

STEAM

IN THE GARDEN



Roundhouse Engineering's
Vale of Rheidol

Reviewed in this issue!





ACCUCAT SAYS
"YOU CAN'T BEAT
THE PRICE OR
PRODUCT"

ACCUCRAFT LIVE STEAM

SCALE 1:32 * STANDARD GAUGE * LOCOMOTIVES & CARS



DAYLIGHT #4449

**CALL TO
RESERVE
YOURS
NOW
ONLY
\$4,449 !**



BLACK GS-4 - DUAL SERVICE - PASSENGER & FREIGHT

CHOICE OF
GAS OR
ALCOHOL
10' MIN. RADIUS

\$4,449 !



GS-4 50/50 #4439



DAYLIGHT
10 CAR SET
HIGH DETAIL
ILLUMINATED



SP S-12 0-6-0 SWITCHER

**RESERVE
YOURS
NOW
ONLY
\$1,999 !**



(PHOTOS ONLY TO SHOW PROTOTYPE
COLOR VARIATIONS)

**7 VERSIONS AVAILABLE
PROTOTYPICALLY CORRECT COLORS
AS USED IN PASSENGER TERMINAL SERVICE**



D&RGW K-27



MICH-CAL #5 3 CYL

SCALE
1:20.3



COMING - WEST SIDE
LUMBER CO.
3 TRUCK SHAY

MANY OTHER MODELS CURRENTLY AVAILABLE

FULL LINE ACCUCRAFT SUPPLIER * PURCHASE DIRECTLY FROM US
WE BUY ASTER LOCOMOTIVES

2 hour steamup video / DVD \$19

HYDE-OUT MOUNTAIN LIVE STEAM

Our Accucraft catalog \$5

CALL US FOR INFORMATION



**89060 NEW RUMLEY ROAD
JEWETT OH 43986**

740-946-6611
www.steamup.com/accucraft

STEAM IN THE GARDEN

Vol. 15, N^o 6
Issue N^o 84

Gather, friends, while we inquire, into trains propelled by fire...

Articles

- 7.....Steamer's Biography -- *Marc Horovitz*
by Vance Bass
- 9.....Book Review -- *Quarry Hunslets of North Wales*
by Mike Simpson
- 13....Happiness and the Missing Strawberries -- *happiness is where you find it*
by Joe Leccese
- 15....The Resonator Whistle - Part 7 -- *the missing piece*
by Larry Bangham
- 18....Building the Hartford Products Truck Kit -- *Product Review*
by Paul Blake
- 21...."Victoria" Steam Tram -- *so homely it's cute*
by Jeff Young
- 26....Wednesday Night Water Boiling -- *a fine tradition from the Frozen North*
by Jeff Young
- 29....Vale of Rheidol -- *Roundhouse Engineering loco reviewed*
by Peter Martin
- 35....Radio Control for Millie -- *steam and electrons*
by Jim Gabelich
- 38....Lima Locomotive Works Shop #517
by Dan Rowe

Departments

- 4.....Calendar of Events -- *Who, What, When & Where*
- 5.....RPO -- *Our readers write*
- 6.....What's New? -- *Latest and greatest goodies for our hobby*
- 45....Swap Shop - *One man's trash.....*
- 45....Wing Nut Sez -- *pearls of wisdom*
- 46....Weedwood Railroad -- *humorous events on a quirky backwoods line*
by Joe Leccese

FRONT COVER:

Owain Glyndwr, paint polished and brass gleaming, prepares for a hard day's work. (review on page 29 in this issue)

photo by Peter Martin

Editor

Ron Brown

Faithful Assistant

Marie Brown

CAD & Other Drawings in This Issue

Larry Bangham • Dan Rowe

Regular Contributors

Larry Bangham..... California
Paul Blake..... Australia
Tom Bowdler..... New York
Keith Bucklitch..... England
Geoff Horne..... Australia
Jim Crabb..... Texas
Les Knoll..... Illinois
Kevin O'Connor..... California
Jerry Reshew..... Mississippi
Dan Rowe..... Texas

Steam in the Garden (USPS 011-885, ISSN 1078-859x) is published bimonthly for \$30.00 (\$38.00 Canadian or overseas) per year (6 issues) by Steam in the Garden, PO Box 335, 6629 SR 38, Newark Valley NY 13811. New subscriptions please allow 6 - 8 weeks for delivery (overseas via surface mail may take longer). Direct correspondence to PO Box 335, Newark Valley NY 13811. Periodicals postage paid at Newark Valley, NY and additional mailing offices.

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

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

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

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

Phone, fax, e-mail or write for mailing information on items for review. Questions or comments? Phone us (Mon. - Thurs. - before 8:00 p.m. Eastern time, please) at 607-642-8119 • 24-hr FAX 253-323-2125
• e-mail address: rbrown54@stny.rr.com



CALENDAR OF EVENTS

January 21 & 22, 2006 - Cabin Fever Expo, York Pennsylvania. Mike Moore will have his gauge 1 track there, and there may be room for additional trackage if there's enough interest. Contact Mike Moore for more information. E-mail: mikemoore@comcast.net Phone: 410-465-3518.

February 18-20, 2006 - Pennsylvania Garden Railway Society & Warrior Run Loco Works 8th Annual President's Day Weekend Winter Meet. 9 a.m. to 5 p.m.. Live steam & electric. 20 x 50 dual gauge 2-track live steam track. For more info contact Clem O'Jevich Jr., 32 S. Market St., Nanticoke PA 18634. Phone 570-735-5570. E-mail wrunloco@aol.com

Due to the extreme damage done to the Gulf Coast community of Diamondhead by hurricane Katrina, the International Small-Scale Steamup has been cancelled for 2006. It will resume in 2007, at which time it is hoped that the infrastructure will all be restored to excellent condition. For more information or to verify the dates, contact Jerry Reshew, 5411 Diamondhead Drive East, Diamondhead, MS 39525. Phone (228) 255-1747, e-mail: <jreshew@mindspring.com>

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

"The Kit That Doesn't Quit"

JigStones

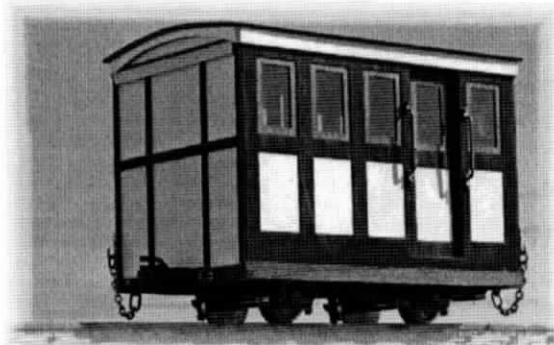


Silicon rubber molds for building garden railway structures. Catalog available at our web site: www.jigstones.com Sticks & Stones, PO Box 211, Elbridge, NY 13060 (315) 689-3402

TWIN MOUNTAIN MODEL WORKS

Laser Cut Rolling Stock Kits for the Live Steamer
in 1:20.3, 16mm, and 7/8n2 scales

Darjeeling Himalayan Railway



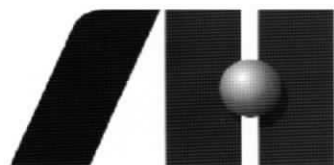
Saloon Car

This easy-build kit, laser cut from aircraft plywood with alignment tabs and laser scribed markings, will assemble quickly for the novice or seasoned modeler.

For more information send \$2.00 to:
Twin Mountain Model Works
P.O. Box 60251
San Angelo, Texas 76906 USA
Or visit our website at:
www.TwinMountainModelWorks.com

the site and source ... exclusively Aster !

roster • references • photos • inventory • awesome array of links



ASTER HOBBY Nickel Plate #779 Berkshire (2-8-4) KITS & RTR

Jim Pitts, 201 Grandview Circle, Travelers Rest, SC 29690 USA Phone 864 . 834. 3954

www.SouthernSteamTrains.com



Letters from readers are welcomed and encouraged. Offer advice, encouragement, suggestions or constructive criticism. Tell us about your current project (and don't forget the photos!) or just share live steam experiences. But please keep your letters to a reasonable length so everyone has a chance to use this forum. Letters may be edited for length or clarity. Send your letters & photos to: SitG, Dept. RPO, P.O. Box 335, Newark Valley, NY 13811, USA...or e-mail to <rbrown54@stny.rr.com>.

Albany, New York
via e-mail

Ron...

Received the SitG this afternoon and so far it is up to your usual high standards.

I'd like to help out on the request for valve setting. I am at a disadvantage though in knowing what the valve gears are on the expensive commercial locos (Aster, Accucraft etc.) If they are true Walschaerts', Baker or whatever.

If the return crank has not been moved on a Walschaerts or Baker, the eccentrics moved on a spit eccentric or Stphen-son, there is really nothing to setting the slide valve or piston valve on front and back dead center.

My own two commercial locomotives have dummy outside gears resembling the real things.

In the review of the Southern Pacific GS-4, I am puzzled about the remark about the cylinders not being "cross-ported". I have never heard this expression used in reference to locomotive valve gears. I do not know what the author refers to. The position of the radius rod has always been down in forward gear for Walschaerts' and Baker gear in this country. This is to prevent a real mechanical breakdown if the lifting arm, reach rod should break when in high speed running forward. Gravity would drop it to the lower position. One British railroad, the Southern, had it in the up position, It

was done to accommodate inside admission valves. It is too complicated to explain here.

Ken Parkinson

Wyoming, Pennsylvania
via e-mail

Hi Ron,

My Accucraft GS-4 (alcohol version) is significantly invigorated. Over the last 6 runs it has done the following: Maintained 80-100 lb. boiler pressure; gauge glass 3/4 full with partially open bypass; running at a scale speed of 80mph.

These improvements were achieved by the use of the Ultimate Wick Material; brass wire screen in the bottom of the burner; and the Glatzbahn Baffle. A conventional baffle is too hard to fit in the firebox, so I did the following: the Accucraft burner screen was beaten flat and one end was turned to approximate the arch at the top of the firebox. The other end was cut off 1/4 inch longer than the distance from the top of the firebox to the top of the frame. This end was then notched to straddle the frame and be a snug push fit against the back flue sheet.

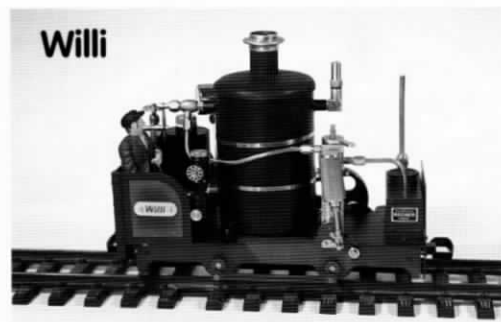
Install the burner and rear truck and start steaming!

Doug Glatz



WHAT'S NEW?

Train Department of BAQS Inc. 512 Summers Drive, Norfolk VA , 23509, Phone/Fax 757-855-6698, Website www.traindept.com, has announced that they are now a Factory Authorized Regner Dealer. The Train Department offers Sales and Service for the full range of Regner live steam ready-to-run and model engine kits, as well as the new Regner narrow gauge industrial series rolling stock. Regner of Germany has



for the past 25 years been recognized for its superb engineering and high quality products, in the time honored German manufacturing tradition. Regner produces ready-to-run models, and scratch builder kits and components, in 1:22.5 (G scale) and 1:32 (Gauge 1), for 45 and 32 mm Gauge track systems. The Train Department is bridging the language, transportation and currency conversion barriers to provide US modelers easy access to these fine products.



Sunset Valley Railroad, phone 253-862-6748, e-mail sales@svrronline.com has good news for the 32mm/ Gauge 0 railroader. Their NEW code 250, O gauge/32mm track and switches are available with aluminum, brass or nickel-silver rail. The samples we received are robust, very well designed and built, and should provide a stable track and smooth running for a very long time. Impressive! Rob Kuhlman (Mr. 32mm in the USA) is currently conducting tests of these products on his own line and will have a report/review for us in an upcoming issue. The rail and tie strips go together as smooth as cream, making tracklaying a pleasure. Sunset Valley also have railbenders, rail clamps and switchstands designed to work with their track. A catalog and samples are available for only \$3. Please tell them that SitG sent you.

Accucraft/AMS has released a 1:20.3 D&RGW short caboose in a plastic version. Identical in appearance to their brass and stainless steel caboose, this one is much lower priced but retains the same excellent level of detail and good running qualities. Yes, it does have working marker lights, interior lighting and full interior detail. The power for the lighting comes from track power, but it's an easy project to add a battery box for those of us who do not have track power. Trucks are plastic with metal wheels, and the couplers are AMS working knuckle couplers. It's 16 inches long, 8 inches high and 5.5 inches wide. It tips the scale at 1.5 lbs. The caboose is available in four different paint schemes....Moffat, Flying Rio Grande, RGS and D&RGW Green. Contact your favorite Accucraft/AMS dealer to get yours.....and please tell him that you read about it in SitG.



Marc Horovitz

by Vance Bass

It seems odd to write a biography of someone you only met as an adult, but when I do some subtraction, I realize that Marc and I have known each other for well over half our lives. We met in 1972 as students at the University of Texas in Austin; I was about to graduate and he was just starting post-graduate work in architecture.

We met in, of all places, an ethnomusicology class and were soon in a couple of groups together, performing medieval, renaissance and baroque music. Marc's love of music has abided strong all these years. He had also had an earlier trumpet gig with a mariachi group at a Houston amusement park, which would serve him later at steamups. You may have seen him at Diamondhead, holding forth on steam cornet. Coincidentally, another member of those early music groups was a cellist named Barbara, later a well-known horticulturist and Mrs. Horovitz. It seems Marc had picked up some sewing machines at garage sales, learned how to overhaul them, and was making some pocket money renting them on campus. Barb was one of his early customers, but clearly liked the owner, too.

Though our friendship was sparked by a mutual love of music, we soon discovered that we had many other shared interests. One of these was a lifelong fascination with trains. Marc had the usual kiddie train sets, of course, but he moved on to the next level of sophistication when he built an HO_{n3} layout in the family's basement. As so often happens, college distracted him from this interest, until one fateful Saturday, when he and Barb and I were making the rounds of Austin's garage sales. Marc spotted a gorgeous Lionel streamlined train and a bunch of other gear, soon negotiated an acceptable price, and took them back to his apartment. He was smitten, and so was I.

Thus he moved into what I'll call his Collector Period. That "Flying Yankee" had turned on the train fever again, and over the next years he managed to amass a love-

ly array of tinsplate trains.

During this time he finished his thesis on historic preservation, graduated, moved back to Denver and married Barb. Life as a newly minted architect can be pretty dreary, though, so rather than slave over detail drawings in someone else's firm, he turned his design skills and his ability with a sewing machine into a freelance fabric graphics shop: the Sidestreet Bannerworks.

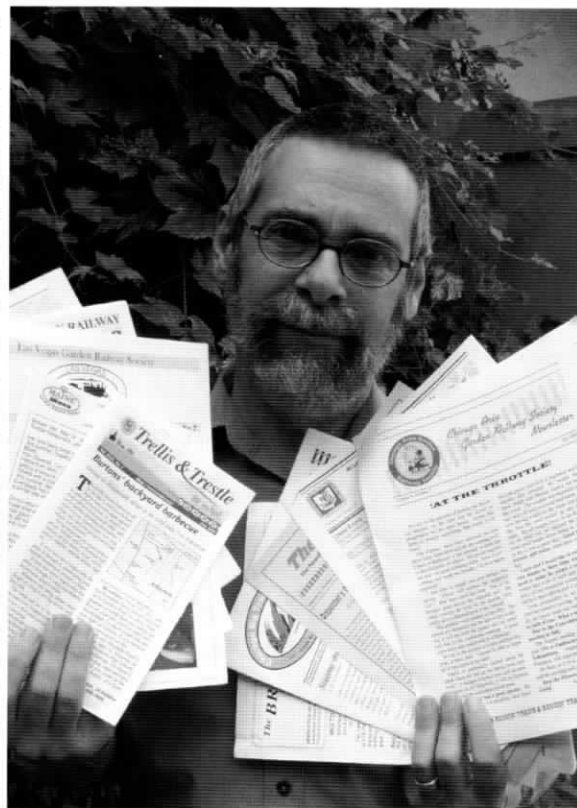
I stayed in Austin to go to graduate school, and we kept in touch during those days through voluminous correspondence. He loved to write and to exchange thoughts and ideas on the page. In the late '70s, he was asked to produce a newsletter for the Rocky Mountain Train Collectors Association chapter, which was sponsoring an upcoming national convention. Marc drafted me to write some articles for it, as my tinsplate collection had grown, too. Thus began an editorial career that he surely had no idea would stretch almost thirty years. But it wasn't clear at that time that it was going to turn into a career.

Right around then, LGB's narrow gauge trains began to make it to the US and Marc was fascinated by them. I remember him pointing them out to me excitedly in the dealers' hall at that TCA conven-

tion. Around the same time, he came across an old Bassett-Lowke 0-gauge locomotive and the die was cast. I was surprised to learn that he had signed up for a machine shop course at the local community college — clearly, something interesting was going on.

By 1979, Marc was importing some funny-looking little locomotives from a German manufacturer named Beck, selling them as a sideline to the architectural banner business. These were the "Anna", whose story I won't repeat here except to note that Sidestreet Bannerworks was the sole importer for the US during their short life, and that they were the start of Marc's serious plunge into commercial live steam.¹

And into publishing. In order to keep his custom-



ers informed, and armed with his experience creating the newsletter for the RMTCA, Marc started putting out a newsletter called the Sidestreet Banner, which ran for one year. By the second issue, people were writing him with suggestions and projects, sending photos, and in general acting very enthusiastic about a publication about small-scale live steam.

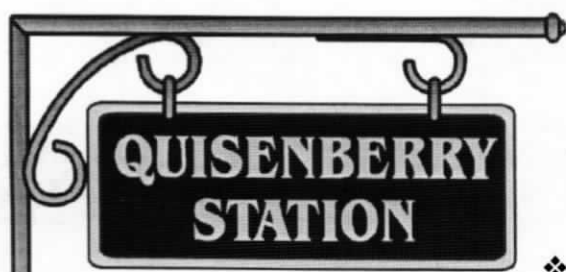
So, wisely sensing that publishing a magazine was a lot more fun than trying to sell architectural graphics, he took the plunge and transformed the Sidestreet Banner into Garden Railways magazine. The rest, as they say, is history. Three years later, now with his full attention on railroad modeling, Marc produced the epic videotape Introduction to Small-Scale Live Steam Locomotives, which is still available and probably still the most thorough introduction to small-scale steam technology available. Though Garden Railways has shifted its focus more to electric models over the years, live steam has remained an important part of the magazine.

Along the line, Marc has built a number of fascinating little locos. His taste has usually run to the four-coupled and off-beat, most often in the form of a tram engine, though his freelance model of a Lartigue monorail has never failed to amaze and enchant anyone who sees it. He was also one of the designers of the "Denver", a simple overtype project loco with a quirky charm typical of his work.

Over the years, he has amassed an impressive collection of interesting live steam locomotives, over sixty of which have been the subjects of the "Locomotive of the Month" series on his web site, sidestreetbannerworks.com. I can think of nowhere else that you can find such an encyclopedia of the shapes, forms and taxonomy of small-scale live steam. This series continues the panoramic overview that the Introduction video started in 1987.

So, the years have flown by much too fast, like a Lionel streamliner on a 27-inch curve. Though he is modest and even shy about his accomplishments, over the last 25 years he has contributed mightily to our hobby. One might even contend that he almost single-handedly established large-scale model railroading here, bringing the British and European traditions to the US and helping adapt them to the native soil. Don't go fawning over him like a celebrity, though. He'd much rather talk about locomotives, or music, or automata, or printmaking, or....

¹ See <http://www.sidestreetbannerworks.com/locos/intro.html> for the full details of the "Anna", the "Denver" and many others.

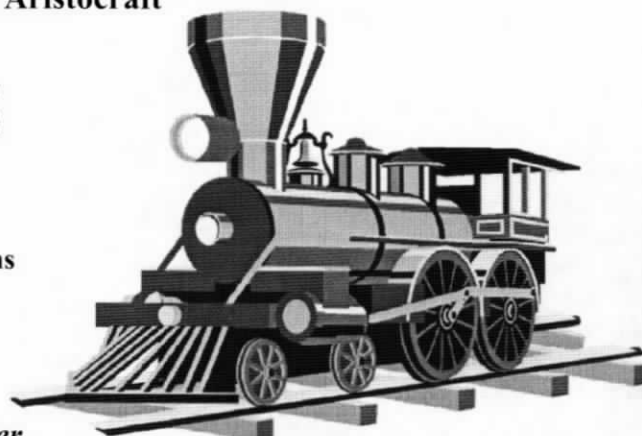



Now selling Cheddar Locomotives & Marine Models. Cheddar Philadelphia ready to ship!

Taking orders for the new Aristocraft live steam Mikado at \$1299. Very few reservations left at this price. Once sold out, Aristocraft will be raising the price significantly.

We are now a dealer and custom installer for Weltyk Whistles!

- ❖ Roundhouse
- ❖ Accucraft
- ❖ Jensen
- ❖ Cheddar
- ❖ Stuart Models
- ❖ Aristocraft



Color Catalog - \$3.00

royce@quisenberrystation.com
www.quisenberrystation.com

Quisenberry Station, LLC
 3903 Quisenberry Dr
 Alexandria VA 22309

Royce Brademan
 (Evenings & Weekends)
 703 - 799 - 9643

Book Review

by Mike Simpson

QUARRY HUNSLETS OF NORTH WALES, The Great (Little) Survivors

by Cliff Thomas (Updated 2004) 256 pages, nearly 200 photos and six locomotive drawings. Available from The Oakwood Press (Usk), P.O. Box 13, Usk, Mon., NP15 1YS or www.oakwoodpress.co.uk. £22.95 plus shipping.

Quarry Hunslets is for anyone interested in Welsh quarry locomotives, whether your interest is in their history, their preservation, or in modeling them. Cliff Thomas presents a wealth of information in a very readable style. Excellent photographs, both by the author and from historic sources, show engines as delivered, as hard-worked industrial equipment, and as restored and fancied up in preservation. The book is printed on heavy, glossy paper and nicely bound.

The Hunslet Engine Co. Of Leeds delivered its first locomotive in 1865. A catalog described the company as Contractor to Her Majesty's Government, The Crown Agents for the Colonies, Public Works Department of Ireland, Etc., Etc., Manufacturers of Tank Engines of all descriptions, suitable for Contractors, Collieries, Iron Works, Quarries, Docks, Sugar Plantations, Tramways, Light narrow Gauge and Short Branch Railways, or Lightly Constructed Colonial Lines, Etc., Etc.

Quarry Hunslets concerns 52 engines which were sold to slate and granite quarries in North Wales, each of them an 0-4-0 saddle tanker and mostly built to nominal 2 ft. narrow gauge. These engines are well-known to British rail fans, because thirty-nine survived to preservation and a fortieth – Lady Madcap – is being resurrected from the scrap heap. Live steamers may be acquainted with the engines from the models by builders such as Finescale Engineering (Lady Madcap, Lilian, Winifred, Gwynedd, Velinheli), Tolhurst Model Engineers (Elidar, Una, Britomart, Maid Marian), David Bailey (Charles, Linda, Blanche), and Locomotion (Cackler).

After an introduction, the reader is treated to the photographic section "Anatomy of a Hunslet." These photos depict engines in all stages of disassembly. Images include the completely dismantled George B, several assembled chassis without boilers, axlebox and guide details, cylinders, side-rods, valve chests, boilers, fireboxes, smokeboxes, tanks, plumbing, etc. Savoring the photos, even a klutz thinks "I could build one of these."

The majority of the book is organized around classes of engines, such as the Dinorwic Quarry's Alice class (twelve engines), Penrhyn 'Large Quarry' class (six), and Granite Quarry class (six). These chapters begin with locomotive dimensions and discussion of matters relating to the class as a whole, followed by a profile of each individual loco-

motive, from delivery to present location and occupation. The history of each engine is given, from delivery to either the scrap heap or present location. Where available, information is given about major repairs, modifications, work life, paint schemes, changes in ownership, etc. The reader gets a feeling for the lives of hard-working engines.

These engines were typically 13 to 17 feet long, mostly cab-less, and eight or nine feet from the rail to the chimney-top. They were true iron horses, often directly replacing the flesh-and-blood animals that had moved slate and granite. These little locomotives never ventured far from home, with coal capacities from 100 to 400 lbs. and water tanks from 60 to 220 gallons. A few of the granite quarry engines, now scrapped, were built to three-foot gauge, with wheelbases as short as three foot and three inches!

Many engines remained on the same gallery (quarry level) for more than a decade. The crew was often a single driver, sometimes with a boy to help. Their day-to-day working life was more that of a fork-lift or a farm tractor, rather than a common carrier. Although Thomas does not mention speeds, other sources suggest ten m.p.h. or less in the quarries.

Engines within a class may have had significant differences, because classes evolved, because individual orders had different specifics, and because of post-delivery alterations. On the other hand, all of the engines had common points. Some classes are denominated different largely because they were sold to the Dinorwic Quarry rather than the Penrhyn or vice versa. (Hunslet saw no need to anger a customer by offering a locomotive whose class name suggested a business rival.)

The harsh quarry environment is reflected in designs and modifications. Many early engines had tapered rear frames, so the frames would not bottom out at the lower end of a steep incline. Frequent collisions with track-side rocks quickly led to the signature angled cylinders, which at least avoided most direct hits. Chimneys were shortened, because of low clearances. Sand boxes were removed, because the quarries were too damp for sand to flow. Spring buffers were replaced with "dumb buffers," blocks of wood faced with a metal plate. Some of these engines operated between a quarry and a port or within a port, and these kept up better appearances.

Although most of these engines were built to approximate two foot narrow gauge, the exact gauges vary as much as 3/4 of an inch. When needed, engines are regauged by driving the tires either further in or further out on the wheels.

In a neat turn on rivet-counters and nit-pickers, engines owned by the Dinorwic Quarry traded parts routinely, with no concern for future historians. The company maintained a pool of spares. If an engine needed, for example, a new boiler or tank, one could quickly be installed and the engine returned to service. Faulty items were then repaired and available for the next needy locomotive. Similar exchanges were made of cylinders, side rods, buffers, and anything else you can think of. Because of the effort re-

quired to move engines up and down inclines, even jobs as large as boiler replacement might be conducted out in the open, on an upper gallery.

Name plates were not easily moved, because names of different lengths required holes in different places. Thus engines often took whatever name was mounted on a replacement tank. Dinorwic was more concerned that the engines worked than what they were called. To increase the confusion, engines frequently were given multiple names during their work lives and occasionally again in preservation. Finally, as if to prevent serial number checking, the one set of parts which was never numbered was the frames.

One example cited is works no. 493, delivered as Enid (owner's daughter) in 1889, changed to Red Damsel (probably racehorse but apocryphally mistress) after 1908, taken out of service in 1957, auctioned in 1969, and re-named Elidir (local mountain) because the new owners recognized what a mongrel the engine was. The auctioned locomotive included contributions from King of Scarlets, Red Damsel, Cloister, Covertcoat, George B, Holy War, Irish Mail, and Lady Madcap (another Hunslet 0-4-0 but of a different class). In "restoration," the formerly cab-less locomotive received the cab from Irish Mail and window frames from Mark (a 4-6-0 Hunslet). And the chimney was extended, because the short quarry chimney drafted poorly.

Many of the most interesting names came from racehorses, apparently a prime destination for quarry profits. Others came from local geographic features, relatives of the owners, and even Edmund Spenser's *The Fairie Queen*. (Britomart and Una).

Most locomotives are pictured at several stages of their lives, often work battered in one and pristine in another, either as newly delivered around 1900 or as newly restored around 2000. The current bright liveries are more typical of the passenger locomotives which they have become, than of the quarry engines they once were.

More from pragmatism than in recognition of the historic practice, the restorers who began acquiring these engines in the 1960's have continued to mix parts. Alice went out of service in 1960 and was "parted out" until little more than a tank and frames remained. The story of her rejuvenation includes the difficult removal of the derelict from a gallery at 1,600 foot level, further scavenging of parts to serve other engines, and fifteen years of re-building, from 1980 until 1994. Parts were acquired from a variety of sources and a number were newly fabricated. Since her re-birth, she has run on the Festinog, Leighton Buzzard, Amberly Chalk Pits, and Bala Lake Railways, and in Germany and France, with trips contemplated as far away as Darjeeling. Such trips are possible because Alice only weighs five tons.

Many engines have been updated to meet the current needs. Preservation trains typically receive updated brakes and lubricators, as well as new sandboxes and spring buffers. Cabs and tenders are sometimes added. Several (Blanche and Linda) acquired pony trucks and oil burners.

Engines run longer, harder, and faster in preservation than they ever did in the quarries. Thomas writes that these engines have been very successful as passenger haulers, with Linda clocking more than 200,000 miles in preservation service.

Restoration workers can encounter a confusing lack of precision. When a fitter made duplicate rods for the brakes on Wild Aster, he found that only one side fit. He learned that the engines "were made by blacksmiths, you cannot take anything for granted."

Engines generally cost £500 -1,000 when delivered new between 1880 and 1932. After many decades of work, they were sold off in poor condition in the 1960's and 1970's, usually for similar prices. Margaret sold as scrap, at £8/ton, or £40, less than the £55 required to truck her away. Lilian's purchaser was told "regrettably the engine will cost £60, because she has a copper firebox." You can now buy excellent 16mm models for £1,000, or a bit more. And, in 1996, a major overhaul for Linda was estimated at £50,000, more than sixty times her original £800 purchase price.

Much of the fascination here is that some of these engines are running more than 120 years after construction, such as Gwynedd, built in 1883. When an original 1893 wrought iron connecting rod on Linda had to be mended in 1997, the welds were checked with X-ray, magnetic particle, and dye penetration testing. The theme of the book is captured by the subtitle, *The Great (Little) Survivors*.

After decades of grueling work in the quarries, these engines blossomed in preservation, through the generous application of expertise, affection, humor and attention. Cliff Thomas has applied similar gifts to *Quarry Hunslets of North Wales*, making it a really great read.

(In 7/8 inch scale on 45 mm track, a 13 foot Hunslet is less than twelve inches long. You could run on the tightest LGB track, as some engines ran on a 21 foot radius, which scales to 18 1/2 inches. Make up a string of slate wagons and a few bug box coaches and you'd have the complete set.)



Ninety-year-old classic Baldwin 2-8-2 steaming from McCloud to Burney. Cab rides, run-bys, interviews, more. \$19.95 plus s/h. 800-564-1066 or www.steamschool.net

TRAIN DEPARTMENT

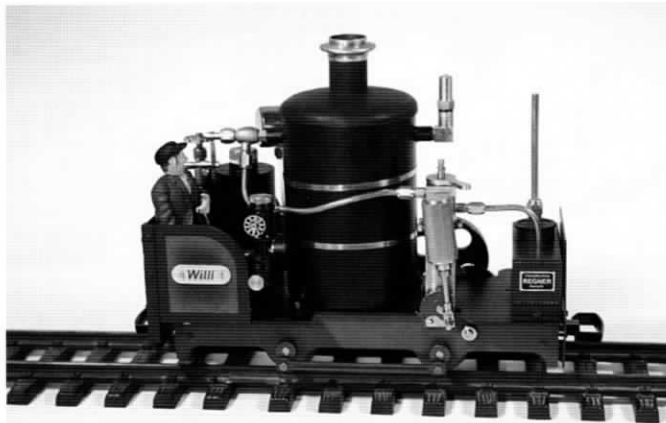
YOUR SOURCE FOR REGNER IN **AMERICA**

**Introducing REGNER'S new Ready to Run
"EASY LINE" Live Steam Locomotives**

"Willi"

and

"Konrad"



**Butane fired, 0-4-0, Single Cylinder Geared Drive w/Flywheel,
Adjustable 45-32-30mm Track Gauge, In Stock ready to ship.**

Only \$595.00 Each, plus S&H

**Price Includes: Steam Oil, Water Sight Glass, Pressure Gauge, Gas Fill Adaptor,
Wheel Gauge, Link & Pin, Metric Tools and a Handpainted Cast Metal Figure**



We Accept Checks, VISA and Mastercard



On the Web: www.traindept.com

e-Mail: ken@traindept.com

Phone/Fax: 757-855-6364

WELTYK'S

H
I
S
T
O
R
Y



Whistles For Small Scale Live Steamers

VISIT US AT:
www.weltykswistles.com

Bob Weltyk
2534 Mercury Drive
Lake Orion MI 48360
248-391-1002

bob@weltykswistles.com

*GS-4 coming this summer
(woo woo valve)*

*Models to fit the Accucraft Ruby,
C-16, K-27, Shay & Mogul*

*Models to fit the Catatonk Climax
and 14-ton Shay*

Give us a call at **573-898-3040** or visit our web site at www.sssmodels.com

NEW

ACCUCRAFT "POP" VALVES
voted most innovative new product at
Diamondhead, 2005. OK, so we rigged
the contest, and we were the only ones
who got to vote, but everyone who saw
our POP VALVES in action were
impressed. They are made with an
ADJUSTABLE seat, that is designed to
wear in, not out. Accucraft POP VALVES
are preset At 40 or 60 PSI.
Instructions are included so that
release Pressure and POP
duration can be changed.

Accucraft

**Sulphur Springs
Steam Models
PO Box 225
Elsberry, MO
63343**

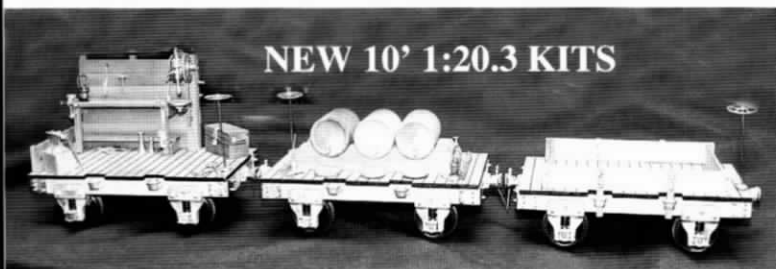


*We have all the steam stuff
you will ever need, screws+nuts
+OIL+goodall valves+ pump bottles+
POP VALVES+sight glass+taps and
dies+ TUBING+wick and blanket
material+Sievert torches+silver
solder+flux+PRESSURE gauges+
syphons+checkvalves+BOILERS+
wheels+brass gears+chain+books just to
mention a few items. **Everything for
the scratch builder, kit basher or
beginner.** Also available are
the new ROUND HOUSE POP
valves set at 40 PSI.*

Graham Industries

OZARK MINIATURES

NEW 10' 1:20.3 KITS



www.ozarkminiatures.com

3461 S. 5225 W. Cedar City, UT 84720 fax 435-586-0580

**900+ G scale Detail
Parts & Kits**

We have the **great detail parts** you
have come to expect & **kits:** Log-
ging disconnects, box cars, tool cars,
flat cars, gondola's....speeder shed,
rural station, bunk house, mine of-
fice...

Catalog \$4.00

Happiness and the Missing Strawberries

by Joe Leccese

Here in New England, winter can last as long as five months. Since I enjoy old movies, I settled down one December evening to watch "The Caine Mutiny", one of my favorites. Having talked briefly on the phone to my long-time friend Ed Coughlin about his recently ordered Sandy River #24 from Roundhouse Engineering, my thoughts turned to purchasing a new live steam locomotive. As the movie ended I decided that tomorrow evening I would go on line and make a few inquiries.

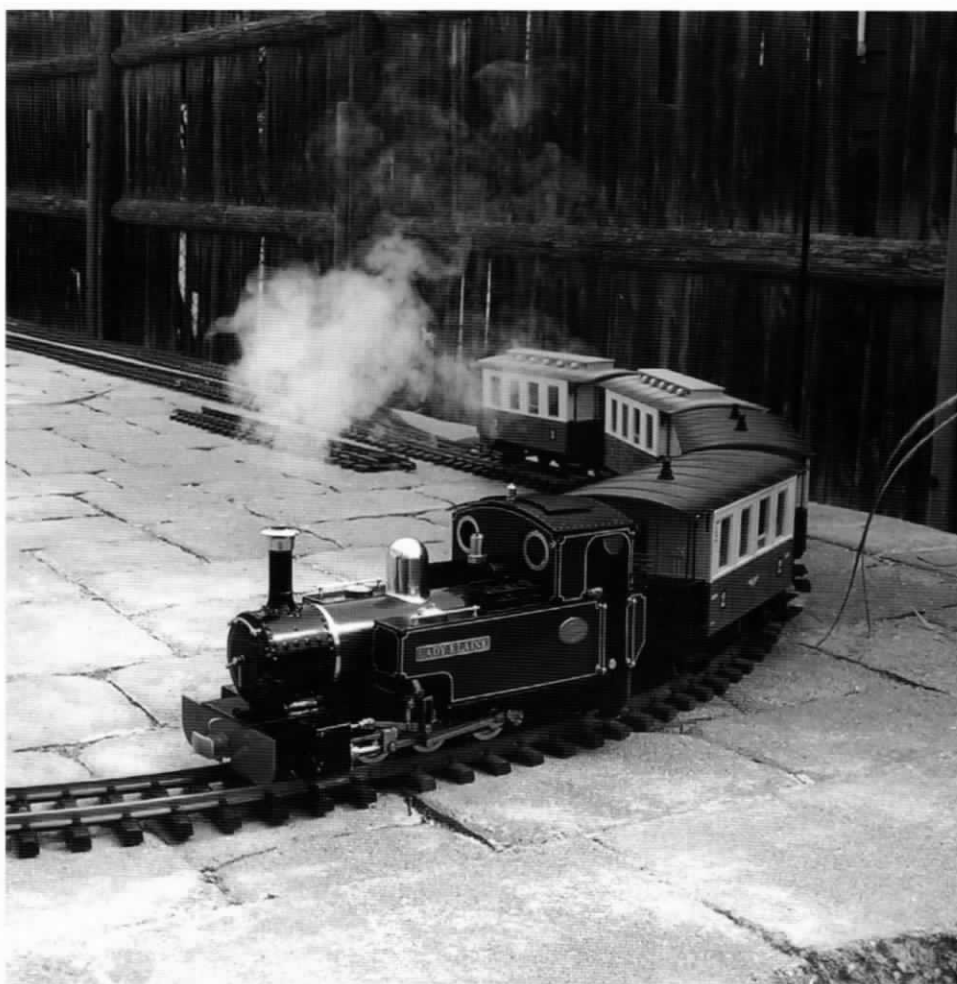
You see, my "tinker" threshold had been reached running my Frank S. Its quirks of not lighting easily in cold weather had finally got to me. I know that modifications and special fuel mixtures are available (after all, I read Steam in the Garden magazine), but being stubborn and expecting no nonsense from my expensive purchases I decided to give myself a break.

The next evening, after a few hours on the various web sites, I bit the bullet and ordered my first loco from Roundhouse in England....a Lady Anne. Of course my lovely wife, Elaine, inquired why, with a

basement full of trains, did I need another? So I explained in great detail the excitement of live steam engines. She listened to most of my explanation and politely rolled her baby browns, shrugged her shoulders, smiled and left the kitchen to do some house stuff. I know the house stuff was probably more interesting to her.

As the winter rolled on and I had watched "The Caine Mutiny" a few more times, I e-mailed Roundhouse about

helping me make a few personal touches to what now was to be called Lady Elaine. After the nameplate change and the pin stripe paint, which was ordered through Light Lines of England, I felt better about



Lady Elaine shows off with a fine steam plume on a cold winter day in Massachusetts.

the wait.

In late February 2004 I arrived home to find a box on my doorstep. I was thrilled when I read the return address, and immediately brought my little orphan in from the cold. Unwrapping that beautiful Lady Elaine was a wonderful moment for me. As I placed it gently on the kitchen table, my mind began to see shiny side rods turning and steam billowing from her stack. I called my wife to come and see our new child. Well, she acknowledged the colorful paint and the special name plate, smiled and went back to her house stuff again. That smile was a little worrisome. I started to believe she knew something I didn't. I felt like Capt. Queeg of the "Caine", asking the crew about the strawberries disappearing

Oh, well....spring would be here soon. It was about this time that I hatched a plan. You see, I remembered that we had a patio out back, a perfect steamup platform if the weather ever cleared. I felt like Humphrey Bogart. Remember? He had a plot to catch the strawberry thieves. I would find out why Elaine was smiling. She never smiled like that when I bought an electric train. I remembered that somewhere in the basement lay my old Weedwood layout, in pieces, but with all the rail joiners intact.

A few weeks later I awoke to a mild March Saturday (it was about 35 degrees). The snow on the patio had disappeared. I had to strike while the iron was hot! I knew that this steamup window could be cut short by a storm at any time.

Up I came from the basement with the boxes of track. Out to the back patio huffing and puffing. Having aroused my Elaine's curiosity, she peeked out the back door and asked, "What are you up to?"

Having set the trap and seeing her take the bait, I explained my instant steamup idea in full detail. Then she smiled again and left me to my destiny. That smile! Why was she so happy?

After a few minutes I composed myself and began weaving an intricate pattern of track out in the back yard. When I was finished I proudly surveyed my "basic oval", as we say here in the States. I quickly caught my breath and did an Italian version of the Irish Jig. Proud, so proud of my unimaginative work.

Back into the house I went, grabbing my tools, fuel, water and steam oil. Elaine watched me with one eye cocked from her chair in the living room. Would

she take the bait again, I wondered?

With everything set, I proceeded to follow the directions on how to lubricate Lady Elaine's many moving parts. I usually don't follow directions, but an exception had to be made here. After all, I didn't want to feel like Captain Queeg after he dropped the yellow stain in the ocean, and then ran and tried to cover up his mistake. This was an expensive toy and I had to be careful.

Next came the water, fuel and steam oil. At the moment of truth I applied fire, and to my amazement (due to past experience with my Frank S.), Lady Elaine's burner caught with no problem. Here it was 38 degrees, using pure butane, and I was boiling water!

I let out quite a yell of joy. Hearing me, my wife peeked out again. She watched the vapors rising from the stack of the little engine and she smiled. Seeing that smile reminded me of the strawberries. What was up with that smile?

Let's see how she reacts when I give the engine some throttle. Off Lady Elaine went, happily steaming away as she trundled down the track. My lovely wife was still smiling! Seeing that happy little engine run around the small oval of track did something to me. My face muscles tightened, and I smiled too. Turning to my wife, we smiled at each other. Suddenly there were no missing strawberries any more. Just happiness.

I'm sure you readers know what I'm saying here. Elaine knew what I would be feeling even before I did. After all, don't we all run our steam engines for this very same reason?

The author has been bringing smiles to the faces of our readers for years with his Weedwood cartoons...ed.





Motor Drivers for 2 ch R/C.
EVO-2 only A\$99
= US \$69.00*

- Intuitive to use with set and forget memory momentum.
- Variable braking & acceleration.
- Self seeking neutral.
- Smooth 20 Khz pwm.
- Directional constant lighting.
- Servo plugs supplied.
- Simple screwdriver installation.
- Totally solid state.

The "F" series have built in accessory functions. 2 Real Time, 1 automatic.

In Australia RCS sells Garden Rail, Steam in the Garden & Light Iron Digest

P.O Box 1118, Bayswater, Vic. 3153. Australia. ++(613) 9762 7785
Website: www.rcs-rc.com E-mail: rcs@alphalink.com.au



EVO-2F SHOWN

The Resonator Whistle - Part 7

by Larry Bangham

This installment will cover a whistle for the Accucraft C-16 #268 and a correction on the Accucraft C-16 #42 whistle.

For some reason now lost in the confusion of short term memory, installment #8 has already been published. So rather than renumbering this as #9 and skipping #7 it would seem less confusing from an historical standpoint to retain the original number and just leave it out of sequence.

C-16 #42 Fig. 1

Part 5 of this series contained some bogus information which is now corrected in Fig. 1. The whistle assembly shown in installment 5, Fig. 1 is too long to fit under the loco without interfering with the reverser link. It just so happened that every #42 I looked at had the reverser in forward position, which puts it down between the from rails. Then I happened to look at Bob Starr's at a recent steamup, and his was in reverse. Whoops!

To compensate for the shorter aperture, the resonator tank is lengthened slightly. This keeps the note at the same pitch. My apologies to any who discovered this the hard way, and if so, please send me your parts and I will rework them au gratis.

C-16 #268 Fig. 2

This is another one of the 'easy versions' with the whistle under the running board. The side mount whistle is used in this application because the running board dead ended before getting to a good spot to go under the boiler. When using a side mount whistle it is necessary to use a deflector to get satisfactory performance (one of the penalties for putting a right angle bend in the

bell). The whistle and valve are detailed in Part 3 of this series.

When routing the silicone hose to the valve, make sure to leave plenty of clearance around the burner inlet. Actually, brass could be used for this section of tubing, leaving a short silicone nipple on each end to attach to the whistle and valve.

As a sidebar, it is interesting to note that after several years of trying to get someone else involved in making whistles, two entrepreneurs have appeared in the hobby almost simultaneously, starting their own whistle businesses. I am sure that each will contribute to the tradition of whistle building in his own way.

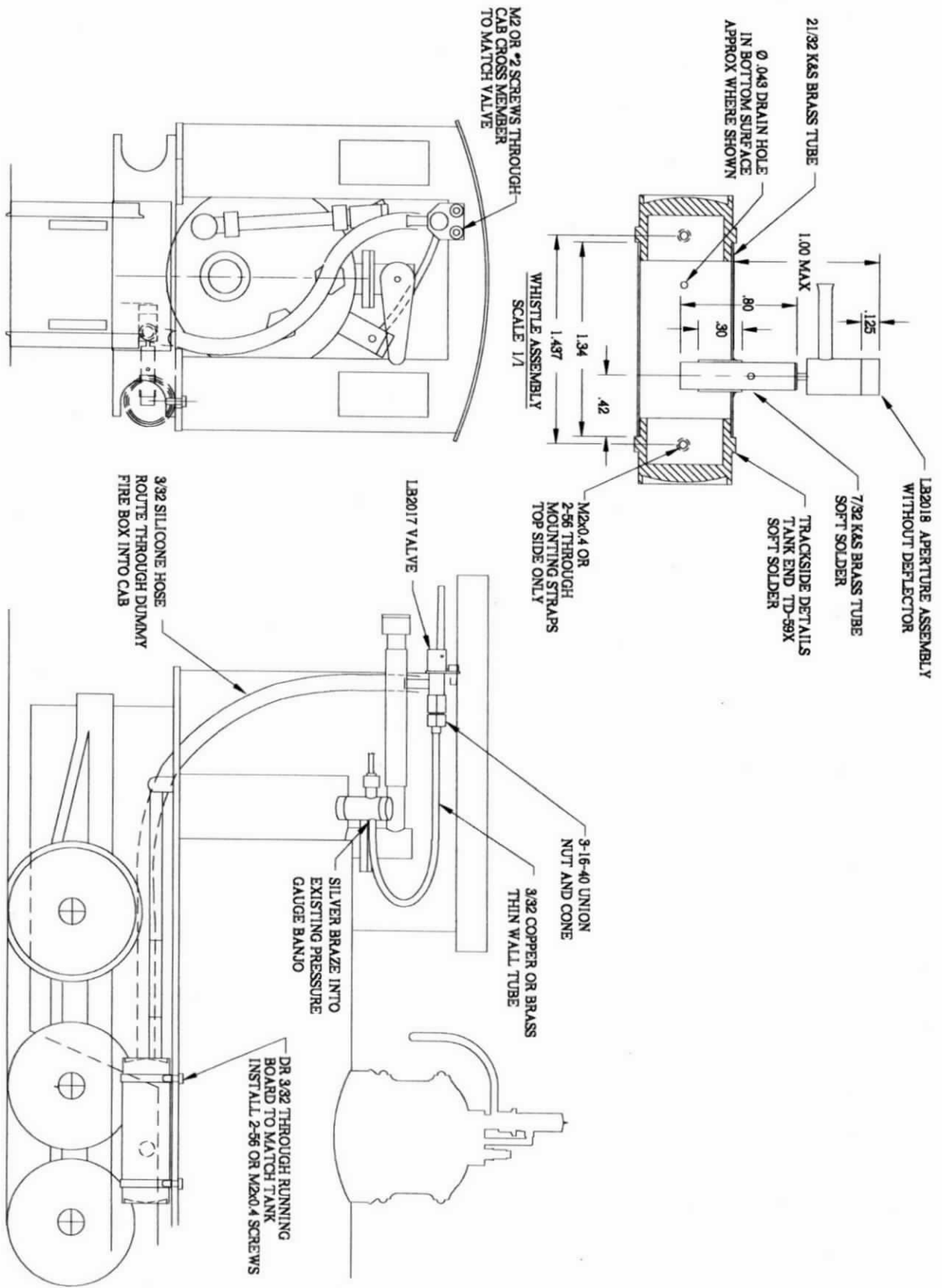
In addition to offering a wide variety of whistle designs, Mike Eorgoff plans on pursuing a program of experimentation with the goal of improving whistle design and performance. Bob Weltyk has demonstrated that it is possible to mass produce the resonator whistle and still maintain sufficient accuracy for satisfactory performance.

Both Bob and Mike are doing custom installations and supplying parts.

As for myself, I may now find the time to pursue other aspects of the hobby, like real bells and air pumps, in addition to more modeling and maybe an occasional new whistle design.

Keep on quilling.....





11-10-04

L. BANGHAM 11-25-03 SCALE: 1/2 & NOTED

LAYOUT - C-16 #42 RUNNING BOARD WHISTLE

REVISED 11-10-04

Fig 1

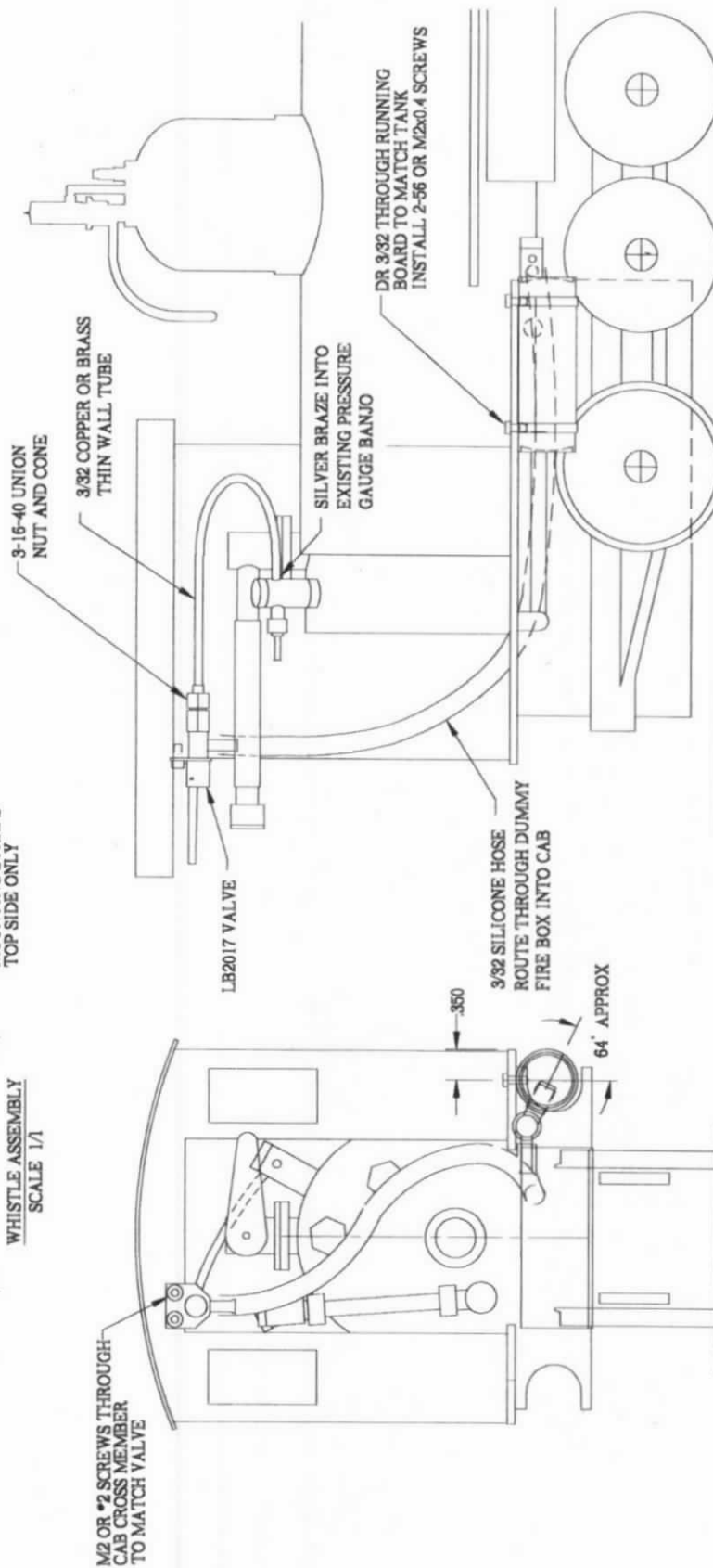
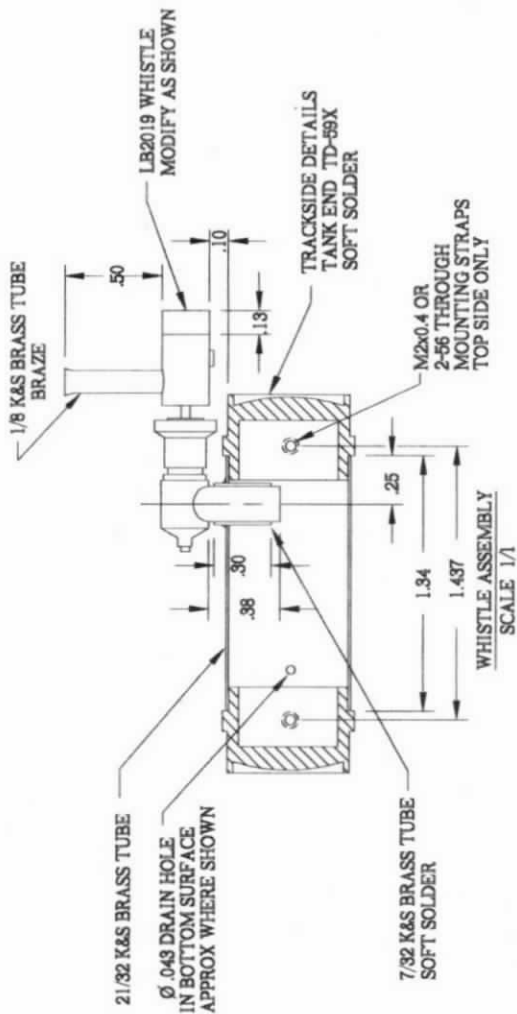


FIG 2

LAYOUT - C-16 #268 RUNNING BOARD WHISTLE

L. BANGHAM 11-14-04 SCALE: 1/2 & NOTED

W4d1121

Building Hartford Products' Truck Kit

by Paul Blake

There is a big locomotive project going on here in Queensland. Much bigger than any previous projects, which have involved logging or sugar cane locos and rolling stock. This will be a mainline narrow gauge project. A Queensland Government railways PB15 class in 1:20.3 is taking shape, and a substantial loco it will be, in the style of a K-27 or similar.

While the project is only in its infancy my thoughts turned to what rolling stock I would pull behind the new locomotive, as a few puny log trucks and four wheelers would not 'cut the mustard'. I would also need some suitable bogies to run under them. To give me a diversion from the rigors and concentration of locomotive building I decided to build some suitable bogies for my future rolling stock.

A few years ago I built a pair of Climax log wagons for the Canungra and Pine Creek Tramway and used Hartford Products Carter Brothers Swing Motion Trucks and found them to be a superb kit. It did not take me long to decide to see what the same manufacturer had suitable for my current needs.

I found that the Queensland Government railways 4 foot Archbar Truck is very well modeled by Hartford's Westside Lumber Co. 4 foot truck.

Hartford truck kits are supplied as a complete kit of parts including 'white metal' castings, laser cut wood components and Sierra Valley wheel sets. Everything except solder, glue and tools are provided, including detailing nut and bolt sets. The quality of parts supplied is superb and minimal preparation or cleanup of castings is required.

Hartford's advise that their metal parts are made of Duracast II, which appears to be a strong form of white metal. The kits are supplied in sealed plastic bags with a sheet of comprehensive and clear instructions.

The kits look a bit daunting as there are a myriad of small parts, but the logical and well written instructions cover the task very well. In each pair of bo-

gies there are over 50 individual parts, not counting wheels and axles.

The trucks are fully sprung on the bolster and it is in the early stages of construction that requires the careful positioning of the bolster and the slide plates to allow the bolster to move up and down under springing. Once this step is mastered and understood the rest of the construction flows easily.

The first step is to prepare the brake beams for later fitting. This is straight forward and only involves drilling holes and fitting nut and bolt sets. Next fit the bolster centre plate (the plate the bogie swivels on) to the wooden bolsters, making sure you fit it to the top face. The holes for the springs face down.

The next step is to install the side frames onto a pair of wheel sets. The wooden bolster is then easily maneuvered into place. Follow this up by installing four slider plates between the wooden bolster and the side frame. Once these plates are positioned a drop of superglue to the back of them will keep them in place for life. Care needs to be taken, though, as a drop of glue in the wrong place will also freeze the springing motion, which we do not want.

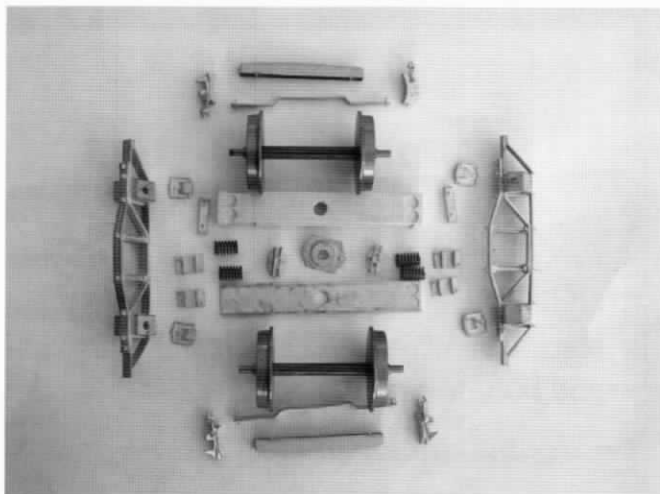
Lift the wooden bolster to its top position and then slide the spring plate into place. The next task is to fit the four springs between the bolster and the spring plank.

I find that these are best inserted using a wide blade screwdriver to compress each spring against the spring plank and then sliding the spring into the recess under the bolster.

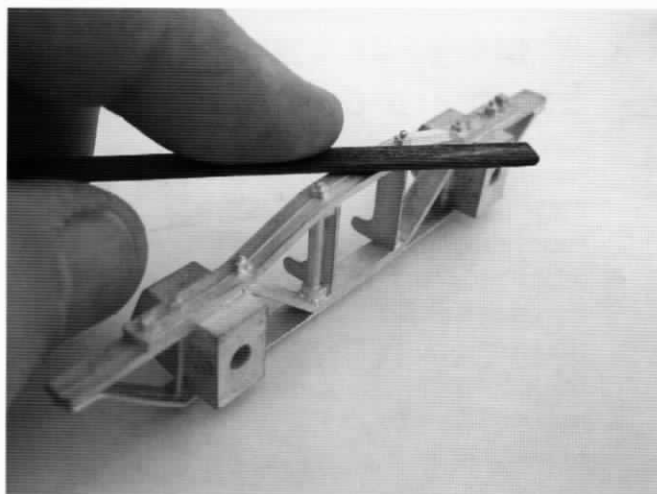
Be prepared to chase the odd 'flying spring' and do this job in an area where a subsequent search will be successful.

The side bearings can now be glued in place on the top of the bolster. I then used superglue to install the axle box lids and the bolster steps to the ends of the bolster.

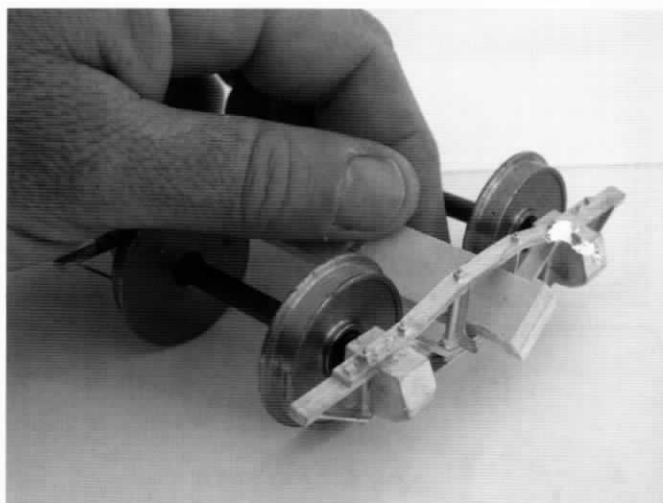
The final assembly involves the installation of



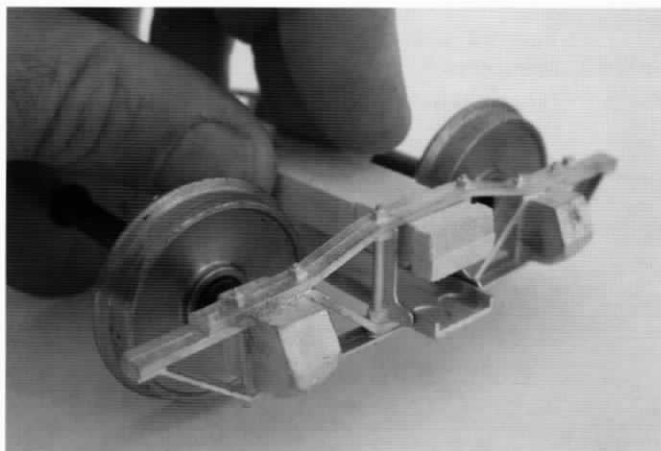
The parts which make up the Hartford Westside Lumber Co. 4 ft. truck laid out for assembly.



Hartford parts need little cleaning up but a work over with a file is worthwhile.



The wooden upper spring plank is maneuvered into place while the side frames are assembled onto the axles.



After locating the lower metal spring retainer plate in place lift the wooden spring plank to its upper position and insert one of the springs using flat bladed screwdriver and pointed nose pliers.

the brake shoes and brake beam hanger straps.

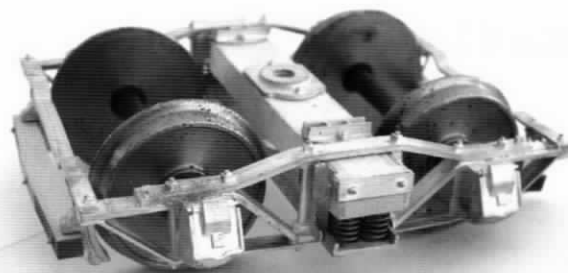
I have a variable temperature soldering iron and I chose to add the brake detail with white metal solder. I find this a very simple process which produces a strong and neat finish, but I am aware that many people are unsure of this technique.

My suggestions for successful white metal solder jobs are:

- a variable temperature iron on a low setting is a must have
- use a quality flux and solder
- everything (particularly the metal) must be clean

If you are still concerned then use superglue or epoxy adhesive for this part of the assembly.

Finishing involves painting the truck. I paint them by hand, but you could spray the metal components before starting assembly. I finish the timber with some dark timber stain and they look a million dollars.



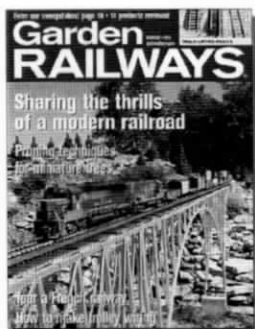
An overall photo of the completed truck before painting. These trucks are easy to build and run superbly.

Hartford makes a great product which is easily assembled. Writing this article was more difficult!!! They make a range of bogies and excellent wagon kits. Have a go and enjoy yourself.



Make your own backyard come alive!

The secrets are in *Garden Railways*, the leading magazine for outdoor model railroaders. Every issue is packed with expert tips to help you combine a realistic railway within a beautiful garden.



You'll discover:

- Train operation
- Landscaping tips
- Track and roadbed construction
- The best new locomotives and accessories
- Project plans, product reviews, and more!

Subscribe now !

6 Issues — Just \$27.95
(\$34.00 Canadian/Foreign)

Call 1-800-533-6644

Or order online at
gardenrailways.com

**Garden
RAILWAYS**
MAGAZINE

G31941AD

A31G

Bangham Resonator Whistles

As seen in SITG

Enhance your live steam experience by adding the sound of a Bangham resonator whistle. Parts, semi-finished, and bolt on kits available.

See the catalog at the website below.

EAST BRANCH TRAINS STEAM SHOP

Mechanical Services, Construction
Customizing

630-830-5288

www.eastbranchtrains.com

Mike Eorgoff

1378 Ct. Marguerite, Hanover Park, IL 60133

Color Catalog \$3.50

TRACKSIDE DETAILS

now a product line of

VALLEY BRASS & BRONZE

7070 N^o Harrison Ave.
Pinedale, CA 93650
phone: 559-439-0419

200+ detailed brass (only)
castings in G - 1:20 scale



TRACKSIDE DETAILS

7070 N^o Harrison Ave.
Pinedale, CA 93650

SIERRA VALLEY ENTERPRISES

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

Munger Mining Series Caboose #M10

1:20.3
scale



Gauge 1

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

SIERRA VALLEY ENTERPRISES
2755 SARATOGA AVENUE, MERCED CA 95340
web site: <http://www.sierravalleyenterprises.com>

“Victoria” Steam Tram

by Jeff Young

So homely it's cute, and a great runner as well

Like most modelers, I have a box full of goodies waiting to be turned into something useful. It's chocked full of things that are too good to get rid of and that “might come in handy someday”. Fifteen years ago, I obtained a spare Saito boiler and oscillator engine for a tug boat model I built. The tug boat was sold long ago, but the brand new boiler and engine has resided in my “project box” since then. The boiler is a simple pot boiler housed in an outer “Smithies”-type of shell, and the engine is a single cylinder, single acting oscillator. I always planned on turning it into a locomotive at some point, it was just a question of when and what it would become.

In my thick binder full of “16 mm scale inspiration”, I have a great article entitled “Tramming by Steam” from the June 1986 issue of *Model Railway Constructor* in which the late Jack Wheldon describes the construction of his locomotive “Hecla”. “Hecla” was powered by a single cylinder, single acting oscillator of Mamod heritage, geared down 15 to 1. Driven by a tiny transverse mounted alcohol-fired pot boiler, it was capable of hauling decent loads at very prototypically slow narrow gauge speeds (15 mph or so). This confirmed my suspicions that the tiny Saito oscillator and alcohol boiler could be put to good use powering a simple 16mm scale live steam locomotive.

Roundhouse Engineering's first commercial offering in 1982 was a model of a tram locomotive “Victoria” from the obscure Plynlimon and Hafan Railway in North Wales. The prototype locomotive was built in 1897 by John Slee and Company of Earlestown, Lancashire. Apparently, the locomotive was not much of a success, and was withdrawn from service not long afterwards. (That's probably why John Slee is not one of the better known builders of narrow gauge locomotives today!) Photographs of the prototype are particularly rare (the only one I could find was in E. A. Wade's book on the railway). For some unknown reason, the sheer ugliness of this boxy

tram locomotive always appealed to me and I regret not acquiring one of the Roundhouse ones when they were first offered. Marc Horovitz owns a model in 16mm scale of the same locomotive made by Colin Binnie and kindly photographed it from all sides so I could use it as a reference for construction. As well, further inquiries lead me to a set of very good drawings from Peter Foley's extensive drawing collection, which were enlarged to 16mm scale. I was off to the races.

From K&S 1" by 1/16" brass stock, I cut sides and ends for a box frame. Heavy 5/16" machined brass angle and 6 BA bolts were used to hold it together and to connect it the 0.032" thick brass sheet deck. I cut the brass sheet about 1/4" narrow and shorter than the body dimensions in order to provide a gap between the body and the frame to allow space for the “drool” from the oscillator to drain away and to reduce the heat conductivity from the frame to the body.

Brandbright 1.20" diameter 0 gauge wheels were selected from the parts box. Although the prototype had connecting rods, I decided to make life easier and used ladder chain and sprockets to transmit the power from one axle to the other. As well, I decided to use ladder chain and sprockets to transmit the power from the oscillator to the axle, having seen this effectively done on the “Denver” and “BAGRS” project locomotives. To get a decently slow speed, a double reduction from the engine shaft to the axle was required. An intermediate shaft was turned up on the lathe and a frame to mount the shaft on was fabricated from 1/16" thick brass. The final reduction is calculated as being 1 to 7.35.

Off the bat, I decided not to use the alcohol burner supplied with the boiler. (It was a tray containing a sponge covered by a wire mesh and prone to spillage). I obtained the Cheddar gas burner and tank supplied as a replacement kit for Mamod locomotives. With a little bit of brass angle and a couple of BA bolts, I devised a way to mount the burner under the boiler in

a suitable fashion.

Even though it is a single cylinder oscillator, I wanted it to be a locomotive capable of operating in both directions. The parts box yielded a surplus Mamod reverser valve. A scale cast brass lever was bolted to the stubby Mamod one with 10 BA bolts. This provided a reverser that could be easily reached from outside the body (and looked somewhat prototypical) and eliminated the "branding iron" effect on fingers the Mamod lever is famous for. I was able to include the tiny Saito displacement lubricator in the cab as well. The exhaust steam pipe was directed up the stack opening at the top of the boiler for effect. The steam and exhaust piping was assembled from 1/8" copper pipe, with proper union joints at appropriate places to allow for easy disassembly. I really like the look of copper pipe and brass fittings in the cab. Even if they are overscale, it make the locomotive look rather "businesslike". With the bag-of-tricks complete and functioning well, I ran it a fair bit of time before settling down to do the bodywork. (I guess I was fascinated by watching the waggly cylinder and the pulleys and ladder chain in constant motion.)

The body work required my favourite material-of-choice, namely Walmart brass door kick plate. The curved openings in the two sides were cut out by hand, not an easy task, but the results were pleasing. The assembly followed the same method described in the construction in the saddle tank for my "Ruby" (*Ruby Gets Tanked*, *SitG* № 77), which is to use 1/32" rivets, soldered in place from inside. It was a relatively straight forward bit of metal box building, and it was then painted gloss black and baked in the oven at 250° F for an hour (sounds like a recipe, doesn't it?).

Four pins in the corners of the body locate it on the frame (the body is removed to access the boiler and engine for servicing). Handrails were made up and four spectacle rings were machined up from brass. (These end windows caused Dave Pinniger to nickname the locomotive "The Owl" at Diamondhead last year.) Left to my own devices, I probably would have named it that, but Alan Walker and Raif Copely from the UK presented me with a proper set of scale "Victoria" name plates and John Slee builders plates for the model- a nice finishing touch.

The original Saito marine pot boiler was soft-soldered together and was designed handle the heat from the tame little Saito alcohol burner. The Cheddar ceramic burner generates much more heat, and proceeded to unsolder the steam delivery pipe on a regular basis. Fed up with the need to resolder it, I decided to replace it with a real (silver soldered) pot boiler. Bill Shipp built one to my design (in one evening, if you can believe it!), made from copper waste pipe, hydro-tested to 50 PSI. With a working pressure of 20 PSI, it powers the tram engine rather nicely for runs of about 15 minutes or so in duration.

The locomotive easily handles a dozen or more tipper wagons or 3 or 4 coaches with ease, running a very sedate and prototypical speed. The boxy little beast sure won't win any awards for elegant locomotive design, but it is cheerful, easy to run locomotive that fits in well with the theme of my 16mm scale garden railway.

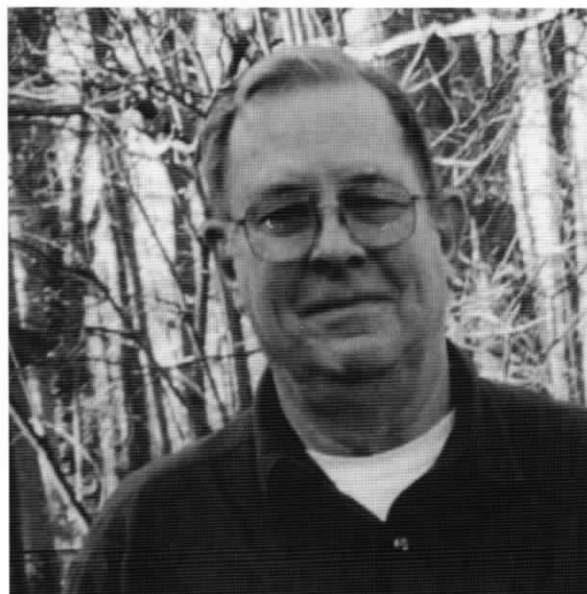


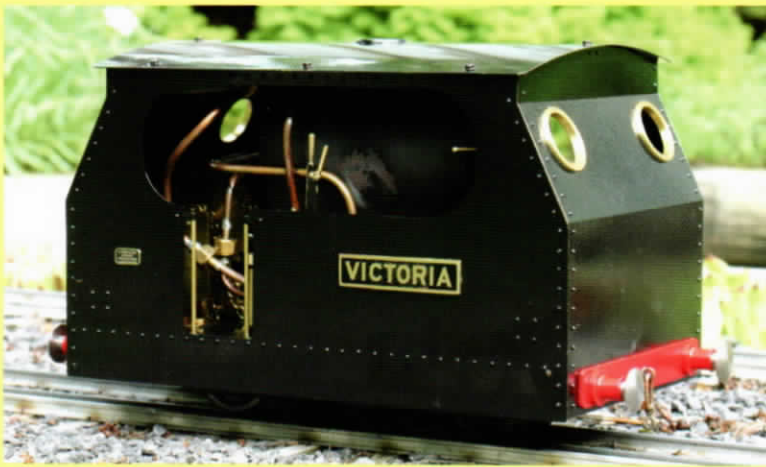
Jim Burns, good friend and fellow steamer, died September 16, 2005 at his home in Charlotte, North Carolina. Jim had been fighting Pulmonary Fibrosis for 3 years, and during this time his love for live steam and the great people he met were one of the things that brightened his day. He always looked forward to the Thursday night chats on the SitG web site.

It's too bad that Jim found this hobby so late in life. Of all the hobbies he enjoyed (and there were many), live steam was at the very top of the list.

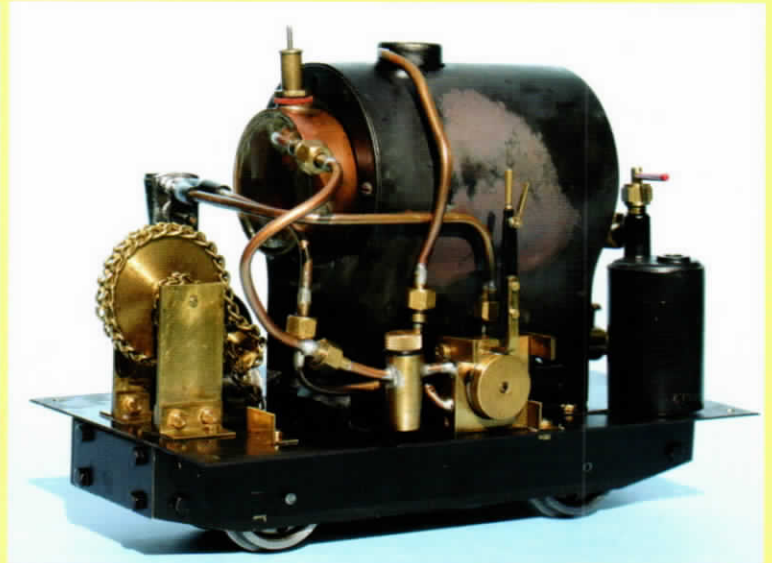
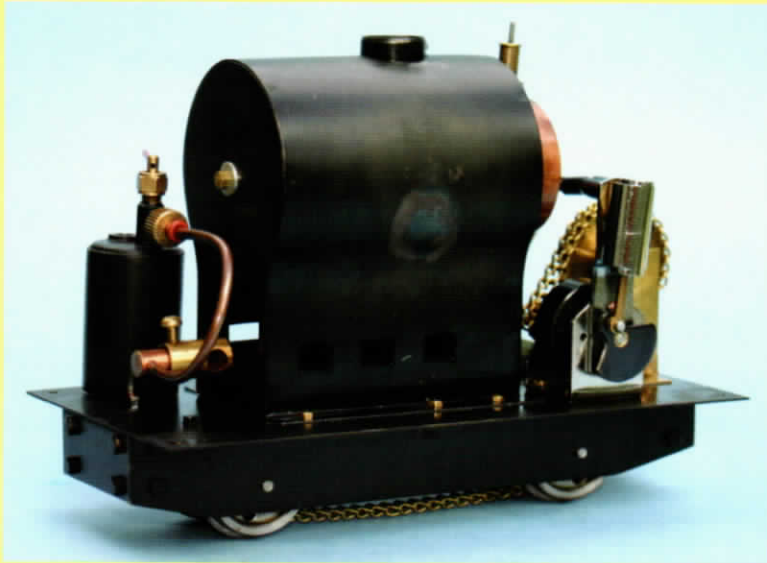
He would spend hours sitting and working with an engine to improve it's performance. He loved Diamondhead and looked forward to this event from year to year. As most of you know, he never ran anything there, but he always carried a car full of engines. He preferred visiting with his fellow steamers to running trains.

Jim is survived by his wife, Shirley, who was always with him at the many steamups they attended around the country. Shirley said, "I would like to thank all the wonderful people in the steam community for the cards, notes and calls. Jim would be so proud. It let me know that Jim had many people who really cared for him. The visits from friends over the past two years when he was unable to travel to steamups meant so much to him and gave him something to look forward to. Thanks for being so nice to Jim. We both really appreciated it."





VICTORIA - with and without her sheet metal.





ARISTO-TECH PRESENTS

LIVE STEAM FOR EVERYONE



#1
GAUGE
1:29
SCALE

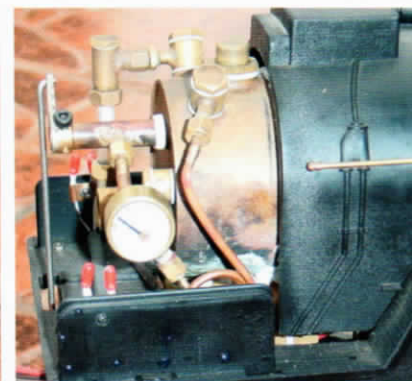


LESS TINKERING & MORE OPERATING THE MIKADO W/RC, SOUND AND ELECTRONIC AUTO-START

Ready to run! Just add lube oil, fuel and water.

- Factory installed Radio Control.
- Butane fired with built in Piezzo igniter.
- Reversing and speed control servo motors.
- Rechargeable loco batteries w/charger.**
- Transmitter controlled bell, whistle, & chuff sounds.
- Large mouth lubricator.
- Locomotive boiler with large water capacity.
- Drain cock & pressure valve.
- Sight glass & pressure gauge.
- Butane tank pre-heater bath with drain valve.
- On-board control panel in tender under coal load.
- Metal carrying case with wheels & handle.
- Pulls 10 freight cars or 4 Std.Hvy.Wht. cars.
- Capable of 10' diameter curves & 3% grades.
- Running time 40 minutes or better.
- Goodall Valve available separately.
- Roadnames: ART84100 Undecorated
ART84101 Pennsylvania
ART84102 Santa Fe
ART84103 Rio Grande

**Transmitter batteries not included



Photos are of Engineering Sample. Appearance of production model may differ.
Cylinders, under frame & many other metal components will be blackened.

Here's your chance to operate Live Steam in G-Gauge and not need a mechanic next to you because Aristo-Craft has made Live Steam simple with the Aristo-Tech Live Steam Mikado! Factory installed R/C gives you locomotive speed and direction control without chasing after it. Smooth locomotive operation allows delicate control and even switching enhancing realism for all senses. This is fun guys! The Aristo-Tech Live Steam Mikado by Aristo-Craft is something new you will want and treasure!

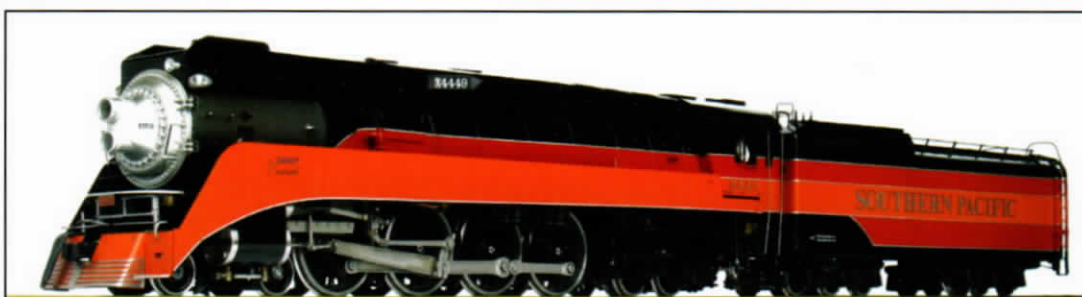
ORDER DIRECT OR SEE YOUR FAVORITE ARISTO-CRAFT DEALER!

Aristo-Craft Trains 698 S. 21st Street, Irvington, NJ 07111 Phone: 973-351-9800 Fax: 973-351-9700
www.aristocraft.com aristo@mindspring.com

The Ultimate Expression...



Southern Pacific S-12 0-6-0 Live Steam
1:32 Scale, 45mm Gauge
Available Spring 2006



Southern Pacific GS-4 Daylight Live Steam (Alcohol or Butane)
1:32 Scale, 45mm Gauge
Delivery in Progress

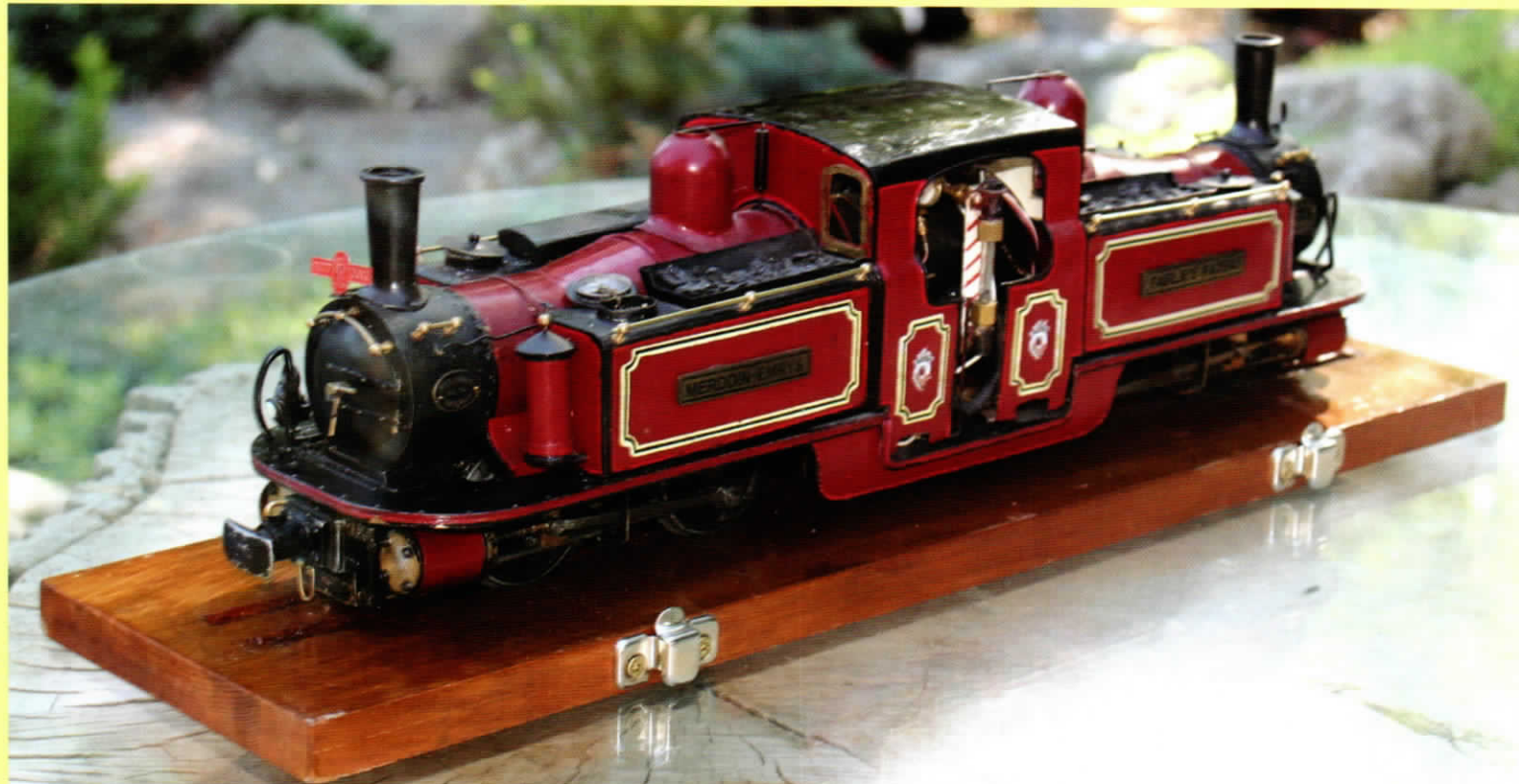


D&RGW C-19 Live Steam
1:20.3 Scale, 45mm Gauge
Available Summer 2006



ACCUCRAFT TRAINS
MUSEUM QUALITY BRASS MODELS

33268 Central Avenue
Union City, CA 94587
Tel: (510) 324-3399 Fax: (510) 324-3366
www.accucraft.com



Top: Bill Shipp's scratchbuilt 16mm scale double Fairlie "Merffin Emrys".

Bottom: Jeff Young's coal fired Fowler with a string of wagons.



The Ritual Known as Wednesday Night Water Boiling

by Jeff Young

Mississauga, Ontario, Canada

There exists in Canada, a group of about ten small scale live steam enthusiasts who participate in a ritual known as "Wednesday Night Water Boiling" (WNWB). What's with the name, you ask? Well, for about thirteen years now, this little group gets together in the greater Toronto area and runs live steam locomotives each and every Wednesday night from early May to late September. (Although we have been known to have steamups outdoors as early as February if it is unseasonably warm.) It is a very informal group, with no dues, no executive, no rules-- in other words, a most disorganized organization. So much so in fact, we really can't pin down what year we exactly started. The lack of bureaucracy and formality is probably why we have stayed together so long.

And just how did this little live steam group known as WNWB start? Well, a good number of us were members of the local garden railway society. In its early days, the garden railway club had a strong live steam contingent, but over the years, we were outnumbered by the "electric rodent" brigade and the focused changed. Others have followed this route from electric large scale trains to live steam and found our little group. Others came to Wednesday Water Boiling (WNWB) from the large ride-on live steam, looking for something a little more manageable than the "hernia gauge" stuff. I should mention that we can boast that WNWB incorporates the entire Toronto area membership of the 16 mm Association of Narrow Gauge Modelers (that would be all three of us).

And what constitutes a typical WNWB session? Well, we usually host the steamups on a rotating basis. No strict roster here--someone just usually speaks up at the end of one session as says "I'll host next week!". Running steam trains in the garden, sipping a cool drink and nibbling on mini sausages is the order of the day. New locomotive acquisitions are admired, technical problems are examined, advice is offered, tools and books are shared--what could be more perfect? One thing that has always impressed me about our little group is the extent we go to to help each other out on a project, whether it is machining small bits, silver soldering a boiler, painting a locomotive or finding photographs or drawings of some obscure prototype. It is amazing what we have learned from each other over the years--did you know that a bottle cap makes the perfect receptacle for condensate from the lubricator drain?

We are evenly split between gauge 0 and gauge 1 railways amongst our group, with two members having dual gauge lines. And what of the locomotives of WNWB? Well, most of us started many years ago with Mamods, tinkered with them to get them running acceptably, progressing to Roundhouse, Aster and every other modern day manufacturer.

A typical WNWB session will see locomotives from vintage Bassett-Lowke, Archangel, Beck, right through to the latest offerings from the current manufacturers (fired by meths, butane and coal). Scales run from 1/32nd to 7/8ths and everything in between, although there is a bit of leaning towards 16 mm scale. Of particular note is the degree of scratch building that has occurred within our group over the last few years. There have been some truly remarkable models by members of our group, such as a Guinness Brewery tramway locomotive, at least 4 de Winton vertical boiler engines and a K-1 Garratt to name a few. I should note that the creativity (and construction of new locomotives) never stops, if you can believe it, two members of our group are currently developing a coal-fired Mamod!

Our outdoor running season usually starts on a somewhat chilly Easter Monday with the "Lady Anne Steaks". A number of years ago, several members of the group assembled Roundhouse Lady Anne kits over the winter months -- the completion of which was celebrated with a steak barbecue, and continues to do so every year. Other special events include our annual "Mamodfest", when we run our vintage wobbling-cylinder Mamods, paying homage to our humble steam beginnings. One member of our group also has a 15" gauge ride-on trolley line in his back yard and an occasional visit to this is an interesting diversion from our usual weekly burnt-finger ritual.

Over the years, we have played host to visitors from the US and the UK at our sessions (and have even been known to move the days to the week around to allow visitors to partake in our Wednesday ritual.) It should be noted that the group also gets together on a regular basis in the winter for informal workshop sessions (typically, more talking gets done than machining at these events). Recently, one member of our group acquired Tom Bowdler's portable railway (as described in SitG Issue #77) which will see use for indoor basement steamups during the winter months. Speaking of winter, a number of the WNWB group also make the annual January pilgrimage to Diamondhead, Mississippi for the International Small Scale Steam Up.

Personally, a WNWB session never ceases to inspire and energize me to undertake new projects and activities in the small scale live steam hobby. Hopefully the success of our humble little group will inspire you to start one in your area, and I am certain that you will be happy that you did.





Clockwise from below, left: Jeff Young's coal fired Fowler puffs through a curve and past a signal box on his ground level line in Ontario, CANADA.

Bill Burgess and his scratch built 16mm scale model of a two-foot gauge Kitson-Meyer locomotive used by the Renishaw Sugar Company in South Africa.

Walt Gray lights up his newly completed scratch built 7/8ths scale 'Waril' class 18 gauge Hunslet 0-4-0.

Ken Roach runs his Accucraft Excelsior on Gary Rutledge's railway in Streetsville, Ontario.

Peter Foley watches his vintage Beck "Helene" trundle by with one coach.



Roundhouse Engineering's Vale of Rheidol by Peter Martin

Specifications

Gauge:45mm or 32mm

Scale:.....16mm

Dimensions:LOA 15" – Width 5" – Height 5 1/2"

Fuel:Butane (FG type burner) or butane blends

Cylinders:.....Double acting – 9/16" bore X 5/8" stroke

Valve Gear.....Walschaerts type (simplified)

Fittings:Pressure Gauge, Goodall Type Valve, Safety Valve, Filler Plug, Box Style
Water Gauge, Throttle, Reversing Gear, Built in Rechargeable batteries
(Available in R/C version only)

Lubricator:.....Displacement type.

Safety Blow-off:.....40 psi

Wheel Configuration:.....2-6-2 (Insulated)

RC Control:.....Airtronics 4+ Channel Transmitter and 4 on board servos

Weight:.....5.3KG (11.6 lbs)

Available from: Roundhouse Engineering O., Unit 6, Churchill Business Park,
Churchill Road, Wheatley, Doncaster, DN1 2TF, England
www.roundhouse-eng.com, or any authorized Roundhouse dealer.

Pin Striping: Lightlines, UK.
www.lightline99.freemove.co.uk

I have seven live steamers and several sparkers (collecting dust), yet I still remain among the ignorant in terms of technical operations of live steam. With that in mind please forgive the moments of attention deficit. I now have four Roundhouse steamers; this latest purchase of the **Vale of Rheidol** is by far the most pleasing and well designed. All the Roundhouse engines are well designed and run out of the box. Attending steam meets I often watch the Aster Wizards tinker and manipulate their magnificent machines, I tend to like firing it up and watching it steam around. The Aster crowd must look upon the likes of me with great disdain!

The Vale is really a superb piece with all the reliability of Roundhouse and a few touches of Aster. The model is available in several different colors (4) and comes with three different nameplates to match the historical roots of the locomotive. I chose a traditional BR green and with the help of Royce Brademan, Quisenberry Station, and Chris of Roundhouse had Lightlines of the UK add yellow pinstripping and BR medallions. I also added front and rear lanterns from TCJ Fittings of the UK to complete the model.

Quisenberry Station ordered the locomotive for me and it arrived this past August in the usual well packed and information loaded manner. Royce was very helpful in providing the support and assistance in getting the model fired-up at Ron and Marie Brown's last steam-up.

History

The Welsh name for the Vale of Rheidol Railway is Rheilfford Dyffryn Rheidol. Say that ten times quickly! The line runs for 11.75 miles across the idyllic Welsh landscape between Aberystwyth and Devil's Bridge. The track is, of course, being in Wales, narrow gauge (1' 11-3/4"). The railway was originally designed to primarily carry lead ore and other ore materials from the Rheidol valley area. The line was also a freight service for the mine pits in the valley carrying supplies such as lumber and hardware. The service connected at Abersystwyth, near the coast, to the main line service and the UK.

As with many ventures in the railroad business, in the late 1800's it fell upon hard times as the mines were in steep decline by the time the line was completed. The line was originally commissioned by an Act of Parliament in 1897; construction followed in 1901 and by August 1902 it was operating! The service changed following the decline of the ore mines and the inclusion of passenger service later that year

saved the line from a complete decline. The transition from ore traffic to passenger services took less than four months. This radical change was due in part to the mining methodology that excluded the use of explosive to remove the ore, and instead hand and pick labor was used to save costs at the expense of productivity.

The line went through four transitions of ownership. In 1913 the line was acquired by the Cambrian Railways. In 1923 the Great Western Railway absorbed the line and 25 years later it was nationalized into the BR in 1948. Prior to the privatization of the BR Network, the line was acquired by its current owners in 1989.

A total of six locomotives were built for the line from 1901 to 1930. The original locomotives, 2-6-2 units, were built by Davies & Metcalfe of Manchester. They built two engines: Prince of Wales and Edward VII. A Bagnall Company locomotive 2-4-0 side tanker was added later and named Rheidol. The very basic numbering system was strange as numbers 1 through 3 suddenly jumped to number 7, 8 and then 9. I have tried to find the missing engines or a reason for the number jump but to no avail (no pun intended). The GWR acquisition was the inception of the sudden jump to numbers 7, 8 & 9. The GWR built replacements for the original "fleet" using the Swindon Works design. This building was started in 1923 and completed in 1938. Roundhouse based their model on those three engines: **Prince of Wales, Llewelyn and Owain Glyndwr**. All are 2-6-2 side tank engines.

The line is operated on a spring/summer and fall basis (late March to late October) for regular service with trips lasting an hour in each direction through magnificent mountain scenery and grades of 1 in 50. The scenic line is started from the coastal terminus at Aberystwyth and winds around the mountains and valleys to Devils Bridge. Between those two stations are seven stations available for passenger pick-ups and drop-offs.

Vale of Rheidol website: www.rheidolrailway.co.uk

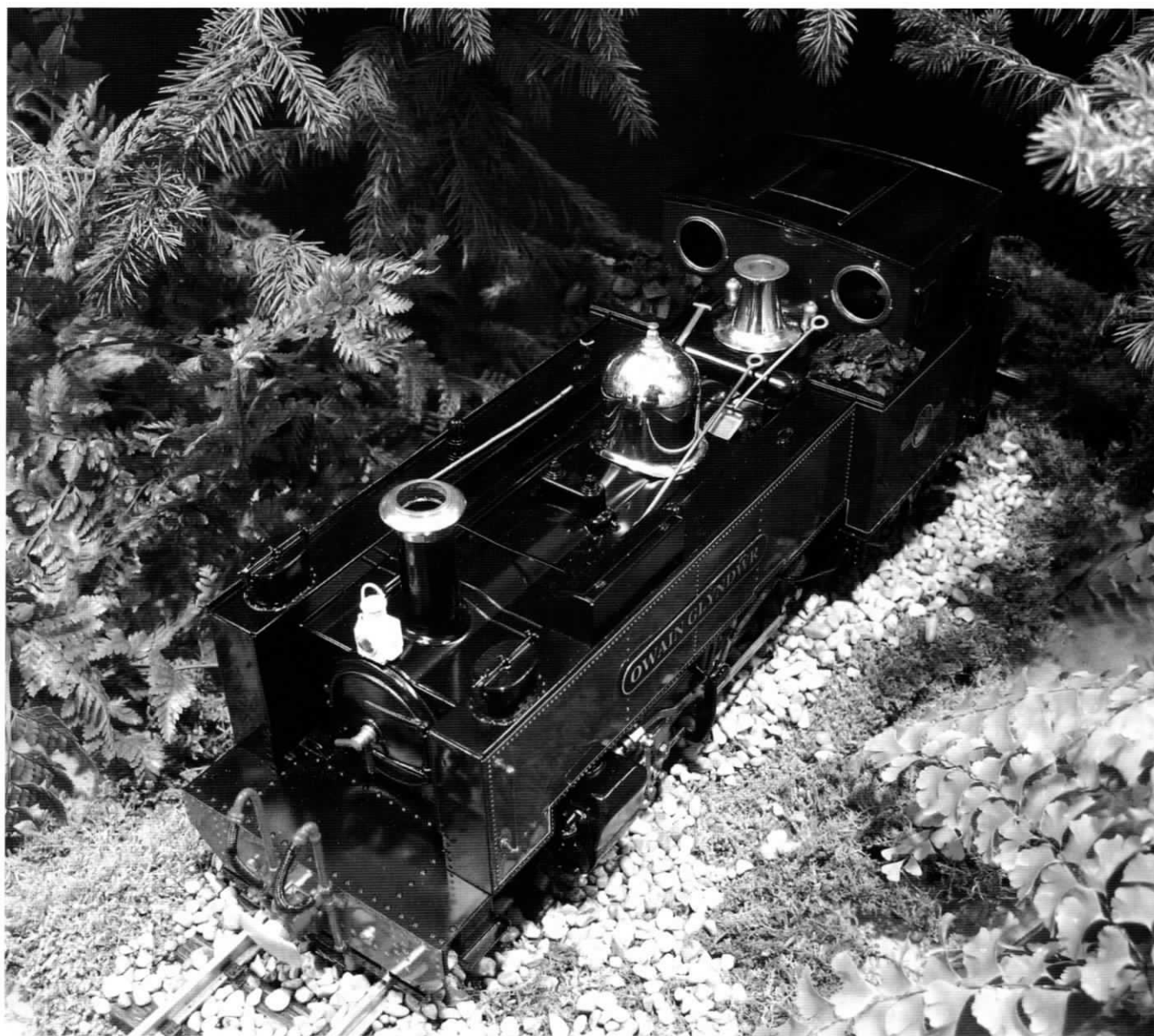
The Unveiling!

The photographs of this model better describe the delight of this piece far more than I could with words.

The model is supplied with several shovels and pokers for the adornment of the top of the boiler. Dual coal loads on each side conceal the oil and gas re-

fill points. Different nameplates are supplied (three) along with the matching numbers (7, 8 or 9). The brass work is the first thing that struck me along with the beautiful paint job typical of Roundhouse. This model is heavy and feels very substantial. This weight

this model. The built in gas tank is perfectly fitted into the cab and provides for very long run times. My one peeve of other Roundhouse locos is that the gas always runs out while there is still plenty of water remaining. They rightly point out that this is to prevent



Bird's eye view of the author's Vale of Rheidol. Very handsome loco, and with performance to match its good looks.

allows for racing around curves and serious finger injury should you decide to fiddle with the track like I did. But fear not, it has fully sprung wheels so it won't derail!

Even my skeptical physician significant other was surprised by the appearance of the model. Her comment was that it belonged under glass on display ...and how much was it! The quality just oozes from

melt downs. This engine, however, really holds a lot of gas and will run for 60 minutes with a fairly heavy load coupled up. The water injection system in the steam dome can allow for even longer run times. The water gauge, those nasty glass tubes that are always wrong, has been replaced with a box type water gauge that reads true no matter what the boiler conditions. A word of warning about these gauges; do not run the

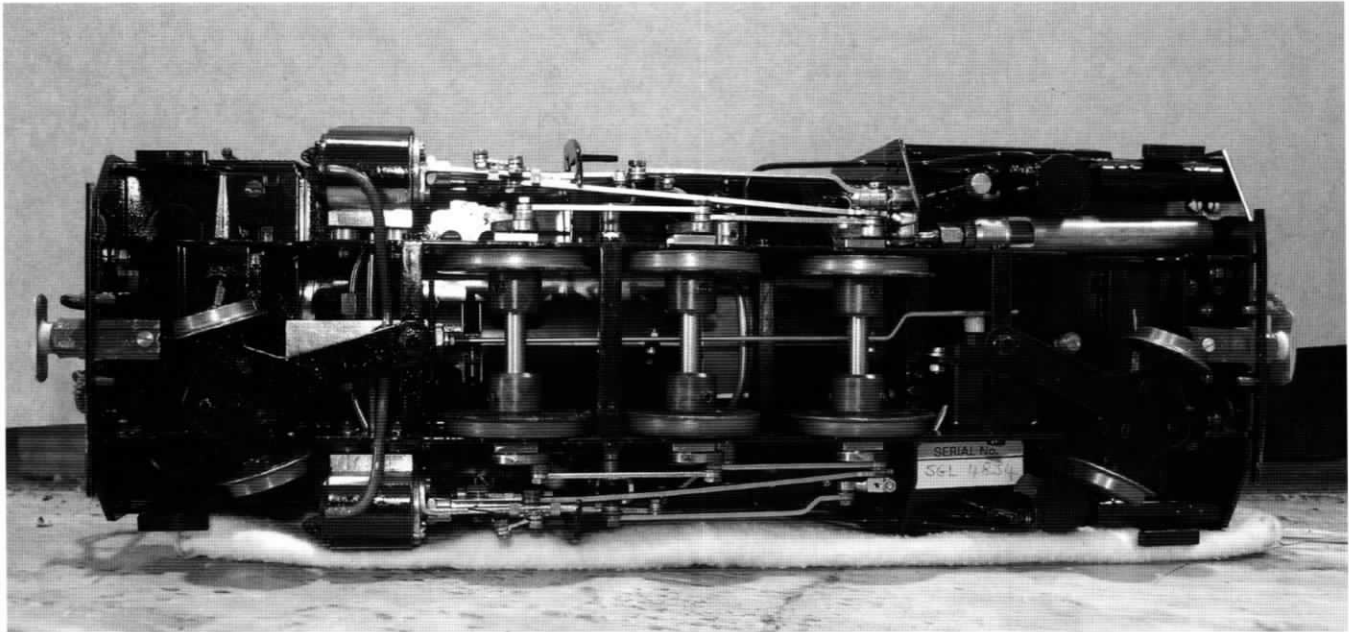
boiler dry...you might damage the gauge.

The firing up is best done after properly filling the boiler and gas tank AND waiting a minute or two to allow the gas tank to warm slightly. I find that not waiting will cause the flame to pop out. This condition is caused by the gas feeder tube being too chilled.

Raising steam took about eight minutes. I usually wait for a few more to allow immediate use of the on-board steam whistle. The model also has front radio controlled drain cocks! Between the whistle and drain cocks and reasonable use of same, I was not

enjoyed excellent run times.

The locomotive body conceals all of the electronic servos and battery packs. A cab charging lead is simply plugged into the battery charger and left to charge. The cab roof is a lift up and pull back hinge that allows for access to the gas flow valve and one visible throttle servo. The cab encloses the entire rear of the engine; the lamp seen in the photos is simply slipped on the supplied lamp bracket. The two air brake hose attachments are bolted onto the rear (and front) buffer beams. I painted my hoses black with



A glimpse of the underside shows a neat, clean layout.

able to completely deplete the steam pressure when the engine was running. The whistle has a restrictor valve to keep the whistle operable under varying boiler pressures. The steam cocks are quite realistic and perhaps offer a track cleaning service.

The locomotive starts very smoothly, even more than my Roundhouse Darjeeling, and the Airtronics R/C controller is configured so that the speed and direction control rests on one stick, allowing for a surprisingly easy control. The whistle and drain cock control stick has one fault...it will not default to neutral position of the steam valves when released, therefore one must make certain it is held down to the right to preclude steam loss. This matter is remedied after several steam runs and some practice. The R/C controller has an excellent power meter and very bright LED read outs. Charging is accomplished in less than four hours for a complete charge; I have charged in between steamings for as little as an hour or two and

Floquil paint.

The side tanks are detailed with rivets and conceal the receiver and battery pack. The body green is contrasted against the boiler black, and both are topped off by the brass steam dome and safety valve cover. The brass work is really magnificent and provides just the right touch to the model. The steam dome is capped with a removable crown that serves as the water input portal for adding to the boiler level. The steam dome is available in black, if desired, to match the boiler color scheme. The tops of the side tanks are full of details; tool boxes, valves, coal bunkers (perhaps bunkerettes!) and water input hatches. Four different color (colour) schemes are available from Roundhouse.

The paint and body work is easy to keep clean. Simply wash it off with hot water and Ivory dishwashing soap and a soft brush. The paint just sparkles again as new. The two part utherane based paint

Roundhouse uses is simply without fault. No drips, no orange peel or slag of any sort.

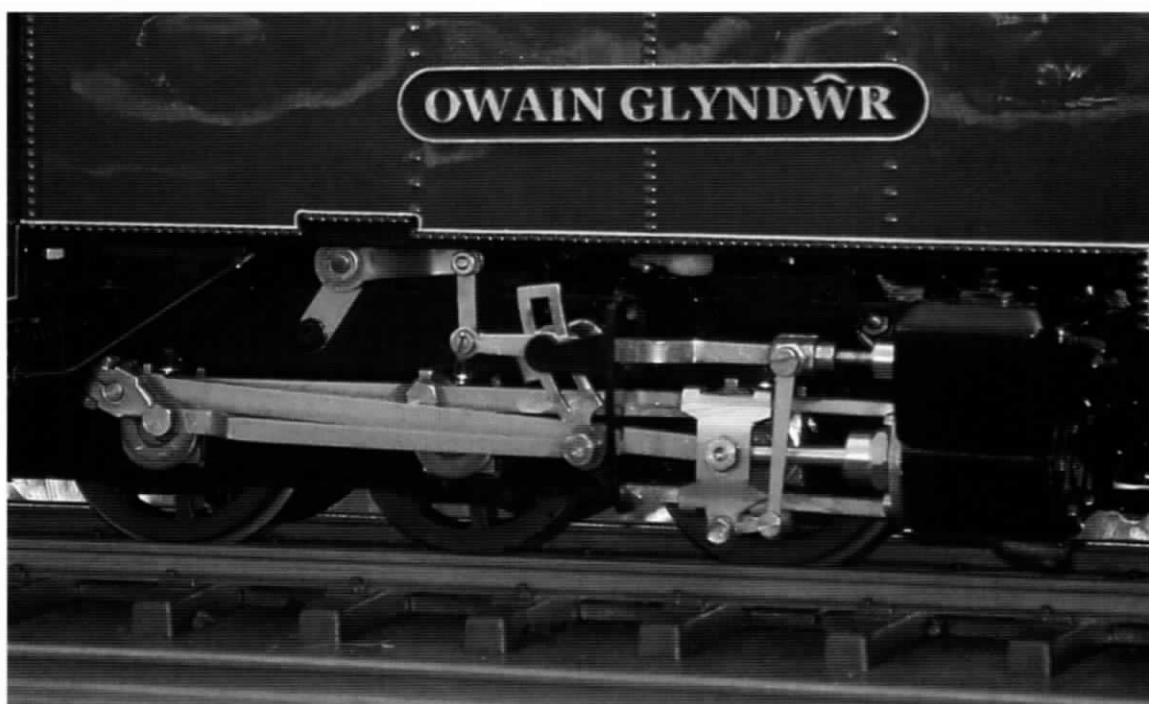
I have run this engine at the editor's steamup and on my indoor track (15' X 25') for well over four hours, and the performance improves with every run. The standard gas tank can hold up to 25 minutes of run time...mine came with a larger optional tank and will, if you're not like me and blow the whistle at your cat every two minutes, last an hour or so. Actuating the whistle or the steam cocks does not result in the engine abruptly slowing down; in fact I never noticed any such degradation even when blasting away on the whistle. The steam cocks actually are fed by the exhaust end of the cylinders, unlike the whistle,

the likes of IP Engineering. Research into the various carriages and wagons can be easily accomplished using the Google search engine and typing in "Vale of Rheidol"

There are several publications that show in map and written form the locations of this and other "lost railways" available from AA Publishing in the UK. Online stores such as Barnes & Noble carry these publications. They are an excellent source of general railway information for steam enthusiasts.

I have one gripe! The couplers are the usual Roundhouse type...I would like to have seen an optional set of different couplers.

Final Thoughts



Cylinder, rods, valve gear...all part of what makes it go.

which is fed from the boiler.

Another nice feature of this locomotive is the very low center of gravity it enjoys, allowing for some really hair raising, high speed runs around curves.

The engine is not as fast as the other Roundhouse locomotives. This in part, in my opinion, is due to the weight. I prefer this reduced speed, though it should be noted it is no way slow! It is a scale speed that with a large layout will translate into significant speed.

This locomotive will lead to severe carriage rake syndrome. The clinical symptoms will include further spending (cashus depletitious) and hours in the workshop (chronic no honeydo) building carriages from

The honeymoon lasts and lasts with this little gem. I must now go on to build expensive and complicated carriages. Perhaps I can sell a kidney on eBay and build a layout like the Stapletons. What ever it takes to run this machine with the correct rake of carriages and on a large enough layout.

This locomotive is the product of a very fine and modest group of dedicated builders in Doncaster, England. The Roundhouse Engineering Company has worked for many years developing a line of ever improving locomotives. I own a **Jack** built back in 1992 and it still runs as new, never had to replace anything on it. The last major project from Roundhouse

was the **Darjeeling**, and that, in my opinion, was the beginning of an era of detailed and superb products from Roundhouse. This past year the **Vale of Rheidol** is a quantum leap forward, combining the reliability of Roundhouse and the detail of the Aster products. The quality of this product and its reliability speaks volumes of the people who made it. These are unique products and are produced in limited numbers....so order yours now!

About the Author

Peter Martin was born in a small village in London. In 1956 he saved 12 nuns from a burning building. In 1969 he was expelled from school and made a living selling Cray computers door to door in New York. After his first arrest he was paroled and allowed to return to school. In 1990 he graduated from the Apex Technical School with a degree in Air Conditioner Repair. Following his second arrest and release from jail he co-invented the internet with Al Gore. Since then he has been under constant psychiatric care and his medication has had significant side effects that lead to his passion for all things steam.

The author failed to mention that he has a warped sense of humor! - ed.



Resources Specifically for Vale of Rheidol

The Oxford Companion to British Railway History. Edited by Jack Simmons & Gordon Riddle. Oxford Press 1997 (see Cambrian Railways for Vale information) 591 pages.

The Festiniog Railway Volume Two – Locomotives & Rolling Stock 1954-1974. By James I.C. Boyd. The Oakwood Press. 2002. (Part 2 of a two volume set devoted to narrow gauge Welsh Railways. Volume One deals with History & Routes) Hard to find publications, available for \$110.00 for both volumes. 626 pages (vol.2)

Encyclopedia of British Railway Companies. By Christopher Awdry, forwarded by Rev. W. Awdry. Guild Publishing. 1990. Many subjects covered in this book including all the main lines. 228 pages.

Encyclopedia of Narrow Gauge Railways of Great Britain & Ireland. By Thomas Middlemass, forwarded by David Woodhouse MBE. Guild Publishing. 1991. Devoted to narrow gauge no main lines. 272 pages.

The Great Western Railway. General Editors Patrick Whitehouse & David St. John Thomas. Greenwich Editions. 1984. 208 pages.

Resources for Steam Locomotives related to Vale

The Golden Age of Steam Locomotive Building. By Philip Atkins. Published by Atlantic Publications with the National Railway Museum. 128 pages.

Resources for Narrow Gauge in General

The Tal-Y-Llyn Railway. By J.I.C. Boyd. Published by Wild Swan Publications Ltd. 1988. a comprehensive resource for narrow gauge especially the Talyllyn Railway. 324 pages

AA Book Resources (Maps & Written Information)

Explore Britains Steam Railways. By Anthony Lambert, forwarded by Christopher Awdry. AA Publications 1995. 160 pages.

Discovering Britains Lost Railways. By Paul Atterbury. AA Publications 1999. 160 pages.

General Information

The National Railway Museum, York, England. One of the world's finest museum and resource centers. www.nrm.org.uk

(Most of these books are available through Barnes & Noble.com or Amazon.)

Merry Christmas & Happy New Year
to all our subscribers, advertisers, contributors and friends!

We appreciate your support of this great hobby and we wish
you good health and happy steaming in 2006

Bob & Marie

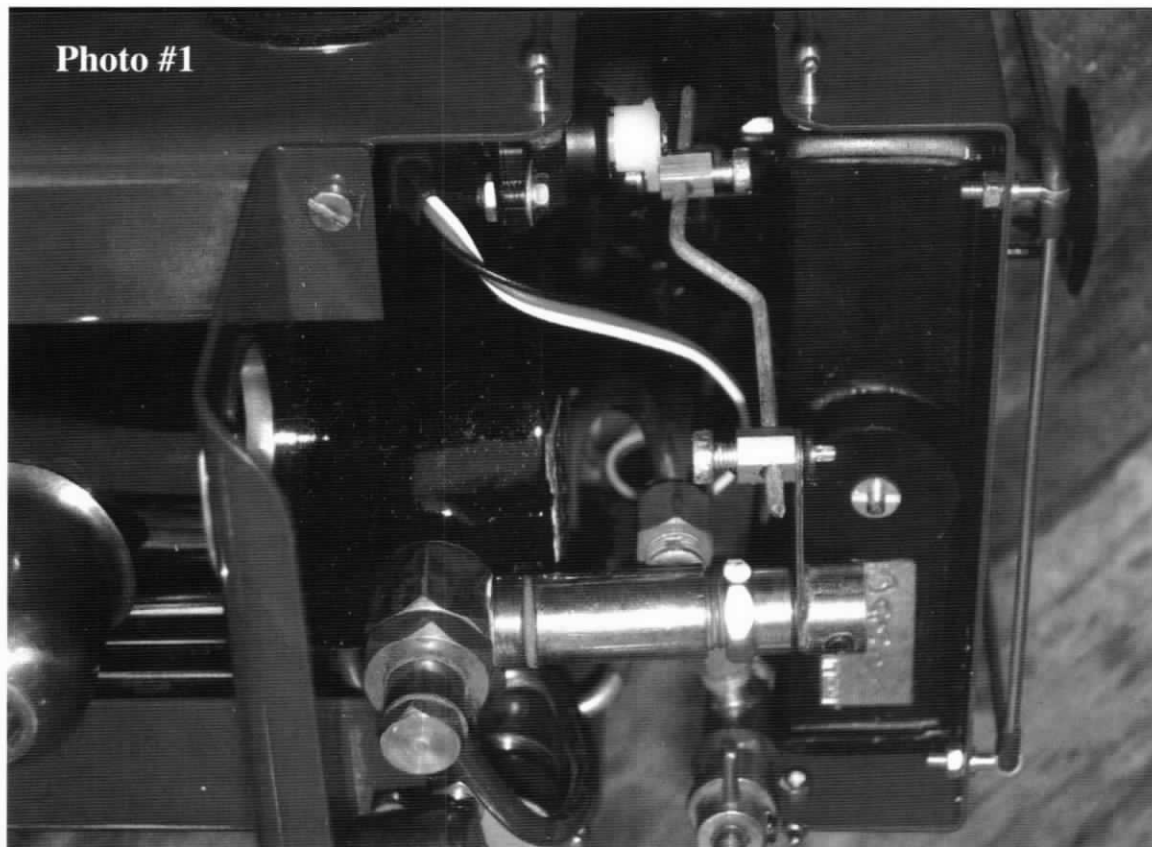
Radio Control for Millie

by Jim Gabelich

Having a ground level track of about 225 feet with 3% grades, radio control is generally a must with a live steam locomotive. The curves of my layout are of small radius, so I use small locomotives. Having bought a Roundhouse Millie from Jim Crabb in Sacramento in July 2005, I set about fitting R/C to it. I

so I built two small open ended wooden "crates" to place the components in (see photo #2). There is just enough room in front of the rear buffer beam and the frame to press fit the wooden crates into (see photo #3). I painted them red to try to match Millie's color, but black would do just as well.

Photo #1



Next I needed an antenna. For this I used hand-rail standoffs from Sulphur Springs Steam Models, with hollow brass tubing that just fits inside the standoffs. I insulated the handrail stand-offs from the tube by using shrink tubing. After bending and attaching the new hand-rail, solder the antenna to the tubing and cover it with shrink tube (see photo #4).

wanted everything contained on the locomotive, with no trailing car needed.

First I installed a micro servo using the Roundhouse bracket and the special Roundhouse throttle body. They use an O-ring type with a shorter throw (see photo #1).

Next I ordered a small HiTec 3 channel FM receiver (HFS-03MM) and bought a 4-AAA battery holder to use for the power supply. It was very important to isolate the receiver and batteries from heat,

As you can see from photo #5, everything is self contained. With the antenna on the outside I have not experienced any glitches. Millie now runs very smoothly, just like the Lady she is.

I am sure this type of installation can be used on many other types of locomotives.



Photo #2

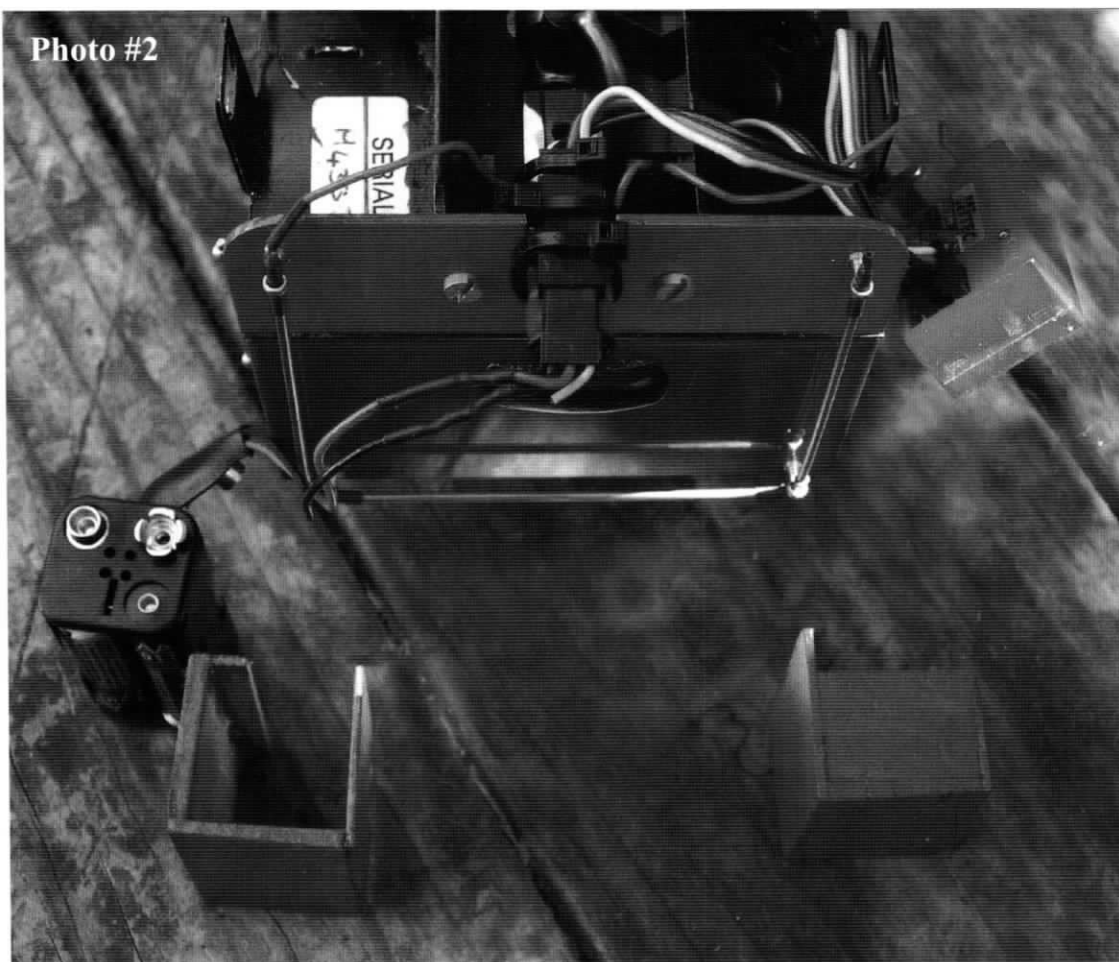


Photo #3

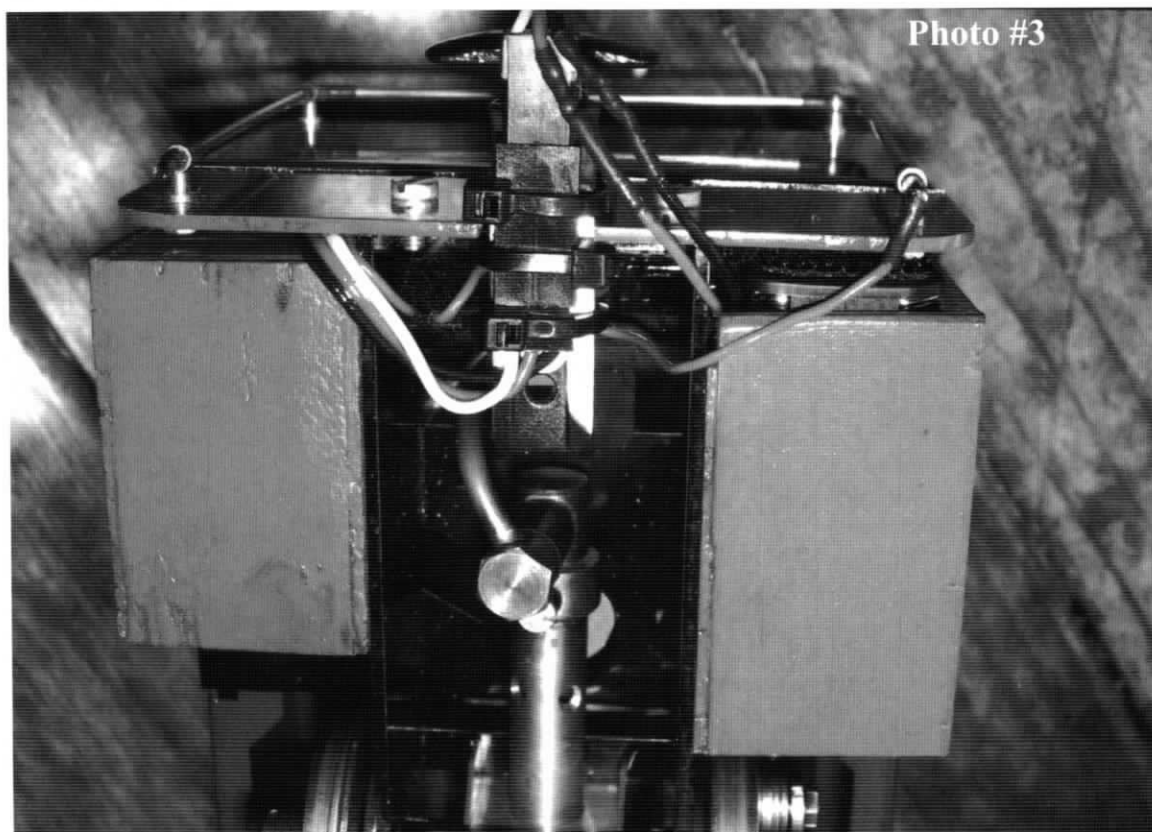


Photo #4

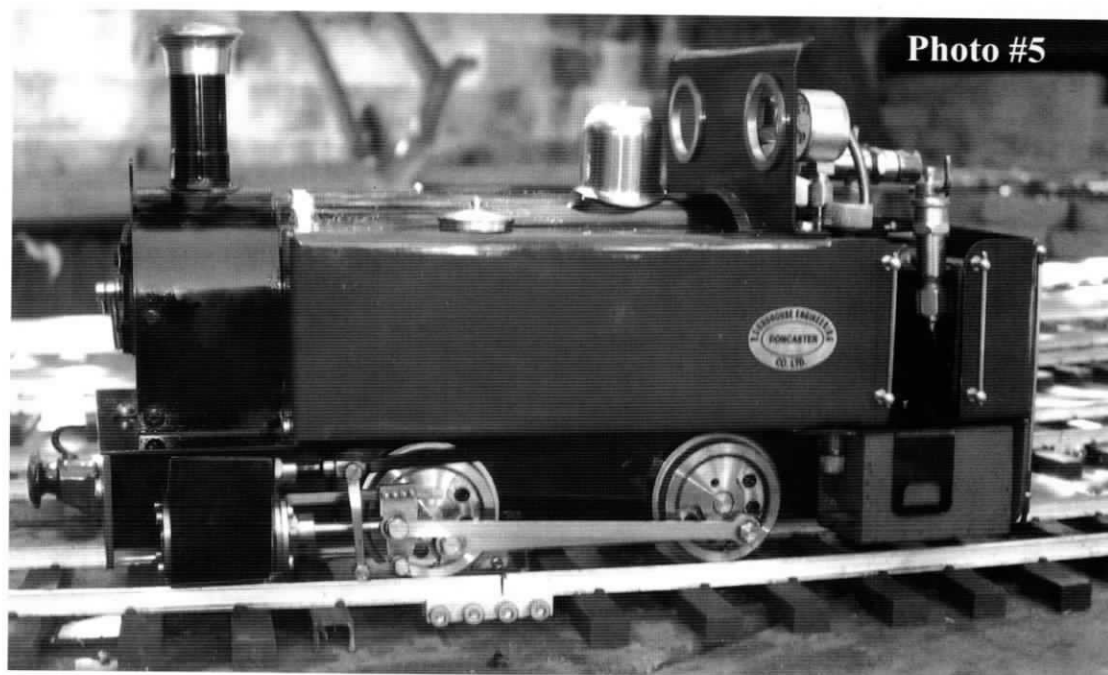
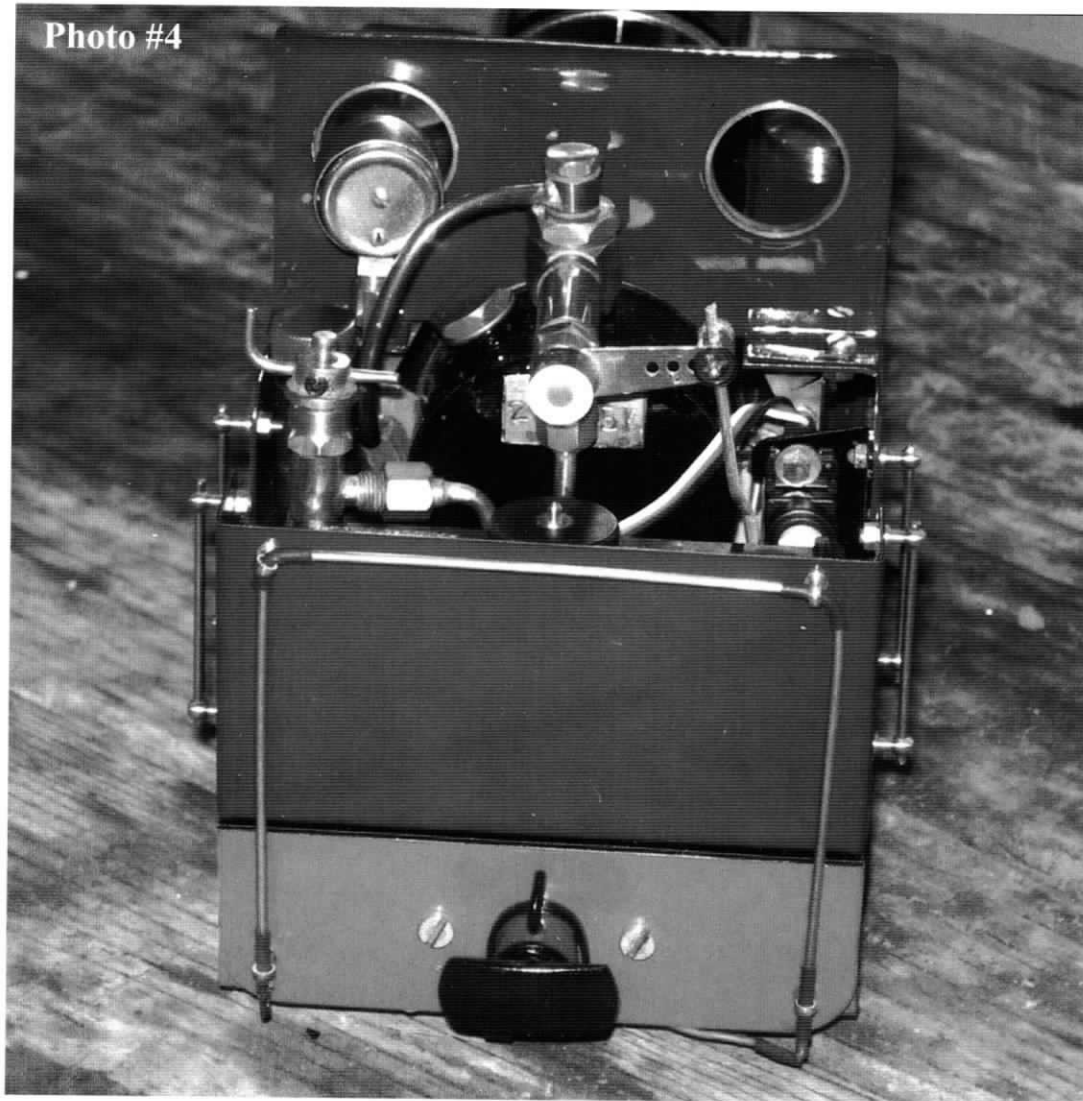
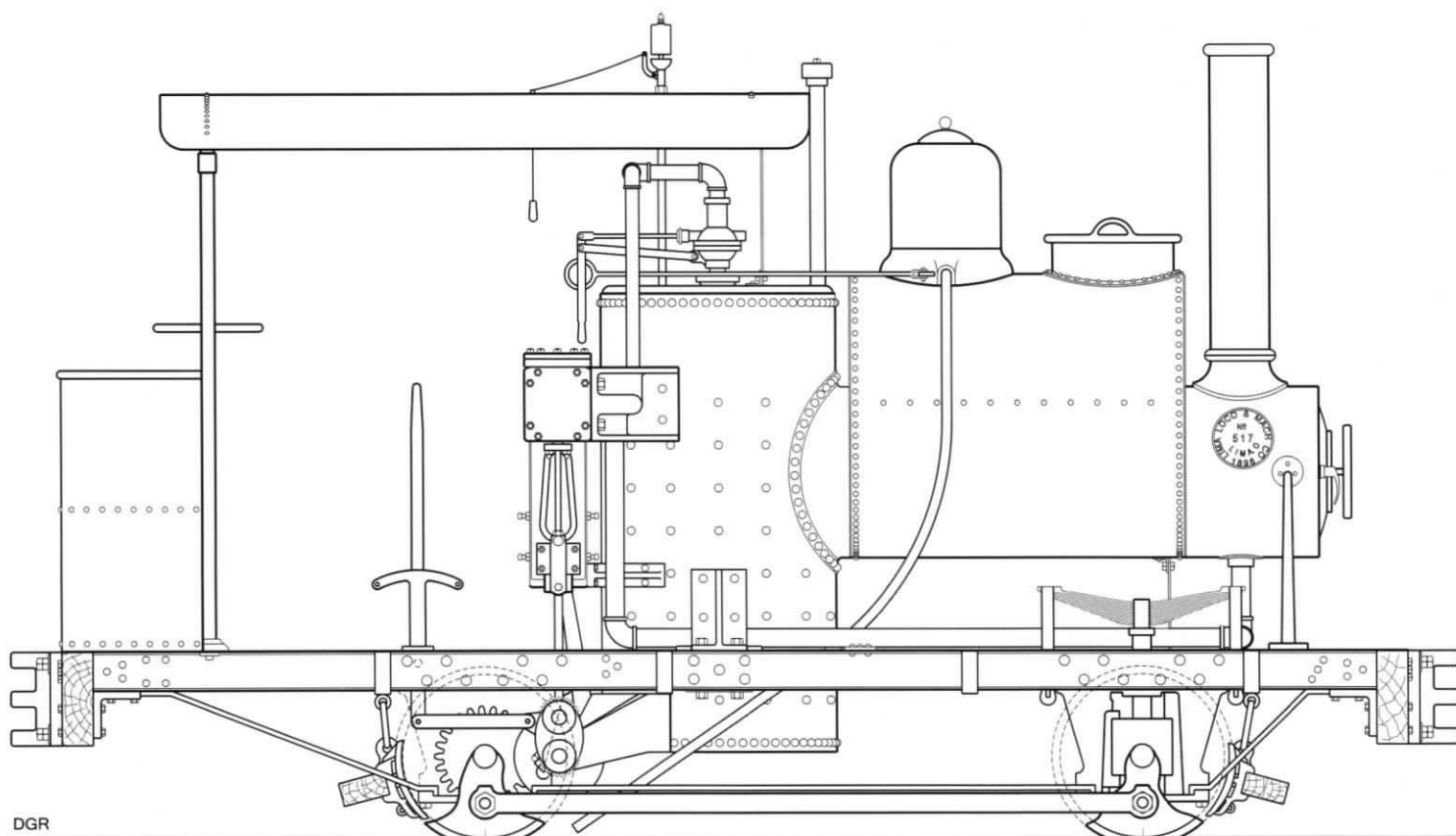


Photo #5

Lima Locomotive & Machine Works Lima Ohio



DGR

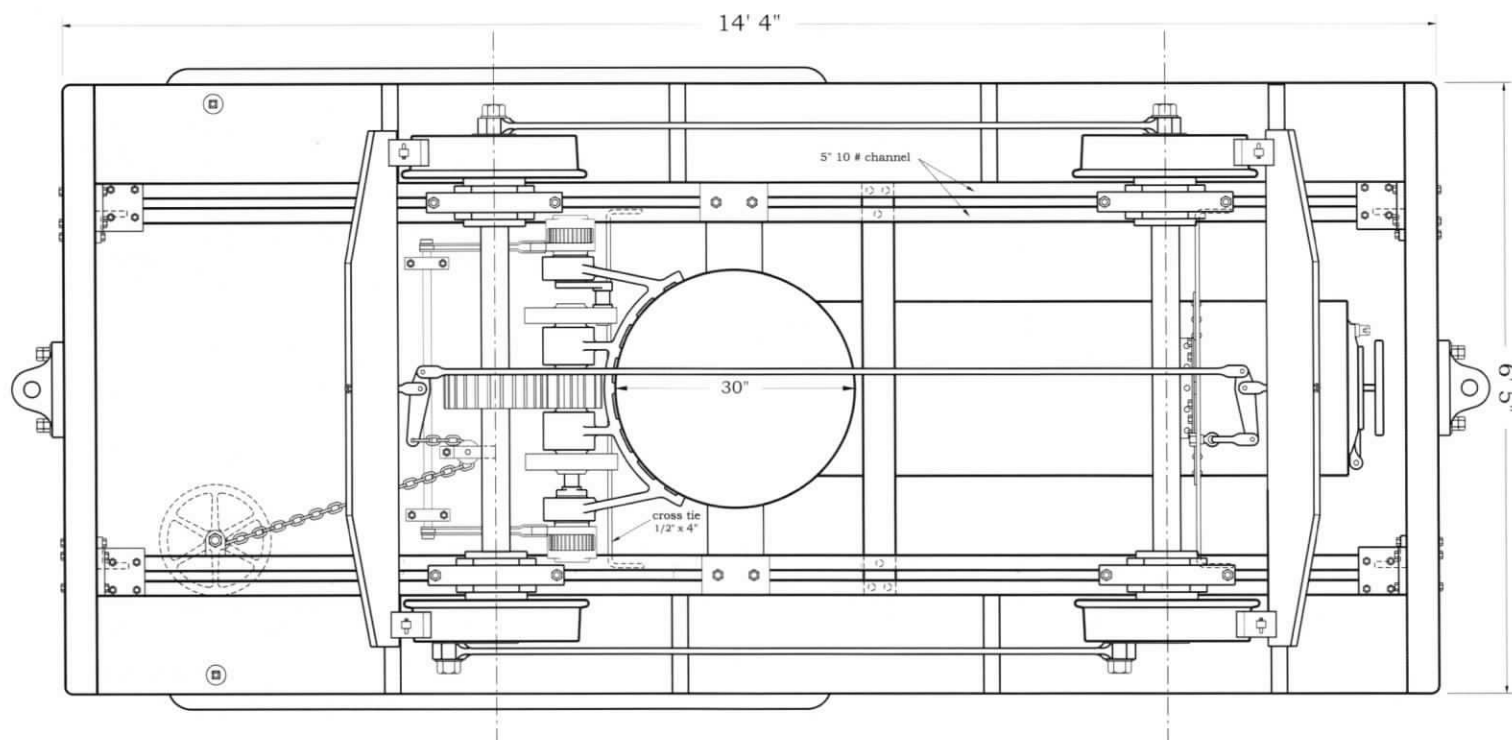
Wheel and bearing pedestal cut away to show reverse and drive gear

7'

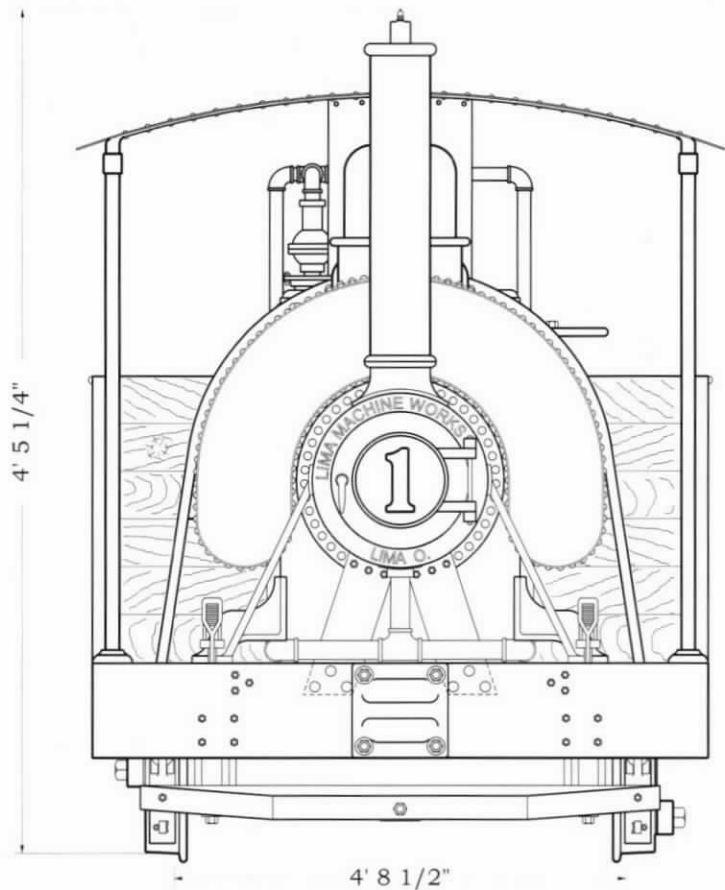
Scale 1/2 in. equals 1 ft.

0 1 2

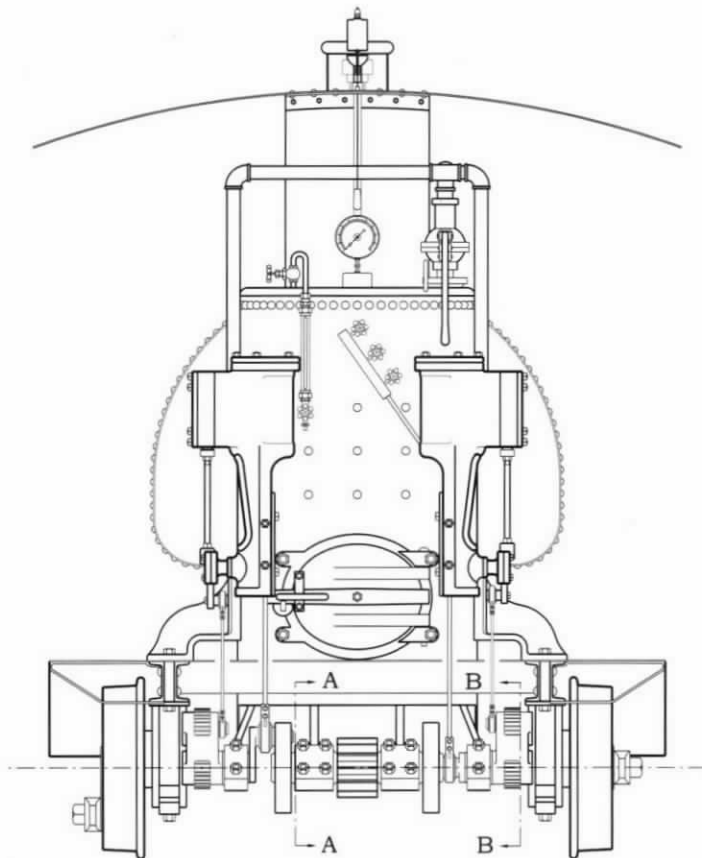
Drawn by Dan Rowe



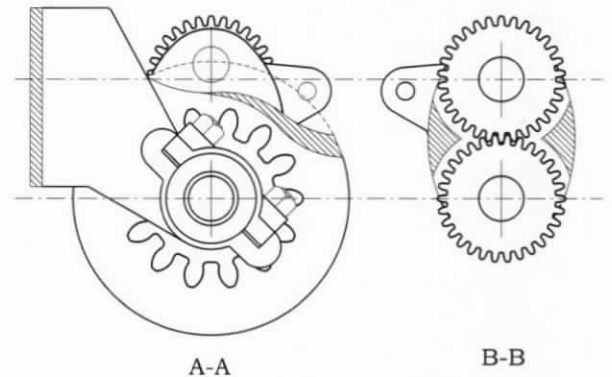
Cumberland Coal Co. Baltimore Maryland



Shop Number 517
 Date Shipped 8/24/1896
 Weight empty 10160 #
 Bore & Stroke 6" x 8"
 Boiler 30" Boot
 Tubes 24 2" OD 51" long
 Firebox diameter 25"
 Firebox height 35"
 Coal capacity 3/4 ton
 Saddle Tank 200 gallons
 Driver diameter 21 9/16"



Details x 3



Reverse gears 30 teeth 6 diametral pitch
 Drive gears 14 & 25 teeth 1.5" circular pitch

Lima Locomotive Works ***Shop Number 517*** by Dan Rowe

There is not a lot of information about S/N 517 that is not on the drawing. All the drawings listed on the drawing card index except the connecting rod were located and redrawn. A Shay connecting rod was substituted and that is why the rods do not appear in the bottom view.

Cumberland Coal Co. ordered S/N 533, another small 0-4-0, which was a normal rod engine but it was 42 inch gauge, not standard gauge.

There was another one of this type of engine drawn with a 2-7x7 engine straddling the firebox door, but it was not assigned a plan number. The word 'plan' is on the drawing but no number follows it.

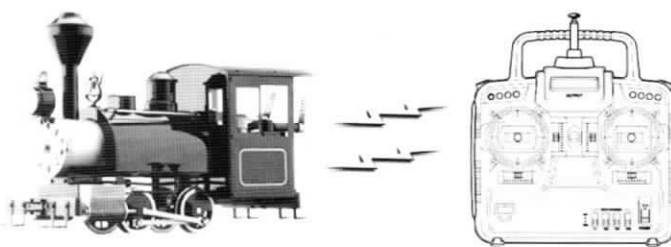
The plan number in the early drawing records is also the shop number of the first locomotive built to the plan.

I just like the concept of shoveling coal between the cylinders.

Large copies of this drawing are available from the Allen County Historical Society, 620 West Market Street, Lima Ohio 45801 -- contact Mr. Charles Bates.

RC-STEAMERS.COM

INNOVATORS IN REMOTE CONTROL PERFORMANCE DRIVEN
PRODUCTS FOR THE LIVE STEAM HOBBYIST.



SERVO INSTALLATION BRACKET KIT FOR ACCUCRAFT RUBY

**BOLT-ON KIT. CNC MACHINED BILLET ALUMINUM BRACKET
FOR MOUNTING TWO INCLUDED MICRO SERVOS IN LOCO CAB.
SPECIFICALLY ENGINEERED FOR THE ACCUCRAFT RUBY LIVE
STEAM LOCOMOTIVE. BLACK ANODIZED FOR PROFESSIONAL
QUALITY INTEGRATION AND LONG LASTING PROTECTION.**

VISIT OUR WEBSITE FOR MORE INFORMATION
WWW.RC-STEAMERS.COM

Electronic Model Systems
22605 E. La Palma Ave. Suite 516
Yorba Linda, CA 92887

To Order Call Toll Free
(800) 845-8978

Sunset Valley Railroad



Complete code 250 track system

**New! O gauge 32mm track
and switches in 1:19 scale**

- O, 1 and dual gauges
- Aluminum, Brass and Nickel-Silver
- Narrow gauge and Mainline
- The strongest code 250 rail you can buy, which means a stable track and smooth running

Catalog and samples - \$3

- Choice of 16 types of gauge 1 switches, from #3 to #10, Wye's and 3-ways also with O and dual O/1 gauge switches
- Switchstands, railbenders, clamps
- Everything in stock - **no waiting!**
- Visit our website **www.svrronline.com** for full color photos of all our products.

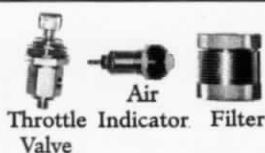
Dealer for Aster, Accucraft, Roundhouse,
Locobox, Kadee, Aristocraft, Raymond.
We have the Aster Duchess kit in stock!

Tel/Fax 253-862-6748 email sales@svrronline.com

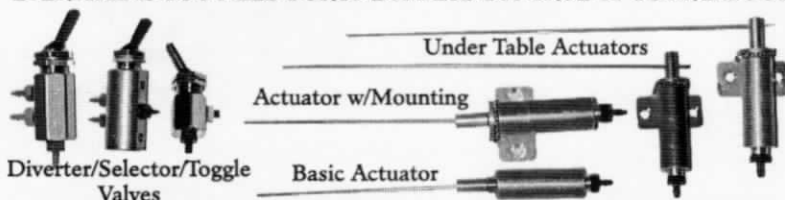


Introducing

E-Z-A-R



EVERYTHING YOU NEED FOR PNEUMATIC CONTROL OF YOUR LAYOUT!



PREMIUM PNEUMATIC CONTROL DEVICES

Superior Craftsmanship — All Components Individually Tested
Allows remote turnout operation and many other uses throughout your layout in all gauges. Compatible with older pneumatic systems.



CALIFORNIA & OREGON COAST RAILWAY
SEE OUR CATALOG AT WWW.COCRY.COM
POB 57, ROGUE RIVER, OR 97537
800-866-8635 OR 541-582-4104

Les lecteurs francophones peuvent contacter Guy Ozanne pour obtenir, gratuitement, une traduction sur un élément de texte paru dans SitG. 41 rue Jeanne d'Arc, 94.500 Champigny, France.

tel (33) 01-48-83-62-86

e-mail <Guy.Ozanne@wanadoo.fr>



Argyle Locomotive Works

Gauge One Steam Locomotive Engineers



1840's Period Wagons

Ideal companion for the
"Aster" - Lion/Titfield Thunderbolt.
Complete Kit.
Resin cast frame.
Laser profiles steel/timber.
Cast axle boxes, wheels and couplings.

Available from: Aster Hobbies (U.K.)
Sulphur Springs Steam Models (U.S.A.)

Argyle Locomotive Works

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

HARD TO FIND

small fasteners for the live steam hobbyist at reasonable prices.

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

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

MICRO FASTENERS

24 Cokesbury Rd St. 2
Lebanon, NJ 08833

Phone (800) 892-6917
FAX (908) 236-8721

e-mail: info@microfasteners.com

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



FINESCALE RAILROADER

The hobby's finest photography.
Superior models, layouts, and dioramas.

Outstanding prototype photos, articles, and plans.

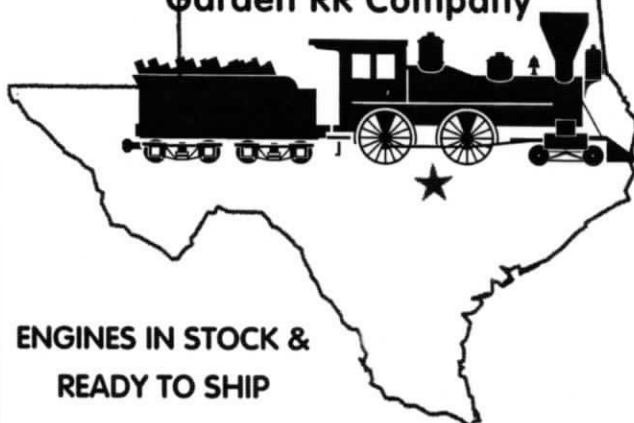
And now your \$26.00 one year subscription (\$39.00 foreign)
also includes two books, **THE NARROW GAUGE ANNUAL** and
THE LOGGING, MINING, & INDUSTRIAL ANNUAL,
(cover price \$14.99 each) plus two magazines.

Or visit www.finescalerr.com and download the magazine for free.

WESTLAKE PUBLISHING COMPANY 1574 KERRYOLEN STREET WESTLAKE VILLAGE, CA 91361
PHONE: 805-494-4070 • FAX: 805-379-1870 • E-MAIL: FINESCALERR@EMAIL.MSN.COM

TEXAS ROUNDHOUSE

Garden RR Company



ENGINES IN STOCK &
READY TO SHIP

send \$5.00 for catalogue

PO Box 404

Seabrook, Texas 77586

For entire offering, see
www.roundhouse-eng.com

Ph 281-543-3028

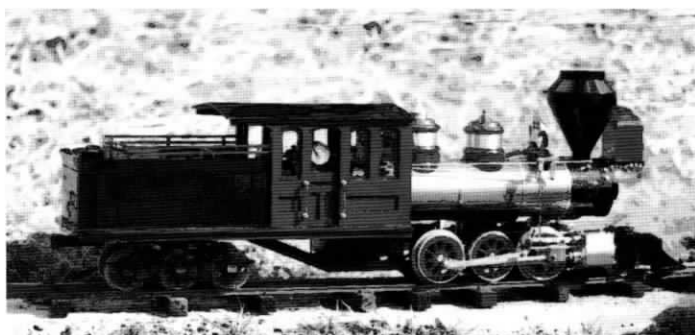
e-mail: TexasRoundhouse@aol.com

**Proudly selling and servicing *Roundhouse*
live steam locomotives exclusively**

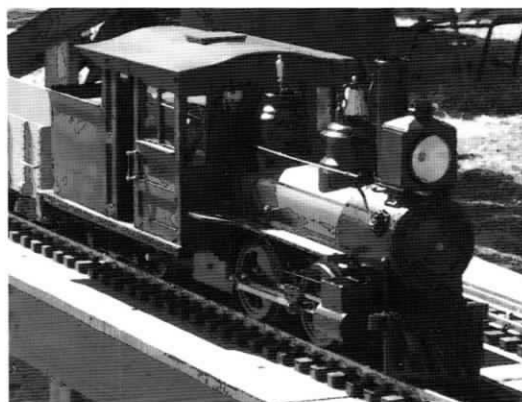
Rishon Locomotives For something different and custom builds.

Available from:
Sulphur Springs Steam Models
PO Box 225
Elsberry MO.
63343-0225 USA
Phone 573-898-3040
Email: sales@sssmmodels.com

Rishon Locomotives
PO Clunes NSW
2480 Australia
Ph Int 61266291115
Local 02665291115
Email: ptr54506@bigpond.net.au



Mason Bogie 20.3 Scale



Portland Forney 7/8 Scale

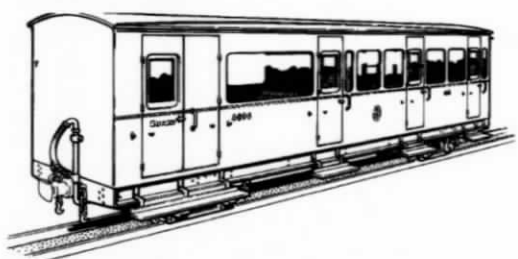
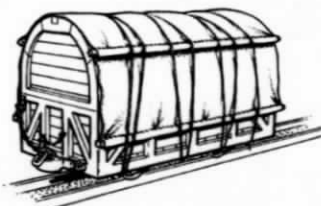
Brandbright

MATCHING TRAINS

We supply live steam locomotives such as the Roundhouse Vale of Rheidol locomotive, and importantly we supply the coaches to run behind the locomotive. They are in kit form and are exact replicas of the 1938 built flush sided saloon and brake coaches complete with extensive decals. We also produce the correct trucks to go under the coaches.

In addition to this our Darjeeling range includes the B class loco and the authentic rolling stock to match.

Or why not create your own narrow gauge railway using our freelance locomotives, with our wide range of matching coaches and wagons for a truly British railway.



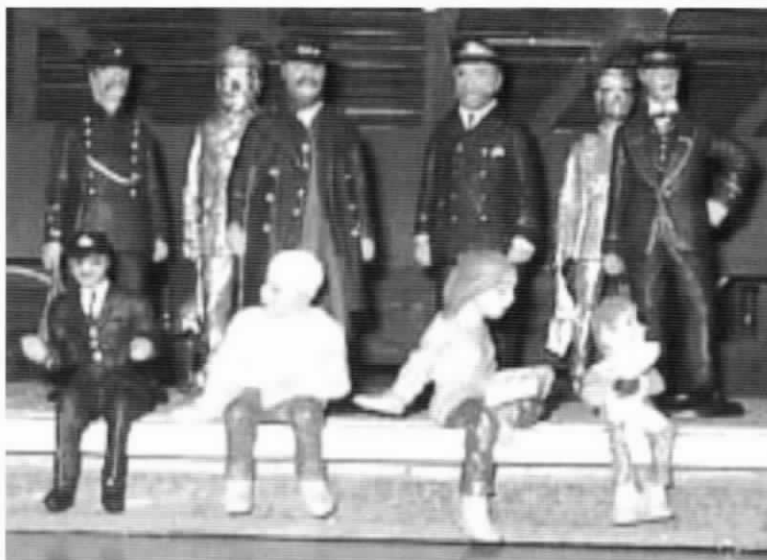
PS29 Vale of Rheidol Brake Coach

Buy the best from Britain – buy direct from Brandbright

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

Brandbright Ltd

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



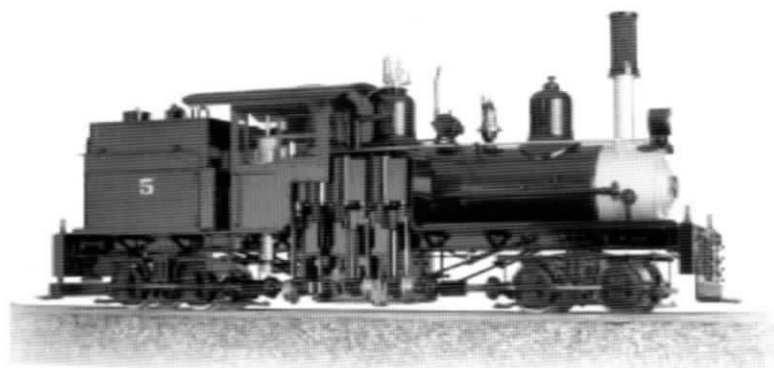
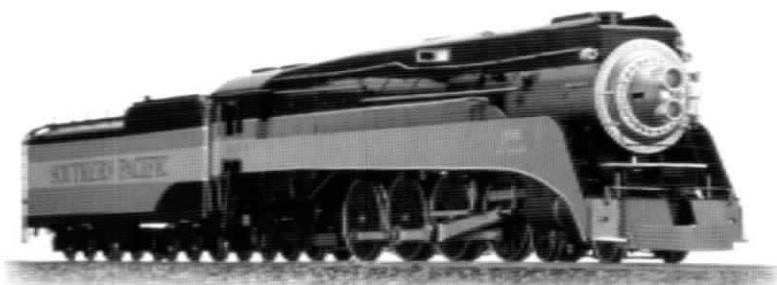
People.... People Who Need People..

Gauge 1 people cast metal or plastic, painted or unpainted... various periods

Call or e-mail your requirements

DOUBLEHEADER ● 972.247.1208 ● kmatticks@gaugeone.com

Accucraft's exciting new SP Daylight (GS-4) in Live Steam, priced at just \$4449.99! Now taking orders...don't miss out on this one! Call for order forms. A small deposit will be required to secure a place in line. ("Built to order" engines - C-21, K-27 Daylight require deposits)



Accucraft 3-Cylinder Shays....

We've got 'em in stock!



We are one of only a handful of Accucraft dealers authorized to sell the magnificent new K-27 in live steam. Call now to reserve yours!



We have the popular and smooth running Accucraft Mich-Cal Shay. (see the review of this loco in SitG N° 68)

IN STOCK

We've got Aster Mikado kits with both pumps....call for our price.

- Aster Locomotives
- HARTFORD CAR KITS
- DELTON CARS
- ACCUCRAFT DEALER
- KADEE COUPLERS & GAUGES
- DEL-AIRE PRODUCTS
- SPLIT JAW RAIL CLAMPS



CROSS CREEK ENGINEERING

P.O. BOX 369

SPENCER, OH 44275

PHONE 1-800-664-3226

e-mail: crosscreektrains@direcway.com



- 70%/30% Butane/Propane, 15.9 oz. (800ML), \$5.50 each in boxes of 12. Twice the gas per can - a 27% savings!

SWAP SHOP

For Sale: *SitG* issues # 1 (July/Aug '90), 5, 8-11, and 13 through 78 (Nov/Dec '04); total 72 issues as a block only \$72. *Model Engineers Workshop* (pub. by Nexus, UK) Issues # 23 (May '94), 26, 29-31, 33, 34, 37, 38, and 41 through 87 (Jan '03); total 56 issues as a block only \$56. Shipping extra. Contact Brian Taylor, Tel. (949) 646-3544, or e-mail taylorarthur1@sbcglobal.net (83)

For Sale: Back issues of *SitG* for sale. Starting with Oct/Nov 1991 [72 magazines in all]. Most are in mint or near mint condition. Contact me for list, condition, and price. Robert Nowell, 41 Sam Brooke Circle, Lehighton PA 18235 or e-mail me at coalportrr@aol.com (84)

Swap Shop listings are offered at no charge as space permits. No dealers and no phone-in ads, please! Send your listings to SitG, PO Box 335, Newark Valley NY 13811 • fax to 253-323-2125 • e-mail to <rbrown54@stny.rr.com>. Ads must contain sellers name, plus address and/or phone number. Ads will be run one time only unless previous arrangements are made.

Wingnut sez...

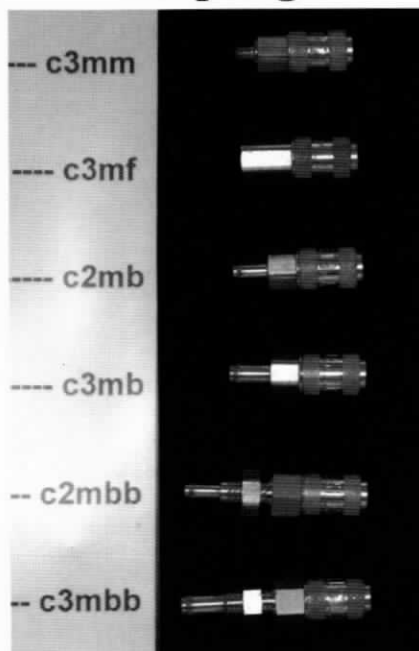
Have you ever had to replace the lathe tool bit or milling cutter because it was a bit dull? Of course you have. This is no problem during the roughing out phase, but what if this was a finish cut? With my not-so-eagle eyes it is very difficult to see exactly when the tool is in the proper position with out leaving a tattletale mark. This is usually does no real damage except leave a visual reminder that you did not think it through well enough. Here is the trick: use cigarette paper, or even the cellophane that covers the pack of smokes that you hide in the shop. Take a small piece and measure it, I usually get .001 as the thickness.

Lightly hold the paper between the work and the tool, turn the machine on and move the tool slowly towards the work. When the paper is snatched from your fingers you are exactly the thickness of the paper away from the work.

Cost of cigarette paper...about a buck. Cost of maintaining your reputation as a crack machinist...priceless.

Miniature Quick Connect Couplings

Couplings



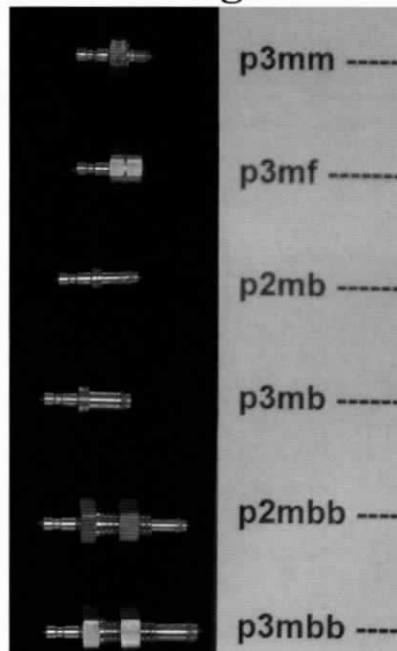
A Coupling Solution consists of two pieces, a female Coupling and a male Plug. Any female Coupling mates with any male Plug. The Couplings and Plugs are threaded or barbed. Barbed fittings also come with bulkhead mounting. Adapters are available to allow solder attachment to copper tubing.

Contact: John Synnestvedt
5172 Lake Shores Road
Virginia Beach, VA 23455

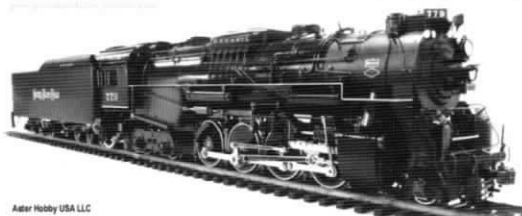
757-363-0958

synnestvedtjd@hotmail.com

Plugs



Make Connections a Snap!



Aster Hobby USA LLC

NORTH JERSEY GAUGE ONE CO.

8 Spring Valley Rd., Park Ridge, NJ 07656

dealer for
ASTER HOBBY INC.

•
ACCUCRAFT TRAINS
museum quality
live steam trains

201-391-1493

Bob Moser



ASTER HOBBY

LIVE STEAM AND ELECTRIC
GAUGE 1 LOCOMOTIVES

also larger scale & gauge live steam locomotives

e-mail: bob1027jane@aol.com



Struggling to make the grade...



ADVERTISERS INDEX

Accucraft Trains.....	25
Argyle Locomotive Works.....	41
Aristocraft Trains.....	24
Aster Hobby Co., Inc.....	47
Brandbright.....	43
C & O C Ry.....	41
Cross Creek Engineering.....	44
Doubleheader Productions.....	43
East Branch Trains.....	20
Finescale Railroader.....	42
Garden Railways Magazine.....	20
Hyde-Out-Mountain Live Steam.....	2
John Synnestvedt.....	45
Micro Fasteners.....	41
Miniature Quick Connect Couplings.....	45
North Jersey Gauge One Co.....	46
Ozark Miniatures.....	12
Quisenberry Station.....	8
RC-Steamers.com.....	40
Remote Control Systems.....	14
Rishon Locomotives.....	42
Robinson & Associates.....	10
Roundhouse Engineering Co. Ltd.....	48
Sierra Valley Enterprises.....	20
Southern Steam Trains.....	4
Sticks & Stones.....	4
Sulphur Springs Steam Models.....	12
Sunset Valley Railroad.....	40
Texas Roundhouse.....	42
Trackside Details.....	20
Train Department.....	11
Twin Mountain Model Works.....	4
Welytk Whistles.....	12

Please tell our advertisers,

"I saw it in SitG!"



Left: Peter Martin's Roundhouse Darjeeling with a string of Sierra Valley cars, seen running at Jim Stapleton's Fall Steamup.

photo Peter Martin



Aster Hobby USA LLC

101 Theiler Rd. Spartanburg SC 29301 USA

Tel: 864 587 7999 Fax: 864 587 2299

Web: asterhobbyusa.com Email: asterhobbyusa@teleplex.net



----- Exclusive US importer and distributor for Aster live steam locomotives and accessories -----

If your passion demands 1/32 scale live steam models of highest precision, aesthetic presentation and prototypical functionality, look no further than Aster. All locomotives are designed and manufactured by Aster hobby Co. Inc. of Yokohama Japan.

First picture of the production model NKP Berkshire #779

Supplied by Aster Hobby Co. Inc. Yokohama / Japan

NICKEL PATH ROAD 779 Berkshire



By the time you read this, delivery of the first batch of NKP Berkshire kits should be underway. We hope you become one of the lucky few owners of this great locomotive, which will certainly be a collector's piece for any live steam aficionado.

If you have not made up your mind do not wait much longer.

Over half of the production allotment destined for the US market has already sold out. Call your preferred Aster dealer from the listing below.



Southern Steam Trains LLC Travelers Rest SC 29690 Tel. 864 834 3954 Web: southernsteamtrains.com	Sunset Valley Railroad Sumner, WA 98390 Tel./Fax 253 862 6748 Email: sales@svrronline.com	Cross Creek Engineering Spencer, OH 44275 Tel. 800 664 3226 Email: crosscreektrains@direcway.com	North Jersey Gauge One Park Ridge NJ 07656 Tel. 201 391 1493 Email: Bob1027Jane@aol.com
Quisenberry Station Alexandria VA 22309 Tel. 703 799 9643 Web: quisenberrystation.com	Gauge One Lines Stittsville Ontario Canada Tel. 613 836 6455 Email: gaugeonelines@yahoo.com	Bear Creek Railroad Surrey British Columbia Canada Tel. 604 594 8695 Email: pantages@telus.net	The Train Depot Winter Park FL 32789 Tel. 407 647 2244 Email: mykal54@att.net

For availability and prices contact your authorized Aster dealer. Check www.asterhobbyusa.com for additional pictures and technical specifications.

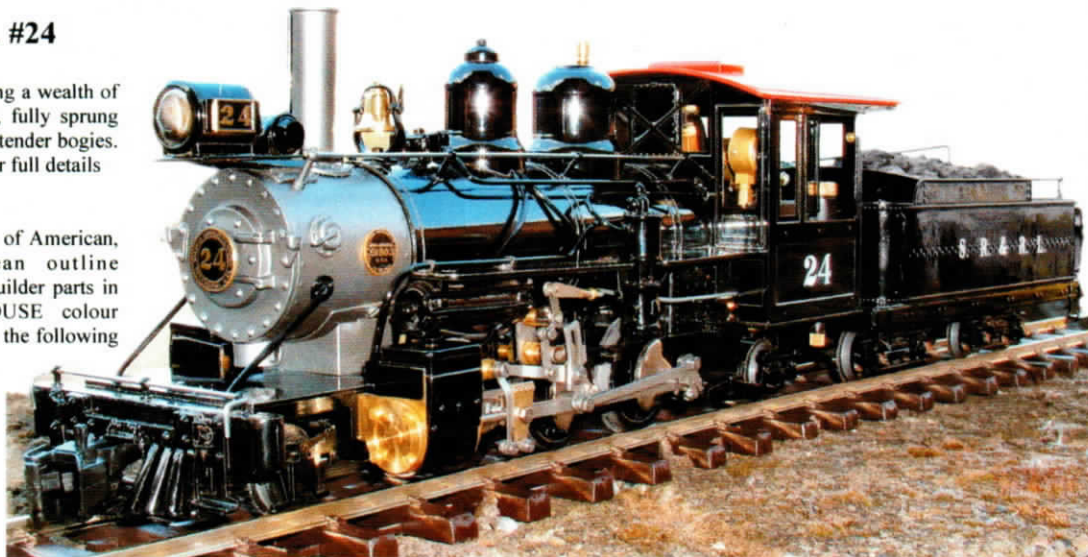
ROUNDHOUSE

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

S.R. & R.L. #24

Now updated and featuring a wealth of improvements, including, fully sprung chassis and compensated tender bogies. Check out our web site for full details

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



Double Header Productions. Phone/Fax: 972-247-1208
S.T.E.A.M. Phone/Fax: 925-778-7061

Texas Roundhouse Tel: 281 474 9579 Fax: 281 474 5703

Sunset Valley Railroad Tel/Fax: 253-862-6748

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

USA

Sulphur Springs Steam Models Ltd. phone/fax 573-898-3040

Ridge Road Station Inc. Phone Toll Free 1-877-477-2253

Quisenberry Station Tel: 703 799 9643

CANADA

Meg Steam Inc. E-mail meg_steam@intertrek.com

Roundhouse Engineering Co. Ltd. Units 6-7, Churchill Business Park, Churchill Road, Wheatley, Doncaster. ENGLAND. DN1 2TF

Tel: 011 44 1302 328035 - Fax: 011 44 1302 761312 - e-mail sales@roundhouse-eng.com

www.roundhouse-eng.com

Below: Aster's new NKP Berkshire #779 with a long mixed freight. The track is Jim and Jo Anne Stapleton's, the location is Virginia.
photo by Peter Martin

