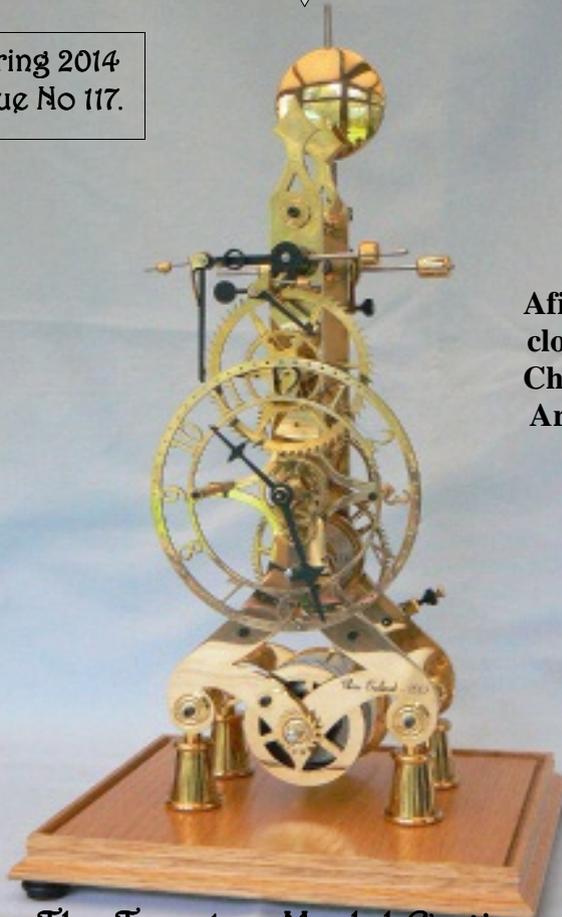


The Oily Rag!

Spring 2014
Issue No 117.



A fineskeleton
clock made by
Chris Orchard
Article inside.

The Taunton Model Engineers'
magazine

Contents

- 3. From the Editor**
- 4. Chairman's Notes**
- 5. News from Creech**
- 7. Report from Vivary Park**
- 9. The Tickers — Horological Sub -Group.**
- 9. New Injector Book.** By Mike Johns
Introducing Bob Bramson's book.
- 11. The Crumlin Viaduct.** By Bob Richards
An interesting piece of Welsh engineering history,
- 16. Of Ships and Things.** By Fireman MN (Retired)
Aspel londryland.
- 18. Don Martin's Engines.** By Tony Gosling
Don's last models completed
- 20. Lateral Clock Making.** By Chris Orchard
Unconventional techniques in Horology.
- 24. "Dianthus", the story so far.** By Tim Hims
The "Oily Rag" goes green with a serial hybrid.
- 29. Vivary Park running Days**
- 31. Creech running days.**
Meetings Programme inside back cover.

From the Editor

Over the winter the TME. Has embarked on a new venture and gone into book publishing. The committee were so impressed by the talk given by Bob Bramson that they decided to get this book on miniature injectors and ejectors printed. An introduction to the work by Mike Johns is printed in this issue of your magazine.

Most model engineers find mechanical clocks fascinating, some consider building a clock but very few get around to it. Chris Orchard is one of the small number who have actually done so. I found his article on the techniques he used in building his skeleton clock of great interest. Early in the production of this issue of "The Oily Rag" I had no doubt that what was to appear on the front cover!

Tim Him has contributed an interesting article on the work on his battery electric locomotive, "Dianthus". He shows that this class of locomotive does offer scope for experimentation and some serious engineering.

I will admit to having mixed feelings about battery electric locomotives. They are useful as workhorses and there is no doubt that some of the models we see at exhibitions are clearly built to a high standard. But they always strike me as more like Hornby Double scaled up than full size practices scaled down. I am not an internal combustion. I have even built a small I.C. engine and would love to see a twice size version of Edgar T. Westbury's "1831" running at Creckh. But to me battery electric seem completely soulless.

What are your views? Maybe a good article extolling the virtues of these locomotives would change my mind.

John

Chairman's notes

By Mike Johns

The start of the New Year was not a good time in this part of the country. Not only did we all have to suffer the violence of several major storms and the consequent possibility of property damage but a few of our hardy members had to cope with living in or very close to areas flooded as well. Most managed to get around making diversions from their irregular routes but one, David Spicer, suffered directly having sustained some 3 feet of water throughout his house and workshop and is having to live with his family temporarily.



He won't thank me for this but now that he is able to get on with the clearing up and all that entails he cannot doubt to see any help anyone living locally is able to offer.

Floods near Creech.

I know all members join with me in expressing our sympathy to him and his wife for what has happened with the hope that they can return their lives to some degree of normality in the area as soon as possible in the near future.

Now that the weather has improved we can all look forward to another lively season of events, both indoors and outdoors.

If we've missed your pet topic please let one of the Committee or the magazine editor know, preferably with an article that they could publish! Meantime we hope you enjoy the events planned and look forward to seeing you there on a regular basis

News from Crzech

By Mike Johns

The recent bad weather resulted in the whole of the station site being under water for a period, the remarkable feature being that the workshop floor stayed dry. It was about 1/4" above high water mark!!



The result was that outside work stopped until the water drained away and it was possible to inspect the track and repack some of the ballast where it had been disturbed.

Some kind individuals decided to see how secure the traverser was in its stowed position, possibly with a view to its removal. Two ice wedges were found it unlocked owing to damage to the padlock hasps. Modified arrangements are being fitted to minimise the likelihood of recurrence. Fortunately the turntable does not seem to have been affected – maybe it is too heavy to remove!!

Inside the workshop the high level storage tracks have been installed and are in use for some items of rolling stock which do not get used very often.

The previous workbench used for welding work is being replaced with a much more substantial steel bench thanks to David Hartland. This will not only give a better work surface but has also been made large enough to enable point fabrication as replacements are required.



John Williamshauls a seasonal guest at the Santa Special

This need has arisen because some 5" gauge locomotives did not traverse some points so smoothly owing to excessive clearances between running and check rails.

Meantime steady progress is being made with the assembly of the two 7¼" gauge Hymek locomotive bodies using the laser cut plate work produced from John Pickering's drawings.

The next major step is the acquisition of a controller in order to wire up one locomotive and to carry out some tests to confirm the locomotives will perform as we want them to. Once proved and both completed cosmetically both locomotives are to be painted, this work being sponsored with thanks to Martin Rickitt.

On the PR front the Club was pleased to host a visit by a party of some 30 pupils and teachers from Creech school on Thursday 6 March. They were not only given a ride round the track but also shown the workshop and its facilities. Apparently 7 and 8 year olds can ask some very pertinent and pointed questions – maybe the beginnings of the next generation of members?? Hopefully they will remember us when the running season starts.

Report from Vivary Park

By Diana Fathers

The weather for the Santa Special was very cold, miserable and alternately damp and wet. This didn't exactly encourage too many visitors! But those who braved the elements and came enjoyed themselves and donations were generously dropped into the bucket.

There were plenty of TME members to help with the general running duties, including doling out the sweets for the children and although Jon and Julie brought their loco there were so few customers that only one was needed. Good old reliable Phil Mortimer towed a couple of riding trolleys with his equally reliable Bodge of Oman and kept going until 3pm, by which time he must have been thoroughly wet, uncomfortable and frozen solid!

So thanks to Phil for his stamina, Barney for keeping us supplied with refreshments and to all the regular stalwarts for making Vivary what it is – warm and welcoming, whatever the weather.

Takingswereway down,butwestill raised£82.Creech's SantaSpecialraised another£58,makinga totalof£140whichwill be senttoBIBIC,the wonderfulocalcharity whichdoessomuchfor braininjuredchildren.

AsatCreechthe floodingcausedfew problems.Neitherthe pavilionnorthe containerwerereflooded andthetrackwas unaffected.Aworking partyhasservicedthe trolleysandcorrected thesuperelevationon thecurvejustafterthe station.

VivaryParkfloods.



Standingwaterinside thetrack.



Wenowalllookforwardto whenpublicrunning resumesatEaster and, hopefully, thefloodswillhaveabatedandSpringwillbe dry, sunnyandwarm!Seeyouthere

The Tickørs (Horological Sub Group)

ByTheEditor

Asaresultofmorepressingmatterthereisnoreportinthisissue fromDavidSpicer.Howeverthenewsisnotallbad.Thisissue includethefirstHorologicalarticleIhavepublished,“Lateral ClockMaking”byChrisOrchard.Thefloodswillobviously impact theHarrisonproject.Ihopethedelaywillnotbetoolongandlook forwardtoareportintheSummer“OilyRag”.

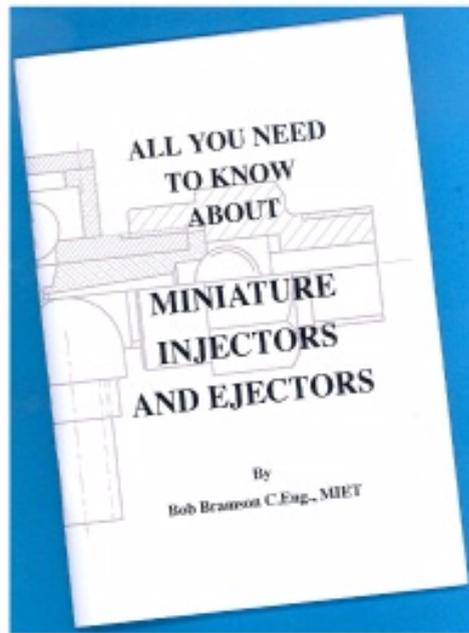
New Injectors Book.

ByMikeJohns

TauntonModelEngineersarepleasedtopublishanewbook“All YouNeedtoKnowaboutMiniatureInjectorsandEjectors”.

This hasbeenproducedincollaborationwithBobBramson,C.Eng., MIET,whooverthepast10yearshasdevelopedaprofound knowledge ofthekeyfactorsaffectingminiatureinjectordesign, construction,installationandoperationthroughpractical experimentsa ndtests.Atvaryingtimeshehasgivenpresentations ontheprogrammadeandlessonslearnedtoanumberofmodel engineering societies(includingtheSocietyofModel& ExperimentalEngineersofwhichBobisamember)andhadan articlepublishedin‘EngineeringInMiniature’ magazine.

TauntonMEwereso impressedwithapresentation onthelatestdevelopmentsin early2013thattheClub decidedtopublishthis book inviewofthekeeninterest showninthesubjectthenand atotherclubsawareofBob’s work.Theaimhasbeento provide modelengineerswith thebenefitsofasinglepoint ofreferencegivingguidance notonlyonthetechnical requirementsforsucc essfully makinginjectorsbutalsothe essentiallessonstobe followedforsatisfactory operationinservice.We hope youfind ithelpful.



Copiesareavailableat£8.00eachincludingpostandpackingand maybeorderedbypostfrom:

TheHon.Treasur er
TauntonModelEngineers
6HawthorneRoad
Wellington
Somerset.TA218EU

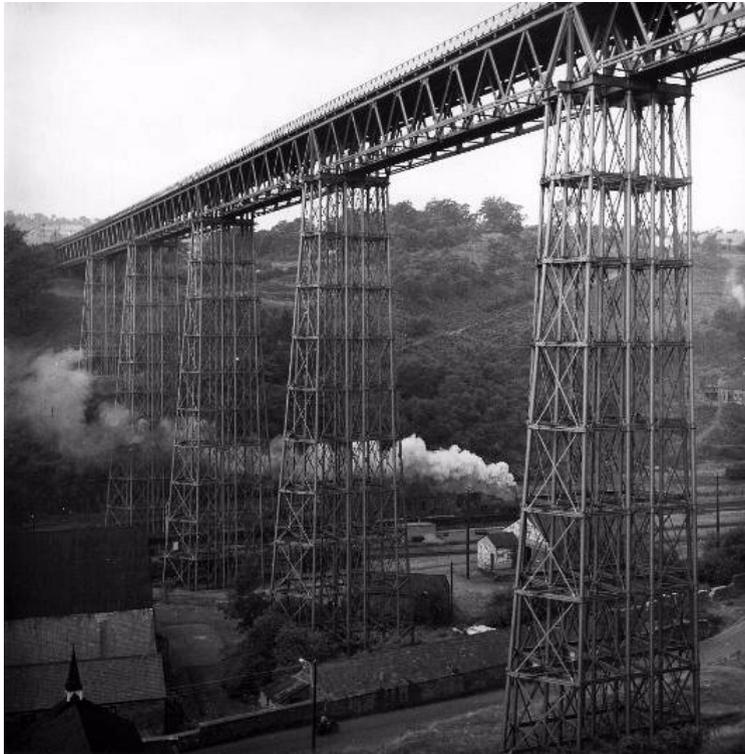
Yourordershouldbeaccompaniedbyachequ emadepayableto “TauntonModelEngineers”please.Thankyou.

Asanintroductoryoffer,thebookwillbeavailabletomembers at thenextfewclubmeetingsatareducedprice.Askthetreasurerfor details.

The Crumlin Viaduct.

By Bob Richards

Prior to the Industrial Revolution, the little-known hamlet of Crumlin, nine miles northwest of Newport, existed only as a few houses clustered around a stone bridge. Despite the series of coal levels, which were gradually being opened up along the Ebbw and Kendon Valleys, and the arrival of the Monmouthshire canal in 1829, Crumlin remained, on the whole, unaffected by industry.



The Crumlin viaduct.

By contrast, the construction of the Viaduct had an enormous impact on the area: between 1860 and 1900 workmen's homes, places of worship, a company school, shops, a hotel and a 'mutual improvement society' with library and reading room were established in its wake by contractor Thomas Kennard. This new area, known as 'Crumlin Village,' serves as a reminder of the importance of the new bridge to the community; Viaduct Terrace, Upper Viaduct Terrace, Kennard Terrace, the Viaduct Hotel and Viaduct Cottage were all constructed here.

Crumlin viaduct was hailed as 'one of the most significant examples of technological achievement during the Industrial Revolution'. During 109 years of service, it remained the least expensive bridge for its size ever constructed.

The Viaduct was a wonderfully impressive structure that spanned the valley. The height above the valley floor was 200 feet, and the span length was 600 yds this would make it the highest viaduct in Britain and the third highest in the world, outdone only by the Aqueduct of Spoleto in Italy and the Portage Timber Viaduct in the United States. When Kennard was awarded the viaduct contract in autumn 1853, his first task was to establish a works at the east end of the viaduct site, the Crumlin Viaduct Works. All fitting and fabrication took place in this custom-built assembly plant. The nearby Blaenavon Wrought Iron Company supplied wrought iron, whilst casting took place at Kennard's plant in Falkirk. Cast iron was transported from Falkirk to Newport by sea and then via canal or rail to Crumlin.

The first girder was hoisted into place on December 3rd, 1854. To winch it into place, the steep natural slope at the east edge of the valley was levelled from 1:3 to fill at least half the distance between the first two piers. Trussed timber beams were used to create a level platform upon which the girder was built spanned the remainder.

The first girder to be lifted into position was hoisted without any form of temporary lateral support. However, the next girder to be lifted in this manner buckled; then slipped and fell. One man, who was standing on top of it, was dashed to the ground and died and a further two were seriously injured. This was the only serious accident during the construction of the viaduct, although there were false rumours in September 1855 that a painter had fallen to his death. The construction of the Viaduct used the following amount of materials.

1,300 tons of wrought Iron.
1,250 tons of cast iron.
25,000 cu ft of timber.
Total cost of £62,000.

Three and a half years elapsed between the erection of the first column and the opening of the viaduct. These seven span section of the viaduct was completed by August 1855; the three span section by December. The first five and a half miles of the Taff Vale Extension from Pontypool to the east side of the viaduct were opened on August 20th, 1855, followed shortly after by the opening of a 14 mile branch line joining Monmouthshire's Ebbw Vale Line at Llanhilleth Junction.

The completed viaduct was tested in the presence of Colonel Wynne, the Board of Trade Inspector in May 1857, four years after construction began. Six locomotives loaded with pig iron or lead and weighing a total of 380 tons, were run onto just one span of the bridge. When both lines of rails were used, the locomotives were the correct size to cover this span and were driven across at various speeds while measurements of deflection were taken. In order for the original test to take place, the railway company required a driver with the necessary courage to make the first crossing. According to legend, the only man to step forward was 'Mad Jack'

from Pontypool (although it is unclear whether he was known by this name prior to his crossing of the viaduct). Before making the historic journey, Jack visited every Public House in Crumlin, consuming large quantities of alcohol in an effort to calm his nerves. Although he had been instructed to avoid unnecessary stresses and strains by driving the train over the viaduct at crawling speed, his first crossing was made at tremendous speed. When confronted by the shaken engineer, he remarked; "when eternity looks you straight in the face, you may as well go at full speed to meet it!"

Lady Isabella Fitzmaurice opened the viaduct on Whist Monday, June 1st 1857. The train travelling across the viaduct and along the Western line beneath were decorated with flags, flowers and evergreens whilst those travelling to the area from other parts of the country were brightly decorated. Beer booths, fun fairs and side shows were set up in the fields whilst two ballad singers strolled about singing a song they had composed about the Viaduct and selling song sheets at a penny a time.

"Thousands come from far and near,
so full of youth and bloom,
too pent the Great Crumlin Bridge
On the Glorious first of June!"

When the first train rumbled over the viaduct, there were "loud shouts and cheers, accompanied by the roar of the cannons and music from the band; it made a most spirit stirring occasion."

In 1963, a British Railways Report by Dr Reginald Beeching, entitled 'The Reshaping of British Railways', proposed that many stopping passenger services should be discontinued and small stations closed. This unpopular strategy, known as Beeching's Axe, resulted in the loss of 67,700 jobs, the shutting down of a quarter of the country's railway lines and closure of 2,128 stations.

On Saturday the 13th of June 1964, the last scheduled passenger train; the 21:10 from Pontypool to Treherbert; passed over the Crumlin Viaduct. Without a passenger service, the future of the line as part of the regional rail network became questionable, and so no major investments had been made in the line for a substantial period. In 1962, the Ministry of Housing and Local Government scheduled Crumlin Viaduct as being of architectural and historical interest. However, by 1964, this decision had been overruled by British Railways, who argued that demolition was the most sensible course of action, partly because the viaduct required regular maintenance even after the line had closed and partly because the structure was thought to be unsound and dangerous.



Crumlin Viaduct demolition of pier 3 (1967)

Bird of Swans carried out demolition of the Viaduct, specialists in dismantling steel works and bridges. The work was scheduled to take 9 months and began in June or July 1966 under the supervision of Brian Houston Barron.

The only cost the viaduct had actually accumulated, after more than a century of use were for redecking in 1928, £10,000 spent on repairs in the 1950's and the expense of repainting which occurred every five to seven years.

Not long before it was dismantled the viaduct experienced a bit of pop culture gloss. In the summer of 1965 Sophia Loren and Gregory Peck turned up there to shoot scenes for their latest film, "Arabesque". It involved walking along the catwalk of the viaduct whilst being shot at, and buzzed by a helicopter.

Before shooting could begin 10 streets, around 200 homes, had to be evacuated in the area to comply with Ministry of Aviation ruling. 350 Crumlin citizens were removed to emergency centres (2 church halls) where they were given a cup of tea and cheese and ham sandwiches. They also received a £2 "disturbance fee". During breaks in filming Loren and Peck signed autographs and chatted to the hundreds of people who had arrived to watch the filming.



Thanks to the Caerphilly Chronicle for the use of the article and the photos from the Images of Crumlin website.

OF SHIPS AND THINGS.

BY

FIREMAN MN Retired.

First things first, last issues print error, the locomotives used for towing ships in and out of the Panama locks were called miles not miles.

As it was the start of April and the beginning of spring let's see how things work out for a while and perhaps get a job of some sort. A Vauxhall and Bedford main dealer at Park Royal wanted a Lubrication bay operative so I applied and got a start, after all it was a posh way of saying greaser.

Training given, the advert said, that was a laugh for the training was a big come on. If the jobsheets said full service or any of the routine mileages services they were much the same.

Oil change, meant drain half the oil out and then top up with new booking out the full amount. Change the oil filter, if accessible, if not clean the outside so it looked as if it had been done. Gearbox and back axle, wipe clean the drain and filler plugs and book a half pint of oil for each. Grease nipples, charge some of them, the rest wipe them, clean usually with a rag on a stick for the hard to reach ones. Brake and clutch master cylinders, wipe the filler clean and book out some top up fluid. Batteries, top up with tap water and smear plenty of grease around the terminals and then above all make sure the oil door locks as this was a sign the job had been done properly, (or so the customer thought).

When on board ship there were always little fiddles to be worked but nobody lost or won, it was just the way things were, but there it was just an outright con trick with the customer paying through the nose.

One perk of the job was road testing which was sometimes part of the so called servicing. The way this worked was, the office gave you a set of keys and a registration number, you then went off to find the vehicle in question be it a bus, lorry or car and take it for a run, traffic permitting this was a high speed dash down the A40 to Hillingdon or Northolt airfield. The garage had a contract with London Fire Service to maintain the engines and these seals went out on test, but you weren't to use the bell (before sirens). When taking a fire engine out a lad also came along. One day we were approaching Northolt and the traffic was building up so I said to the boy every thing seems to be ok, better test the bell which he did. What a feeling of power, the traffic just parted leaving a clear road it felt like Moses must have when he did his part piece with the waves.

On getting back the news of ringing the bell had beaten us to it and the manager was none too pleased as he warned me to the line or I would be out, that really worried me as it was a pretty crummy job anyway.

Two days later I got the sack in spectacular fashion. I picked up the job sheet and keys and went looking for the car. It was a brand new Vauxhall Cresta in for its 500 mile service and check. This was a proper American type of car, low slung with bench seats which stretched forever, gear change on the steering column and that squishy suspension. In I got and turned on the ignition and looked for the starter button or switch, I couldn't find anything so I gave up and asked a lad who was sweeping up. With a withering look he said turn the key a bit further, this was a new one on me so I did just that and as it had an automatic choke the engine burst into life straight away also it just happened to be in gear so off we went at a rate of knots for about 15 feet and stopped with an almighty crash right into the side of a spanking new coach just out of the paint shop.

Only that morning I had admired the sign writer who writes that flourish wrote "Valiant Coaches of West Ealing" right along the side, both car and bus was not a pretty sight. After the manager got over his little tantrum he sacked me on the spot.

Don Martins Engines.

By Tony Gosling.

Our late and very loyal member, Don Martin who died last year was working on a number of projects during his final years and included with these were two Traction Engines which were very near to completion.



Don's 3" Burrell.

He was very disappointed that his final health was not very good and that he was unable to complete them himself. When he was finally confined indoors, Pam, his wife, arranged for the engine to be completed for him by his friend Cyril Finch, so that Don could have

the pleasure of seeing them finished, just as he would have wished.

Cyril completed the mechanical side and the engines were tested and ready to run. They then went to Adam McKay of Ottery St Mary to be painted and lined.

They look superb, but very sadly Don died before he saw them finished. I am sure that he would have approved.

Pam has now decided to sell both engines. If you are interested in either of these magnificent models, she can be contacted by telephone on 0146063162 or by email at pamela@cakeice.eclipse.co.uk



Andy's 4" Foster.

Latgral clock making.

ByChrisOrchard.

No, I'm not going to tell you how I made a clock and neither am I going to tell you how to make a clock. If you really want to have a go, and it can be an interesting exercise, then there are plenty of "how to do it" books and serials in various magazines. The "Model Engineer" magazine for example, has serialised many clock construction articles, as has "Engineering in Miniature", and the John Wilding series of books available from Rite Time Publishing, are well worth their somewhat high price. No, what I am going to do is to tell you of a few unconventional ways I go about making things for clocks.

Most of the traditional mechanical clocks consists simply of two pieces of plates spaced apart, with various spindles between them, on which the gear wheels are mounted. For skeleton clocks, these plates are very visible and can be very elaborate, and many skeleton clock designs aimed at the amateur come with a full sized paper template, which you can paste onto the metal you are making the plates from. After attaching these second plate to the first with a couple of taper pins, you then start sawing and filing to the line on the template. But, skeleton clock plates tend to be made from 3/16 in. (4.8mm) thick material, so you have to be able to file the edge square to the plate face over a width of 3/8 in. (9.5mm). Not too easy if you haven't been practising for years!

My method is to stick the template onto a piece of 1/16 in. (1.6mm) thick steel sheet, slightly larger than the clock plates, and to locate the plates on the sheet with a couple of dowel pins, conveniently placed where the plate spacers will be. This combination is then clamped to a milling machine table and the edges cut up to the lines

with a cutter in the vertical spindle. That of course, only works for the straight edges and a different approach is required for the curves.

If you had worked in a drawing office before the age of computer aided drawing, you may very well remember the steel, then plastic, templates we had at our disposal for the reproduction of all sorts of shapes, more commonly curves, circles, squares, ellipses etc., and may even have had one of these.



Photo 1

Using this, it is very easy to find and mark, on the template, the



Photo 2,
Clock plates omitted for clarity

centres of all the edge curves. With a rotary table setup with its centre exactly under the vertical spindle of a milling machine, the curve centres may be placed on this centre line and the milling machine table moved to enable the plate edge curve to be machined with an end mill, by rotating the rotary table.

A great advantage of all this work is that it is “decorative engineering” and doesn’t have to fit anything else, although it would be nice to have the plate symmetrical. How do you do this? Just turn the mill over on the jig and do the corresponding straight or curve on the other side, all at the same machine settings. And OK, some handwork is still involved in blending the various curves and straights into each other, but you do have two reference faces to work to.

The traditional method of forming the crossings in the wheels, the “spokes” in the “gears” on non-horologists, is to cut the teeth on the outside of a brass disc, and then to mark out the spokes, some workers even make small templates to do this, and cut a file to the scribed lines. I adopt a similar approach to making the plates, in that I use the rotary table in a vertical milling machine, and by dead reckoning with the hand wheel graduations and some table stops, to machine all the spokes. This way, they all come out the same, unless of course you wind a handle the wrong way, when you then have two choices; make the spokes thinner than you wanted them, or throw it away and start again! These four pictures illustrate the method.



Photo3



Photo4

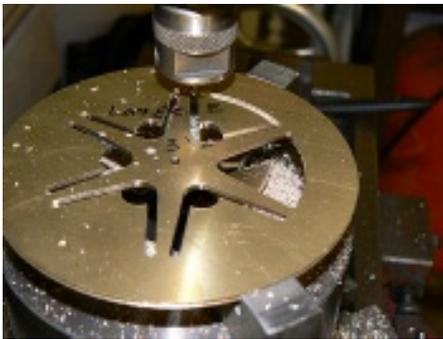


Photo5



Photo6

You can leave the small radii at the ends of the spokes, but if you want to follow tradition and make the corners square, again you have two reference edges to guide your careful filing.

I have referred to the decorative nature of skeleton clockwork, but there are bits that need to be accurate and one of these is the way the “gears” mesh with each other, called the “depthing” by clock makers. Traditionally this has been achieved by the use of a depthing tool, the gears being mounted on their respective spindles (arbors in the clock world), which can then be moved in respect to each other until a suitable free running mesh is achieved. This distance is then scribed onto the clock plates using the sharp points on the outer ends of the spindles, and the bearing holes drilled.



Photo7

Whilst I am sure many people have, over a long period of time, had much success with this method, at my level there are too many opportunities for error. If I made such a tool, would the four spindles be parallel? And can I accurately pick up the centre of a scribed line with a drill?



Photo8

A glance around my workshop produced a solution that was so obvious as to be almost invisible! This picture shows the clock plates bolted down to the vertical milling machine table, one hole having been drilled in the correct place for the centre arbor, and the appropriate pinion mounted on a temporary mandrel.

The mating wheel, the great wheel in this case, is fixed to a suitable mandrel held in the spindle chuck, positioned to mesh with the pinion, and the machine table moved until a free running mesh is achieved. The bearing holes for the great wheel arbor can then be drilled, knowing they will be in the right place. A bonus is the arbor centre distances can be accurately measured; in the case of this particular clock, they were all within 0.005 in. of those specified, so there wasn't much wrong with the gear cutting or lantern pinion dimensions.

And the result of all this work..... See the front cover!

Dianthus, the story so far.

By Tim Hims.

Dianthus was purchased as a Battery Electric (B/E) loco in September 2009. It was a eBay auction item and was purchased without viewing from a 71/4 member in Kent. With some trepidation we set off on our 520 mile round trip to collect the new toy. We were given a quick demo to show that everything worked, paid up and loaded Dianthus for its journey back to Teignmouth. Dianthus was built by a model engineer for his grandchildren, was loosely based on the John Southland locomotive of the Romney Hythe and Dymchurch railway, and used to run around the figure of eight garden track at his home. He sold Dianthus to the Great Torrington Railway, but she then seemed 'off the map' until seen by the builder and myself one Bay!

At the first opportunity, Dianthus was tested on a local track (once described as 'challenging' by Tony Newberry!).

Her performance was very pleasing – it seemed she could ‘pull a house down’ but was not very fast. She was often found to be baulking those following steamers.

At the end of the 2011 season, the decision was taken to try and improve her speed. The bogies were removed and stripped down. Performance curves were obtained from the motor manufactures and the gearing to the driven axles recalculated to give a theoretical top speed of 9mph. New chain sprocket sets were obtained and the drive arrangements in the bogies altered from the original. In the event the gearing changed from 8.2:1 to 5.5:1. In practice this resulted in an increase in top speed from 4mph to 8mph!

The end of 2012 was a major change for Dianthus. By this time, the batteries were showing their age in that they were not holding their charge for very long. These two 85AH were going to cost a small fortune but it was felt that the expense was not sensible for a loco that was only used a few times a year and only for 6 months of the year, meaning that the other 6 months of their warranty was wasted. As a six footer, the cab space had always been a bit tight! And I was fed up with being told that the colour of Dianthus should be red and not blue!

Having been a little involved with the new Thomas Telford developed by BSME, the decision was made to follow that route. Removing the two large batteries created a big hole – enough to fit a Chinese copy of a Japanese petrol engine (with electric start), and a 24-volt (cartype) alternator. Since the batteries had to be replaced, two much smaller 35AH mobility batteries were purchased and fitted into the ‘hole’. The principles involved here are that the loco runs on the batteries as before, and the petrol engine and alternator keep the batteries charged as required. So at the end of a running day there is no need to charge the batteries from any other external source. Simple!

In my past, I have carried out a few 'cut and shuts' Legally! So to cut and open up of the cab was no problem – Inow have an extra 4 inches of leg room! And Dianthus now feels quite elegant in her new Burgundy livery – no extra charge for the paintruns.

My garden track, from my workshop up to the house has an initial incline of 1 in 8 for about 10ft or so. I climbed aboard and set off for the awaiting trailer a little gingerly. Dianthus had accomplished this easily in the past. Just before the 'summit' I came to a standstill – and began rolling backwards. I decided to take a run at it next time. I withdrew a reasonable distance and gave full lit full steam (as it were). Again I stalled at the summit and again I rolled backwards. This time there was that strange smell associated with failed electrical components! And no response to the controller. After much thought and consultation the controller was sent back to the manufacturers who fitted a new 'innards'. This was subsequently refitted to the loco which was then driven up the garden path without its 17 stone driver and with no further trouble.

Dianthus made her first trip in the new format to Bristol earlier this year. There she pulled a loaded carriage all afternoon on the fairly level circuit in the quite cold weather. Her next trip was to the Crech Funday. Here she performed well all day in the lovely hot weather, still with a single carriage.

Dianthus' s next trip to Crech turned out to be a busy day. In order to help with the numbers it was decided to attach two carriages. Several circuits were made but unfortunately were an out of petrol at the new island station. NOPR OBLEM, Dianthus simply made her way back to base on battery power alone. She was refuelled and made another trip. However this time, on the incline back to base with a full load, Dianthus came to a standstill. Ignominiously, all power having been lost, the passengers had to walk back to the station for a refund.

Back home, at the workshop, it was thought that in the 'rebuild' maybe the controller had not been mounted in a cool enough situation, and that together with the added heat generated by the presence of the petrol engine, the controller had failed again through overheating.

I decided to move the controller to a much cooler situation under the driver's seat. I have ordered a new 'innards' from the manufacturer for me to fit in the existing control box and now look forward to more tests in the forthcoming season.

**Larcombes Coal
Coal and Solid Fuel Supplies
Suppliers of fuel to Taunton Model Engineers
Telephone—Chard 01460 221217**

The Society is very grateful for their sponsorship.

Subscriptions

Ordinary Membership is £30 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**

Notes subscriptions for 2014 are now overdue.

Vivary Park Running Days

2014

April

Sunday6th PublicRunning
Sunday20th PublicRunning(EasterSunday)

May

Sunday4th PublicRunning
Tuesday13th ClubRunning 6pm
Sunday18th PublicRunning
Sunday25th PublicRunning (Bankholiday)

June

Sunday1st PublicRunning
Tuesday10th ClubRunning 6pm
Sunday15th PublicRunning

July

Sunday6th PublicRunning
Tuesday8th ClubRunning 6pm
Sunday20th PublicRunning

August

Friday1stPublicRunning(FlowerShow)9am —6pm
Saturday2ndPublicRunning(FlowerShow)9am —5pm
Sunday3rd PublicRunning

Tuesday 12th ClubRunning 6pm
Sunday 17th PublicRunning
Sunday 24th PublicRunning(BankHoliday)

September

Sunday 7th PublicRunning
Tuesday 9th ClubRunning 6pm

Tuesday 9th Wellington preschool(provisional) 9am —noon.
Tuesday 16th Wellington preschool(provisional) 9am —noon.
Thursday 18th Brean Steamers(provisional) 9am —4pm

Sunday 21st PublicRunning

October

Sunday 5th PublicRunning
Sunday 19th PublicRunning

December

Sunday 14th PublicRunning
Santa Special 12noon -3pm

Working Parties

On occasion are by advice from Phil Mortimer
If you would like to become involved, then contact him
Details inside the front cover.

Public running will normally take place between
2.00pm. and 5.00pm. Weather permitting.

Crezech Running Days

2014

April

Sunday13th	PublicRunning
Monday21st	PublicRunning(Bankholiday)
Sunday27th	PublicRunning

May

Monday5th	PublicRunning(Bankholiday)
Sunday11th	PublicRunning
Tuesday20th	ClubRunning 6pm
Monday26th	PublicRunning(Bankholiday)

June

Sunday8th	PublicRunning
Sunday22nd	PublicRunning

July

Tuesday1st	ClubBBQ
Sunday13th	PublicRunning
Sunday27th	PublicRunning

August

Sunday10th	PublicRunning
Monday25th	PublicRunning(BankHoliday)

September

Sunday14th **PublicRunning**
Sunday28th **PublicRunning**

October

Sunday12th **PublicRunning**
Sunday26th **PublicRunning**

December

Sunday21st **PublicRunning**
SantaSpecial **12noon -3pm**

WorkingParties.

Meeton-siteThursdaysandSundaysfrom9.30.a.m.

Publicrunningwillnormallytakeplacebetween
2.00pm.and5.00pm.Weatherpermitting.

Meetings Programme

Tues6thMay	TheNational21/2”GaugeSociety
	DesAdeley,VicePresident.
Tues20thMay	VisitNewberryRail
Tues3rd June	AneveningatCrech
Tues17thJune	VisitShuteRailway
Tues1stJuly	BarbecueatCrech

**Tues15thJuly
Tues5thAugust
Tues19thAugust**

**AneveningatVivaryPark
VisittoLauncestonSteamRailway
VisittoIsleAbbotsRailway
MartinRickitt**

**Thisyear, AtIsleAbbots,amownareawillbeavailablefor
thosewishingtoruntractionengines.**

**Tues2ndSeptember
Tues16thSeptember
Tues7thOctober**

**Bitsandpiece s -workinprogress
Tethercars -DavidGiles
Engraving,talkanddemonstration
RoyCooney**

Tues21stOctober

**Lifeboatlauncherproject
SimonTurner,Supacat.**

**Tues4thNovember
Tues18thNovember
Tues2ndDecember**

**AuctionNight –MarkDavis
QuizNight -DickWhittington
NarrowGaugeBritain.
PeterTriggs**

Tues16thDecember

MincePiesandNatter

**MeetingswillbeheldattheVillageHall,StokeSt.
Mary,
Taunton,commencingat7.30p.m.unlessotherwise
indicated.**



Phil soldier on at Vivary during the Santa Special.



A bit of nostalgia from the Bristol 150 celebration.
Tony Newberry talking to a certain V.I.P.