## The Chairman's Notes

First of all I am glad to be able to report that our treasurer Bernard Lambert is well on the road to recovery after his recent operation and I fully expect to see him mixing cement by the ton during the winter working parties! Best wishes to you Bernard from us all.

We have had some very busy Sundays at Colney Heath with lots of kids enjoying themselves, thanks to all the track stewards and tea makers who work so hard on their "Duty Days". Without them we couldn't run our Sundays so **Please**, **please remember**, **if you can't do your duty it is your responsibility to find a substitute**.

Mencap visited us a week earlier than expected (a breakdown of communication.) However we were able to provide ample rides on the track and my double, Dick Hesketh, trundled round all afternoon on my little Burrell.

I and a large team of unrecognisable individuals coated in coal dust and oil have been trundling around on the steamroller this month. When Mrs Macdonald came to pick up Jim after he had been steering the roller she was not pleased with his appearance. Before getting in the car the dog's blanket was spread over Jim's seat and he had to take off his shirt. Then instead of progressing directly to a social engagement as Jim had expected, he was taken home to be cleaned up!! Nevertheless more of our members are now having a go on the roller. If you want to try your hand, contact me and we will arrange something, but remember its hard work, very noisy and it isn't clean. *Important Note: - She isn't as noisy as Brendan's Aveling*.

On Friday 4<sup>th</sup> October our general meeting will be an illustrated talk by the Corcoran's on the retubing of their Aveling showman's engine. It's worth coming to this as it will prove the sense of model engineers who can enjoy steam without getting filthy and ending up with bad backs sprained wrists and bruised toes.

On Friday the 1<sup>st</sup> November at 8pm we will be having our general meeting at the St Albans Organ Museum, 320 Camp Road, St Albans. For those of you who have not been to this museum before you have a treat in store. There is a fine collection of mechanical musical instruments that will be demonstrated during the course of the evening. This is an evening entertainment which may well be enjoyed by wives and partners who are not necessarily enthusiastic about the more intimate aspects of model engineering or indeed any aspects of model engineering. So come along and bring a guest and I promise you'll enjoy it.

The general meeting On Friday  $6^{th}$  December will be a social evening with a guest speaker and light refreshments. Details of this will be published in the next New Sheet.

On Friday 3<sup>rd</sup> Jan 2003 the general meeting will be film show on the BiiiiiiG screen at HQ. The program will be displayed on our notice boards later in the year. It should make a nice change from watching telly over Christmas.

Finally we have moved more of our insurance cover to the Southern Fed scheme thus supporting our umbrella organisation. Thanks are due to Bernard and the council members who have spent much time discussing this very important but dry subject.

John Squire

#### **Treasurer Twittering**

Nothing to report this month except the payment of insurance premiums. The nice balance left from subscription income is, as happens every year, being eroded by all the usual running expenses of the Society.

**Bernard Lambert** 

### **From the Membership Secretary**

#### **New Members**

This month we welcome two new members approved at the September Council Meeting:

Jon Doar, Michael Griffiths,

#### Old Member Rejoined:

Paul Harwood,

Bernard Lambert

### **Marine Mutterings**

As neither John Morgan nor I will be able to attend the October the  $6^{th}$  (first Sunday of the month) light-hearted competition at the lake we have decided to cancel it. However, there will be normal Sunday sailing so please go along and enjoy yourselves just the same.

We are still thinking about the next winter work program – so far we have had little response from members. Some of you must have some ideas of what you would like to see happening in the Lake area. Please tell John (Morgan) or myself. If we get no response from you we will do only the jobs that we fancy!

The 'Club' boat is now running and will be available on all Marine gatherings at Colney Heath. It can also be made available at other times by arrangement with John. Everybody is welcome to have a 'go' with it.

Enjoy the boating.

**Bernard Lambert** 

## A Sad Occasion!

What with all the Jubilee celebrations going on, the death of a very famous person almost went unnoticed this last Summer.

Larry La Prise, the man who wrote "The Hokey Kokey", died aged 83.

His death didn't come as a surprise (he had been ill for some time), but the most traumatic part for his family was getting him into the coffin.

They put his left leg in - and from there things just started to go downhill....

## The Wells Patent Compound Balanced Reversing Engine

#### **By Bernard Lambert**

The Wells Patent Compound Balanced Reversing Engine was an interesting attempt made in the late 1880's to minimise both the mechanical out of balance forces and the out of balance steam thrust forces in a small marine engine. The object was to reduce vibration and the wear and tear on crankshaft and bearing journals and to permit high-speed engine running without any ill effects.

The resulting engine was also claimed to be lighter, smaller and more efficient than an equivalent conventional engine. It spite of these plausible claims the design concept does not appear to have survived - one wonders why.

The high and low-pressure cylinders were mounted co-axially on a vertical axis. The two pistons and their reciprocating links were designed to be of equal weight and to move in opposite directions. This was achieved by attaching the connecting rod of the lower, high pressure piston to a throw at the centre of the crankshaft whilst the upper, low pressure piston had two piston rods and connecting rods (not seen in the sectional view on the cover) which straddled the high pressure cylinder and were attached to two throws one either side of the centre throw and at 180 degrees to it.

Thus the reciprocating masses become balanced, or nearly so, and a potentially smoother engine was achieved. This could offer high speed running without

appreciable mechanical vibration.

Steam was supplied from a single combined steam chest and was controlled by a single combined piston valve supplying both cylinders with steam simultaneously. On the power strokes the two pistons are driven in opposite directions (one up and one down) at the same time reducing the out of balance steam thrust forces. Additionally the combined steam chest reduced temperature and pressure drops between high and low pressure cylinders, which improved thermal efficiency. The piston valve was driven by Joy valve gear, which gave good control of cut off and running direction.

Thus, in addition to good mechanical balancing, the power thrust forces were well balanced and thermal efficiency was improved again making for stress free highspeed engine running.

Tests carried out at the time against a good contemporary single engine show the Wells Compound in a good light, though the choice of a single rather than a compound as a basis for comparison does seen a little suspicious.

As a rather simple old engineer I am attracted to the principles of the Wells Compound design but I also wonder whether I have missed something of significance that would scupper the whole idea. The concept appears to have some advantages but also appears to have some thermal efficiency snags.

Perhaps some of you who actually know a little bit about steam engines would like to comment on the proposition that the Wells Compound principle could be used to advantage on a modern launch engine.

### **Railtour Report**

# THE CITADEL, SATURDAY MAY 11<sup>th</sup> 2002

#### by Ian Murray

The above train, which was intended to herald the return of 6201 *Princess Elizabeth* to the mainline, was only advertised at short notice but both Grahame Ainge and I saw it in the steam press and decided instantly that this was not one to miss. Number one son, Robert, said he also wished to go as did Frank Dell and Mike Collingwood (fellow conspirators from the North London Society of Model Engineers).

Thus the five of us found ourselves, with others, in the somewhat uninviting surroundings of Watford Junction station at 06.00 awaiting the arrival of our train which was starting from Harrow and Wealdstone. For operating reasons too boring to relate, and totally outwith the control of the tour organisers, our train did not arrive at Watford until 07.00 giving a wholly inauspicious start to the day and leaving me to

reflect that if none of the time was made up en-route, then Lizzie would be out of path and nicely clinkered by the time we reached Preston.

Some time was in fact pulled back but we arrived in Preston station at the time that we should have been leaving. Further time was then dropped removing the class 47 which had dragged us from Watford. By the time Lizzie's support coach could be seen being propelled around and down the sharp left hand curve into the station, spirits were at something of a low ebb. The coach slid into the platform and as it did so I was struck by the amount by which the Stanier 10 ton tender dwarfed the coach and clearly filled the loading gauge. This applied equally to the loco and when buffered up to the train it seemed to tower over the coaching rake, it's distinctive single chimney only appearing to be a matter of inches below the 25KV contact wire. The blower was hard on and the throng of passengers and general sightseers clustered around like ducklings drawn to mother duck. There were some sights to be seen as well! Why an interest in steam trains should so often go hand in hand with poor social skills and sartorial disaster is a source of never ending mystery to me.

I spoke to one of the support crew who was leaning out of an open vent, apologised for our late arrival and expressed disappointment that water was to be taken at Oxenholme, half way up Grayrigg. "Ah well, at least we'll get to hear her bark" was the reply, said with a smile and a knowing look. Walking back to my seat in the fifth coach I could feel the initial gloom starting to lift. Lizzie looked good, the unfinished lining not detracting in any way from her presence and there was a cheerful air about the footplate staff and support crew. Many years of effort were now behind them and the day had finally arrived when she was back on the main line in revenue earning service. Not only that, she was standing on her old metals with her nose pointed to the north where her old adversaries of Grayrigg and Shap lay in wait.

Our start was imperceptible, drawing favourable comment from our party when compared to the uncomfortable jerks and snatches imparted by the class 47 on each start earlier in the day. Frank managed to get his head out of the window vent as Lizzie drew her train of twelve coaches out onto the rising left hand curve, giving a running commentary of her various slips which encouraged Graham to stick his head out of the same vent giving some prospect of the pair of them spending the rest of the day in rather closer proximity than they had perhaps planned! Fortunately they both managed to draw their heads back inside without too much loss of skin, hair or dignity and we settled back to listen as Lizzie began to get into her stride.

Ian – "Who's the driver?" Grahame – "Don't know but he'll be a Crewe driver" Frank (astounded) " a screwdriver????"

The sounds of her exhaust were now very audible and the evenness of her beat and the smoothness of her progress again drew favourable comment from our party. As an LMS fan with a particular soft spot for 6201 going right back to my earliest childhood I began to swell with ill earned pride. The weather was glorious, very warm and sunny with scarcely a cloud and set fair to remain thus all day. It rapidly became obvious that word of Lizzie's outing was well known in the area as people were out in force in gardens, streets and lanes. The photographers were positioned on embankments, in fields and clustered in tight groups on every overbridge.

Lizzie was well under way by now, striding purposefully out onto the Lancashire plain. The initial three and a half miles are on gently rising gradients, which gave us chance to listen to that wonderful exhaust beat. Four cylinders venting through a single chimney coupled with driving wheels of six foot six inches give a loud and measured sound. There was none of the "six beats to the bar" fussiness of a Jubilee or Scot – this was a slower but loudly determined noise, which, to an extent, hid the degree to which the train was actually being accelerated. Once well on top of the job the driver eased the regulator on the falling grade towards the short length of level track at Brock where the troughs used to be situated and Robert's face lit up as that familiar smell of steam coal wafted into the train. For the next few miles the track runs parallel with the M6 and as Lizzie hustled her train onward the prevailing westerly wind carried the flow of brilliantly lit white steam across the adjoining land teasing sheep and cars alike.

To me it seemed that there was an eagerness about Lizzie's progress. I believe that the recently completed overhaul has been the most extensive since Lizzie was withdrawn in 1962 and the newly rejuvenated loco almost gave the impression of exuding joy at feeling the metals of the west coast main line once more beneath her wheels. Certainly the weather could not have been better, the lush meadows and trees basking in the warm late spring sunshine and giving promise of the northern fells being, for once, on their best behaviour.

Having passed Lancaster Old Junction the brakes came on as we descended the 1 in 98 towards Lancaster Castle station, passage on one of the centre roads being taken at a sedate pace, presumably due to track repairs, and the brakes came on again to reduce our progress to walking pace immediately before Carnforth station – a particularly cruel slack which deprived the crew of taking a run at Grayrigg. Smart acceleration followed down the short dip before the climb over the "knob" before Burton and Holme. The track immediately after Carnforth station is carried on an embankment and the road which runs parallel was lined with cars, bumper to bumper, their occupants standing excitedly waving encouragement as Lizzie strode past.

Once onto Grayrigg proper, immediately before Milnthorpe, Lizzie began to dig in as she took her fist bite of the grade she knew so well and those of us in the train were treated to the sound of a big pacific doing that which she had been designed to do some sixty years ago. We all sat back, revelling in the noise as Lizzie followed the curvature of the track up the East bank of the river Kent, gaining height as she did so. Dark smoke and steam rolled past the right hand side of the train as we continued to climb, the first sets of really alarmed sheep and cattle fleeing the noise and the smoke which threatened to engulf them. The next six miles passed in similar unrelenting fashion until steam was shut off and the brakes applied to take the train into the loop before Oxenholme station itself to where the water tanker was waiting. The coach in front of ours was the kitchen car for first class, but this had a corridor and, on restarting, I suggested to Robert that we go and look out of a couple of the sliding vents. Robert took the first vent, I had the one in front and someone with a video camera took the one in front of me.

We pulled out of the loop, on completion of watering, and back onto the mainline and continued our slow progress into Oxenholme station itself. The driver was watching

for the tail of the train to clear the loop before opening up, which he did about half way along the platform. The delighted faces of the people standing at the north end of the up platform soon changed as an up Virgin train passed between us and them. Their frustrated antics could be seen through the windows of the Virgin train as they glimpsed Lizzie and could hear her and see the smoke but their carefully planned photo shots were spoilt. The crew had had time to make up the fire during the water stop so now here we were with the remainder of the climb of both Gravrigg and Shap in front of us and next stop Carlisle. I had taken a pair of workshop goggles with me and I now fixed these firmly to my face as I anticipated that there might be a cinder or two thrown! Lizzie steadily accelerated her long train around the rising left hand curve away from the station, with its junction for Kendal, which could be seen basking in the sunlit valley below and to our left. I revelled in the noise coming back from the loco, the coach tilting with the cantilever as the track swung first one way and then the other. The determined acceleration was very impressive, aided no doubt by the dry rails and as Lizzie powered her long train out onto the embankment at Hay Fell a further line of parked cars could be seen on the adjacent road with their occupants strewn around both road and fields.

Smoke and steam swirled back as Lizzie dug in and worked her train back up to speed. Cinders bounced off my goggles and head as speed increased and on a long cut-off and well into the main valve she was certainly telling the world that she was coming. The minutes flew past as onward and upward we climbed until a sudden quickening of pace indicated that Grayrigg summit had been passed. The disused viaduct which carried the old Midland line to it's junction with the LNWR mainline at Low Gill stood out clear in the sunlight and as we swung left into the Lune gorge the beautifully lit rounded fellside seemed almost close enough to touch. I do not believe that I have ever seen the fells of Lakeland look better. They seemed to revel in their late spring lushness, the yellow of the Gorse bringing splashes of vibrant colour to the patchwork of greens and browns. The curve into the gorge behind us, I found myself torn between drinking in the fresh beauty of the hills with the infant river Lune splashing over it's rocky bed and peering forward to where Lizzie was accelerating hard. The long straight before the line swings right towards Dillicar and Tebay was being used to pile on the speed. Lizzie roared her triumphant return whilst the fells looked on in benign silence, seemingly snoozing in the warm sunshine.

A veritable maelstrom of cinders poured down onto the coaches as Lizzie continued to accelerate hard and I could feel the excitement rising in my chest as speed continued to increase. I was having to protect the top of my head and my face as best I could from the stinging lash of the cinders and grit. Robert took a painful blow to his left nostril and staggered back into the corridor yelping. Within seconds he had whipped off his jumper and wrapped this all round his head and face, just leaving his sunglasses clear. Still Lizzie continued to accelerate. The gentleman at the sliding vent in front of me withdrew into the corridor, checking that there was no damage to his video camera whilst exclaiming- "This is just awesome!!!"

The loco swung to the right, pointing her nose towards the site of Dillicar troughs where she would have dipped her scoop on many occasions over the years. The noise was by now deafening as she charged along towards Tebay, cinders continuing to rain down, as speed reached the mid 70's. Had she charged Shap like this in November 1936 when she ran non-stop from Euston to Glasgow in under six hours I wondered –

but then she had only had a light train of some six coaches, not like today's load of 12. We swept past the site of Tebay station and on to Shap proper. The M6 passed over our heads and Lizzie continued to roar onward, through the rock cutting and out onto the curving embankment leading to Greenholme. Once under the road bridge the grade began to tell and speed started to drop off. The noise from the chimney also began to decrease as speed fell off giving the impression that perhaps the loco was " beating the boiler" i.e. using more steam than the boiler was generating. There were large numbers of cars and people on the east side of the line as we entered the last couple of miles of Shap's 1 in 75 grade and there was also much evidence at the trackside of recent works having been undertaken to the track itself. I did wonder whether Lizzie had met with a permanent way slack on the climb itself, particularly as she began to accelerate again as she reached the cutting preceding the summit. Once

I made my way back to my seat where Grahame expressed disappointment that, from a flying 75mph start, speed should have fallen of to the extent that this was down to around 45mph at Shap summit. I made mention of a possible permanent way slack but I could tell from the look on Grahame's face that he thought I was just seeking a convenient excuse.

Our descent to Carlisle was swift and uneventful leaving us to savour from the comfort of our seats the sunlit rolling hills bordering the river Eden as we ran down the 31 mile incline from Shap's 915ft height to virtually sea-level at Carlisle. Despite the forty-minute late start from Preston, we rolled in to Citadel station "right time" at around 1.30pm. Much of the time had been made up at the watering stop at Oxenholme, but time had also clearly been made up by smart running and the fact that we had not run foul of late running service trains. A chat with the driver would seem to be in order and we made our way forward accordingly. Lizzie sat at the northern platform end surrounded by the usual admiring crowd whilst I reflected how, in years past, I had been able to use my small blonde haired son as a passport onto various footplates – including Lizzie's at Blackburn in 1991. I looked up at the young man in trainers and cropped hair towering over me and sighed at the passage of time.

Nonetheless I struck up a conversation with the grinning, dusty faced fireman who was leaning out of the cab window. I asked him what he thought of his steed and he replied, "Well, over the past few years I had become swayed by the Eastern pacifics, but having got back on this I have to say she is The Business". Oh Grahame, where were you! Robert and I were then invited up onto the footplate where we leapt without hesitation, standing in front of the open firedoors and basking in the heat. The grate was covered with a thin layer of fire, the flames from which were dancing in the blower induced draught. Various glands dripped slightly, the floorboards had a covering of coal-dust, and everything had a real work –a –day feel, including the fact that the fireman was the only crewmember present. Robert asked if it had been hard work on the run up. "No, dead easy, as you can tell from the huge hole in the coal in the front of the tender!" came the reply, accompanied by the grin again. It was obvious that the fireman was delighting in his role, was proud of his efforts and his affection for the loco oozed from every dust-covered pore. He showed us the new air brake gear, the operating handle being fitted to the driver's cabside alongside the reverser, the actual valve being at floor level. Reluctantly at that point we climbed down, thanking the fireman for asking us up and making way for others.

The driver, Gordon Hodgson, was on the platform, speaking with a number of people and I took the opportunity to look at him. He was about five foot four tall, slim built wearing clean overalls, collar and tie and with his silver hair peeking out from beneath his greasetop. Looking at him I was reminded of the legendary drivers I have read about, Bill Hoole, Sammy Gingell but perhaps most of all Laurie Earl of Camden who was a hard runner and an enthusiast for the Princesses. When the moment was right I caught his attention and asked him how he had found Lizzie and he replied in the positive. Was she steaming OK? – Yes. How was she on Shap? "Twenty six minutes from a standing start to the top" came the reply before he moved on. This intrigued me and I have since dug into my various books recording loco performance on Shap.

The distance from Oxenholme to Shap summit is 18.6 miles on a ruling grade of approx 1 in 120. Looking through some of the published performances in my books I find that City of Hereford on the down Mid-day Scot, with a gross trailing load of some 16 coaches (three more than us), passed Oxenholme at 2 mph after a signal check and thereafter took some 28 minutes to pass Shap summit. Also, City of Bristol, with a similar load to ours passed Oxenholme at 64mph, Tebay at 65mph and cleared Shap summit in approx 22 minutes. The average time seems to come out at around 28 minutes from passing Oxenholme with somewhat heavier loads but with the advantage of not starting from rest. No doubt the railway press will give more accurate details in due course but there would seem to be little doubt that Lizzie's climb was up there with the best.

The five of us stood on the platform and watched as Lizzie backed the whole of her train out of the station in the direction of Upperby. No Jinty was on hand to relieve her of this duty. Wetherspoons and a large dollop of Carlisle's best fish and chips then followed before we made our way back to Citadel station where once again we stood alongside our steed as she hissed and gurgled beneath the platform canopy. Looking south from the platform end it is possible to see where the old North Eastern / Midland lines drop away to the east whilst the erstwhile Maryport and Carlisle Railway lines ascend a rising curve to the west. In the centre, in pride of place in my view, lies the route of the Premier Line striking south for the fells, the industrial northwest and London. It was at this that Lizzie was pointing her nose, eager once more to do battle with the high country.

The gradient begins a matter of a few hundred yards past the platform end, rising initially at 1 in 110 before settling at 1 in 131 for the first three miles. In the thirty-one miles from Citadel station to Shap summit there are only six miles of level track and even these are so widely spaced as to be of little benefit to a hard working engine. No wonder crews leaving for the south with a "green" fire and cold engine, or worse still a poor steaming engine working through to Crewe, did not relish the task even before the vagaries of the weather were added to the equation. I wandered back to my seat looking forward to the run and reflecting that my last south – bound run behind steam had been over forty years ago.

Lizzie got her train under way in her, by now, usual smooth style and accelerated strongly past Upperby depot. I went back to the window I had occupied on the down leg of the trip and watched Lizzie getting into her stride. I was now in the seventh coach so the rain of cinders was not quite so intense but the side views as she leant to

the curves were excellent. It was soon evident that Lizzie was being driven hard and as she worked her train up to speed the effort continued, wonderful even chimney sounds matching her glinting side rods as she stretched her long legs once again on west coast metals. Speed continued to increase as she forged onward and upward, ducking under bridges, rattling windows in nearby houses and sending the odd overhanging branch leaping upwards with the ferocity of her exhaust. This was exhilarating - fast running on continuously rising grades with an engine in the peak of condition. No evidence whatever of steam leaks from around the steam chests, only a sizzle from the safety valves and frequent blasts from the injector overflow. She leant to the left curve through the woods at Great Strickland, well into her stride by now and making a thunderous noise. I decided to walk forward and as I did so I listened as Lizzie's noises got louder. When I reached the corridor linking the coaching set with the support coach the connecting door was open and two fluorescent jackets swung on pegs. I could well imagine the adrenaline coursing through the veins in the support crew as Lizzie continued with her show. The droplights in the first public coach were fully occupied, but I did not mind, I could hear all I wanted to hear and I leant against the wall in the entrance vestibule watching as Lizzie's smoke swirled in, the individual smoke particles curling in the afternoon sunlight. I closed my eyes, rocked from side to side with the motion of the coach and revelled in the fact that I was able to be part of something so innocently wonderful.

After a few minutes the need to see as well as hear became too strong and I made my way back to the sliding vent in the seventh coach where I stuck my goggled face back out into the airflow. Lizzie was charging onward in great style and after the easier grades through Penrith she hit the steepest part of the southbound climb – almost seven miles at 1 in 125 – and this after 21 miles against the collar! Little wonder that these west coast climbs are held in such regard. There may be steeper main line climbs elsewhere in the UK, but generally these are shorter. The distance from Penrith to Shap summit is just over thirteen miles on gradients varying from 1 in 125 through 1 in 142, 1 in 108 and 1 in 130. Northbound, after the level at Dillicar, there are two miles of 1 in 146 before the final four miles of the famous 1 in 75 to Shap summit. That climb of course is preceded by the fourteen miles of Grayrigg, with principal gradients varying between 1 in 104, 1 in 106 and 1 in 131 - which gives a certain symmetry to both north and south ascents. Anyway, enough of analysis, and back to the trip.

Well on to the main part of the climb, the noise from Lizzie was tremendous, her exhaust smoke and steam being flung high into the still air and well clear of almost the full length of the train. No wonder there was never any call to fit the Lizzies with smoke deflectors! Clifton and Lowther disappeared astern and on she forged towards the right hand curve past Thrimby Grange where, in the late sixties, the LNWR box still had charge of one of the towering LNWR lower quadrants controlling the home section on the up main line. I thought I spotted the location but the growth of vegetation and the bridge carrying the M6 motorway over the line made me uncertain. Lizzie's scouring of the underside of that bridge jerked me back to the present, which, I suddenly realised with a start, was far more interesting than the late sixties!

The westering sun was illuminating the fell sides in front of me in a glorious warm light but this beautiful, almost manicured, landscape was rudely and suddenly despoiled by the ugly scars, tips and even worse machinery comprising the Harrison's quarries and their associated sidings. Pure white steam, smoke or dust (I could not tell which) was pouring from two vents or chimneys and drifting up the hillside but Lizzie's own smoke and steam soon, mercifully, obscured this evidence of man's ravishing of nature. The site of Shap station, a mile or so north of the summit, I missed and suddenly we were amongst the refuge sidings in the shallow cutting that marks the summit, beyond which our driver shut off steam and applied the brakes to take us slowly past what were now obvious permanent way works. Once clear we were treated to quite electric acceleration down Shap, the exhaust beat quickening with real purpose and although I expected steam to be shut off so that the train would accelerate under gravity the crew had other ideas. I listened with open-mouthed amazement as Lizzie treated me to easily the hardest acceleration on a falling gradient that I have ever heard. She was out of my sight at this point but, from memory, steam was not shut off until Greenholme, by which time speed was well up into the seventies and as we shot out from under the M6 road bridge and flew past the remains of Tebay, steam was gently re-applied to keep speed up past Dillicar and Low Borrowbridge. We swept on towards Low Gill where, on the mile of rising 1 in 204 steam was suddenly re-applied with vigour and for the first time in my life I heard what I have previously only read about - the Stanier purr. Lizzie was still running at speed as steam was re-applied and her deep, fast, even exhaust gave a wonderful impression of a contented lioness. She had eaten her fill of the fells which had decked themselves out for her in their spring finery and the Gods had blessed the event with clear skies, brilliant sunlight and warm temperatures. I returned to my seat a happy man.

The remainder of the journey I enjoyed from my seat as the sun slowly sank in the west and I continued to soak up the countryside and enjoy the number of people who were still at the lineside to see us eat up the last miles to Preston. On arrival the majority of the passengers went forward to see Lizzie detach which she did with much roaring of steam through draincocks – much like the theatrical stretching and roaring of that previously mentioned lioness. A ripple of applause ran through the throng as she moved off with her support coach, the occupants of which were grinning and waving from every opening. Several minutes later she reversed back on a track adjacent to the rolling stock and as she drew slowly up in front of us, the track creaked and groaned under her weight. Not having her lower half obscured by the platform gave everyone an opportunity to admire her length and her sheer presence. Even at rest she seemed to fill the station, exuding power and capability in equal measure. The arrival of our class 47 to take us the rest of the way sent everyone scurrying back to their seats and as we set off and past the warm bulk of Lizzie her smokebox door seemed to carry just the hint of a smile - mind you, it could just have been wind!!

The last stage of the journey back to Watford seemed to take for ever, visiting most of the backwoods of the West Midlands on the way, but all credit to Past Time Rail, EWS and not least the Princess Elizabeth Loco Society for a truly superb day out and an on time arrival back home.

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