concerned, I rang Tony Sant, and in his usual helpful way he asked whether I was using butane gas. "Of course" says I, at which Tony explained that butane is liquid at low temperatures

I tracked down a supply of canisters in a DIY store. Next weekend was still cold and the new gas was put to the test. "Louisa" made steam really well and produced an even better exhaust in the cold, damp air. I have since used this on two other ailing gas engines this winter with miraculous results, so if you are having difficulty running with butane, try switching to a propane/butane mix - it might be the answer to your problem.

WARNING! DO NOT USE PURE PROPANE AS THIS CAN BE DANGEROUS AND MAY CAUSE DAMAGE TO THE ENGINE!

It is worthwhile mentioning that the boiler of the prototype engine is

very small and a scale 16mm version would probably only give a very short run before the water ran out. Tony Sant's solution to this is to make the boiler diameter larger than scale size, but to fit a scale diameter smokebox and disguise the bigger boiler under the saddle tank so it is not noticable. One thing that I have noticed is that the first 15-20 minutes of a run are usually the best, and that she does not make steam as freely when the boiler is low on water. To overcome this and to extend the duration of a run beyond the normal 30-35 minutes, Tony Sant now supplies all engines with a special valve which screws in as a replacement for the boiler filler plug. This device enables water to be pumped into the boiler from an ordinary plastic garden hand sprayer with a plastic pipe. It seems to defy the laws of physics that you can pump in cold water against a head of steam at 50 lb. psi, but I can assure you that it works well. Regular top-ups enable a steady water level to be maintained in the boiler with the consequent advantage of more efficient steam raising.

Subsequently I have had great fun with "Louisa" and she has captivated all who have seen her perform. Not only is she small and delicate, but she can turn in a really impressive performance. On an away visit to John Chambers' Boyn Hill Railway she took over from a big Lynton and Barnstaple 2-6-2T and hauled a heavy train of wooden stock totalling 24 axles. I would not normally recommend this, as "Louisa" was at her limit of adhesion and overloading is a sure way to wear an engine out, but it did demonstrate what a little engine can do if it is well designed and well made. She is more at home on a light load of small sand tipper wagons or a local passenger extra and often comes out when I want a

relatively quickly prepared and relaxed run. There is nothing better than sitting with friends and a bottle of beer, watching "Louisa" trundle sedately past the sedums and heathers and through the miniature conifers with the Sedimentary Sand and Gravel works train. Every 16mm line should have one!

For those of you interested in the technical details, the Quarry class Hunslets have twin double-acting cylinders with slide valves operated by slip eccentrics. One point of interest is that the valve travel is extremely short. Those of you who are used to the relatively long travel on Roundhouse engines may wonder how this engine works. The boiler is silver soldered with water crosstubes and operates at 45-50 lbs. pressure. The lubricator is displacement type and the gas tank is under the footplate with the valve disguised as the handbrake. The engines are available in Penrhyn black with blue lining (like "Louisa") or Dinorwic Indian red with black footplate and smokebox. There are a selection of names available (see section on the prototype), and now the Hunslet even comes with a cast bronze Welsh driver with a grumpy expression! The bad news for all of you with only G scale 45mm gauge track is that because of their small size, the Hunslets are available only for 32mm (1-1/4") gauge. Your only answer is to lay a third rail (dual-gauge) like Marc Horovitz!

DETAILS OF THE PROTOTYPE QUARRY HUNSLETS

A large number of these engines were made to the same basic design by the Hunslet Locomotive Works in Leeds for the Welsh slate quarry industry between 1886 and 1909. Although often referred to as two-

footers, the gauge of the quarries was nominally 1' 10-3/4". This strange figure was because the primitive double flanged wagons used in the quarries were two feet between rail centers, rather than between the inside faces of the rails, which is the measurement used for normal flanged wheels. In practice it probably varied a lot from this! Many of these little engines survived and some continued in service until the quarries closed in the 1960's. Fortunately, many were purchased and have subsequently been preserved in the UK. Some have even made their way over to the USA and Canada. The Finescale engine is based on one of the so-called "Alice" class, which had inside Stephenson valve gear, 7" x 10" cylinders and weighed about 7-1/2 tons. The wheelbase was very short, and this enabled locos to traverse curves as sharp as 20 foot radius. In 16mm scale this works out to be even sharper than Mamod curves!

Here are some quarry Hunslet names for you to conjure with!

PENRHYN

Nesta, Elin, George Sholto, Gwynedd, Lilian.

DINORWIC

Velinheli, Red Damsel, King of the Scarlets, Alice, Rough Pup, Cloister, Covertcoat, Holy War, Maid Marian, Irish Mail, Wild Aster, Doldabarn.



The South Pacific Coast - a scenic live steam railway

by Grover Devine

My garden railway is going on seven years old and has been through a lot. Storms, drought, vandalism, insect attacks, cat attacks, changes of mind and many other things have resulted in a garden railway that is much different today than it was planned to be seven years ago. One thing that hasn't changed is the capability and my desire to accommodate a fair amount of guests for open house days.

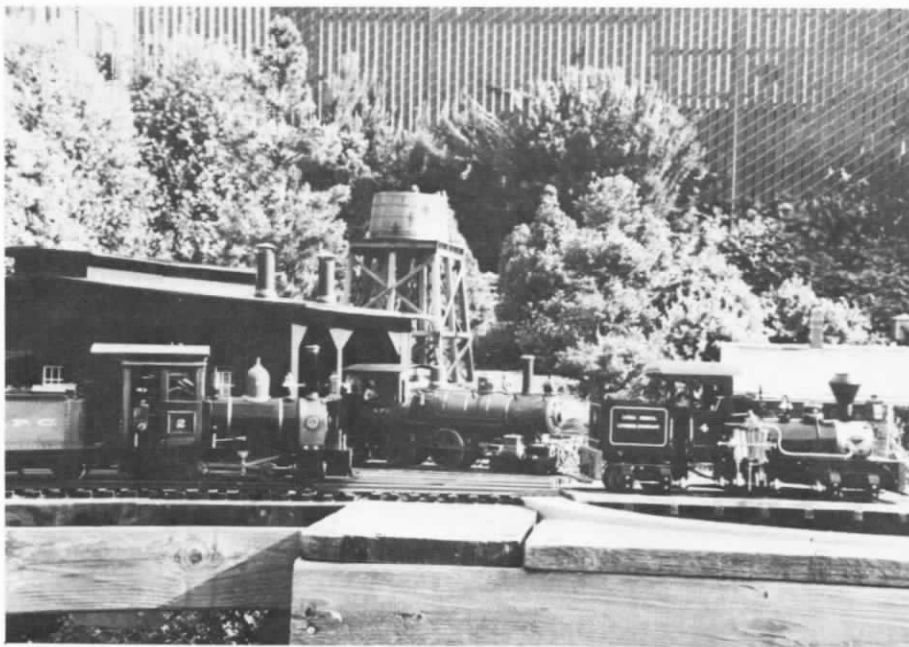
I've had many open house days since starting my garden railway in 1985, but only a few have been what I call a steam-in. A plain open house is where everyone is invited

to come and enjoy my garden and see my equipment operate. Usually a couple of people will bring their own equipment and ask to run it, but basically people come to see my trains run. A steam-in is where I specifically invite others to bring their steamers and operate them in my garden. I may or may not operate my own engines.

I was hesitant to hold my first open house, but after getting through it I realized it was more fun than work. I encourage everyone to have steam-ins, even if all the track you have is a simple loop (that's all I have - plus a few sidings). In fact, for operating live steamers, it seems

the simpler and more level the track, the better. Turnouts and grades tend to get in the way of the real business of operating steam engines. I've learned a few tips that may help the first time host to have an easier time. These tips may seem simple and obvious, but sometimes it helps to have things like this written down.

- *Provide fuel, water and steam oil for your guests, as well as an assortment of tools.*
- *Food and drink is always appreciated, especially if you want to encourage people to stay. Keep it simple - you want to play host, not fry cook. Don't forget to provide a convenient trash receptacle. People don't really want to leave trash in your garden, nor do they like to carry empty plates and soda cans around.*
- *Bring some chairs outside and provide a shady spot for folks to sit and rest. Last year I bought an inexpensive 12' x 12' free standing awning to cast shade over my steaming bay. With July temperatures in the 90's, this turned out to be one of the more popular places in the garden.*
- *Rest rooms - well marked and accessible! Need I say more?*



From left to right: Modified Merlin Mayflower, heavily altered Kalamazoo 4-4-0 and much changed Lindsay Shay pose in from of scratchbuilt roundhouse and water tank.

All photos by Grover Devine



No fancy camera tricks here! All that smoke coming from the modified Merlin is real. The rustic flagstop "**Call of the Wild**" really existed on the SPC and was named after one of Jack London's books. He frequented the Santa Cruz mountains and stayed with friends when he needed to relax.

- *Check your track and test it for proper gauge and running qualities a day or two before your steamup. Nothing is more embarrassing than having a guest's locomotive derail and possibly get damaged because of your poor track work. The morning of the event is a good time to walk the track and clear leaves, twigs, rocks, etc.*

My track has been in place for six years. I hand laid code 332 aluminum rail after weathering it with Floquil rail brown. Ties were cut from scrap redwood on my table saw. Spikes are plain steel spikes. A lot of controversy has arisen over the years about steel spikes rusting (is it good or bad?). I haven't found nay negative aspects about using steel spikes. In fact, I've found many good reasons to use them instead of other types. I've noticed that as the spikes rust, they actually get tighter in the tie. Old spikes are often more difficult to pull out than

new spikes because they've rusted in place. Don't worry about the heads rusting off, it just hasn't happened.

I've talked to others who have used brass pins and stainless steel

spiked in wooden ties. They notice that as the tie ages and dries out, the wood shrinks away from the spike and they become loose enough to work their way out of the hole (I'm sure the same would be said about galvanized spikes if anyone made them). Plain steel rusts, and the iron oxide crystals will grow into the gap as the wood shrinks away, keeping the spike tightly in place. Lastly, the appearance of rusty spikes which have stained aged wood ties is more lifelike than anything that could be painted or faked, and they look great in closeup photos.

Another thing that will help make your steamup a success is to provide a scenic environment. I've spent more time on building structures and landscaping than I have on the railway proper. People

like to look around when they're not running trains and often discussions will focus on miniature plants instead of steam engines, though steam engines still lead the list of things to discuss.



A very realistic and quaint town in the Santa Cruz mountains - with the SPC tracks passing right through the middle of town. Everything here is scratchbuilt except the truck parked by the hotel.

One question I'm often asked is - why does my Merlin 0-4-0 smoke so well? I wrote an article on this and it appeared in the Nov/Dec 1990 issue of Garden Railways magazine, but to summarize here, the main clue to the source and reason for all the smoke comes from the color of the smoke. Smoke from the stack has a bluish cast to it, while steam from the safety valve is pure white. Exhaust steam from the stack has steam oil dissolved in it, and when I discovered that the exhaust tube terminated inside the smoke box instead of the top of the stack like other Merlins, I reasoned that the oil was being heated in the smoke box by the fire tube and was being vaporized - just like in a car engine when it "burns oil". To test my theory, I shortened the tube in my new 0-6-0T Merlin and now it smokes as well as the 0-4-0. I still get opinions offered as to why my analysis isn't right, but right or wrong, no one denies the results I've gotten with the experiments on the 0-6-0T.

For future projects I plan more buildings and fences, making a

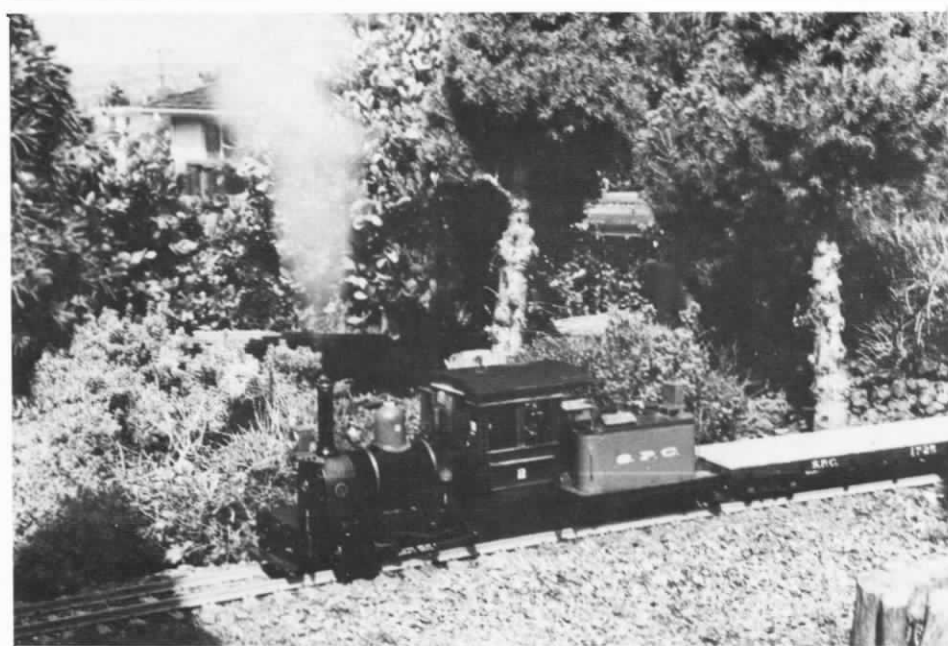


A scene reminiscent of a warm summer afternoon in the Santa Cruz mountains. You can almost hear the bugs buzzing!

steamer from scratch, and replacing all the track on my elevated wooden bench work. I plan to use the new code 250 steel rail and pre-cast "narrow gauge look" plastic tie strips from Llagas Creek Railways. The hand laid track on my elevated

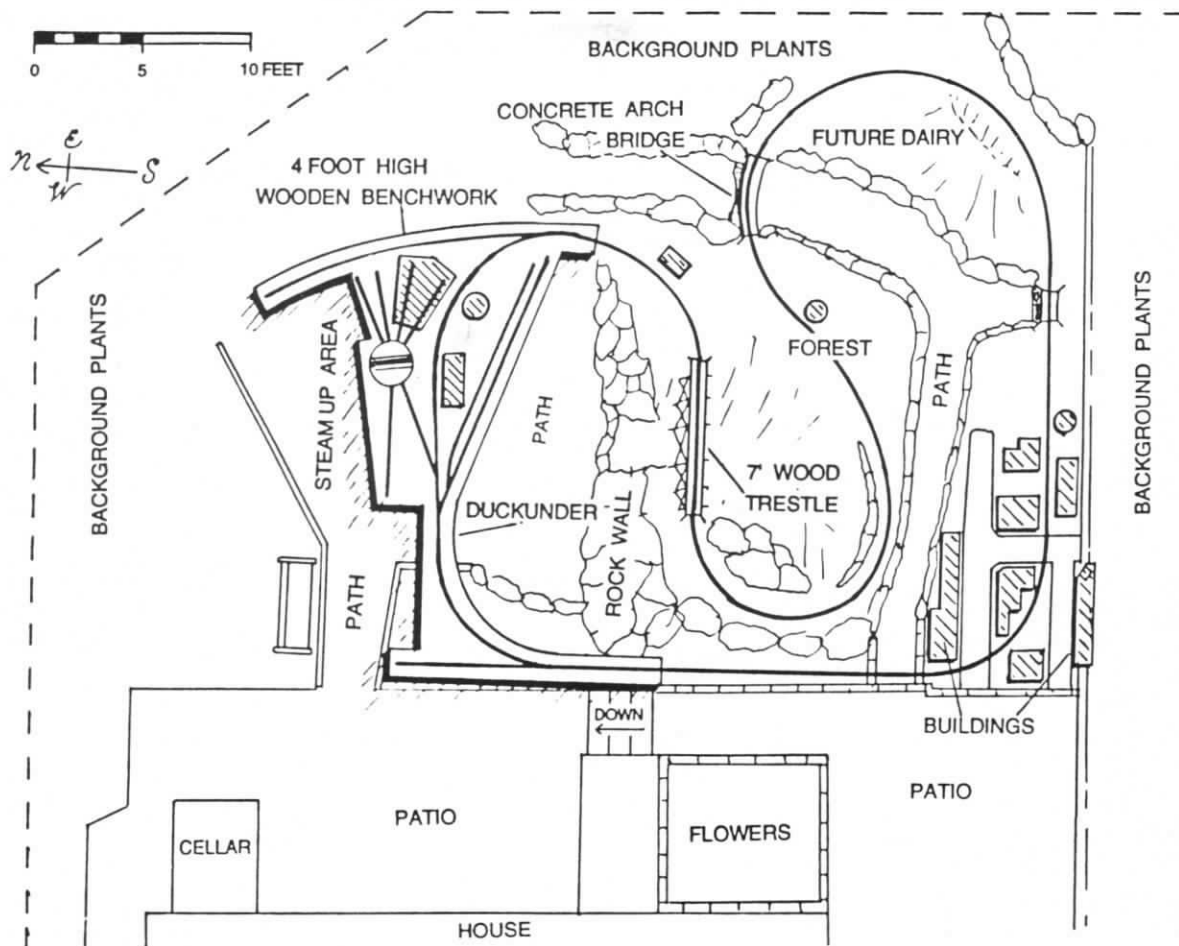
section is becoming unreliable because of the different rates of expansion and contraction between aluminum and wood, which has resulted in buckled rails and spikes that have been forced out of the benchwork - even though they are rusted! Track that sits on the ground is generally not fastened down, so it is free to wiggle around when the rails expand and contract, and this track has caused us no problems. Annual reballasting, leveling, gauge checking and the bolting together of rail sections has resulted in dependable track work.

I'm planning a steamup for the last Sunday in May (everyone is invited) and possibly another in the late Fall. My garden railway is on the list for open house tours during the 1993 Garden Railway Convention, which will be held here in Northern California. Stop by and say "hello".



The modified Merlin pulling flatcar #1725. The real #1725 was built by Carter Brothers Car Company and has been restored and can be seen and ridden at Ardenwood Park in Newark, California.





Track Plan for SOUTH PACIFIC COAST RAILROAD

AN AFFORDABLE LIVE STEAM SHAY

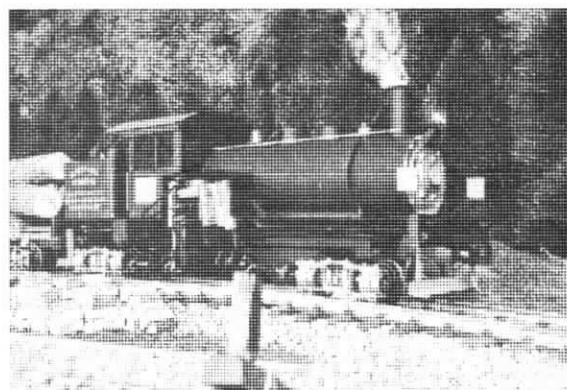
© Jerry Hyde - 1988

- Runs with LGB
- 1:24 Scale, Gauge 1
- Handbuilt of copper, brass & wood
- Each locomotive is test run
- Operating front and rear lights
- Displacement lubricator
- Kadec couplers
- Burns Storno gel or canned Sterno
- Can be double headed (several radio channels available)

INCLUDED

- 1 ga. fuel (approx. 64 runs)
- 16 oz. steam cylinder oil
- 1 lubricator water extractor
- 1 Flashlight
- 1 doz. reed switches
- Radio batteries
- Instructions

**WE PAY UPS
SHIPPING**



\$975

- Insulated drivers prevent shorting if track is powered
- Accessory trip device (© Jerry Hyde 1988) can be used to throw track switches, lower motorized water spouts etc. by radio
- Designed to pull several cars similar in number to prototype
- Low pressure boiler with sight glass in cab

SPECIFICATIONS

- Min. radius 2' (LGB 1100 curves)
- Running time approx. 25 minutes
- Copper porcupine boiler 2" X 6", 8 oz.
- Fuel tray 2 oz.
- Lubricator 1/2 oz.
- Overall size 16-1/2" L x 4-1/2" W x 5-1/2" H

(Ohio res. add 6% sales tax)
(Personal checks must clear
before shipment)

89060 New Rumley Road

Jewett, Ohio 43986

1-614-946-6611

Steamin' Up, Japanese Style

by Scott E. McDonald

When I first received orders for an un-accompanied overseas tour, one of the many thoughts that went through my mind was whether I was going to be spending two years devoid of running live steam. I wasn't sure if any local groups existed, or if my schedule would allow me to be able to locate ASTER. Magazines, at one time, were what I considered to be my only link with the hobby that my wife (Jeni) and I enjoy so much. I departed Washington D.C. on the heels of Desert Shield, arriving onboard my ship in the Arabian Gulf at the beginning of Desert Storm. These events - and the uncertainty of when I would return to my home port, Yokosuka, Japan - put the hobby even further from my grasp.

As soon as the ship arrived in Japan in April of 1991, I was getting

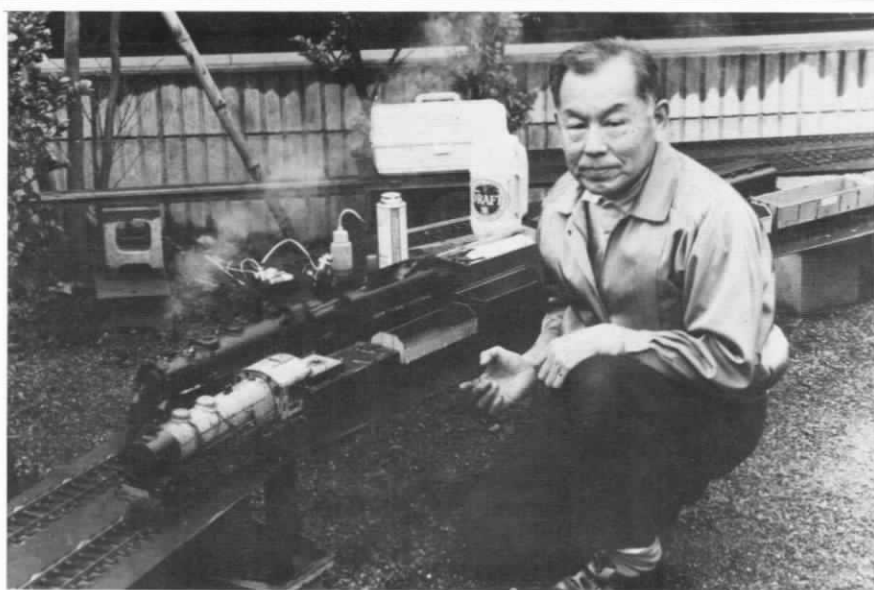
maps, learning the Japanese rail system, preparing for the adventure of locating ASTER Inc. and gathering what information I could about small scale live steam opportunities. That was a most interesting day, and thankfully, the local people were very helpful in showing a crazy American how to get to an address listed in a catalog. The company was located within walking distance from a train station, which made the adventure easier. Walking into the showroom at ASTER is, for a miniature live steam enthusiast, like walking into a candy store would be for a child. Each engine ever produced, in various livery, were proudly displayed along two walls. I met Mr. Inouye, the export manager for ASTER, and we had a very enjoyable visit. He contacted Mr. Karou

Suzuki, chairman of the Yokohama Live Steamers, who came out and took me on a tour of the facilities of the YLSC, and we steamed up a couple of engines since it was a "good day to run". Since then, I have been steaming up with the Yokohama Live Steamers as a regular.

The YLSC is an organization that has been around since about 5 years after the ASTER company began producing their fine-scale locomotives. Many of the members are also members of the Japanese Miniature Railway Club, which has an exhibition track at the Museum of Transportation in Tokyo. That group has been running small scale live steam since 1936, and will be presented in a future article in SitG. The YLSC obtained rights to an open area between some houses on the outskirts of Yokohama and ran there for seven years until moving to the present location at the home of a member. Gauge 1 is the predominant gauge, though there is one loop of track that is dual gauged, with gauge 0 sharing the right-of-way. This puts the total available mainlines at five, and all are busy during a regular meeting.

The YLSC has a foundation of traditions that are the highlight of Japanese culture. These deep rooted traditions make for an enjoyable and exciting group. While this is evident in the manner in which all meets are conducted, it was accentuated at the annual New Year's Steamup. This event brought out a multitude of locomotives and tradition.

There is a natural regulation of the track as members prepare to steam up. No tote board or track right-of-way sign is used. By scanning the tables and steaming bays, you can tell who is in preparation,



Mr. Karou Suzuki, Chairman of the Yokohama Live Steam Club, firing up his 1948 scratchbuilt Japanese 2-8-2. The tender carries enough alcohol to run for one hour. Axle driven pump ensures that the boiler will maintain the proper water level.

All photos accompanying this article by Scott E. McDonald



A double-header with Aster D-51 and C-62. The C-62 is on a break-in run after being fired for the first time. At this point on the mainline, the track is at ground level and is passing through a garden currently under improvement.

in motion, or clearing the track. The timing of run to run between members is phenomenal; a true art of steaming to which the Japanese elevate the hobby.

While ASTER is the mainstay and accounts for the majority of engines (they are only a couple of miles from the tracksite), we have many members who build their own. This group encourages members to become proficient in construction of quality locomotives from scratch, or from parts gathered from many sources. Running the locomotives is then the next natural step. At every meet I see bits and pieces of locomotives slowly coming together until the finished product is running down the track!

We have many members who prefer coal as their fuel, so the air is always filled with a potpourri of

fragrances of burning coal, alcohol and butane. Double heading two ASTER Japanese C-62 coal burning locomotives is not an unusual sight at a meet. With the ASTER C-11 being the least expensive locomotive currently produced, we have had as many as eight of these show up on any meet day.

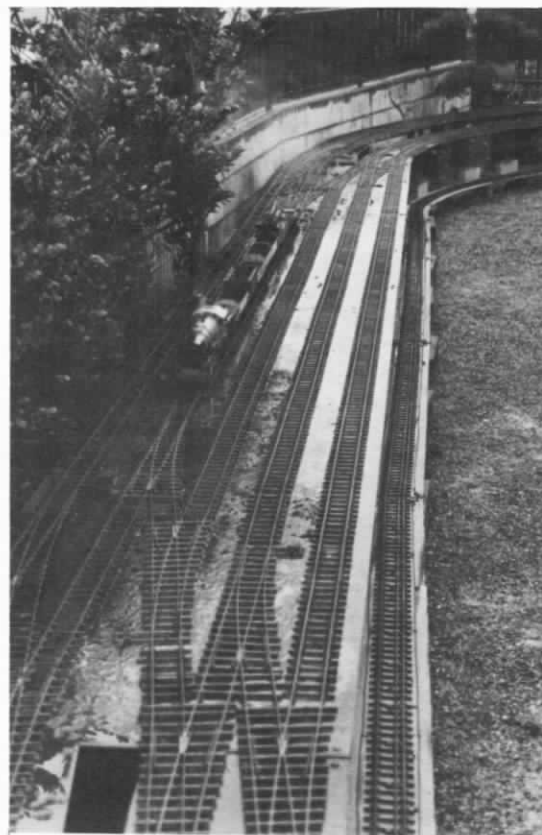
British prototypes seem to be a favorite of those who scratchbuild - probably because of the great diversity among locomotives

live steam locomotives - all using hidden oscillating cylinders and full scale simulated Walschaert's.

One of the more "unique" engines making calls at the station is a scratchbuilt steam turbine. A marine boiler and vaporizing alcohol burner generate steam to a miniature turbine that provides motion through reduction gears to power the locomotive. At first glance, you see what appears to be a diesel locomotive coming around the bend, and then you hear the distinctive hiss of steam exhaust and the whine of the turbine.

(A detailed article on this engine is in hand - complete with photos - and will appear in an upcoming issue.....ed.)

Like many train organizations, an average meeting encompasses



Switching yard between the mainlines. The two mainline tracks on the right and the lower track run a loop in front of the house, while the two tracks on the extreme left run a circuit around the house. Trains can be moved from inner to outer loops at any time via the yard. Lower loop is dual-gauged (0 & 1).



New York Central (Aster), butane fired, on steaming bay. Note the beer bottle. These are used to hold water for firing and emergencies. Red bottles are placed around the tracksite at 3 meter intervals for emergency use.

steaming, sharing videos, catalogs, magazines and cuisine. My peanut butter and jelly sandwich brown bag is no match for the variety of sushi that appears, but a thermos of American-style brewed coffee helps in bridging the gap between cultures.

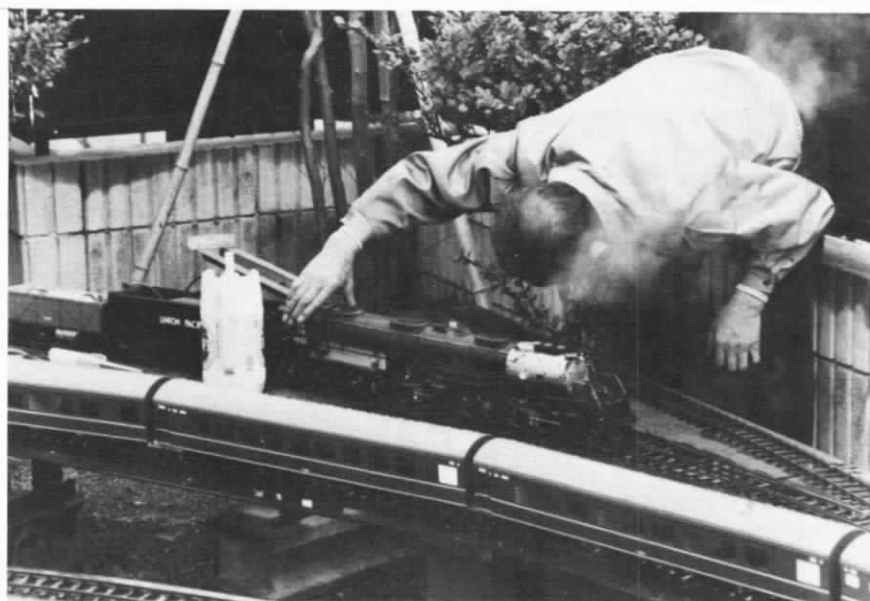
The track is mounted on metal plates, and is elevated for 98% of the run. There are three loops in front of the house, with a double mainline circumnavigating the property. At the rear of the house is the only spot where the track is at ground level, and is secured at this point on a right-of-way of bricks and mortar. The change of sound from elevated metal plates to ground level as a locomotive completes the circuit is evident from the front of the house, so rarely do members need to "chase" their locomotives. At this juncture, the garden is currently under improvement with miniature mondo grass and bonsai. For the remainder of the trackage, the garden is in the form of potted plants and bonsai in various locations. Access to the track is optimum, so plants are at a minimum. The mainlines all converge to a yard where you can

switch between any of the mainlines. This is where all locomotives begin and end their trips. Nearby are two sidings, where the rolling stock waits to be utilized.

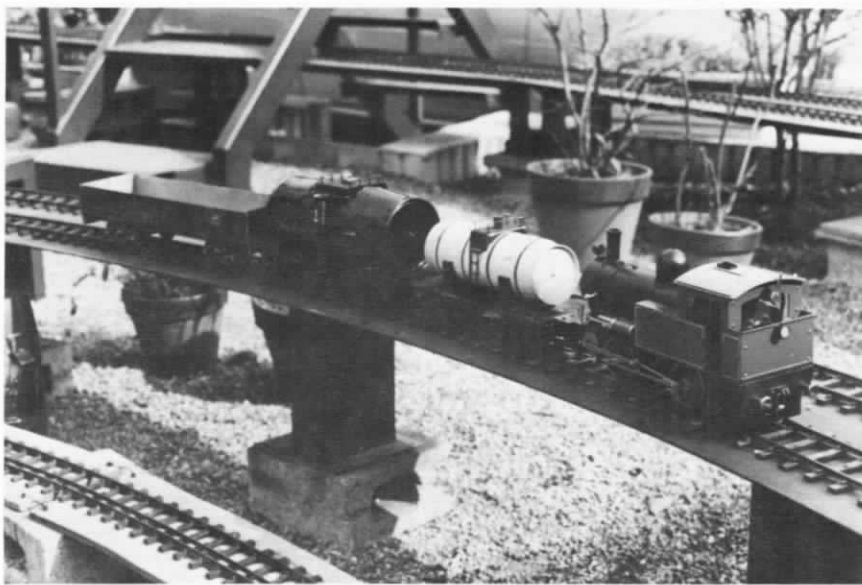
It is rare to see a locomotive running light. Many people I know share a similar feeling that all locomotives should be pulling some

type of rolling stock - unless moving about the yard switchin' and hitchin'. The YLSC shares a similar feeling. Once steam is raised, you get only a short distance to clear condensation from the cylinders, and then cars are coupled up. Not only does this add to the visual enjoyment of the locomotives, but serves to help control the propensity for speed that the small scale, super efficient boilers give these engines.

The club maintains a large volume of rolling stock at the tracksite, so members need only bring their engines. Homes are small compared to our standards, and many of us know what it is like to transport a large amount of rolling stock in a Japanese-built vehicle. Economy in transportation between the home and track is optimized. Many members, like myself, utilize only public transportation, which really puts economy foremost. The majority of the rolling stock are passenger cars. The minimum radius of the track is 3 meters, and the largest radius is 6 meters. The large, gentle curves really add to the beauty of the long trains as they run the circuit.



Mr. Suzuki listens to the butane burner on an Aster Big Boy, a regular sight at YLSC meetings.

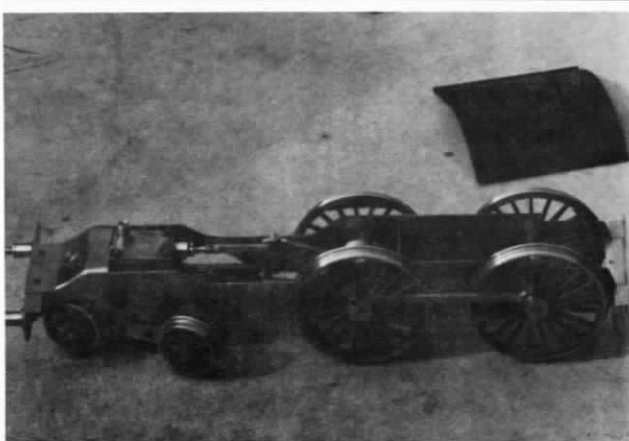


Scratchbuilt 0-4-0 side tanker pulling a consist. Tank cars are made from beer cans.

Should a train build up too much speed, it will quickly be attended to by whoever is closest. Of course we do have our "close calls". One of the most heart-stopping events I have witnessed to date was an ASTER Daylight, at full throttle on a one percent downgrade, heading towards an ASTER SNCF 150X in Russian livery that had jumped the outside track and was precariously perched on the inside track - right in the path of the approaching Daylight. Disaster was avoided in a matter of seconds, and everything

was back to normal with both trains making circuits and passing each other for the next twenty minutes without incident. Thank goodness for Glasnost!

As a course of safety, red water bottles are located along the track at intervals of about 3 meters. These are only used in emergency, and one day provided instant relief for an ASTER Big Boy that



Scratchbuilt engine under construction. Superb workmanship!



Taking a break from Steamin' Up - Japanese Style

From left to right: Mr. Karou Suzuki - Chairman; Scott E. McDonald - American; Mr. Ito - Tracksite at his house; Mr. Kitazawa - Member.

Steam Scene.....along the rails

A recent trip to California gave me the opportunity to visit the garden railways of Grover Devine and Gary Broeder. We boiled some water, ran some trains and took some photos that we want to share with you in this issue. You'll also find an article by Grover elsewhere in this issue, accompanied by more photos of his beautiful and very photogenic garden railway.

We invite you to send in your favorite photos for this feature, always with vital information like photographer, subject, where, when and why. Then mail them in to SitG, P.O. Box 335, Newark Valley, NY 13811. Please include a LSASE with sufficient postage if you'd like your photos returned. And please be sure to affix a label to each photo with your name on it so we can identify the sender when your photo gets mixed into the pile with all those others!



Top: South Pacific Coast loco #2 eases through the center of town and past the magnificent Los Gatos Hotel, a favorite of tourists and summer people in the Santa Cruz mountains.

Bottom: A Loma Prieta Lumber Co. train rolls over the Main Street grade crossing on a sleepy summer afternoon. Looks like they're working in a grove of redwoods this summer.

Photos by Ron Brown





Top Left: South Pacific Coast #2, a much-modified Merlin Mayflower, sits outside the SPC engine house, while a stock (so far) Merlin Major moves toward the turntable. The engine house is scratchbuilt, as is the water tank behind it. Notice that the plants on this raised deck portion of the railway are potted plants that are "plugged in" to holes in the decking, thus allowing Grover to change the landscaping to suit the occasion.

*All photos this page
by Ron Brown*

Center Right: Loma Prieta Shay #4, a Lindsay Shay modified and detailed by Grover Devine, patiently awaits a spin on the turntable. The headlight on this loco is a real work of art - literally! The side panels are hand painted with a different mountain scene on either side. Other details installed by Grover include an ornate sand dome turned from brass, pilot steps, link & pin coupler pockets, and a new stack. The cab and tender wrapper were also built by Grover.



Bottom Left: South Pacific Coast engine #2 approaches the water tank at Camp Teller. This scene closely duplicates the cover of the first South Pacific Coast Railroad book by Bruce A. MacGregor.

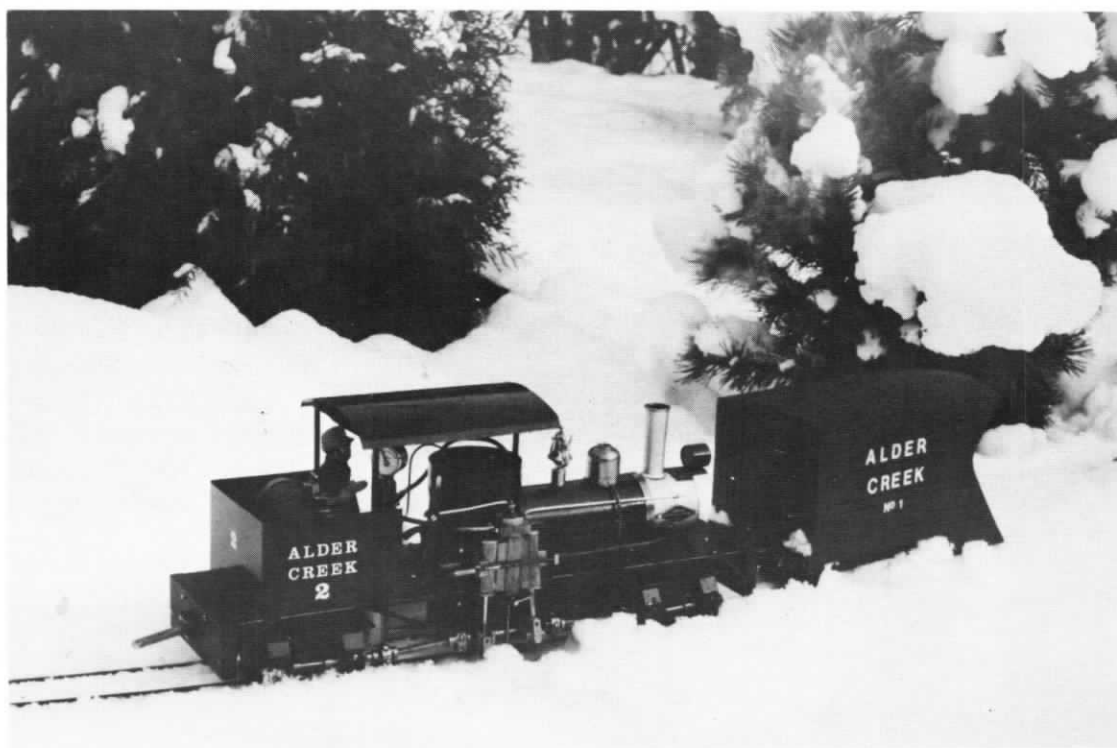


Top Photo: Rich Chiodo's ballast train, headed up by his Frank S., is about to take to the main on the Coalport R.R. This photo was taken at the 1st Annual SitG Steamup at Bob & Judy Nowell's in Pennsylvania over Memorial Day weekend in 1991. The loco sitting on the steaming bay is a Steamlines Austerity 0-6-0, which unfortunately never ran during the meet because of mechanical problems.

Photo by Rich Chiodo

Bottom Photo: Alder Creek #2, a Lindsay Shay, pushes plow #1 through some heavy snow on the Alder Creek Branch on Dave Pinniger's Ambledown Valley Railway in the U.K. The engineers on the other side of the pond must be a hardy lot - this one appears happy as a clam in his shirtsleeves - and he doesn't even have the protection of an all-weather cab!

Photo by Dave Pinniger

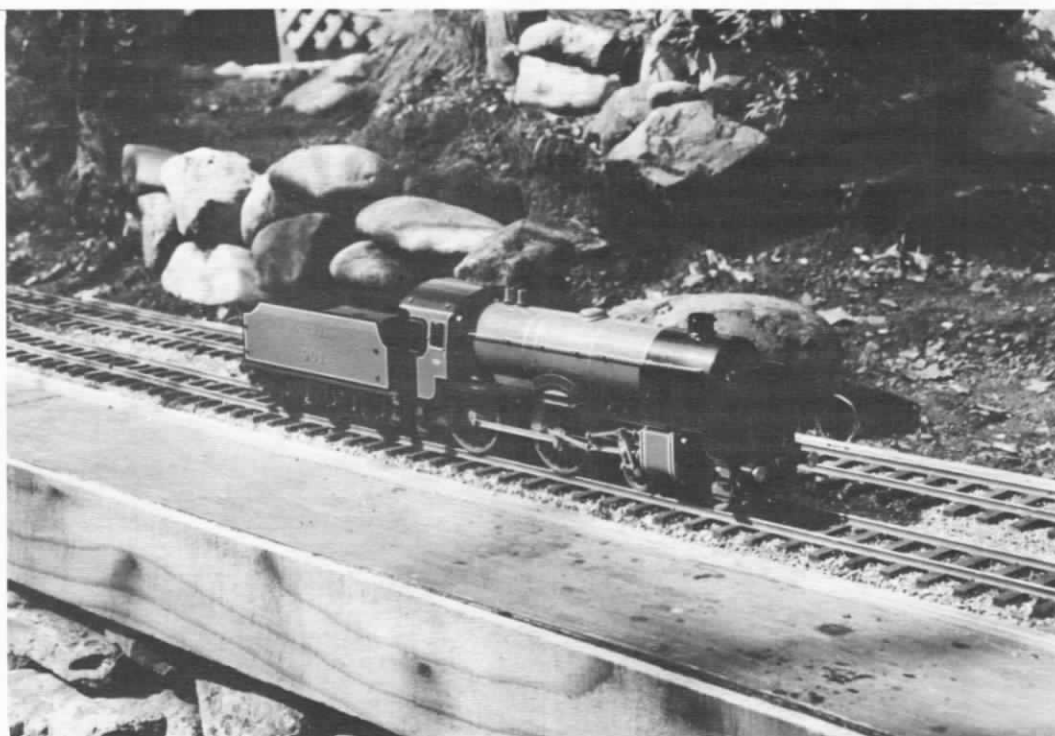




Above: Austerity 0-6-0 loco on a passenger-hauling run. This photo was taken during a visit to Gary Broeder's ground-level railway on the banks of Llagas Creek in California. Gary says his railway reflects his eclectic interests, changing personality from British mainline to American narrow gauge - depending on which locos are on the rails.

Photos by Ron Brown

Below: An Aster Schools Class 4-4-0 in Southern livery sits idle on a siding on Gary Broeder's Llagas Creek Railway, dreaming of high-speed runs down the long mainline, around the reversing loop and back up the grade at full throttle.



TURNOUTS

CODE 332 BRASS RAIL

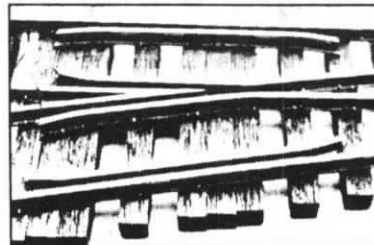
For info, send LSASE to:

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

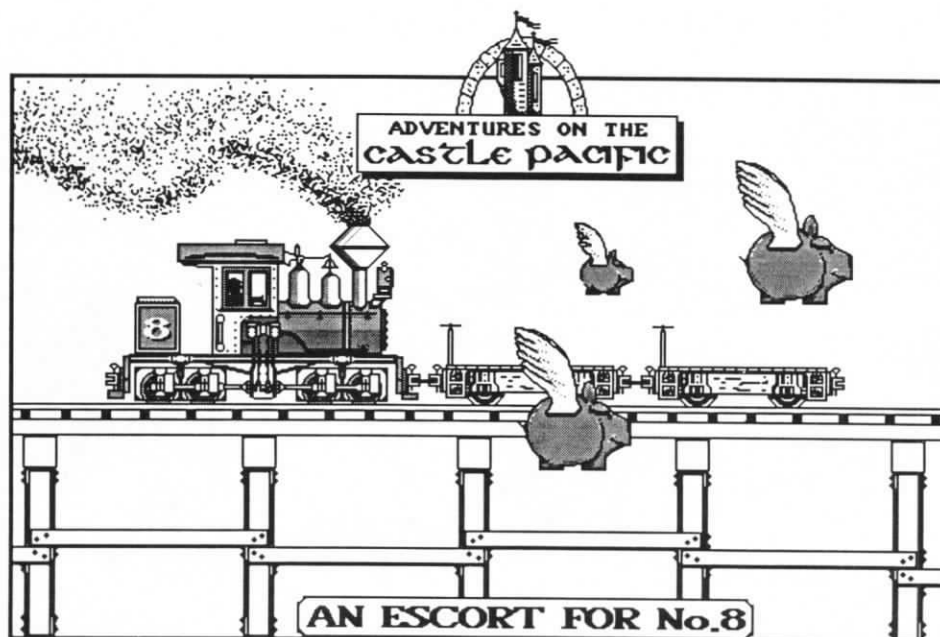


MAHOGANY TIES
DOUBLE SPIKED STRAIGHT AND
CURVED 8' & 10' RADIUS

We accept M/C & VISA



Rick Drescher's.....



Rick Drescher © 1991

GEOFFBILT

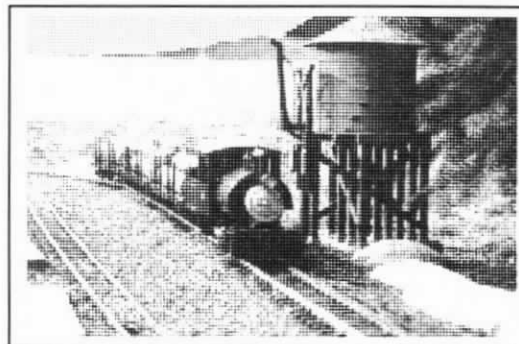
CUSTOM BUILT LOCOMOTIVES AND ROLLING STOCK

(Specializing in Garden Railways & Live Steam)

The first batch of SCORPION's have been delivered and are hard at work, hauling the freight (and passengers) on garden railways all over North America. We'll be starting the second batch soon, and we have several different models and styles of steam locos available - one of which would be perfect for your garden railway! Write or call us about building one for you - you'll be surprised at how affordable live steam can be.

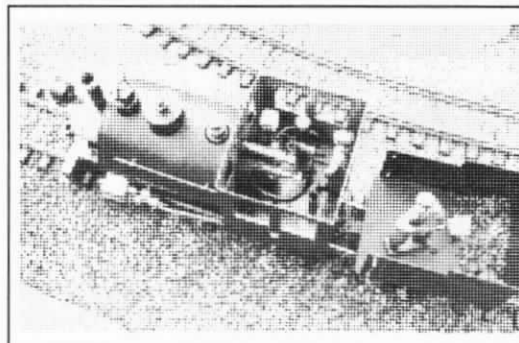
Send \$2.00 for our
illustrated catalog

Geoff Coldrick
Box 277
Salisbury,
New Brunswick, EOA 3EO
Canada
Phone (506) 372-4364



Above: Frank Ulman's SCORPION stops for water on the way to the mill.

Below: With cab roof removed, backhead plumbing and cab interior is easily accessible.



Living Steam Railways for G Scale & SM32



Available from
the dealers
listed below.
Further dealer
inquiries
welcome.

The latest addition to our range of
live steam locomotives features—

- * Working outside valve gear
- * Two-channel radio control
- * Water-carrying tender with pump
- * Boiler water gauge
- * High level of detail



West Lawn Locomotive Works
PO Box 570
Madison WI 53701
608-231-2521

Rio-Pecos Garden Railroad Co.
27136 Edenbridge Court
Bonita Springs FL 33923
813-495-0491

Railroad Supply Corporation
115 South Victory Road
Burbank CA 91502
818-845-1727

Roundhouse Engineering Co.
Unit 6, Churchill Business Park
Churchill Road, Wheatley
Doncaster DN1 2TF ENGLAND
Ph: 011 44 0302 328035

CODE 250
CODE 332
TURNOUTS

Preassembled all metal turnout, dual-gauge turnouts, crossovers and crossings. All include ground and pivoted points. Guard rails pre-soldered to stock rails.

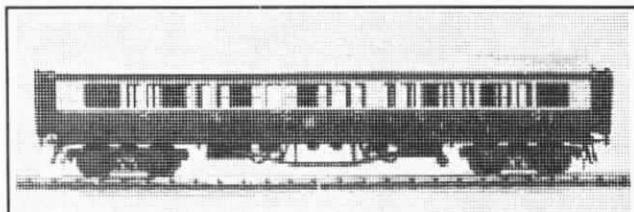
#5 Turnout	\$59
#6 Turnout	\$62
#7 Turnout	\$73
#8 Turnout	\$79

For more information, send LSSAE to:

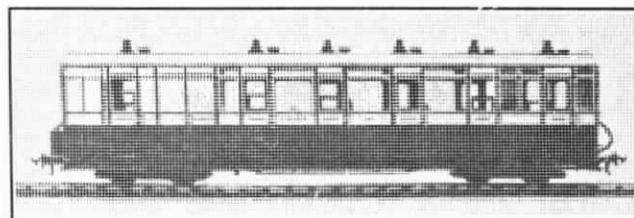
C. Michael Products
P.O. Box 311
Granby, CT 06035
Phone 203-653-7583

British Prototype Kits by

Tenmille
Products



Great Western Mainline Coach
10mm (3/8") Scale, Gauge 1



Lynton & Barnstaple Narrow Gauge Brake/3rd Coach
16mm Scale, Gauge 1 or 0

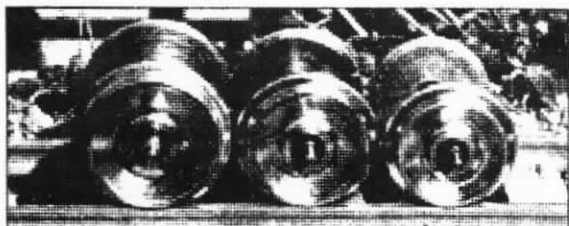
KITS, PARTS, TRACK: 10mm (3/8") Scale Gauge 1; 16mm Scale (NG) Gauge 1 or 0. PRICE LIST, with illustrated leaflet, \$2.00 postpaid.



HARPER MODEL RAILWAYS

PO BOX 24728 LYNDHURST OH 44124 TEL. (216) 464-8126

METAL WHEELS



Unplated Steel \$2.49 per axle
Nickel Plated Brass \$3.25 per axle
Shipping & Handling - add \$5.00/50 axles
Double insulated. For G, 1/2", REA, #1 gauge.
Dealer inquiries welcome. Cal. res. add 6% sales tax

GARY RAYMOND

P.O. Box 1722, Thousand Oaks CA 91360
805-492-5858

Subscribe to

Garden Railways

the bimonthly magazine for outdoor model railroaders

Don't risk missing a single issue! Just send in the form below (or a reasonable facsimile thereof, if you are queasy about cutting up your magazine), along with your payment, and we'll begin sending GR with whichever issue you specify.

Rates:	USA	\$21.00/year (6 issues)
	Foreign and Canada	\$28/year via surface
	(US funds, please)	\$55/year via air
	Sample copy	\$4.95

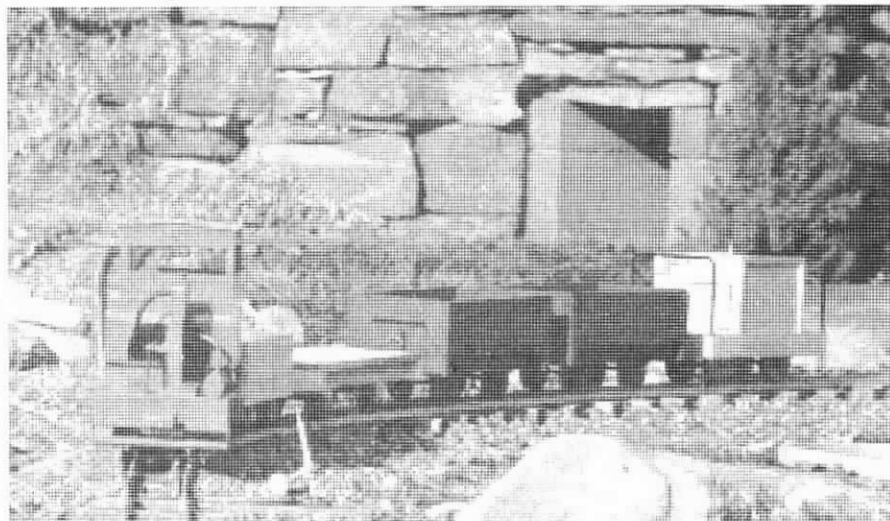
Name _____
Address _____
City _____ State _____ Zip _____
Visa or MC # _____ Exp. _____
Please start with _____ issue.

Garden Railways

Box 61461 Dept. SitG • Denver CO 80206 USA • 303-733-4779

Light Railways For The Garden

Gauge 1 Models of Heywood 15" Gauge Railways



Drawings - Kits -- Send \$1.00 for list to:

Decker's Trains, Rt. 1, Box 102-E, Hot Springs, SD 57747
605-745-5487

Live Steam Clubs

In this space in each issue we will list those clubs or societies that have an interest in miniature live steam. Drop us a card or letter with the essential information and we'll add your group to the list.

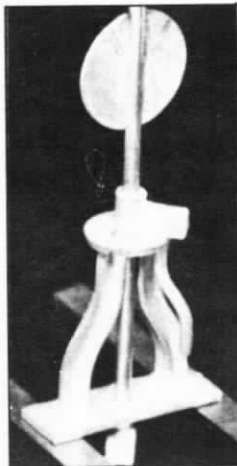
New club being formed in Central Connecticut: Running live steam and battery powered locomotives on large 70' long oval with 10' radius curves and room for branch line expansion. Gauge 1 track, code 250 weathered rail. Looking for fellow live steamers for Steam in the Garden Fun!

Call Barry Bridges at 203-232-0295 evenings.

Pennsylvania Garden Railway Society

A large garden railway group with a high percentage of live steam enthusiasts. Contact Fred Kuehl, Box 93, Rowland, PA 18457 - phone 717-685-2239.

"G"



OM-44-BR
Lostwax
"Bronze"
Switchstand
Kit \$13.75

OM-44
Whitemetal
Switchstand
Kit \$7.85

**OZARK
MINIATURES**
P.O. BOX 22
Dept. R.B.
Linn Creek, MO 65052

"G" & 1/2" Kits,
Detail and
Scratch Builder Parts.

14 PAGE LOGGING & R.R.
CATALOG - \$2.00

See your local hobby dealer today
To order direct (ADD \$2.00 FOR
SHIPPING), MO residents add 6.725%
State Sales Tax.
Dealer Inquiries Welcome

Eighth National
19  92

*Garden Railway
Convention*

July 5 - 9, 1992

Sponsored by:

Washington, Virginia
& Maryland
Garden Railway Society

For Reservation &
Dealer / Exhibit Information:
Convention Registrar
171 Elden Street, Suite 160-217
Herndon, VA 22070
(703) 471-1442

MAMOD LIVE STEAM LOCOMOTIVES THAT WORK



SL1 Green Locomotive, "0" or "1" Gauge, \$320 postpaid

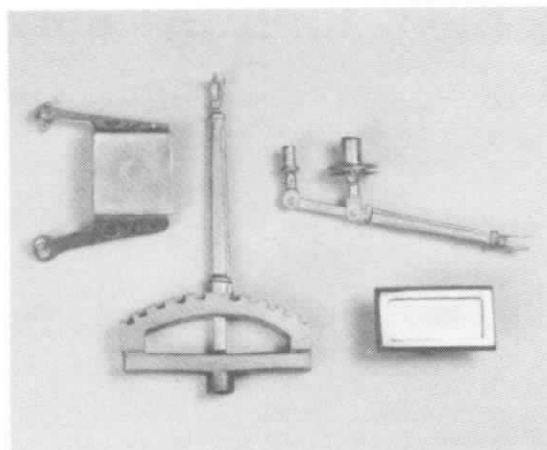
If you bought a MAMOD locomotive elsewhere and are unhappy with its performance, maybe you should have tried us!

OUR MAMODS are equipped with proven MSR cylinders, soldered steam pipe, ground valves, improved fittings, and are STEAM TESTED before shipping complete with steam oil and fuel.



Send long SASE for our Catalog
P.O. Box 201192
Arlington, Texas 76006

Send LSSAE For Catalog Sheet



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

Calendar of Events - 1992

May 24 - Don't Miss This One!

If you are planning to attend, please call or write Bob right away so he and Judy will know how many to plan for. **2nd Annual SitG Memorial Day Weekend Steamup**, hosted by Bob & Judy Nowell in Jim Thorpe, Pennsylvania. Send a LSASE for more information and a map. If you'd like info on local motels, be sure to ask Bob to include it.

Bob Nowell
Woodside Drive
Jim Thorpe, PA 18229

Phone 717-325-8246 (before 9 p.m. Eastern time, please)

August 22 - 4th Annual Silo Falls Steamup, hosted by Ron & Marie Brown in Newark Valley, New York. Large ground level railway with 10' radius curves and fairly steep (4%) grades. Please send LSASE for more info and a map.

Ron Brown
P.O. Box 335
Newark Valley, NY 13811

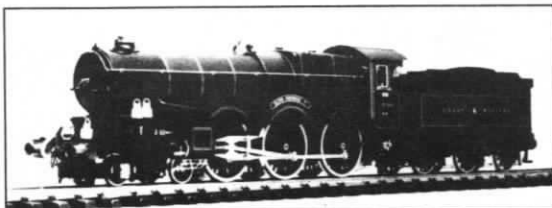
Phone 607-642-8119 between 5 p.m. and 10 p.m. Eastern time or any time on weekends.

Steam once ruled the road...

ASTER
brings it all
back in
Gauge 1



1991 Aster Live Steam
catalog available.
\$15.00 + \$3.00 postage



GWR King George V

1:32 scale model, available in live steam kits & built-up, as well as electric (built-up only).

Aster Hobby USA, Inc.
P.O. Box 90643
Pasadena CA 91109-0643

For Sale or Trade:

Complete LGB Anniversary Set with all four annual cars (all in boxes) - sell or trade for a Frank S. Rich Chiodo, 9 Janvrin Road, Hampton, New Hampshire 03842 - phone 603-926-4858.

NEW for '92from Salem Steam Models

For 1992 we are introducing a range of low cost live steam locos in 16mm & G scales. Based on an externally fired, silver soldered boiler with a Goodall water filler valve and a 20 psi safety valve, the locos are powered by twin double-acting oscillating cylinders fitted with O-rings for maximum performance and reliability. The variable gauge wheels are mounted between the frames, as is a rotary reversing valve operated from a cab-mounted lever. Butane gas and meths fired versions are available. Typical narrow gauge bodywork is fitted, with the side tanks and cab having embossed rivet detail. Alternative cab styles are available as well as varying levels of detailing - for example, the provision of extra brass handrails, sandboxes, etc. The wheels can be easily adjusted to either 32mm (gauge 0) or 45mm (gauge 1). Dimensions will vary slightly, depending on specifications, but locos will be approximately 11" in length, 4-1/4" wide and 5-1/2" high, making them compatible with most other locos and rolling stock. Locomotives are finished in a semi-matt black with brass fittings. Prices are as low as we can reasonably make them - comparable to the cost of a fully reworked Mamod loco! There is no comparison to the Mamod in quality, however. Our locos have heavy brass frames, steel wheels and flycranks, the boiler heat shield is of stainless steel, a displacement lubricator is fitted as standard, etc.

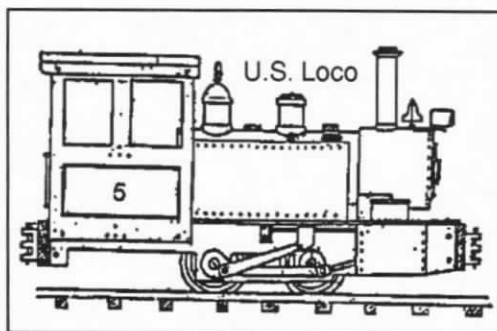
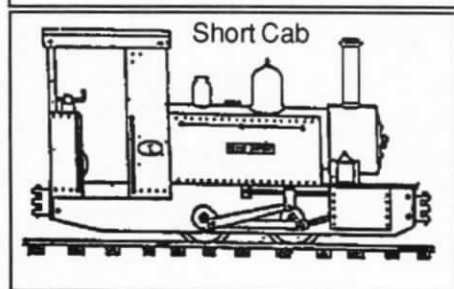
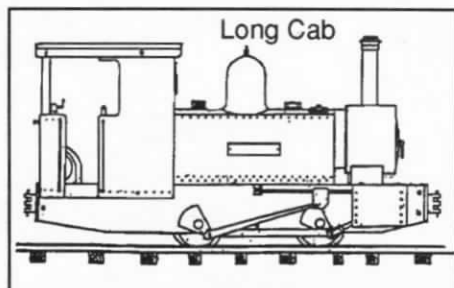
PRICE LIST

Basic "River Class" Loco, spirit fired	£290.00
Basic "River Class" Loco, butane gas fired.....	£300.00
Basic G Scale U.S. Outline Loco, spirit fired.....	£320.00
Basic G Scale U.S. Outline Loco, butane gas fired	£330.00

Optional Equipment (at extra cost):

High Pressure Boiler with water level gauge & 40 psi safety valve	£30.00
Separate Steam Regulator.....	£20.00
Extra Detail Pack (Toolbox, sandbox, extra brass handrails)	£12.00
Dummy Motion (Connecting rods, crossheads & slidebars).....	£12.00
Nylon centre buffer couplings (in lieu of whitemetal jaw type)	£2.00
Etched brass name and number plates (your choice of name, etc.)	£5.00

Factory installed radio control is not yet available, but will be quite easy for the owner to fit, as the control lever is in the cab and there is ample room for a servo to be installed.



Illustrations not to scale.

We reserve the right to alter specifications and prices, etc., at any time.

Minor details may vary from these illustrations.

Salem Steam Models
Brynglas
Salem, Llandeilo,
Dyfed SA19 7HD
United Kingdom



End of the Line

Lots of things to look forward to in the 1992 steamup season! The National Garden Railway Convention in Reston, Virginia on July 5-9 will have a steamup track available every day, thanks to SitG subscriber and live steam enthusiast Harry Quirk. We expect to see lots of new steam stuff at the convention, which should bring some new converts over from electric power. Interest and enthusiasm for steam is growing fast here in the northeast, and, judging from conversations we've had with readers and advertisers around the country, it's happening in lots of other places, too.

We should all give thanks to those manufacturers that took a chance and built good looking, good running live steam locomotives based on American prototypes. The very successful Roundhouse SR&RL #24, Wrightscale Porter and Maxwell Hemmens Porter are, in my opinion at least, good examples of the sort of quality engine that will win the hearts of all those that see them in action. All I can add to this is.....give us more!

We have been pleased to note the increased interest and activity in 1:20 scale. This is the correct scale for modelling 3' narrow gauge on 45mm

(gauge 1) track, as Tony Ferraro of Little Railways has been preaching for many years now. Tony has been on the receiving end of much good-natured joshing, having earned the nickname "One to Twenty" amongst his fellow members of the Pennsylvania Garden Railway Society. But it looks like he is no longer wandering alone in the wilderness, having been joined by several well known names in garden railway circles.

For those that don't give a hoot about correct scale and other such things, there are still some advantages to encouraging manufacturers to build their offerings in 1:20 scale. The advantage that appeals to me is that it comes very close to 16mm scale, or 1:19, which is the scale most used in the U.K. for modelling 2' narrow gauge on 32mm (gauge 0) track. Structures, figures and detail parts can be used freely between the two scales without the glaringly obvious size differences that exist between 1:24 and 1:19.

And speaking of modelling both 2' and 3' narrow gauge.....**Gary Broeder of Little Railways is seriously considering producing dual-gauge flex track, complete with turnouts and other necessary accessories.** This would be a real boon for those of us that like to run both gauge 0 and gauge 1 steam locos. We're redesigning and

rebuilding our own garden railway here in Newark Valley, and dual-gauge track is on our list of priority items. Drop Gary a note or give him a call (2200 Llagas Rd., Morgan Hill, CA 95030 - phone 408-779-4391) and tell him you like the idea. He needs some encouragement to get moving on this project!

Looks like we're out of room for this issue. Next time we'll be bringing you a report on the steam turbine mentioned by Scott McDonald (SitG's Roving Reporter) elsewhere in this issue. Along with a DIY steam engine for \$100, a steamup report from the Northwest, and all the other usual good stuff. Hope to see you at the Steamup in Jim Thorpe - and at the convention in Virginia. Stop by and say hello!

We'll close this issue with Bob Nowell's photo of his scratchbuilt live steamer, "Miss Randi", making an unscheduled stop on the edge of Coalport, Pennsylvania. The engineer is having a quick one at the local pub before visiting a friend that has been unfortunately incarcerated at the town jail. The fireman has stayed with the loco to watch the water level.



Brandbright

SPECIALISING IN STEAM RAILWAYS

Locos in stock at time of writing: Roundhouse SR&RL #24, Roundhouse Fowler (black), Roundhouse Jack (maroon), Roundhouse TAW, Steamlines Shay (black), Regner Tram Loco (G Scale). Also available for quick delivery: Finescale's Cranmore Peckett & Quarry Hunslet locos in gauge 0. The Roundhouse/Brandbright Fiji loco is available now, and the Wrightscale line of fine quality locomotives (including the Wrightscale Porter, featured in SitG #11) is now available through Brandbright. The Maxwell Hemmens Porter (see review in SitG #10) is due in soon. See **What's New** in this issue of SitG for more good news about what's happening at Brandbright.

Send \$3.50 for the complete Brandbright catalog to our U.S. agent, **Railway Garden Ltd., 4210 Bridge Street, Cambria, California 93428** - phone or FAX 805-927-1194.

Brandbright Limited

The Old School, Cromer Road, Bodham, Near Holt, Norfolk NR25 6QG U.K.
Telephone: 011 44 26370 755 or FAX: 011 44 26370 424

Railway Garden Ltd.

*4210 Bridge Street
Cambria, California 93428*

Steam on the way! Argyle 'NA' Class and Forney, now due in May.

Salem Steam Models new live steam locos, body kits for Mamod and many other new items from Salem Steam now available (see **What's New** feature in this issue for more details)!

Cuckoo's Nest Works KATIE, 16mm 0-4-0 in gauge 0 - a very few available on special order.

Victor Shattock 1/2" scale steam video, *"He Wanted To Play With Steam Trains"* - this incredible video of ancient 1/2" scale live steam locos is now available for only \$24.95.

Between Brandbright and RGL we offer the most in service, technical support and customer satisfaction. With over 12 manufacturers of steam locomotives alone, not including track, rolling stock and battery locos, we can give you the most value and the best service.

Call or FAX 805-927-1194 to place an order, ask a question or just talk trains.

LLAGAS CREEK RAILWAYS

PRESENTS

OUR NEW GAUGE 1 CODE 250 FLEX TRACK



Available with your choice of aluminum, nickel-silver or steel rail. Send \$1.00 for a sample and more information on our growing line of gauge 1 track products.

**LLAGAS CREEK RAILWAYS
2200 LLAGAS ROAD
MORGAN HILL, CA 95030**

OR CALL 408-779-4391