

# The Oily Rag!

Autumn 2012. Issue



**A Shay locomotive and train at the Cass Scenic Railway. More on these unusual engines inside.**

The Taunton Model Engineers' magazine

# Contents

- 3. From the Editor**
- 4. Chairman's Notes**
- 5. News from Creech**
- 6. Report from Vivary Park**
- 6. The Tickers — Horological Sub-Group**
- 7. TME Introductory Video**  
Your chance to become a film star! By Mike Pinkney
- 8. Of Ships and Things**  
From Adelaide to Auckland By Fireman M.N. (Retired)
- 11. Distinctly odd!**  
Or were they? An article on the Shays By Phillip Innes
- 17. TLC.**  
A story of "deviationists" By Bill Edmondston
- 24. All Change!**  
Comment and a charming simple locomotive By Mr. MDF.
- 28. The Crowborough Locomotive Society.**  
A new feature about other people's clubs By Neville Watts
- 30. Sales and Wants**
- 31. Letters to the Editor.**
- 32. In Memoriam, Brian Jenkins.**
- 34. Running Dates 2012.**
- 35. Meetings programme.**

## From the Editor

This is the first issue without our new chairman in control. Many of us were sorry that Gerry Willis decided to quit the job, we all wish Andy Webb the best after his enforced promotion.

Model engineering can be a very solitary hobby, with hours spent alone in the workshop. So the social side is important. I think meeting other enthusiasts and visiting other clubs adds something. So I thought an occasional feature written by members of other clubs may be of interest. To test the water I have included a piece on the "Crowborough Locomotive Society" by one of its founders, Neville Watts. If you would like to read more about the club or have a connection to another club and can persuade one of its members to write a similar piece please get in touch, similarly if you think it is a waste of space do not hesitate to put pen to paper!

Although letters on the subject have been rather sparse, actually just one, but there has been a lot of verbal support for a "Tiddler track" (must think of a better name!) It has been suggested that initially the portable track could be used for more information see the "Report from Crech" Mr. MDF. Has taken up the challenge of designing a suitably simple locomotive for the beginner to use on this track and introduces us to his delightful choice of prototype.

For those who always wanted to star in a movie, now is your chance! Mike Pinkney has taken on the task of producing a video to promote the TME. He outlines what he has in mind on page 6.

I was pleased with this quarter's crop of articles, gathering which entailed relatively little arm twisting! I hope you enjoy issue 111.

John Pickering

# Chairman's Notes

**By Andy Webb**

In May Gerry Willis stepped down from the position of chairman of Taunton Model Engineers and despite many pleas from the other members of the committee asking him to withdraw his resignation he felt unable to and insisted that his decision was final. As Vice Chairman I shall take over the Chairmanship until my term expires at the next AGM when I intend to stand down from office and will not seek re-election. I should like to extend an enormous vote of thanks to Gerry on behalf of myself, the committee and all the members for everything he has done over the year to make the club the success it has become.

It is my sad duty to report the death of Brian Jenkins who passed away on 1<sup>st</sup> August aged 79. Brian had been a member of TME for many years, regularly attending our evening meetings accompanied by his dog. I should like to pass our sincere condolences to his son David and the rest of his family.

We are now well on into our summer schedule of activities and I should like to thank Tony Newberry, Tony Gosling and Martin Rickitt for hosting visits to their railways. I know that they put a lot of time and trouble into organising these evenings and we are all very grateful for their efforts. And whilst on the subject we mustn't forget Nick Nicholls who prepared and cooked the barbecue for our Crech steam up at very short notice.

Finally I would like to pick up on the comments made by Gerry in the last Oily Rag regarding the future of the Exhibition. The committee has taken the decision that it will be shelved next year and that without a volunteer to act as manager we may not have one

in 2014 either. Declining interest from the traders attending and falling number through the doors suggest to me that it might be a time to knock it on the head and do something different. Perhaps a smaller one day event or even a rally at Creech, I don't know. We shall be setting one of the evening meetings in September aside for a brainstorming session to see if we can come up with any new ideas.

## News from Creech

**By Mike Johns**

Until July the weather defeated our attempts to provide a train service but it encouraged foliage to grow even faster than normal. This has meant that the only activity on Sunday mornings has been maintenance, indoors when wet, and outdoors to try and keep the grass under control. Even so there has had to be some last minute cutting back when it has been possible to run trains. Some extra help would be welcome."

Bad weather has also hampered the efforts of the Thursday gang. The section along the embankment has been straightened and reballasted. The track in the lower part of the cutting has been straightened but the ballast still has to be trimmed. After several tries the heavy plant arrived at Creech on 11th August (see back page) to do the required earthworks. This work was needed where the track is to be realigned. The embankments have been built up to support the new track position and the foundations for the new station, which is to be built on the passing loop, have been dug. Many thanks are due to the Hartnell brothers who provided the machinery and the other members who provided the muscle. All we need now is more settled weather to move things forward.

The current thought on the suggested training and test track is to use

the portable track, to test the level of use. The track would be securely fixed down behind the carriage shed, to prevent it "walking" but would be quickly detachable when needed by the "Nomads". If this proves popular, a more extensive elevated track could be built, probably inside the loop near the new ground level station.

## Report from Vivary Park

**By David Spicer**

Running days have been very well attended, when the weather allowed, with good passenger numbers. The flower Show was well supported and a big thank you to both the locomotive drivers and the support staff.

Taunton Deane have put a netting and support columns adjacent to the track which has required additional personnel to maintain safe passage. The final outcome yet to be decided. Running days as per the "Oily Rag". (Note - the spacing of the supports from the track does not meet the recommendations of the Health and Safety Executive given in HSG216 available online. Ed.)

## The Tickers—(Horological Sub Group)

**By David Spicer**

I am progressing well with the Harrison clock, we are now in the final twelve months of the build, setting and adjusting, so that it will be on display in January 2014.

If any club member has Horological questions please contact me. (details inside the front cover.)

## TME Introductory Video.

I need your help! I have undertaken, on behalf of our committee, to make a Taunton Model Engineer's introductory video. It is intended that this will show to prospective members, the various engineering activities of the club and the benefits that membership can bring. It will be about five to ten minutes long and will be uploaded onto YouTube for all to see. A link to it will be placed on the TME website.

In order to maximize the club's appeal, it is important that the contents should be as broad and inclusive as possible. Therefore, I should like to make contact with as many members as possible with a view to filming your particular model engineering interest. I am thinking here, in addition to railways - planes, boats, clocks, traction engines, tools, Meccano or you name it, basically any activity that could be labelled an engineering activity - anyone into robots? Also, I wonder if I might persuade some of you to talk, on or off camera, about your involvement with the hobby.

Meantime, I shall start this process, hoping for some improvement in the weather, by filming extracts from various club events and activities over the coming months, so please do not hesitate to get in touch with me - see below.

I look forward to hearing from you.

Many thanks.

Mike Pinkney

email: michael.pinkney@scenewide.co.uk

# Of Ships and Things

By Fireman M.N. (Retired)

The trip to Adelaide was quite uneventful, arriving at the mouth of the Torrens River on a Sunday morning and having to drop anchor, waiting for high tide. When we did move off the river was crowded with small boats and yachts. This was the usual Sunday pastime, (lets go and see the big ship come in), and luckily most of them gave us a wide berth.

We got tied up and shut down at about 11 o'clock but we kept sea watches, I was on the 12 – 4 so my afternoon was spent watching the donkey boiler and the engine generator still running. The team demand was fairly erratic so it was quite a job to keep the steam pressure and water level just right. The generator needed the valve rockers shaft soiling, pressures and temperatures checked and the oil filter turned to clean them, this was done every half hour. The generator was at the lowest level of the engine room and the boiler up in the funnel so the job kept you on the go.



Oiling the rockers.

In those days Australia was dry on Sundays (pubs shut) so the town was pretty dead with most families on the beaches. These days the mission was open till 6 on a Sunday so when I finished I went ashore to stock up on some books as reading was one way of



passing time. Then back on board for a few hours skipas I was on watch again at 12.



After Adelaide we went round to Geelong which is a pan inlet off Port Philip Bay, here they unloaded huge crates of car parts for the Ford plant. Next it was a little way up the river Yarra to Melbourne to unload more car parts. When we arrived the Royal Yacht was in port as the Duke of Edinburgh was opening the Olympic Games, being held at the cricket ground. We tied up at the next berth, with a suitable gap for security.

As it was Friday a crowd of us went ashore for a few sherberts, my idea was just a few as I was on watch again at 12 o'clock, that was the plan, what happened was (sorry Jethro) we piled out of the bar at closing time, not drunk, just happy. We were met by a police riot squad who picked out the 6 biggest of us and handcuffed us together. Off to the nick in the Paddy Wagon and straight up to the front desk. Here we were pronounced drunk and given the option of £100 fine or a night in the cells, as we were flat broke the cells won.

6 o'clock next morning we were woken up with a cup of cold tea and led out into the backyard and given the option £100 fine or

muck out the stables. They had not been done for a week so there was a fair bit to shift so we got stuck in. We were let out at about 10 o'clock. Back on board after a bacon sandwich and a big mug of coffee I pick up my watch at 12.

Apparently this was a regular thing at Flinders Street where the horses were kept, about 20 of them, also I was fined 2 days pay for being AWOL and 4 hr sover time rate for the chap who stood in for me. I wasn't sorry when we left. Next stop Sydney that bridge sure is some sight.

Two days later and it's up the coast to Brisbane where they start to load cargo for the U.K. cheese and wool. We got away from Brisbane on the 20th Dec, 4 days to New Zealand which gets us into Auckland on Christmas Eve, we just made it before things came to a stop.

What a time!! No work for 3 days, all the engine room was shut down with the electric power being taken from ashore and a steam hose for the usual services, this is so that the boilers can cool right down and be ready for a thorough overhaul which included replacing several tubes descaling the water spaces and sweeping the soot from the uptakes.

Meanwhile it was party time all over town, the best time was the dance then the nurses from the Hospital put on. The docks were a wash with lights all the ships were floodlit and had a Christmas tree tied to the tops of their main masts, then at midnight all the ship's sirens started blowing and the foc's'le bells ringing it was ear-splitting.

When the Dockers started work again the first job was to unload 4 big fabricated girders which had been chained down on deck, they weighed about 30 tons each, these were parts for the bridge to be built across the harbour and every ship sailing from the U.K. brought sections of it.

# Distinctly odd!

By Phillip Innes .

There are many nineteenth century locomotive designs which to the modern eye look distinctly odd. Even on closer examinations some look to have been designed to be different simply in order to be different. There is nothing wrong with trying out new ideas, indeed without experimentation there would be little progress, but without a good engineering reason for using unconventional designs the resulting locomotive is usually going to be an eccentric oddity. Initially the Shay looks to fit into this class, but since 2767 were built by the Lima Machine Works between 1881 and 1945, the concept must have been reasonably sound.

In 1873 Ephraim Shay and his family moved into a new logging settlement at Haring in Michigan to set up a saw mill and general store. He soon bought a packet of land to cut timber. The loggers worked by cutting native woodland until the area was exhausted and then moving on. The timber was cut in the spring, summer and autumn and stored until the winter snows arrived. As soon as there was a good depth of snow, work started to turn the tracks through the woods into icy runways along which the logs could be dragged down to the rivers by horses or oxen. Here they rested on the ice until the thaw. They then they floated downstream to the saw mill. The Shay locomotive may never have been invented had it not been for a mild winter which prevented the timber being moved in this way.

To get the timber out Shay built a wagon way similar to those used in the North of England many years earlier. It had a gauge of 26" with both rails and ties made of wood. The logs were reloaded onto two 4 wheel trucks, one at each end, and then hauled by animals.

Anyone who has had anything to do with horses will know they do not have very good brakes, as a result serious accidents were common. In 1876 Shay built his first locomotive to try to get better control of loads running down steep gradients. Even Shay admitted it was rather crude. No detail survives but it is known to have had a conventional layout. It was partially successful, but Shay soon noticed that although it was no heavier than the loaded log trucks it did far more damage to the track. A conventional steam locomotive has the power source, the transmission and the suspension all in one tightly integrated unit. Even well respected designers sometimes failed to balance the often conflicting requirements needed to produce a successful design. The Deely "flatirons" are a classic case where despite much work they were never able to fulfil their intended purpose. No surprise that an amateur engineer could produce a design which highlighted rather than solved the problems.

It can be argued that Shay invented the modern locomotive. Instead of trying to optimise a conventional layout he decided it would be better to separate the different functions completely. A twin cylinder vertical engine of 5" bore and 7" stroke was obtained from William Crippen (no relation!) The engine was mounted at the back of a 14' long chassis supported on two logging trucks. The front one was free to swivel but the rear one was fixed to allow for a chain drive transmission. A 3' diameter vertical boiler 5' tall provided the steam. Except for problems with the chain drive, which was later replaced by a belt, the locomotive was an immediate success.

Shay initially tried to keep his invention secret, to give himself a commercial advantage over his rivals, but other loggers were soon asking him to build engines for them. Instead of building engines he made an arrangement with William Crippen and his company started to supply replicas of Shay's prototypes. Soon the demand outstripped Crippen's capacity.

When a prominent logger and one who had done much to introduce railway logging, James Alley, approached Shay to build an engine, Crippen could not supply.

Alley went to the Lima Machine Works and asked them to build an engine to the Shay design. In stead they supplied an engine to their own design based on the Fontaine steam tractors with which they were already familiar. There was some contact between Shay and Lima when this locomotive was being designed and built but the locomotive owed little to Shay.

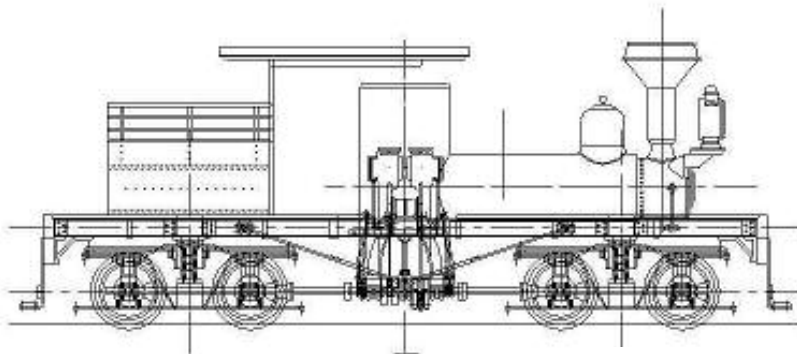
After much experimentation during 1878 and 1879 Shay needed work on his engine which he could not do himself. The locomotive was shipped to Lima in January 1880. One of the engineers who worked on the project was John Carnes and it was he who came with the idea of moving the engine onto the side of the locomotive so that both axles on both trucks could be driven and both trucks could swivel. In this form the locomotive was returned to Shay who took a patent out on the design. Lima Machine Works started to build production locomotives to what they called the "Carnes design", this was to become the classic Shay.

The resulting locomotives were very "light on their feet" and could run on track which would be wrecked by a conventional engine. Many worked on wooden rails and had very wide wheel tread to spread the load. The conventional locomotive configuration works largely since it runs on smooth tracks with very small suspension movements. The Shay/Carnes designs could cope with the very rough temporary tracks found in logging and similar activities. All the weight was available for adhesion so they were able to haul heavy loads for their weights and also run on steeply graded lines. It was not unusual for smaller locomotives to work on lines with gradients as steep as 1 in 7. The short wheel base of the trucks (bogies this side of the pond) allowed them to negotiate the very

tightradiusturnswhichwereoftenfoundontemporarylines.

Atfirstmostofthecustomerswereloggerswhoneededlocomotive s  
toreplacehorsesandoxen.Theyhadtoprovidebettercontrolofthe  
loaddownhillandonlyreallyneededenoughpowertore turnup  
hillwiththe"empties".Sotheoriginalenginesweresmall.The  
advantagesofthenewlocomotivesconceptweresoonrec ognised  
byotherpotentialcustomerswhoneededmorepower.The  
flexibilityofthebasicconceptallowedLimatomeetthesedema nds  
basedonaverylimitedinventoryofstockcomponents.

TheLimaShay'sarenormallydividedintofourclasses,A,B,Cand  
D.Thesizesbelowareasin1911.classCenginesupto160tons  
werebuiltlater.Locomotivesarealsoclassedaccordingtot he  
weight,intonsandnumberoftrucks.



ClassA15 -2CN850

classA

Twocylindertwotrucklocomotives.Thesehadenginesranging  
from5"x8"to8"x12"andweighedbetween6and20ton s.CN850  
wasastandardgaugeenginebuiltin1903forW.G.Tutenandwas  
intendedforserviceonwoodentrack.

## classB

Three cylinder two truck locomotives. These were by far the most numerous they had engine sizes from 8"x8" to 12"x12" and weighed from 24 to 60 tons.

## classC

Three cylinder three truck locomotives. The layout was similar to the B class but with an articulated tender supported on an additional truck. All axles were driven. The engines were from 12"x15" to 17"x18" these locomotives weighed between 70 and 125 tons.



Photo A. Gosling.

Class C90 -3CN3221

CN3221 was built for the Hutchison Lumber Co. in 1923. And now runs on the Cass Scenic Railroad.

## classD

Three cylinder four truck locomotives. These looked somewhat more conventional than the class C engines with the locomotive part running on two trucks and the tender on two more, all axles were driven. These used the 17"x18" engine and weighed 150 tons.

Although the Shay is often thought of as an industrial engine many were used in mainline service. Railways such as the Chesapeake & Ohio and the Western Maryland used Shay on heavy freight trains in rather the same way that the LMS and LNER used Beyer Garratts. Shays were also favoured by railways where the terrain meant sharp bends and steep inclines could not be avoided, so, for example, quite a number of Shays went to South America. Some were even used on urban passenger services by companies, including The New York Central Railroad Company, where fast acceleration was needed and their low top speed was no disadvantage.

Any new hoist tempted to build a model Shay should beg, borrow or steal (or even buy!) a copy of Kozo Hiraoka's book "Building The Shay" which contains the design for a 3.5" gauge class B locomotive and includes notes on scaling the design to other gauges. If you fancy something larger, castings and drawings for a 7.25" gauge locomotive, which can be built either as a class B or a class C, can be bought from Kenneth Schroeder, full details on his website <http://shaylocomotive.com>.

How can Ephraim Shay be considered to have invented the modern locomotive?

By separating the power source from the other functions of the locomotive and making it a self-contained package it could be steam, diesel or anything else without changing the basic concept. Similarly since the transmission was also a self-contained package it could be mechanical, hydraulic or electrical again without changing the basic idea. This argument also applies to the suspension. In later years several engines were converted from steam to used diesel or heavy oil engines simply by changing the power source.

A modern B or C Diesel is just a Shay class B (diesel).



# TLC \*

By Bill Edmondson.

Probably most have heard of the Festiniog Railway in Snowdonia, maybe you went on family holidays in these parts, perhaps we've taken up building a model of one of their locomotives: The Alco "Mountaineer", a "Lady Class" Hunslet Blanche or Linda (aka Nora Batty), or the Hunslet "Lilla". So we probably know that this is a 2' gauge line (actually 1' 11½") that still runs between Porthmadog and Blaenau Ffestiniog. Built originally by Act of Parliament in 1832 as a gravity railway to bring slate to the port; empty wagon taken back up to the quarries by horse. Steam traction came along in 1863 and in 1869 the first of Robert Fairlie's new concept, an articulated 0-4-0+0 -4-0 named Little Wonder arrived. The Fairlie locomotive is now synonymous with the Festiniog.

The railway did very well until a slow decline set in between the two world wars, culminating in complete closure in 1946. The 1950s saw stirrings of a new railway era; amateurs opened the first preservation railway – The Talyllyn in 1951. Efforts to reopen the Festiniog took longer; not until 1954 were legal difficulties overcome and with financial help from industrialist Alan Pegler (who died 18 March 2012), the company came alive once more. The first trains ran in 1955.

In the meantime, the British Electricity Authority (soon to become the Central Electricity Generating Board) had a planned plan to build a pumped storage hydroelectric power station (using coal fired power station electricity at night to pump water to the higher reservoir, then when we all put the kettle on at the end of a TV soap, the water is let out to generate power at the turn of a tap) with their intended lower reservoir flooding part of the Festiniog Railway



track there by splitting the line into two. The BEA regarded the FR supporters as a bunch of amateurs. At this point, remember that the FR was built by Act of Parliament. To make any modification to the railway required further legislation. The original company was so bereft of funds they couldn't even afford to legally close it down. The BEA didn't bother to apply for the necessary legislation to have the railway abandoned. BIG mistake! As the preservationists always intended to open the whole 13½ mile railway.

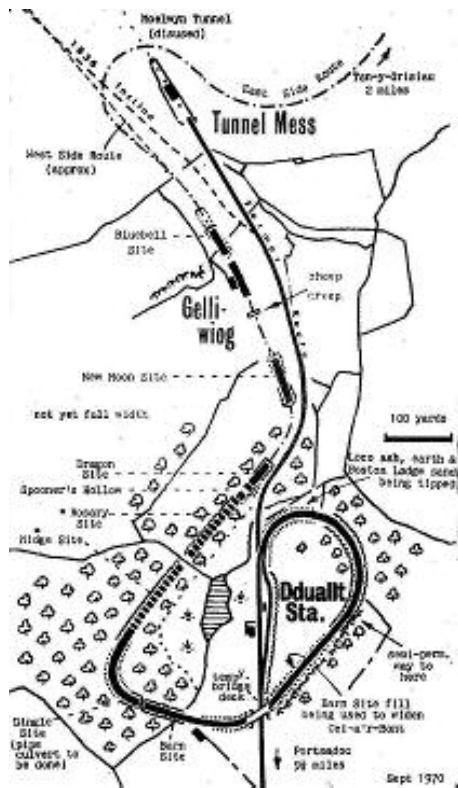
Plans started to form in the late 1950s to find a way around the lower reservoir – Llyn Ystradau. What ultimately became known as “The Deviation” resulted in a case for compensation against the BEA; at that time it was the longest in British legal history – 16½ years. At this point it's worth noting that when built, the FR was running gravity slate trains. To keep the trains rolling down hill on tight radii curves, the gradient is *increased*; when steam traction is pulling passengers up the line, to help on tight radii curves, the gradient needs easing! This was now a factor in finding a new route around the hydro station lower reservoir.

There are various alternative solutions to gaining height on a railway, these may include putting in extra distance without steepening the gradient; or perhaps a zigzag as in some mountain railways. But the option chosen consisted of a spiral on a single

grade which eventually crosses over itself at a height which represents the gain of altitude won. The location of this spiral is

Dduallt, just short of the area to be flooded.

Following the spiral, there were more decisions as to which route to follow to pick up the original line just after the reservoir. Eventually the western shore of Llyn Ystradau was chosen. To learn more of the mammoth task of building the Deviation, the book by Brian Hollingsworth called "Ffestiniog Adventure" is highly recommended. Published in 1981, it is readily available on internet sites such as Abebooks. The following notes are extracts from this book by kind permission of David & Charles publishers.



The first sod was cut on 2 January 1965 by Doctor Michael Lewis of Cambridge University. From then on it was a case of following standard railway practice of making a grade by either digging down to lower the line, or by tipping material to raise it. The greater part of this work was performed by manual labour provided by hundreds of volunteers who came to the site to chisel away at Mother Wales. This is complicated by rock never being far below the surface. To deal with that it is necessary to shatter it into smaller pieces before it can be moved. Fortunately a local resident, Colonel Andrew Campbell, held a license to keep and use explosives. Andrew was

more than happy to become involved in the project; indeed he allowed an outbuilding of his ancient residence to be converted into a host for visiting volunteers. Travellers on the FR will not there be a Campbell's platform named after him. A second hostel was built on a part of the abandoned railway track.

There was always the difficulty of placing the correct amount of explosive to achieve the required result. An error of judgement one day caused bad damage to Rhoslyn Cottage. Due to a misunderstanding, the blast across the line from the cottage had been too heavily charged. A row of trolleys and skips had been placed to protect the building but: "in the event six trolleys took to the air, two skips went through the fence of the cottage, one window was demolished and another holed. There were two major holes in the roof. Many willing hands set to work and in not time at all the tide of loose rock receded." Very commendable, but there was a note of surprise when the cottage owner seemed very irate! Technology developed slowly, but by August of the first year, converted wagons with end tipping had arrived. Gas cooking



replaced paraffin and a party was held where 18 gallons of beer was consumed! By 1966 progress had improved such that the line would become complete in 79 years.....

But, the number of skips of spoil moved each day increased, and with it the timescale improved. Entertainment came when bog blasting was required. It is very spectacular and very effective. Mudslinging on grand scale. Mud hurts less than rock if it hits you. The project owes a debt of gratitude to many individuals, but one Gerald Foxo saw the early years of the Deviation. He had many talents, but the man whom a denoistakes never made anything. He is remembered for a bulk purchase of goat meat at 5 pper lb in an effort to reduce mess expenses. The first group on which it was tried apparently waited until nearly midnight for this material to become chewable and it never did. In the end it served a useful purpose by becoming part of an embankment.

On the same subject, a malicious rumour was put about that Mike Schumann (another key Deviationist) was ordering fruit cake without cherries in as opposed to cake with cherries as it was a farthing a ton cheaper.

The then general manager of the FR was cast as the villain of the piece by the Deviationists. He of course had to worry about keeping each and every train running to time, whereas a missed day of digging at the Deviation mattered not. Then one of the farmers through whose land the line was planned to run came to enjoy twisting the Deviationist's tail. Of course, it is fairly essential that a project should have enemies, for the cohesiveness of the participants is hard to achieve without it. There was a Deviation milestone on 16 May 1970, because on that day Sergeant David "Bunny" Lewis, Royal Marines, became its first full-time regular paid pair of hands. He had been active as a volunteer for the preceding 18 months and others on site soon learned there were two ways of doing a job:

Bunny's sway and the Wrongway. His worksheets for the day left very little room for any misunderstanding; a group leader who reported that some wheel bearings on a skip were broken, had the remark, "why didn't he do something about it" recorded against him for posterity!

One incident very nearly marred the whole project.

Where the Deviation climbed over itself, Rhoslyn Bridge had to be constructed. Designed to use standard 5m long Dow-Mac concrete beams sitting on six concrete piers. Grandfather right meant that existing limited clearances between train and any rock cuttings and tunnel faces were very close. However, where new work required the rock face to be relieved to take the three concrete pier each side of the line, the Deviationists reasonably assumed the clearance would remain the same as the rock face just removed. Wrong. They perhaps had made the mistake of thinking that rules were for the governance of fools but the guidance of wise men. The absurd position had been reached where the new piers would have to be resited. However one Gerard Fiennes (one time senior man at BR, now on the FR board) suggested and carried home the view that if the cuttings were artificially restored where it had been cut away to build the piers, then honour and the law (but not logic or common sense) would be satisfied.

Unsuspecting holiday makers hiking in the area provided a target for entertainment; one such group were told that a concrete pipe which in fact was being carefully laid in place to act as a sheep creeper once the embankment had been tipped, was indeed the early stages of a pipeline for North Sea Gas. Then when the cuttings at both ends of what was to become the new 294 yard Moelwynt tunnel frequently flooded, the southern end attracted a design which believ it or not took in many casual sightseers - reading:

BLAENAUNAVIGATION  
SITE OF FLOCK NO 57  
WRYSGAN FLIGHT

When it came to boring the new Moelwyntunnel, it looked as though a civil engineering firm would have to be employed as the risk to an amateur workforce were deemed too great. But three individuals made themselves known; Bob Le Marchant, Peter Hughes and Robin Daniels. All were Cornish and all had plied their trade in South Cr ofty and around the world. Bob was a graduate of the famous Camborne School of Mines as well as being a qualified mine captain. These three individuals were employed by the company and given sole charge of the tunnelling.

As Sir Edmund Hillary said upon climbing Everest in 1953, "we knocked the bastard off", so it was that on 24 June 1978, a train hauled by Hunslet "Blanche" came off the Deviation and placed her lady-like pony wheels delicately onto the old Festiniog line at the north end of Tan-y-Grisiau station. The Deviationists had done it. And the rain fell like stair rods! At a party held that evening at Dduallt, 195 Deviationists consumed two spit roasts, sheep and drank a toast (or three) – it is recorded that 63 one litre bottles of wine, 5 gallonso f cider, 60 gallonsof beer and 60 bottles of champagne were drunk.

The eventual cost of this undertaking was almost £610,000. It was to be nearly another four years before the railway was re-opened into Blaenau Ffestiniog – two miles further on from Tan-y-Grisiau; the Company were caught unawares when it learned that the volunteers who had built the Deviation had no interest in restoring the railway to its ultimate terminus. But that is another story.

**\*Top Left Corner (of Wales)**

# ALL CHANGE.

By Mr. MDF.

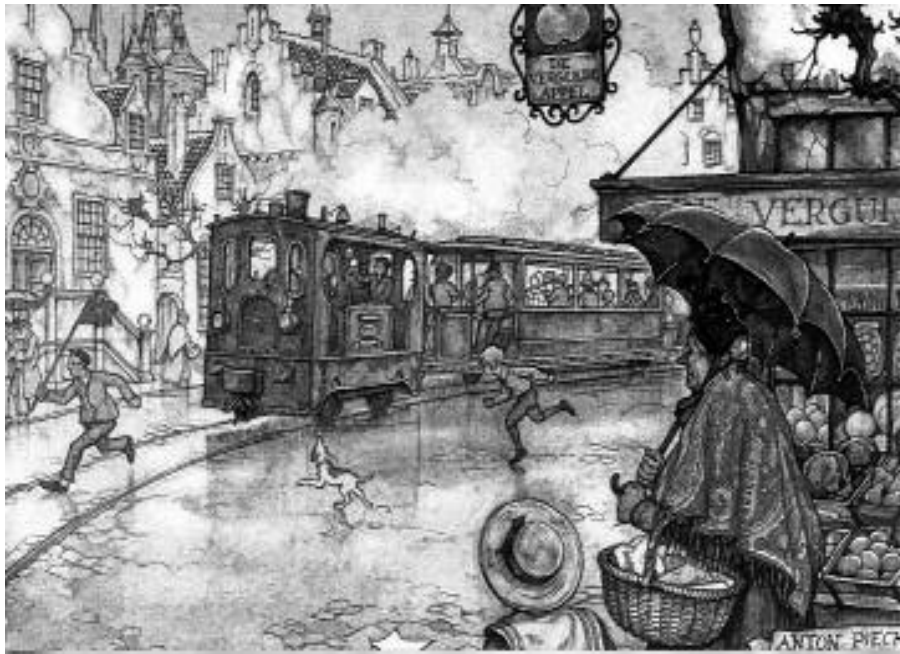
Once a familiar sound at junction stations, now, alas you are lucky to find anyone even at mainline hub of railway activity. However with "The Oily Rag" things are far more organized and civilized. The Gosling has flown the nest and Pickering is installed the new Gov'nor (pardon the puns, I couldn't resist). The Editor thinks things might take "a serious downturn", sounds like "political speak" to me, he not being up to "Gosling speed" so he says.

Your Editor in his opening Broadside hinted that what was needed was a "Tiddler Track" out of the way of the serious running where Tyro's, Novices and others similar members "Tiddlers" in a word, could have Fun, "Learn the Ropes" and become proficient. His "Second Salvo" was tome (what has the Gosling bird been saying?), could I Mr. M.D.F. offer advice to Tiddlers young and old? Anyway a challenge is a challenge and so M.D.F. scratched his head, disturbed the sawdust and got round to thinking (very dangerous).

Tome. the criteria for a simple model is it must look the part, simple but not crude, realistic not grotesque and above all could be reasonably replicated in full size, in other words, "The tail should wag the Dog"

My wife Valerie works one day per week as a volunteer in a local Charity Shop and some months ago she brought home for me a pencil drawing of a Dutch Street Scene with a steam tram locomotive passing through. This was my immediate inspiration, basically a box on wheels, you could not get much simpler than that and still be realistic and with a full size precedent, could be steam or electric powered and what was inside the box didn't matter.

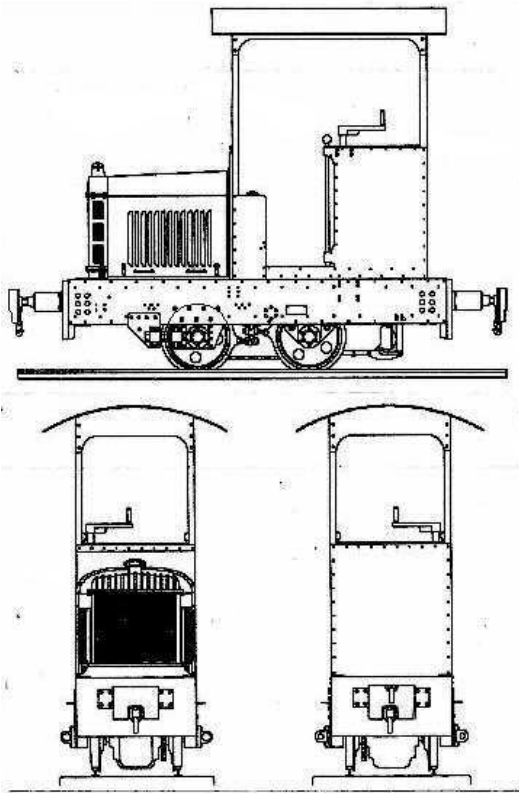




On my bookshelves I have the first two volumes of a series detailing The History of the British Steam Tram (when I tell you that the series runs to seven or is it eight volumes, volume seven is in two parts with over one thousand pages and that the total cost is £355.00, I drew the line after Volume two and an outlay of £80.00) Volume One contains many drawings that originally appeared in "Engineering" or "The Engineer", two well-respected publications, one which particularly appealed to me was of the locomotive of the Wolverton and Stony Stratford Tramway, a 3'6" gauge outfit. Also on the back cover of the book is a colour photograph of the car unit pulled by the locomotive being restored at the Milton Keynes Museum and so it would be possible to build the complete outfit, but that's another story.

All of these pipe-dreams, brainstorm, call them what you will came to a shuddering halt after our yearly visit to the Guildford Society

meet early in July. I had arranged to collect books from, Adam Harris (Camden Miniature Steam Services) an acquaintance of long standing and he presented me with three or four old French Railway magazines. I do not read French but the mags contain drawings and photographs which are universal and so I was in business. I have friends who are moderately fluent in "Frog" and so any problems — "send for the cavalry"



**Berliet narrow gauge locomotive.**

One of the drawings reproduced here in seemed to me to be the perfect answer. Reality, not a pipe dream, simplicity on four wheels, Scale 2.5" = 1 foot for 5" gauge, nothing small and fiddly, no metal bending just drilling and driving in gornuts and bolts. Some simple metal machining (turning) wheels, axles, bearings etc.

Nothing too demanding, just care and common sense. Also woodwork, again, nothing too strenuous, Simple paint work your choice. A good winter project.

I am working on the drawings at present so all should be ready in the near future. The materials should be easy to source, especially if you know of a sheet metal shop that can cut all of the sheets to size.

The machine work to wheels, axle etc. is routine and the woodwork is again simple

The electric motor to drive is something for you to source — Maybe a motor from an invalid carriage, a battery lawn mower or whatever or a last resort buy a new motor. Chain and sprockets you may be able to buy locally, Rivets screw etc. from your local Model Engineers supplier, If economy is important most your local "Screwfix" store may be the way to go or B. & Q. or may be the local hardware shop, it's up to you!

However if you find difficulty with motor, chain and sprockets: -  
Parkside Electronics, Units 2E & 3J,  
Valley Mills,  
Southfield Street,  
Nelson, Lanes. BB9 0LD. Tel: 01282 -613646.

They can also help with an electronic controller for your motor, the proprietor is a Model Engineer and so fully understands your requirements! Ask for his catalogue. That's sit for this time, but a useful tip. Having just got into there fresh ment tent at Guildford show was the heavens opened for a ten minute deluge, a cup of tea seemed a good idea, Valerie dutifully trotted off and returned with two cups of tea served in polystyrene foam beakers (throw away, no washing up) I picked mine up to drink the same and nearly scalded my mouth, the beaker was cool to the touch, its contents far from hot. The wall thickness of these beakers is I guess 2mm max., when used and thrown away, if washed out dried and cut up to form a sheet material it occurred to me good boiler lagging material and FREE!

The enclosed drawing illustrates my inspiration and final choice for a "Tiddler Model". I hope the latter meets with your approval.

**ALAN M. WESTBY - (MR. M. D. F.) D. I. Y stuff.**

# The Crowborough Locomotive Society

**By Neville Watts**

The Crowborough club was formed back in 1989 when a number of like minded local people got together and decided to call the club Crowborough Locomotive Society.

The local council was approached and an unused prominent area of land in the recreation ground was agreed could be 'ours'. Bill Pickering, an enthusiastic supporter of the club (father of John), prepared a suitable set of drawings in order to apply for planning permission which was duly granted. To get the club up and running, a short, temporary ground level track was laid across the site to stimulate interest. An old wagon body was found in a local farmer's yard and purchased to form our first clubhouse. This has been extensively upgraded and added to overtime.

Construction of the track started as soon as planning permission was



obtained late in 1989. All the construction work was carried out by the members and their helpers with the generous support of a local building company who supplied a lot of the materials. The first track for the raised mainline, in 31/2 and 5 inch gauge, was purchased second hand from Beech Hurst club in Haywards Heath as they were replacing some of theirs with new.

At the time of construction, the local council had indicated that, if the club was successful, they intended purchasing an adjoining field so an enlargement of the 500ft track would be possible in the future. We are still waiting! Unfortunately the restricted length of the track means only two or three trains can run at the same time but,



hopefully, one day the long awaited extension will become a reality. A ground level track has been laid around the outside of the main circuit for those with better backs. The council has since built a boating lake in the centre of our site which is an added attraction.

Club membership has always been around 30+ and, with our club house doubling up as the station building with an over track

canopy, this has ensured a nice, friendly atmosphere.

We run on a Saturday afternoon from Easter through to 5th November with an additional opening through the summer holiday on a Wednesday afternoon. Regular visits from the local Beaver packs take place and it has proved a popular venue for children's birthday parties. Members' working parties meet on a Tuesday morning, weather permitting.

The club owns a battery Deltic Diesel outline loco which is a good standby but steam dominates our running days.

Access to the club is arranged each year to another fairly local club to stimulate interest and visitors are always welcome at Crowborough.

Neville Watts  
(Foundermember)

## Salgs and Wants

"LOCOMOTION" 4 off Wheels for 7¼ gauge model.

"TITFIELD THUNDERBOLT" based on LBSC Design but for 7¼ gauge. Frame material, Frame Stretcher plate, Smokebox Front and Rear plates etc. Cylinder Block machined. Wheels machined. Photoetched plates by Alan Gittings plus some drawings of original Locomotive "Lion". Copies of LBSC Articles.

Battery Electric Locomotive 7¼ gauge. Lots of parts for a BE Locomotive including 2 brand new Sinclair C5 Motors. Frames, Buffer Beams, Wheels, Axle etc. Based on Yorkshire Engine Company 0-4-0 Shunter preserved at the National Railway Museum.

De Winton Vertical Boiler Locomotive 7¼ gauge. Frame steel, Buffer Beam steel (curved) "Dart" cylinders machined and Boiler tubes (based on

Martin Evans 8" dia. Vertical Boiler).

Castings and materials for ROMULUS based 7 1/4" gauge Loco -phone for list.

All the above can be viewed in Devon, Dorset or Somerset by arrangement. e-  
Contact Tony B. on 01249651044.

WANTED

CENTRE LATHE 3 1/2" to 5" capacity Anything considered  
Contact Nigel G. 0198 4623190

## Letters to the editor

Dear Editor

I write this letter in total support of your idea for a 'tiddler track', as a relatively new member and totally new driver I feel that the society desperately needs such a facility. A raised track for 3 1/2" and 5" gauge loco's which could be made available for member to run on at all times would be most useful for testing, training and for the general running of locomotives which are not suitable for continuous passenger hauling. a-

The facilities that we have both at Vivary Park and Creech are superb and a credit to the club but it is both difficult and dangerous to attempt to learn the art of running a steam loco whilst the club is involved in an ordinary running day, and the operating conditions, rightly in place, at Vivary make it difficult to use the track at other times. n-

I hope that sufficient interest can be mounted in support of the idea and I would be happy to help with the construction.

Dave Wood

## In Memoriam

Members will be sorry to hear of the death at 79 of Brian Jenkins on 1 August. His health had not been of the best in recent years. Brian was a TME member and also volunteered in the WSR workshops at Williton. He covered electrical work and a number of the machine tools were commissioned and/or maintained by him. He regularly attended TME and occasionally contributed to discussions at meetings. Both organisations knew him as 'Brian the dog' from the time when he was invariably accompanied by his pet where ever he went. He also had several cars and you could never be sure which he would arrive in next.

His funeral was at Taunton Crematorium at 11.30 on Monday 20 August. Our condolences go to David, Brian's son and other members of his family.

Mike Johns

## Subscriptions

**Ordinary Membership is £25 with a further £5 for spouse or partner.**

**Junior Membership — £5**

**Membership Secretary contact details — see inside front cover.**

**If renewing by post, please enclose S.A.E. for Membership Card**

**The views and articles featured in this magazine do not necessarily represent the views of all the Committee, Officers or Members.**

**Taunton Model Engineers is a company limited by guarantee, registered in England No. 3042204**

**Registered office, c/o Webb Engineering, Meteor House, Culmhead Business Centre, Taunton, TA3 6DY**



**LarcombesCoal  
CoalandSolidFuelSupplies  
SuppliersoffueltoTauntonModelEngineers**

**Telephone—Chard01460221217**

**TheSocietyisverygratefulfortheirsponsorship.**

# Running dates 2012

## VivaryPark

Sunday 2nd September	Public running
Sunday 16th September	Public running
Sunday 7th October	Public running
Sunday 21st October	Public running

Sunday 16th December	Santa Special 12 noon to 3pm
----------------------	------------------------------

## Creech.

Sunday 9th September	Public Running
Sunday 23rd September	Public Running
Sunday 14th October	Public Running
Sunday 28th October	Public Running
Sunday 23rd December	Santa Special Running starts 12 noon

**Public Running -weather permitting -will take place between 2pm and 5pm .Unless otherwise stated.**

## Working parties.

**Creech meet on sight Thursdays and Sundays from 9.30am**

**Vivary on occasion –if you would like to become involved contact Phil Mortimer\_details inside front cover.**





**There is plenty of spare earth to get the job done**



**and useful to have members who can move it!**

**Civil engineering at Creech. Full report next issue.  
Photographs by Mike Pinkney**