

## The Chairman's Notes

As with last month I have been very out of touch with Society activities as I have been continuing to allow earning a living to take precedence over the really important things in life. However, I know that the Colney Heath site is nearing the end of another busy and successful winter of working parties. I'm sure that the members who work so hard over winter gain their own satisfaction by seeing the fruits of their labour, but on behalf of the Society I would like to thank them all for their hard and often wet work.

Probably when you read this John Caldwell and his family will be on their way to New Zealand. From us all, I wish them health, happiness and success in their new venture.

We are now at the end of the winter workshop night meetings and I would like to thank Mike for presiding over a very successful winter season of meetings. I look forward to next year's session.

The Marine Section has produced a splendid shelter this winter that will add much to the comfort of the sailors should it rain and is a new asset to our Society. The Garden Railway Section will be laying additional track, mostly storage loops for rolling stock and have tidied up the general area, putting in gravel paths to keep the mud at bay. So the track will be ready for all those new G1 locos being built.

I am looking forward to a busy and **dry** running season and I'm sure that you all share my sentiments.

*John Squire*

### *North London Society of Model Engineers*

#### **Notice to members**

**The 58<sup>th</sup> Annual General Meeting of the North London Society of Model Engineers will be held at Headquarters, Legion Way, Summers Lane, Finchley, London N12 at 8.00pm on Friday 3<sup>rd</sup> May.**

Preceding the AGM will be an ordinary general meeting to receive nominations for Council.

*Tony Dunbar. Hon Sec NLSME*

## From the Secretary

Members will be pleased to hear that your Council has agreed to fund a replacement boiler for the Club Engine *Jupiter* as and when required.

The Society welcomes two new members, Tony Callcutt and Brian Latimer-Davies.

*Tony Dunbar*

### Don't Miss The April General Meeting



A talk by Andrew MacAlister from Three Valleys  
Water entitled



8.00pm, HQ, Summers Lane, Finchley

# From the Membership Secretary

Membership currently stands at 232 consisting of: 12 Honorary, 121 Full, 64 OAP, 13 Junior and 22 Country members

## New Members

This month we welcome two new Members approved at the March Council Meeting:

**Bryan Latimer-Davies**

**Anthony Callcut,**

## Change of Telephone Number

**Ian Johnson**

*Bernard Lambert*

## Treasurer Twittering

Our application for Charitable Status has been rejected by the Charity Commissioners basically on the grounds that we exist primarily for the benefit of our own members.

*Bernard Lambert*

## Tyttenhanger Gazette

### By Roger Bell

The topic for the March Loco meeting was a talk with pictures by Les Brimson on valve-gears. The gears are split into three groups; link, radial and poppet. The link-gears are Stephenson, Gooch and Allan. The radial-gears are Joy, Hackworth, Marshall, Walchaerts, Baker, Jones and Beames. The poppets are Greenly and Caprotti.

Valve-gears were used on the earliest of locomotives. One of the first gears was the Buddicom Gab motion and was similar to Walchaerts'. Stephenson designed his own version of this and it was known as the Stephenson Gab motion. (I wondered if this was where the phrase 'the gift of the gab came from'!) This led through various changes to the Stephenson Link valve gear of which we are familiar today. This gear has two eccentrics fitted to the drive axle for one cylinder. One drives an eccentric rod which is connected to the top and one to the bottom of a curved slotted link. A block slides up and down in the slotted link. The block is supported by a lifting link which is in turn lifted by a reversing arm which is rotated by movement of the reversing screw. The block has a reach-rod fitted to it which moves the slide valve. Thus when the reverser is in mid-position and the eccentrics rock the curved slotted link, almost about the centre of the die-block, no motion of the reach-rod or movement of the

valve takes place. However, as the reverser is moved to full-gear the die-block is lifted which in turn moves the slide-valve.

Les developed an interest in the principles of valve-gear design when he decided to build one of Wainwright's 'L' locomotives, a 4-4-0 with a tender, using the motion from the 'Maid of Kent'. However the 'Maid' has the weigh-shaft above the centre-line of the valve-gear whilst the L-type has it below. This is due to there being variations on the Stephenson valve-gear. I could mention at this point that the first ten Wainwright 'L' locos were made by Borsig of Germany and were delivered to the UK in 1914 just before the outbreak of war. The Germans did not get paid for them!

A novel feature of the valve-gear design was a steam reverser. There are two cylinders; the top one is steam and the bottom one is a hydraulic lock. The gear is controlled by two levers. One lever only controls forward and reverse, the other adjusts cut-off. It is hit and miss and is adjusted until the desired cut-off is indicated by a lever against a gauge.

Les spent many hours trying to understand the valve-gear, but there are so many moving parts, each one depending on the position of another, it was too difficult to do. Eventually he came across a book by Don Ashton entitled Stephenson's Gear for Model Engineers. Les has based everything on the book, which has only 24 pages. His 'L1', on the table for us all to see, runs beautifully on air, which is the proof of the pudding.

The biggest problem with the gear is trying to achieve equal cut-off at each end of the piston's stroke and Les redrew the gear for the 'L1' using paper templates and a beam compass to achieve correct cut-off. This he demonstrated to us on a drawing board which was particularly interesting. The design was proved by making the gear mounted on a board before making the parts for the loco. This technique was used, as a photograph proved, by BR at Doncaster in 1950, only their model was full-size.

We thanked Les for a superb presentation as he really knew the subject and it is quite a daunting one to follow and one which, as Les showed, some of our model locomotive designers have got wrong on a few occasions.

## **Loco Section News**

### **A Farewell from John Caldwell**

It is time for me to bid you farewell. By the time you read this my family and I will be on our way back to New Zealand. Unfortunately that means leaving I get two winters back to back and you lot need to find a new Loco Section leader. I have enjoyed the task and found that it was not nearly as difficult as I had feared, due in large measure to the great group of people around me who have taken on various tasks. The main protagonists are listed below, and until a new Section Leader appointment is made your query is best directed to one of them.

Track Committee	Keith Bartlam Jack Edwards Les Brimson Mike Foreman Mike Chrisp
Treasurer	Jack Edwards
Bulk supplies	John Squire
Gardens	Kate Reddish
Grass mowing	Ian Reddish
Site Tidiness	George Case
Sunday duty rota	Ian Johnston
Coach supplies	George Case
Monthly meetings	Brendan Corcoran
Secretary / news-sheet write-ups	Roger Bell
Party bookings	Tony Dunbar
Party duty rota	Ian Murray
Safety Officer	Paul Lacey
Winter work party teas	Peter Shewry

Thank you all, for a sterling effort.

A plea to all those who have anything to do with Colney Heath. Treat it like your own workshop. Look after things. Keep them maintained. Clean tools after use (particularly where concrete is involved). Do not allow rubbish to accumulate. George and his team have the site clean and tidy for the running season. We are on show to the public every Sunday afternoon. Let's give them a good impression.

To all the members of the North London Society, you have been a great bunch of people to know and work with. I'll miss you. All the best for the future.

*John Caldwell*

## **A Discussion Paper on the Future Management of the Colney Heath Site**

**By John Caldwell**

As a parting shot I would like to leave you something to ponder on. Twice in a recent Council meeting we came up against a distinction between the Society and the Loco Section, and that one or the other is responsible for some piece of equipment. Some people seem to think that the Loco Section is a separate club within the Society. It has its own bank account and raises and spends money on the Colney Heath site. I was quite surprised to find that Loco Section funds have not been reported in the Society annual accounts. That cannot be right. (The honorary treasurer does in fact audit the Loco Section accounts every six months – Ed)

Once upon a time Colney Heath was built and operated for the exclusive benefit of the Loco Section, as there was a single use of the site – the raised track. Now there are four different uses of the site: raised track, pond, garden railway and ground level track. Each forms a focus of interest for our visitors. If you like, there is a fifth focus – the coach with its tea facilities. The revenues from the site come from two sources – Sunday afternoon visitors and birthday parties. The maintenance of the site is supported by those revenues. This is all obvious and well known, but note the change of perspective. It is no longer the single preserve of the Loco Section. There are now three Sections actively involved and all should be represented on the Track Committee (or Site Committee or whatever you want to call it).

The stumbling block comes when the revenues are seen to belong to the Loco Section but the expenditure belongs to three sections. A Site Committee (with mixed membership) spending Loco Section funds is seen by some to be a bad thing.

Remember that each member of the Society is automatically a member of whichever sections he has an interest in and no one can be a member of the Loco Section without also being a member of the Society. For goodness sake, we are a small group with common interests and a common purpose. We don't need this sort of division and petty squabbling.

I would like to propose a re-organisation of the internal structure. I don't think it even needs a constitutional change to implement.

- Council remains unchanged – it is the overall governing body that holds the various Sections together and provides a chairman, secretary and treasurer.
- The workload of managing the site is too great to lumber the Council with, so we need a Site Committee (with representation from each section involved at Colney Heath) which is elected at a General Meeting (because it spans several Sections). It runs its own bank account, collects revenue and spends its money on anything relevant to the site. Annual results are reported in the Society annual accounts.
- Ownership of all equipment is vested in the Society, not in any particular Section.
- Capital expenditure decisions belong with Council, upon recommendations by Sections or the Site Committee. Council may decide to set a threshold so as not to have to deal with trivial items.
- Maintenance costs can be met from any pool of money available, remembering that it is all Society money when rolled up in the annual accounts.
- Loco Section leader will have a less onerous job although still organising monthly meetings. There will of course be Loco Section members on the Site Committee.
- Other sections remain unchanged.

This is in fact very close to how we are operating at present. We have representation from the Marine Section on the Track Committee. The Track Committee has its separate bank account. Jack & Bernard are intending to incorporate the Loco Section finances into the annual accounts this year.

My hope is that this change of perspective will lay a body of argument to rest and allow us to work more amicably together.

*John Caldwell*

# There's Lots of it About

## By a One-Time Driver (Retired)

*National pride is on every government's agenda. The population must be made to believe that their country is superior and the envy of all other nations. To achieve this, news is screened and adjusted to give the required 'spin' even if vital data has to be omitted. Children are taught on manipulated facts, which provide more acceptable history. Wars were never lost; go to the site of the Battle of Waterloo near Brussels and you will find two museums. In one the great victory of Napoleon is vividly displayed. In the other the great victory of the Duke of Wellington is clearly shown. Such a policy may seem pointless but how else can the working, paying population be induced to support, although perhaps unwillingly, exorbitant taxation, unjustified wastage and endless government-protected fraud. In the following article the basic facts are undoubtedly true but the underlying theme of national resourcefulness and ultimate victory over the country's enemies might be taken with a pinch of salt.*

Probably the first definitive account of woman's inability to listen is well documented. As far back as the Old Testament – Genesis Chapter 29 – where you will or won't remember how the God-fearing Mr Lot was visited by angels and ordered to leave wicked Sodom and Gomorrah taking only his wife and two daughters and head for safety to the surrounding hills. With this instruction came the strongest warning, 'On no account look back'. As you probably know, Mrs Lot could not resist temptation and paid the penalty for her uncontrolled inquisitiveness by being turned into a pillar of salt.

Whereas the biblical event took place aeons ago, it was only recently revealed that a not-too-dissimilar happening took place in Holland just a matter of 30 or so years past. The account was given in a seminar held in Den Hague by a senior official of Nederlandsche Spoorwagen (Dutch National Railways) and thus retailed to this writer indirectly. However it is fully accepted that the basic truth remains intact and has been well documented although largely forgotten with the passing of time.

This later event took place during the time of the uprising by Indonesia against Dutch colonial rule. It will be remembered that the seemingly unstoppable Japanese armies were poised to overwhelm all opposition in the Far East. Holland, already under German domination, could do little to offer any real assistance to its beleaguered colony but begged the inhabitants to defend the country to the bitter end. In hindsight it was a pointless hope as Japanese forces swept through Indonesia and were considering whether their next attack, into Australia, should be through Port Darwin or perhaps Port Wyndham against minimal opposition.

But in all of this the Dutch made one important promise. After the war, which would somehow see a victorious Allied outcome, then Indonesia would be granted independence. Fine words but as with so many promises given under dire pressure, soon forgotten. Twenty years after VJ Day Dutch control of that great country remained; only the Indonesians remembered the promise.

As has become the standard form of nationalistic uprisings, groups of heroes/freedom fighters/terrorists/armed thugs – choose your own description – are formed with the intention of publicizing their claims, legitimate or not, by killing or bombing innocent people and causing mindless destruction to almost anything. Soon authorities would tire of such behaviour and find it more reasonable to accede to the blackmailers' demands.

One planned scheme of Indonesian insurgents was to take over a Dutch train and use the ensuing publicity to highlight their cause. Without notice a group of armed guerrillas, dressed of course in civilian clothes, boarded the train in Amsterdam; after a dozen or so miles had been covered the driver was approached by a gang member and ordered to stop the train. That a pistol was first pressed into his ear may well have influenced him but it is merely recorded that he obliged the gunman and brought his three-coach electric train to a halt. He then left the control cab and became just another passenger. So that there could be no misunderstanding the passengers were informed of the situation and promised that they would be quite safe providing they - and the Government – obeyed all demands made of them. They were clearly made to understand that any failure to do so would be swiftly punished by the immediate shooting of one or more passengers.

Shortly a railway official sent from the nearest station came along the track to enquire the reason for the mysterious delay but a couple of pistol shots over his head soon convinced him that he was very much only the messenger boy. He was ordered to return to his station and cancel all other trains scheduled along that section of track but importantly to demand the presence of the Dutch Prime Minister so that the highjackers' instructions would be clearly understood at the highest level.

There can be no doubt that the taking of a Dutch train with Dutch passengers aboard caused enormous concern to the authorities (which was very much the aim of the gunmen). Not surprisingly the Prime Minister felt it to be inappropriate to accede to the instructions of criminals but equally some gesture had to be made. In his place the Minister of Transport was ordered to meet up with the highjackers, explain that the Prime Minister was presently visiting Australia and could not immediately attend as requested. The Minister would point out the impossibility of such a mission being successful and would suggest – nay, insist – that the gunmen hand over their weapons to the authorities when their demands would be given every consideration. (That these would be dismissed out of hand was not to be mentioned.) He quickly found that his ears, not his unused rehearsed speech, were required. The response from the gunmen was cool and clear as a spokesman, looking down from a carriage door made their simple demands. 1) The Prime Minister would broadcast to the world that Indonesia would immediately be granted full independence and 2) the gunmen would be unharmed and flown out of Amsterdam back to their own country. Thankful for escaping with his life the Minister retreated, promising that he would ensure that these demands would be fulfilled.

Although hidden by the bushes and trees it was soon obvious that a large contingent of militia had taken up position around the train. The response of the gunmen was well rehearsed as a terrified passenger, pistol held against his head, was paraded and the appearance of a senior officer from the hidden army demanded. He was given the simple message that any harm suffered by the gunmen would immediately be

revenged by the killing of one or more passengers. In the time-honored fashion it was pointed out that the responsibility for such deaths would not be that of the gunman who pulled the trigger but rather the Dutch government for failing to act honorably. It was further demanded that to make life more acceptable a list of requirements such as food, cigarettes, water, cooking facilities, radio sets and daily newspapers should be delivered and placed on a table set against the side of the track. A sort of calm reigned; supplies were delivered and taken in by gunmen who walked round the train with impunity, certain that no harm would come to them. The massive, but helpless militia could do little but wait.

But as in all these situations events were moving along and the next action came from the passengers themselves. Given unlimited time to consider their position, two passengers staged their own show. First a man fell to the carriage floor clutching his chest; an empty medicine bottle in his hand indicated that his supply of heart tablets was exhausted. In the excitement a young woman began screaming that the birth of her baby was starting. The gunmen, killers when required to be, were not wicked men and the sight of the two victims gave them concern. After all an unprovoked death which could be blamed on their indifference to Dutch nationals would immediately discredit their cause. There remained plenty more prisoners so with little delay the two sufferers were handed over to the authorities.

This proved to be the awaited breakthrough. Miraculously both passengers made remarkable recoveries and were able to reveal in detail the conditions and circumstances in which the passengers were being held. It was learned that all passengers had been moved to the middle carriage, seated, served meals at their tables and allowed to smoke and drink. Except for toilet visits which were escorted, passengers had to remain in their seats. Apart from these restrictions they were well treated. There was always one or more armed guards patrolling the centre isle and it was thought that there were ten or 12 gunmen in all. For the most part they stayed in or near the luggage compartment at the end of the centre coach.

With this meager but sufficient information available a plan was prepared, the aim of which was to free the train, ensure that the passengers were released unharmed but without accepting the gunmen's political demands or assurances for their safe release. Little time was required and by morning all was ready.

The first indication that events were moving on came with a loudspeaker announcement that the Prime Minister was on his way and that he had already promised that a practical and satisfactory solution would soon be reached. Because of safety conditions imposed by the government it was demanded that the PM's arrival must be kept private and to ensure this all passengers were ordered to lean forward, head on knees and to ensure strict compliance a coat or jacket must be used as a cover. Total silence reigned only to be blasted by the deafening noise of a group of jet aircraft swooping low over the train. Hardly had this unbearable roar begun than another deafening noise could be heard – the clamor of heavy machine guns which were raking the length of the train at window sill height and just above the heads of the crouching passengers while others ripped open the luggage compartment.

Within seconds it was all over. Standing gunmen were cut down; the remainder died as they sat. Storming the train was no more than a formality to remove dead bodies

and help the imprisoned passengers to escape. What a clever scheme. What a successful conclusion to a hugely difficult challenge and an example of how this caring government looks after its people under any emergency. But not quite. As disbelieving as her sister many thousands of years previously, one woman could not resist the temptation to have a look, lifted her head and alas put it directly into the line of fire.

P.S. General Suharto ruled Indonesia from 1966 to 1998.

## **Auto Tanks, Boilers and Duchesses**

**By Owen Chapman**

The Severn Valley Railway in the West Midlands has long been regarded as a high quality location for steam and has had much written about it. The line has been suffering in recent years from floods and a long list of boiler problems, which have resulted in its special events being postponed. However in 2001 with the building of two reverse-osmosis plants, these problems have been left behind and I made three very different visits to the line last year to see whether the line can continue to put on its previous good shows. It can.

My first visit was in March 2001 when I visited the line by its rail connection at Kidderminster, for the Branch Line Gala. This was the first weekend of the Foot and Mouth problem and the railways officials had put up notices asking for visitors to respect the problem and avoid using lineside fields and footpaths.

The day was cold with blue sky and sun and following watching the Birmingham Railway Museum's special train with double headed GW Halls though Birmingham Moore Street station I arrived at Kidderminster and boarded a train pulled by the SVR's 8F which took us for a spirited run to Highley. It was strange to see the usual crowds of photographers along the line reduced to nothing and a tribute to everybody in their support of the local farmers.

At Highley I left the train for my lunch and to shoot half a role of film on the passing trains. These included visiting Auto Tank 1420 that was doing shuttles with an auto trailer, in the time honoured fashion on the northern part of the line. When I arrived she was taking water in the yard. She then shunted out on to the main to load passengers.

The shuttles were a main feature of this weekend, which saw many small engines in service on three, four and even two coach trains shuffling up and down linking the intermediate stations. There were few of the large eight car trains running, and those that were, were not very frequent giving a very authentic branch line atmosphere, until the big train arrived with a 9F on the front! I had a very good day with all my journeys that day by rail and everything to time, even Silverlink!

My next visit was to meet a group of friends who are all young volunteers on preserved railways. This visit was organised by Gareth Evans, who writes a monthly

column in Heritage Railway Magazine. From the model engineer's point of view the highlight of the day was a meeting with SVR General Manager Alun Rees at Bridgenorth, where he showed us round the workshops. The first point of call was the boiler shop which was purpose built about fifteen years ago.

This enormous building was filled with four boilers in various stages of repair from one newly removed from service to one about to enter traffic again. This was of particular interest to me as I had just a week before seen the boiler from Brian Kennedy's Black Five after it was damaged in a fire. It was interesting to see the differences and similarities in construction, especially the boiler of Stanier 42968, which was lying on its side, where we could inspect the inner firebox and removed front tubeplate. This had badly wasted and a new one was being marked out by a worker nearby from 1.5 inch copper plate. This was to be marked and the tube holes cut, following this the lower half of the plate would be milled down to ½" before being flanged to shape and fitted to the firebox. The mud ring had also been removed and revealed this thick casting usually sealed by a triple riveted seam, very different from the braised copper seal on the 3.5" engine. Another boiler being repaired was that from "Bradley Manor" (upturned supported by a crane) and we were able to compare the corrosion in the water spaces by inserting a finger into the mud-ring.

Next to the boiler shop is the machine shop. This has some very big machines in, including a press used for pressing tyres onto carriage wheels and a seven foot wheel lathe. This was last used to turn the tyres on *Duchess of Sutherland* which are 6'8" and was truly massive. Also impressive was the supply of castings and patterns and spares supplying the preservation world with fusible pugs, continuous blowdown valves and the like.

We were next shown on to the footplate of newly overhauled A4 *Union of South Africa*. She is truly impressive and has had the painted crests of her namesake country re applied under her cab numbers. We were shown the new air brakes and Alun told us of how she is supposed to be the fastest post preservation locomotive, running down Whiteball in 1993 at a very sensitive pace.

We were also shown behind the scenes at Bewdley and Kidderminster, but it was nice to see how busy the line was on a normal running day. There were four service trains and a special that day, which was not the peak one. The special was especially nice to see and was newly outshopped pannier 5764 in green with four immaculate GWR "Toplight" cars in its natural environment with fully operating and impressive semaphore signals.

Well following this I was tempted back in late September for the SVR Autumn Steam Gala. This was the icing on the cake. Everything that could run was and this included *Duchess of Sutherland* visiting as a thank you from her owners following all the work done by the boiler shop and workshop on her. This locomotive has just returned to action for the first time in 30 years and I have always wanted to see her run since I stood on her footplate in Bressingham Museum. She is now immaculate, in LMS Crimson Lake livery but has been converted to air braking. The combined brake valve in the cab is gone and so has the steam brake. Now air brakes the loco and the air valve, off a class 37 Diesel, applies the vacuum brakes on the coaches, the large ejector valve still in place.

I followed this locomotive up and down the line, with the only remaining rake of LMS coaches and an observation and griddle car pushing the train to ten cars. She made a particularly spectacular ascent of the 1:100 grade near Bridgenorth, coming out of the morning mist with a cotton wool exhaust.

Other trains were running every 20 minutes, all to perfect time, breaking the two hours late tradition of previous years. The A4 was running with eight Gresley teak coaches, Bullied Pacific *Taw Valley* still in its Hogwarts Express red, with nine red MK1s and made a spectacular sight coming out of the woods near Bewdley, following a shower, with the sun back lighting the clag. A Horwich Crab was visiting from Lancashire; the 8F was giving footplate rides at Bridgenorth and ex Port Talbot 813 was giving brake van rides at Bewdley. Panniers 9466, 5764 and 1501 (Speedy prototype) were shuttling short trains to Bewdley and Arley.

Added to this the Black Five (45110) was recovering from its all night trains in Bewdley yard. She did venture out to double head the Crab into Kidderminster though. At Kidderminster a 7¼" V2 was topping and tailing a Grange on the Miniature Railway and *Rood Ashton Hall* called in on the Railtrack main. She then shunted the train on to the SVR and used the turntable, before laying over with the train in the new and massive carriage shed, returning to the main line in the evening.

This large terminus station (not original) had a superb atmosphere, especially as it got dark, with the Crab laying over in the headshunt, her crew eating fish and chips and the A4 arriving from the north. Just before this the sun made its second appearance for the day and lighted the Duchess perfectly as she left the station at sunset. I will never forget this, as she started without much warning, without any loudly seating valves and just moved off past me and the gallery of photographers.

From my experiences last year, I hope you can see that the SVR is a must to visit for great steam action and a good place to see the hard work of restoring and overhauling the larger locomotives. If you have been before, go again and if you haven't go anyway!

Details of operating days on the Severn Valley Railway are available on 01299 403816 or [www.svr.co.uk](http://www.svr.co.uk).

The views expressed in this News Sheet are not necessarily those of the Chairman or Council of the NLSME