

The News Sheet

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The Chairman's Notes

Some time ago a solicitor friend of mine told me that one of his clients had died without leaving a will. He had been entrusted by some legal contrivance to sell his client's house and its contents which rather surprisingly included a fairly substantial workshop. Knowing I was interested in engineering and model engineering in particular, I was asked to make a competitive bid for the workshop.

I thought that I would not be able to make a bid unless I had the privilege of seeing the workshop first. An appointment was made to view. On one inhospitable rainy winter's afternoon the agent let me into the house and left telling me to lock up when I had finished. The house was a modest bungalow and had the stamp of a residence of a lone man. Everything was in order but had that feeling about it that it had been a long time since a woman's hand had touched the contents of that bungalow. Of the previous occupant's life I could glean but little; there were a few replica pistols and a Samurai sword on the walls. Some rather sophisticated and intriguing short wave radio equipment was placed in rather strategic positions complete with Morse keys; most of it seemed to carry no prominent maker's marks.

I passed through the house and when I entered the workshop I was at first struck by the feeling of comfort, warmth and snugness in that rather untidy but pleasant environment. The place was in a convenient shambles; screws, spanners and bars of metal all over the place but to hand, with hardly a flat surface for me to rest a note book to do my estimations. I found an old electric kettle with powdered milk and coffee and two cups standing close by it. A strong steaming brew was soon made and I settled down in the previous occupant's chair to make a few calculations.

The principal items of equipment were a *Myford* lathe and a *Fobco* drilling machine, with a great many taps and dies, many of them to Model Engineer specifications. At small depots were piles of what is euphemistically called 'stock'. Mild steel bar from about three inches diameter down to one eighth inch diameter abounded and there was enough hexagon brass rod to provide fittings for a considerable sized locomotive. The *Myford* lathe came with all the trimmings such as dividing heads and tail stock devices. In fact there was everything that a model engineer could desire to start and complete a project. But where were the completed models that this unknown colleague could have at least attempted

in his life and where were the folk that must have frequented it?

I lit a pipe and started to wonder about this recently departed engineer who seemed to have led the life of a recluse not even bothering to make a will. The existence and well-being of others appeared to have little impact on him.

'Typical model engineer', I thought to myself, but was he a typical model engineer? Because when you think about it, is there such a being as a 'typical model engineer?' I don't think so. Hardly anything seemed to have been completed in that shop, the standard of workmanship of some pieces was quite crude and some superb. It transpired from a next door neighbour that the occupant had been widowed years ago and spent most of his time enjoying himself in the workshop and was as happy as the day was long.

Really the pursuit of a hobby should be for pleasure and personal fulfilment, and the products of that labour are immaterial so long as it brings pleasure to the labourer. And so long as that happiness is achieved without detriment to other folk that is. We all pursue the hobby in different ways some of us take great satisfaction from making superb models with every rivet in place; others have great enjoyment so long as it works! Others in our group derive great pleasure from running their models, which in some cases may have been purchased, the owner knowing full well that he could not achieve the standard required in a thousand years. With our workshops it is the same; a number are immaculate, others a shambles, some have just simple tooling such as a hand drill while others have the most sophisticated *Lorche* lathes in the land. Many of us gain great pleasure simply from the fellowship gained round the table sipping a cuppa on a Thursday afternoon while others feel the urge to work on the track every minute that God sends. Thankfully many derive great benefit from helping at parties and fetes.

You see there is hardly a 'typical model engineer' at all and we should recognise that fact. We gain our happiness in diverse ways; the Club would be very dull if we were all the same.

At the end of the day we all should be able to aim for our own particular brand of happiness within the enclosing mantle of the Club and the Club will be the stronger for it. From the armchair mechanics to those who will go down in history alongside Dr Bradbury-Winter, there is a place for us all. Provided we remember to do our track-stewards duties, that is!

Have a good month.

Ian Johnston

Secretary's Snippets

The Secretary has received a copy of the 'Coupling', the News Sheet of the Bedford MES. It makes interesting reading, as they too are considering a new track layout.

The Society will be exhibiting at the Steam Fair 2006 at Waltham Abbey Gunpowder Mills, 20/21 May 2006. Maurice Cummins will be organising our stand.

David Harris

Treasurer's Report

You will have read in the last News Sheet of the opportunity to expand the facilities at the Colney Heath Site. As you know you get nothing in this life for free and the Society will bear the cost of moving the fence using a Three Valleys Water PLC approved contractor. This will of course reduce the Society's funds considerably and could leave things a bit tight at the end of the financial year, but if you wander up the 'far end' and have a look at the land that has been made available to us and engage the imagination we now have the potential to expand, to create a visionary ground level railway and the possibilities of expansion in other areas. For this we should be thankful to Three Valleys for making this possible.

Whilst looking forward the Council has also had a look backwards and have decided that the current system of 'instant membership' should be discontinued and to have a 'getting to know you, getting to know us' period before membership applications are processed. During this time each applicant will be welcome at all Society meetings, events and functions, and should in all respects be treated as a fellow member of the Society. In order to facilitate this the membership form will be revised to include a 'Proposer and a Secunder' for each applicant, and will be available from the Membership Secretary. It is suggested that the period of introduction be a period of months and that the proposing and seconding members signing their name on the form do genuinely know the person who they are signing the form for; they will be their first port of call if the applicant has a problem.

I have a large number of new members to introduce this month as I missed last month's News Sheet deadline and as Nick will agree this month's also, but that

annoying thing that helps us all enjoy our hobby has been getting in the way rather a lot recently.

Jeffrey Bolton
Interests: Loco

Gareth Clift
Interests: Junior, Garden Rail, Marine

Larry Cheeseman
Interests: Loco

Martin Ginger
Interests: Traction Engine, General Engineering

Philip Rowe
Interests: Loco, Garden Rail, General Engineering

Bob Gamble
Interests: Loco, Garden Rail

Peter Berkley
Interests: Loco, Garden Rail, General Engineering

Cover picture: The Editor, Nick Rudoe, grins from ear to ear after completing his first circuit of the raised track, at the controls of Tony Dunbar's 'Britannia' class Pacific, at the North American Section Day on 25 June.

Photo: Owen Chapman

Alexander Robinson
Interests: Loco

John Winson
Interests: Loco, General Engineering

David Burman
Interests: HO, Loco

Kieran Corcoran

FOR SALE

1. Lathe, approx 3.5" x 15", gap bed, BGSC on cast iron stand with motor, chucks & some tooling/ accessories.
Make unknown. Working but needs some TLC. £100
2. Speedy (5" gauge GWR tank to LBSC design). Just about complete and steamed a couple of times only, but unpainted and unused for several years. With plans and construction book. Needs stripping, cleaning & painting. £2,000

Both the above have been dry stored and are not rusty. They belong to **David Briggs**, whose late father Harry was a member of NLSME some years ago.

3. 7 3/8in. FACE PLATE TO FIT BOXFORD LATHE - £15
Contact: **Jim Smith**

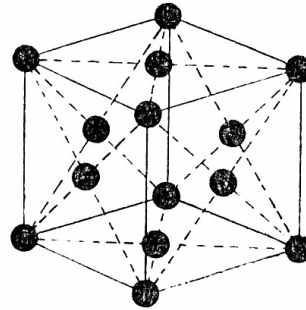
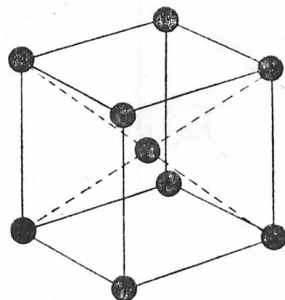
The July General Meeting By OMAH

Ian Johnston opened the meeting, confirming that the Three Valleys Water Company had agreed to the further acquisition of land at Tyttenhanger and we could now start to think about what we were going to do with it and asked if anyone had any questions arising. Negotiations have been going on with the board for some time now and this is the culmination. Not everyone was in agreement with this extension initially but having got it we should push forward. Adrian has been making a list of names and suggestions for possible layout of track, sidings, lineside features etc. Question from the floor, (sorry I couldn't see from whom), What process do we go through to decide what to do? Adrian felt that we should 'test the water' and have a meeting to discuss which of the many suggestions we should implement. Nigel Griffiths felt that we should think carefully before plunging in and ripping up the countryside.

It was noticed, by some, that a process of tidying up, shifting round, making new shelves, etc had begun at headquarters by the usual nameless few. Ian asked if anyone would be available for the following Friday, July 8th to continue this project. (Although by the time you read this that date will already have happened it is a worthy and necessary process to keep things looking nice, or even better, any volunteers please contact Ian Johnston if available for further activities.)

Ian then introduced our subject for the evening, which was "Heat Treatment". Mike Chrisp said that he hoped that this would be a 'sharing experience' evening rather than a lecture. To start the ball rolling he had set up a 'fiendish contraption' on the front edge of the table consisting of a ¼ in. steel rod fixed at one end and attached to a DTI at the other. He then proceeded to heat the rod to a nice cherry red in the centre and predictably the DTI rotated indicating the amount of expansion. Having turned off the heat the DTI showed the rod's contraction; except that, having contracted a certain amount it stopped contracting and momentarily expanded a small amount before resuming contraction. This was somewhat of a surprise as it appeared against nature. Mike said that he had shown this phenomenon to illustrate some of the properties of metals.

He then drew on the blackboard the cubic lattice of mild steel. This is a cube with an atom at each corner and a 9th atom at the centre, and is the structure known



as "body-centred cubic"; at room temperature the atoms of mild steel are arranged in this form - see diagram at foot of previous column.

When the steel is heated the atoms in the lattice reshuffle and take up the structure known as "face-centred cubic", with an atom at each corner of the cube and one at the centre of each face, making a total of 14 atoms. See diagram above.

When allowed to cool, the lattice returns to the body centred arrangement. As it cools, due to thermal delay, the atomic structure is momentarily upset and causes the peculiarity demonstrated before returning to body centred condition.

Mike commented on the problems in heat treatment caused by quenching. Bert Mead said that when hardening silver steel he always watched the colour change before quenching it in water. Mike said that this was excellent practice and that silver steel is a water quenching material. Mike asked for other reasons for heat treatment. Mike Collingwood suggested: temper the metal to make it tolerant or to give it toughness, anneal it to make it malleable. Mike added normalising, to refine the grain, soften or to prevent cracking and hence enhance toughness. Annealing can be done in a variety of mediums depending on the material and the end product; some would only be used in industry. Nitrogen avoids rust; salt water is quickest due to better conductivity stopping steam forming; oil is another favourite. Bert said that people doing sheet work tended to use a brine bath. Mike drew a graph of temperature against carbon content to show that there is a critical point for different materials, 723°C for mild steel. Knowing those temperatures and being able to set them accurately is essential in industry.

We then viewed a DVD on Heat Treatment which highlighted the comments Mike had made and showed their uses in industry, starting with the relatively simple case of a blacksmith drawing out a cold chisel and showing that it would be too brittle if just plunged into water but would have a tough but workable edge if re-heated to a lower temperature before quenching. It continued through increasingly complex processes in various industries. It included; localised hardening such as gear teeth by flame or induction heating, nitriding etc, concluding with various methods of case hardening, some of which looked pretty lethal. Although these processes are far above anything we are likely to need at home it was nonetheless very interesting. Mike pointed out that it only covered steel; to cover all materials would take up a considerable time. A last comment from Derek Perham, if you can't get 'Kasenite' for case-hardening at home, use sugar.

Following some appreciative comments from Ian we showed our appreciation in the usual manner.

Fetes and Fairs Section by Jim Macdonald



Adrian Reddish at the controls of Jim's Sweet Pea loco departing with two youngsters and the Mayor of St Albans, at Colney Heath School.
Photo: Jim Macdonald

On 9 July the second outing this year of the portable tracks took the Fetes and Fairs section to Colney Heath School's Summer fete, along with Ron Todd (Stationary steam section) and his traction engine.

Members helping at Colney Heath were Jim Macdonald (whose track and Loco were used), Robert Oldfield (station master and driver) Adrian Reddish (driver) Mike Avery (driver) Mike Chrisp (helper and public relations) and Jim Robson (beer tent refreshment adviser).

Other refreshments organised by Kate and Laura Reddish.



The Mayor again caught on camera enjoying a ride with our Ron Todd, who was never without passengers throughout the afternoon..
Photo: Jim Macdonald

On the same day the ground level 7¼" portable track and other members of the section attended the Leverstock Green village fete, another regular booking giving us the opportunity of promoting our hobby to the unsuspecting public. Leverstock Green saw Peter Macdonald and Ian Reddish with their 7¼" locomotives plus the stand-by diesel (The lawnmower) helped by Alex Chapman and Mike Hodgson. Other helpers included the girlfriends.

Special thanks to Laurence Steers who transported the ground level portable track to and from Leverstock Green and spent the rest of the day helping at Colney Heath School.

The combined fetes raised a total of over £300 for charities and a good time was had by all.

David Rogers (1921—2005) an appreciation by Ian Johnston

It is sad to report the death of a dear old friend of the club, David Rogers. He died a short while ago after a long fight against prostatic cancer complicated by a series of strokes.

David was born in Newcastle and you could tell because he never lost that wonderful dialect. David

never liked to be called a Geordie because he knew he wasn't. To be a Geordie you must be born in Gateshead, and Geordies never recognised David as one of them. At fourteen years of age he was a student at South Shields Art College, getting there each day on the ferry from North Shields. When David had passed his exams he worked for a firm of Commercial

Artists which unfortunately packed up when the War started, and David curiously learnt Morse code at the South Shields Marine College at this time. Perhaps he was going to make the sea a career as a Marconi Radio Operator, I don't know. Anyway David moved south to London and de Havilland where he worked on the design of bombers and where he used his undoubted artistic and mathematical abilities. After the War he joined Vickers Armstrong in the Drawing office and soon became Projects Manager in the bottle and butter machinery department. He travelled all over Europe surveying works and supervising the building of new bottling plants for them.

He married Hazel in 1951 and they had one daughter Julie who then proceeded to become a lawyer, get married to Daniel and gave birth to Hanna and James, in that order. (When she had grown up that is.)

I first met David over twenty years ago at the evening engineering classes in Barnet College. In those years the workshops were fully occupied during the daylight hours by engineering apprentices on day release and at night the class - for which we had almost to fight to get enrolled on - was bustling with embryo model engineers of different persuasions. On one occasion we even had a state visit by the then editor of *Model Engineer*, Ted Joliffe.

Needless to say David assumed the role of unofficial leader of our little band and was always on hand to help us out over our problems. (Engineering wise mind you, none of that silly social stuff). David really knew what the hobby of railways and model engineering meant to him and had an almost evangelical crusade in their propagation. Even to the extent of the taking of railway holidays with *Inside Track* to far away places such as New Zealand. He enjoined us to become members of the NLSME and taught us in his ways of robust practical model engineering. David encouraged us to make class visits to Model Engineering Exhibitions all over the country. The lecturer at the College was quite rightly mainly interested in workshop practises and with David on hand they presented a fine teaching team. The first part of the evening was involved in a discussion and an instructive admiration of the work that David had done during the week before the class. After that we got on with our tasks with a certain amount of guilt that none of us had perfected anything remotely in the same league as David.

Then disaster struck David retired and seemed to have a stroke at about the same time. Retirement left David bereft, mainly, I think because he had no

longer access to unlimited supplies of stainless steel bar! The stroke, he took in his stride and although other mortals would have packed up and gone home; not David. He soon returned to the Class and although he could not articulate accurately and had difficulties with dexterity it did not deter him from playing a full part in the proceedings. At this point his good wife Hazel should be mentioned as none of this would have been possible without her support and help; he would not even have been able to get out of bed without her help let alone getting to the class in her car.

David also joined an Industrial Archaeology Class with Ken West and a few other members of the Club. It was on one of our Class visits to Ridley's Brewery that I realized what a superb and modest engineer David was. It transpired that David had surveyed, designed, planned and built the bottling plant at the brewery and we saw it there still working to perfection twenty years after David had completed it. Bottles were rolling, flipping, sliding, filling, labelling and stacking in boxes all by remote control with no spills or breakages; the only thing they did not seem to do was 'loop the loop', but then perhaps I did not watch accurately!

At the NLSME meetings David always eagerly sat on the front row and in later years had to leave on time because Hazel would be waiting in the car to take him home. In earlier years David had been a very active Club member; the stage and the crush hall at the back of the lecture theatre in Headquarters were mainly to his design and completed by his hard work. We are often led to believe that older members may not have done much in the past, but David played a quiet major role in those turbulent days when we moved from Church Farm.

In model engineering terms David had two wonderful and well-planned workshops both at the end of the garden. (The area was also a very productive vegetable garden cared for by Hazel and David.)

As is customary for all model engineers of any standing, he had a Myford lathe with modest trimmings. Taps and dies did not just come loose but were attached to their holders for immediate use and of course always replaced in their appropriate places after employment. (A lesson to us all).

After a few years the evening classes at the college folded and the eight lathes with associated milling machines, shapers, benders and the small foundry were swapped for a few computers. David decided in his evangelical way to go it alone and the privi-

leged of our group went to his house once a week for instruction and help in our projects. At this time we completed *Bridget* and started three *Sweet Peas* and made the *GLR* boiler. After a few years David and Hazel sold up house and moved to Milton Keynes. The lure of much cheaper excellent housing may have played a part but the real reason was to be near their daughter Julie, her husband Daniel and their two wonderful children.

Despite the strokes David soon built himself another workshop in Milton Keynes and took over part of the double garage which he had obtained for the price of one! Unhappily the distance up the M1 prevented us from making our weekly visits to see David so that phase ended. Happily David was able to help out occasionally when we were able to visit but the large garden and stamp collecting seemed to play an increasingly important part in his creative life and he died never having steamed his locomotives, as far as I know. They were only run on air because I think that David got his satisfaction and fun from the making of models and in helping others but not in running the

completed units. David built a large range of locomotives mainly by Martin Evans. If our memories serve us correctly, the models were: the gauge one model *Newbury*, the three and a half inch gauge tank locomotive *Jubilee*, the five inch gauge tender locomotive *Nigel* and the five inch gauge tender locomotive *Great Western 2-8-0*, all by Martin Evans and all robustly and practically built. In fact David was also completing a Martin Evans *Simplex* when he died.

David's models and workshop will not be dispersed and David's memory will remain constantly with us. He taught us well on how to be true and practical model engineers, with that Northumberland accent and that unique sense of humour of his where he could chuckle indefinitely over a joke or a humorous incident. No we will not forget him.

We all send our deepest condolences to his wife Hazel, his daughter Julie and Daniel, his son in law and his two grand children, Hanna and James.

News from the Loco Section of the Tyttenhanger Committee

By now most of you will be aware of the Additional Land that the Water Board has kindly allocated to us, enabling us to plan and build additional facilities for the benefit of the Society. Many of you have also visited the coned off area and appreciate just how extensive the area is. As was said in the last issue many are already talking and having grand designs even at this very early stage. In consultation with the Tyttenhanger committee, the Council have agreed to the expenditure for the fence to be moved and instruction to the Water Board's contractors has been given.

So what's next?! On Friday 16th September at 8pm, the Loco Section meeting at Headquarters will be devoted to this ambitious project. This meeting is open to ALL members and will be your first "official" opportunity to present any ideas YOU may have, to help us decide the best use of the land and the funds available. This project will probably occupy many years, so your thoughts might be along the lines (no pun intended!) of what is possible within 2-3 years and what would the final facility look like.

The first step is to clearly define what features and facilities are required, and in this we don't just mean "railways" if you have ideas in other directions, too.

There will be constraints, of course – for example, in the railways arena the minimum radii of track and the steepest gradients (50 foot radius and 1 in 70 have been recommended). Then apply engineering principles to design the very best layout possible. We also have to take a long-term view, as it is better to design in future facilities than shift tons of earth when things are already operational.

So, what would you like to see? What ideas do you have?

The September meeting is important, and therefore must be rather more formal than a simple debate. Donal Corcoran and Jim MacDonald have kindly agreed to take sketches and ideas and put them onto overhead slides to that all can see them. The proposer will have the opportunity of presenting them for an allocated period of time (or can nominate someone else). Afterwards the proposer may wish to answer questions. At the end of the presentations and discussions, we'll be looking for a consensus, or at least common ground to move forward to the next stage. This will be to put one or two more detailed schemes to the Membership. **If you wish to participate, please let Adrian have your ideas by 20 Aug 05.**

You can use the plan (enclosed) as a guide.

Fairs, Fetes & Birthday Parties

The visit by Friends of Chernobyl's Children was well attended and for those present, a very moving experience. The Colney Heath School this year did well in raising in excess of £80 for the School. On the same day at the Leverstock Green fete we raised £190 for their cause. We also have had two highly enjoyable parties on the 2nd and 16th July, which brought the following letter (slightly abridged)...

“Dear Everyone involved in Oliver's party,

Thank you so much for a truly wonderful day. The children absolutely loved it (as did the adults!). Oliver

was asleep within 5 minutes of getting in the car (always a sign of a good day!). He then woke up when we got home (which is in St. Albans) and was so excited we had trouble getting him to bed!

Everyone was so very friendly and helpful and the weather was perfect. Please put our names on the list for next year straight away. Thanks again. Lots of love. S.N.”

As LBSC used to say – Nuf Sed.

There are Birthday parties on 30th July and on 27th August. Your help really would be welcomed.

Adrian & Robert

Responses to Adrian Newson's question in the July issue

1. Roger Bell:

As a draughtsman for 37 years and partly responsible for the dilemma Adrian faces, I feel that I ought to reply.

The reason that fractional and decimal dimensions were used side by side was for the convenience of tolerances. The tolerance block on the drawing would read as follows:-

Fractional +/- 1/32”

One place decimal (2.5”) +/- 0.015”

Two place decimal (2.50”) +/- 0.005”

Three place decimal (2.500”) +/- 0.002”

Fractional dimensions were not important and would be measured with a rule, the decimal dimensions being used for tighter tolerances and measured with a micrometer or the like or machined. 1/16” was the

smallest fraction used; the decimal equivalents of 3/16”, 13/16” and the like could be remembered. 1/32” and 1/64” were not used and a decimal dimension would be put in its place.

I believe Martin Evans had it right in 1973 when he was using fractions for boiler making where a rule is used, but elsewhere it's decimals. However we keep getting dragged back to fractions as that's the size of the stock material. It is a bit of a mess and probably the reason that everyone went metric about 1974. If one has an imperial lathe or milling machine and a digital readout is fitted it can then read either in imperial or metric at the touch of a button. The next design I start will have been drawn on CAD; if the details are modelled and positioned in an assembly there will not be any dimensional errors.

2. John Shrubsole:

Most of my work is from scratch so dealing with mixed dimensions is the bit that makes life 'interesting'. Some years ago I found and purchased a metric-to-imperial conversion calculator. This helped but was not entirely foolproof: press one wrong key and it's oops time. However I did persevere with it and went around the drawings writing in the new dimension; this had the additional benefit of studying the drawing more closely, which gave a better understand-

ing of the project.

For the workshop where I have imperial and metric calibrated machinery, I use a conversion chart, produced on a computer using a spreadsheet. This chart is based on someone else's table, which was a copy of a copy how many times I don't know, but was becoming difficult to read, so I made my own. Compiling the chart was not as difficult as making it fit on a couple of

pages of paper. The chart consists of two sheets of paper placed back to back in a transparent plastic envelope and hangs at a convenient place in my workshop. The chart contains measurements up to 1.0" in 0.001" increments and their respective conversions into vulgar fractions and millimetres to 3 decimal places. Included on the chart are sizes of letter and numbered drills.

I am a little older than Adrian and had to learn metrication later in life, and feel that I adapted well. Also I use only millimetres as the measurement (forget the centimetres and metres) and it has become less confusing. In fact in model-making / engineering it is easier with only one dimension type to consider.

Note from the Editor:-

John will be happy to send a set of his charts to anyone who would like a copy. As most members will be aware, conversion tables like John's - albeit somewhat less detailed - can be purchased at low cost; for example, the one I have in my workshop is called "Data charts and reference tables for drawing office, toolroom and workshop", is produced by Zeus Precision, and also contains loads of useful data on various threads, tapping and clearance drills, tapers etc etc etc.

Nick Rudoe

XX



Fond Memories

Mike Crisp recalls



Many photographs of North London SME activities have come to light during a recent search through my photo archives while clearing the office following my retirement. It seems appropriate to include a few here together with what I like to think is a nice picture of Tom Luxford with his 'Princess Marina'. All these photographs were taken thirty years ago!



Clockwise from top left, first we see Jack Calderbank raising steam in 'Caterpillar', one of the LBSC engines.

Ted Moon is seen at the regulator of his Vale of Rheidol No. 7 passing the old carriage shed before its destruction by fire.

Geoff Cashmore had many tales to tell of visits to Curly's track and is seen here at speed with LBSC's 'Olga'.

Arthur Marsh was a prolific builder with a solution for any problem which arose. Here he is at the controls of his 'Butch' later bequeathed to NLSME for use as a club locomotive.



Ahead is Ahead - But the reverse was not true. Or How a Hammer Shaft took 0-6-2 Radial tank No. 5601 from Cadoxton to Abercynon -Bunker First by Peter Kearon

It would be difficult to imagine a more bleak workplace than Barry Sheds at 7.30 on a January morning. Light had yet to dawn, rain or sleet was ever threatening but the really dominant factor was the icy wind which swept along the cinder path leading past the canteen building and hardly abating within the primitive shelter of that open-ended shed structure. Despite these conditions there was always activity as engines were prepared and fires built up prior to going out onto the road while shed fitters could be seen perhaps working on brake blocks, an uncooperative injector or maybe some problem in a smokebox

But on the morning in question there was an uncanny lack of movement. None of the usual fitters were to be seen and when I reached the haven of the fitters' cabin I found it deserted - in a way that "Marie Celeste" must have been found. Worse. Not only were there no people but the huge pot-bellied stove, our sole source of warmth - and survival- was perilously low on fuel. First things first as I shovelled about five hundred-weight (250 kg in child terms) of best Welsh onto the embers.

My skin tingled as behind me I heard the chilling voice of the loathsome shed foreman (as distinct from Charlie, the locomotive foreman), the abominable Mr Roger Trigg - universally known as Rog. the Troglodyte) but only when safely out of his hearing. Rog had a personal dislike of all things apprentice but kept his real displeasure for me, remembering no doubt a previous coming together over a slight misunderstanding with the regulator gland of an R-class Rhymney engine. His blood pressure was obviously high when he screeched: "your xxxing engine has broken down again and is blocking all the xxxing lines at Cadoxton. Get your xxxing ass down there quick and xxxing sort it out. Harry will take you." With that threatening but mysterious message he stalked off.

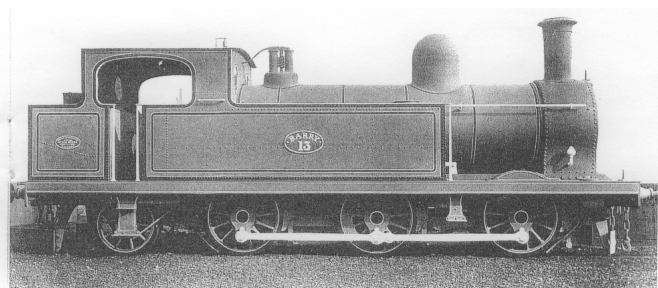
Harry, who had come with him, was the shed shunter. A one-time passenger driver, Harry had failed the annual eye test and spent his days arranging engines, keeping the coaling stage serviced and taking engines to and from Barry Works. He was a

kindly soul who welcomed footplate visitors and even would-be firemen.

Putting a shovelfull of coal through a firehole looks easy but it is also easy for the shovel to touch the backplate and spill the coal onto the plates. Firing an express engine at speed hour after hour while keeping an eye on the gauge-glass and sometimes looking out for signals was a skilled task and one which was rarely appreciated.

Harry told me that there had been a serious derailment at Peterston, a junction on the Swansea - Cardiff main line served by a branch from the Barry main line and all the shed fitters, along with the Barry breakdown van, had been called away to assist. Hence the "Trog's" unhappy reliance on me. Harry knew nothing about the Cadoxton problem beyond being told to take me there on his engine.

The shed shunting engine that day was one of the few surviving Barry Railway B-class 0 - 6- 2Ts built in the late 1880s by Sharp, Stewart and at that time a veteran of some 60 years. With a few hastily gathered tools I climbed onto the footplate where Harry was impatiently waiting; he was certainly on a high. We ran along the track leading to Barry station where Harry explained to a friendly signalman that we were on an urgent call to Cadoxton and required "main line" routing. With a wave of his hand the "bobby" sent us onto the Barry Island branch where we reversed onto the "up" main line.



No. 13 was one of a total of 25 engines of the Barry Railway B class built by Sharp, Stewart between 1888

and 1890. The illustration on the previous page, taken from Eric Mountford's well researched "The Barry Railway" was probably a builder's delivery photograph.

I had never previously, or since, passed non-stop through Barry Town station but with a blast on the whistle Harry sent us steaming through at a pace. Barry Works was also considered worthy of a blast and we must have built up to all of 25 mph approaching Barry Dock station (as it was then called) only to see the signals set against us. With many a squeak and groan we came to a halt at the end of the platform and close to the (East) signal box. Harry was cross and shouted to the signalman demanding immediate passage for an engine on an emergency call. The signalman listened to this harangue but merely pointed an accusing finger at the engine.

Harry left the cab and walked over to the box better to explain his demands but the signalman again pointed a finger, mouthed a few words and closed his window. The signal arm remained horizontal.

Harry came back cursing all signalmen but in truth he was in the wrong. "He won't let us through without a lamp" we were told. By their very nature shed shunters neither need nor display identification lamps but main line engines do; for that slight "safety" consideration we were being held. Fortune came our way as a "down" passenger train drew into the adjacent platform allowing Harry time to sprint across, borrow a lamp, run back and locate it on a hook on the front buffer beam. Immediately the signal arm went down and we were again on our way with a few rude gestures to the out-of-sight signalman. Within minutes we passed through Cadoxton station and then took the main line to Pontypridd and came to a halt. We had arrived.

For 70 years Cadoxton had been the largest concentration yard on the Barry Railway system. Although serviced by only an "up" and a "down" main line (where "up" meant up to the north and to the coalfields as distinct from the more generally accepted "up" meaning towards London) at Cadoxton the "down" track spread out to form about 15 reception lines where loaded wagons were stored ready for delivery to Barry Docks while on the "up" side a similar number of tracks stacked "empties" waiting for return to the collieries.

Coal trains were led across the Barry- Cardiff main line, down a dedicated goods line and through a

massive underpass onto Barry docks. Remains of the underpass can still be seen but sadly no trace of the Cadoxton yard exists as it has been covered by a mass of "luxury" houses, some with garden walls built just feet away from the existing main line. Part of the approach cuttings remain but in a water-logged condition while further north the former track bed now forms part of the Cardiff Link Road.

Picking up my few tools I thanked Harry and with some trepidation walked across to the sidings. The source of my problem was easy to see. The radial tank engine No. 5601 was straddling the final points over which all goods trains must pass on the way to the docks. Traffic was at a standstill. A crowd of unemployed shunters eyed my approach while the driver, a little man wearing a cloth cap leaned against a buffer head smoking a ready made cigarette. As I approached he pointed back over his shoulder and muttered "won't go in reverse". We climbed into the cab where I could see that the reversing lever was in the full back position but when the driver blew off the engine brakes and gave a touch of regulator we immediately moved forward accompanied by shouts and curses of the assembled shunters. There was no doubt that the driver's complaint had been proven.

What next? In hindsight the solution to this problem was perfectly clear but I was alone and in less than sympathetic surroundings. Taking things slowly I climbed up the front steps and looked over the motion. The links were in the lowest position which meant that the ahead eccentrics, connected to the top of the links, were in line and explained why the engine wanted to go ahead. The pin connecting the weighshaft to the bridal rod was in place which again proved that the gear was in the full ahead position so back to the cab to have another think. On 5600-class engines the reversing rack frame was shielded on the inside by a plate so it was not possible to see the other bridal rod pin. Moving the reversing lever was easy, as if it was not connected. Not connected? That's the answer. The cover plate was secured by a mass of 5/16th set bolts, easy to remove with a 5/16th spanner but decidedly difficult with an ill-fitting shifting spanner. It must be admitted that a few which proved to be particularly awkward had to be defeated with the hammer and chisel treatment.

It seemed likely that removing this cover plate would reveal a missing pin but in this I was mistaken and a gap between the floor timbers and the side tank was the explanation. To find a pin of some 1-1/4 inch diameter was not a consideration but one remedy came to mind - to use my hammer shaft. In the full ahead position the holes in the bridal rod

and the reversing lever came together sufficiently for the hammer shaft to make a connection but the hammer head had to be supported to prevent the shaft from falling out.

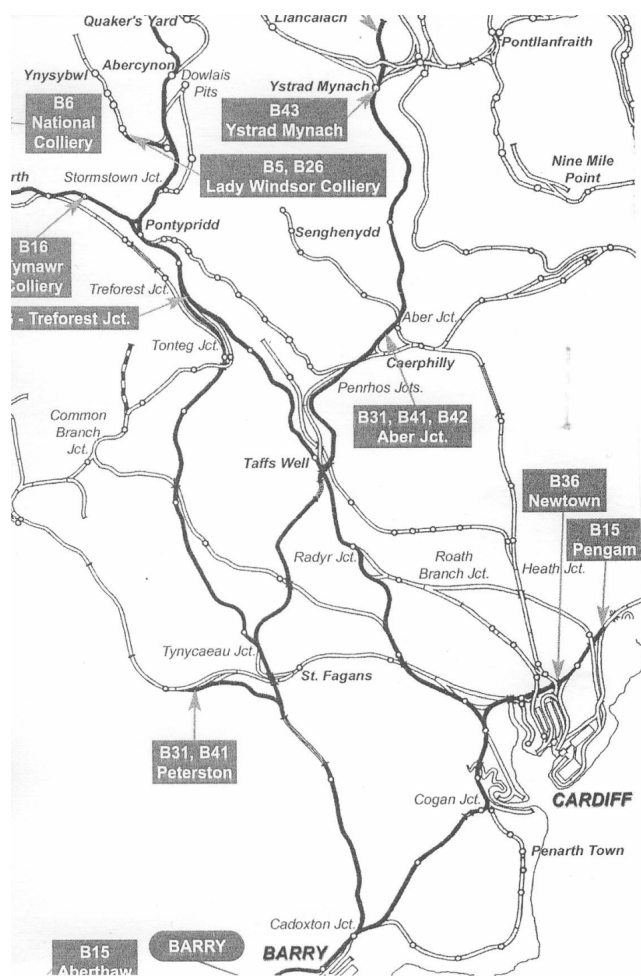
Indeed it would have been impossible to have fitted the pin even if I had found it. The links had dropped down until they were directly supported on the radius blocks and thus giving a greater cut off than the maximum provided by the reversing lever such that the holes in the bridal rod and reversing lever did not align and it would have been necessary to raise the links to push back the bridal rod to its proper maximum cut off position. Such work was quite beyond my capability and I was happy that the hammer shaft could be pushed into place.

Looking back it is easy to see what had happened. When that pin fell out the gear fell into the full ahead position and a bit more. As the engine was running chimney first on a falling gradient it was probably in the drifting position i.e. full ahead and the merest hint of steam was sufficient to keep the engine on schedule. It is likely that the driver was unaware of what had happened until he tried to reverse at Cadoxton to uncouple. Being surprised at the engine's behaviour he probably tried several times to reverse but succeeded only in running the engine forward until straddled the points.

It could be suggested that the driver should have taken the train forward onto Barry Docks to alleviate the problem but this was not allowable. As 5601 was an Abercynon engine and the driver from the one-time Taff Vale shed it was impossible for him to proceed over Barry lines. Outsiders may wonder how a GWR-built engine working on a system which had been under GW control for the previous 30 years could be denied access to a one-time Barry Railway track but at Cadoxton the built-in parochial attitude remained strong. The Taff Vale Railway remained the enemy.

To digress somewhat, in my own experience travellers from Penarth wishing to reach Barry would take a train which had come from Cardiff using ex-Taff Vale lines until it came to Biglis Junction where it joined the ex-Barry Railway lines. It was allowed to go on only into Cadoxton station where it was "all-change" making passengers wait for the arrival of a train coming again from Cardiff but using the Barry Railway main line which would take them forward to the next couple of stations. It was likely that both trains comprised five Collett coaches hauled by a Collett 5600-class engine. This strange, spiteful routine continued until the Penarth - Cadoxton line closed in 1965.

I called out to the driver who came back, blew off the brakes and tried reversing while I squatted at his feet. I heard the buffers close up as we pushed the wagons back off the junction, uncoupled, ran forward then back along the main line, reversed again and coupled up to a rake of empties. From the plates I asked the driver what he intended to do and quite logically he told me that he was going to take the train to Abercynon. What could I do? Were I to leave the cab my hammer would immediately fall out allowing the gear to drop into full ahead while the engine was supposed to run bunker first. There was no alternative - I would have to stay.



Part of the rail network above Cardiff. The route from Barry/Cadoxton to Abercynon crosses the main GW line at Peterston. The Barry Railway lines above Pontypridd turned West to Trehafod. Only the Taff Vale track went North to Abercynon. Trevithick's Penny-Darran tramroad led from Merthyr to Quaker's Yard. Details from Brian Miller's readable new book "Rickard's Records"

Off we went. By some good fortune the driver didn't believe in expansive working and once the train had fully joined the main line he linked up to about 45% and worked exclusively on the regulator. As the reversing lever was steady, except for the normal pulsing, it was possible to hold the hammer shaft in place

with my foot while sheltering against the bunker back.

Up the coal-carrying main line, over the GW main line which was still blocked and on through Treforest towards Pontypridd station where we were held. On to Abercynon, junction for Merthyr and Aberdare, to uncouple and run light engine into Abercynon sheds. Perhaps I expected some word of thanks, even congratulations, but I remained disappointed as both driver and fireman left the footplate with the merest of fare

wells. My reception at the shed office met with scant interest.

Perhaps wrongly I returned to 5601, put the gear into the full ahead position and pulled out my hammer. (I still have it). To make the next driver aware of the problem I jammed the cover plate against the frame and left the engine. A passing coal train took me down to Cadoxton in the guard's van. I was back in Barry sheds in time for morning coffee. Strangely, Mr Trigg was not around to welcome my return.

General Meetings Update by Mike Crisp

Friday 5 August 2005: The Locomotive Section Entertains

For our now annual summertime General Meeting away from Club Headquarters, members of the locomotive section have kindly agreed this year to arrange some 'entertainment' at the track.

In years gone by we have enjoyed friendly and light hearted competition; more recently we have acquired two electric 5in. gauge locomotives which can provide an introduction to the pleasures of driving a real passenger hauling miniature locomotive.

If you prefer to enjoy the idyllic surroundings of our Tyttenhanger track site while watching others getting involved in various activities, this evening will provide an ideal opportunity to do so in the good company of like-minded fellow members and friends.

The barbecue will be lit so you can cook or cremate something to sustain you through the evening.

Friday 2 September 2005: Work in Progress – On the Table

Work in Progress meetings provide the ideal opportunity to learn about our fellow members' current projects. The chance to appreciate the workmanship and problem solving involved always gives rise to interesting and enjoyable meetings.

If you have something to Show and Tell us about.

The meeting will be at our Headquarters in Legion Way, North Finchley, 8pm - 10pm, with tea and biscuits courtesy of Frank Dell.

Friday 7 October 2005: The Story of the Edison Cylinder Phonographs

Illustrated by working phonographs and colour slides, in this lecture, Keith Catchpole traces the history of sound recording as developed by Thomas Edison.

A long standing friend of North London SME, Keith has entertained us several times down the years. Deriving from his long experience as a teacher, Keith's fascinating talks are always authoritative and presented in a very professional fashion. While Keith has kindly agreed to present this lecture, he is currently in poor health and may have to postpone his talk to a future date for which eventuality alternative arrangements are in place.

The meeting will be held at our Headquarters in Legion Way, North Finchley, 8pm - 10pm, with tea and biscuits courtesy of Frank Dell.

Next month (4 November 2005) we will be entertained by the NLSME Video Group. See you there!

📖 Dates for your Diary 📖

Tuesday 2 August	8.00pm Tyttenhanger Committee Meeting; Colney Heath (in the coach)
Friday 5 August	8.00pm General Meeting hosted by the Loco Section at Colney Heath
Monday 8 August	8.00pm Council Meeting; HQ, Legion Way, North Finchley
Saturday 13 August	Invitation Club Day at Colney Heath. Contact Brian Apthorpe for more details
Friday 19 August	8.00pm Loco Section meeting at Colney Heath
<i>Friday 19 August</i>	<i>Deadline for copy to Editor for September News Sheet</i>
Saturday 27 August	Birthday Party at Colney Heath (help required)
Monday 29 August	Bank Holiday - members' running day at Colney Heath
Friday 2 September	8.00pm General Meeting; Work in progress - on the table; HQ, Legion Way, North Finchley
Saturday 3 September	Private function
Tuesday 6 September	8.00pm Tyttenhanger Committee Meeting; Colney Heath (in the coach)
Saturday 10 September	MENCAP children's visit to Colney Heath (help required)
Sunday 11 September	11am Boating Regatta at Colney Heath; open day for local clubs
Monday 12 September	8.00pm Council Meeting; HQ, Legion Way, North Finchley
Friday 16 September	8.00pm Loco Section meeting; presentations and discussion of ideas for the New Land at Colney Heath; HQ, Legion Way, North Finchley
Saturday 17 September	Birthday Party at Colney Heath (help required)
Friday 23 September	8.00pm Workshop Evening; HQ, Legion Way, North Finchley; first of the Autumn Season
Friday 23 September	<i>Deadline for copy to Editor for October News Sheet</i>
Saturday 24 September	G1MRA visit
Saturday 1 October	Birthday Party at Colney Heath (help required)
Tuesday 4 October	8.00pm Tyttenhanger Committee Meeting; Colney Heath (in the coach)
Friday 7 October	8.00pm General Meeting; Talk by Keith Catchpole; HQ, Legion Way, North Finchley
Monday 10 October	8.00pm Council Meeting; HQ, Legion Way, North Finchley
Friday 21 October	8.00pm Loco Section meeting; HQ, Legion Way, North Finchley
Friday 21 October	<i>Deadline for copy to Editor for November News Sheet</i>
Friday 28 October	8.00pm Workshop Evening; HQ, Legion Way, North Finchley
Saturday 29 October	Starting at Dusk! Halloween Evening at Colney Heath
Sunday 31 October	9.00am. Start of winter working parties at Colney Heath

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Every Wednesday	Miniature Railways, British and American and Video Group at HQ
Every Thursday	Slot Cars Section at HQ
Every Sunday	Morning work parties at Colney Heath (start 9.00am).