



Southampton Society of
Model Engineers Ltd
www.southamptonme.org
NEWS LETTER

100th Anniversary Season

Member of Southern Federation of Model Engineering Societies
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Here we go again for the 2012 season, the trains are running again and the sun has shone for a day or so!



Model Engineering is more than just locomotives,
wouldn't you like to have a model of this in your garden.

From the Editor

We have a new Chairman and he has given us his thoughts for the future; openness, fun, support and getting back to the way it used to be and insightfully to restore the good reputation that the club had in the past. I certainly remember the warm welcome I had as a new member in 1992, I had an engine and not much else. It was David's father, Derek, on the next steaming bay who made the difference providing a bucketful of good advice, tips and help. He found me a lathe and gave me the courage to dismantle my engine and make a new main crank. That was the way it used to be.

In a similar sort of vein, a member came up to me the other day and asked if I remembered the dark days of Feb 2010. At the 'special meeting' called that night, the membership wanted to know what was going on and what was going to be going on, in short they wanted openness and, to use the modern word, transparency. This member asked me when were the committee meeting minutes going to be posted on the board in the hut. I told him about David's intentions as he says on the opposite page. This member was happy.

We missed celebrating the 50th on 14 April but perhaps this is a good thing as when we do have a celebratory bash the weather will be better than of recent. We do however have a rather historical theme to this newsletter so read on and enjoy some recollections.

Contributors – Bless you!

This was going to be a very skimpy edition but as usual, members have made the difference. Thanks to Merlin for his recollections from 50 years on and thanks to Derrick Lampard for a fascinating story from our history and a Chairman some may remember. Richard, apologies, still have your IMLEC to use, next edition hopefully. Peter Clare continues his reflections on water wheels; what a idea to model this in your garden, you would need to live on a hill I think!

From our New Chairman — David Giles

First of all, thanks to all the members who thought I was a worthy candidate and voted for me to take on the job of Chairman. (Thanks, what have I let myself in for?) I hope I can carry on in this position in the footsteps of our previous chairmen such as Bob Wallace–Sims, Dave Batt, Eric Moxham, Tony Hoile, Steve Titley and my late father Derek, who was Vice–Chairman. I have an awful lot to live up to. So here goes, let's try to get things back to how they were in the good old days; lets be a Model Engineering Club and pull together to be one. Yes, we have to have rules and regulations (Health & Safety, the dreaded words), but that is the modern times we're in and we have to put up with it. It is not just decisions by committee so don't give the committee a hard time, we're only volunteers the same as everybody else in the club just trying to run the club safely, keep on track and have a happy and friendly atmosphere in everything we do as a club.

If any member has something to say, speak to the committee, if you have an idea, speak to the committee, if its good and it is possible to do we will talk to the membership, see if they agree and if so improve on the idea and we'll try to do it, don't bottle things up TALK TO US or come and see me at the track. I try to be there most Sundays but I do have to work like a lot of us so if I am not there see my right hand man John Lockyer (Vice Chairman) or any member of the committee.

That's enough of my babble, let's get on with the job and make Southampton Model Engineers one of the best and friendliest clubs around. We had a good reputation once, let' get it back but most important of all, support the club, help us run the track, there is always a job to do in its upkeep. It's the running of the track which keeps the subs reasonable, so come and see us, talk, be friendly, drink tea, and do some MODEL ENGINEERING.

Dave, Chairman

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CLUB DIARY

Our diary is a bit sparse at this moment as the Anniversary celebrations have rather crept up on us and swept by. Our Chairman has told us that we will make this up later in the year.

2012

- Regularly Sunday running from 12 to 4 until the clocks go back. Second Wednesday each month the track is open for fun running. Wednesday morning working times, come and join us. The possibility of Wednesday holiday running for the kids out of school for the holidays.
- July 11 Community Play link running all Day.
- July 28 SSME Electric Day. Ralph Stockton is the driving force in this event and I am sure he will help you with any queries.
- Later 2012 The 100th anniversary of the club itself occurs this year and we think the Chairman plans another celebration later in the year.

Annual General Meeting

Our AGM was held 14 March 2012. The minutes of the AGM will included in a future newsletter when they are received but here is a synopsis of the AGM. The Vice-Chairman opened the meeting on behalf of the Chairman who could not attend and was otherwise indisposed and read a letter from the Chairman. The next item of real business was the Treasurer's report that covered both the 2010 accounts (that had been late for the corresponding AGM and had not been accepted by the membership) and the 2011 accounts. Both were accepted, those 2010 as a formality and those for 2011 subject to audit, a subject that was to be voted on later.

An election of Officers produced David Giles as Chairman, John Lockyer for Vice Chair, Mollie Giles for Secretary and David Goyder for Treasurer. Well done to those!

Two motions were put to the meeting, one to restore an internal audit to the club's affairs (accepted) and one to limit the period of service the four officers would have in office (not accepted).

David Giles concluded the meeting with the comment that it was one of the most lively for years. (hope I got that right!)

Committee Activity

The Committee has not met since the AGM.

Treasurer's Department

Subscriptions means Members

Now that the end of March renewal deadline has passed and for those of you who like numbers the membership stands as follows,

Full members	87
Life Members	11
Junior Members	6

The total is therefore 104 down three from 2011 and down some 17 from 2010.

The Treasurer can report also that John Gardner has accepted the appointment as Club Internal Auditor and is currently assessing the Clubs processes. Perhaps we can persuade him to report to the membership later!

Track Jobs List

Time to refresh this list as it seems an awful lot has been done!

. . . And your email addresses

The newsletter costs the society a little over £1 per copy. Staples would charge £4.00 a copy. A more effective way to send it is by email so could I ask everyone with an email to ping me at dgoyder@fidelio.ltd.uk so I can gather your email address and please let me know if we can send the newsletter to you this way.

Club Clothing

There are some quite nice items of club clothing that you might like to consider. I have a polo shirt and I am impressed by how comfortable it is!

Fleece - £ 20.00

Polo Shirt £16.50



Cap—£11.50



(Like the model!!)



Sewn on Badge £4.50

To purchase any of these, contact our Clothing Manager Mollie Giles whose details are in the Directory!

A Wanted

Graham Walker wants a vertical slide for a Myford super 7 lathe. Imperial. 023 8078 1720.

Out and About

Unfortunately we have missed the April 14 2012 50th anniversary date of the opening of the raised track but we are indebted to Merlin Biddlecombe who reflects upon . . .

50 Years On by Merlin

It crossed my mind that quite a few Southampton members might not know any history as to how the raised track came about and how it was constructed. It also crossed my mind that Ron Bray, Eric Moxam and myself are perhaps the only three members still around involved in building the same.

It started as an idea in about 1958 when Dr. Urmston was Chairman, when he Bill Perret and Edd Salt approached the Council with a track in mind. The Council were not quite sure what was envisaged so some of the planning people were taken to the Beechhurst track to see what might be. They were quite impressed as in those days the Beechhurst track was quite impressive. Plans were duly submitted and from then on steady progress was made.

First the track was marked out and various pegs inserted and levels were taken. The next or first real job was to make four moulds for the concrete uprights, two of one size and two slightly smaller. Bill Perret constructed these and were installed into the back yard of the Crown and Sceptre pub in Bevois Valley, which was run by the late Jim Rawling's parents. Jim used to assemble and grease the moulds and I used to go to the Crown in the evenings to mix the cement and fill the moulds. After two days Jim took the moulds apart cleaned and reassembled them ready for me to fill again. The total made were a hundred and fifty. The aim was for twelve a week which did not always happen.

Bill Perret soon acquired the name of Foremen Bill. Very soon quite a few uprights had been installed and some longitudinal beams were bolted to the uprights. All the longitudinals were hand planed level by Edd Salt ending up with a superb level job. Next came the sleepers and as far as I can remember Bill cut all of them, several of them had to be cut tapered to create the banking required on the curves. Also transition curves were built in making for quite a smooth ride.

Next was the rail and 3/8" x 3/8" steel was purchased for this. The feet were cut and given to various members to draw the fixing holes and the welding of the feet to the rail was carried out at Winkler Engineering at Priory Road, St. Denys, where Edd Salt used to work.

From then on it was steaming bays, traverser and the buildings, which were lovely Cedar Wood until eventually they had to be clad in steel due to vandals. All the concrete around the steaming bays and Station was mixed by hand. Unfortunately I don't remember most of the members who beavered away to construct what was a very nice track and I hope that members will still keep this facility as it should be kept. This, as I said at the start, is only a brief outline of its construction which I hope is not too boring. It was officially opened on 14 April 1962 by the then Mayor Alderman Haskell.

Then of course much later came the 7 ¼" ground level track but that is another story. This was surveyed and over seen by Eric Moxam. A little late but I should just mention that Eric dug the holes for the uprights to sit in this of course was for the raised track.

Merlin.

This is a remarkable story and links us back to an era before the track was built

One of Our Past Chairmen by Derek Lampart

As a member who doesn't get to club events these days I will start by introducing myself. I am Sotonian born and bred but I took a job in Somerset in 1957 and am now well settled in South Somerset. I joined the club in 1991 and our children were often brought to the Bitterne Park track when we visited their Grandmother back in the '60s and '70s. I think those were the days of Bill Perret and his Speedy. I used to be able to come to evening meetings and tried not to miss an AGM but in recent years the 70 mile journey and getting home at midnight have rather discouraged me. I joined the Westland and Yeovil District club in about 1996 so I do get involved in club life.

Before getting into my story I must emphasize that I am writing about events that happened some 64 years ago so one or two of my memories may be incorrect.

My story starts in 1945 when I was at school in Southampton (Central School in Argyle Road) and when for a number of reasons, such as an education interrupted by the war and a lack of ability, I wasn't put to the grammar school entrance exam. However all was not lost because someone suggested I could sit the exam for the Southampton Junior Technical School. Well I did and success in this was a significant turning point in my life. So, at just short of 14 years old in January 1946, I was off to the JTS for a secondary education.

The JTS operated by running a two year course with three terms in each year, taking about 25 boys in each entry at the start of every term. It was not technical in a broad sense but was rather aimed at the building trade. Obviously, with the war just over Southampton needed a lot of rebuilding and a lot of builders. JTS was located in what had been Eastern District School in Albert Road. It was and is a three storey building with an additional playground on a flat roof.

In the first year, the week included a half a day each in carpentry, in plumbing, in brickwork and in painting and decorating. The remaining three days were spent on the normal subjects. In the second year you had to chose a particular trade. This all suited me very well. I enjoyed the practical subjects much more than the usual school subjects.

My interest was in carpentry and joinery so I did that in the last year. However I had no particular enthusiasm for the building business but for a number of reasons I was keen on becoming a cabinetmaker. This presented a serious problem because it seemed that short of going to London to live there was little chance of getting the apprenticeship I needed. Now fortunately for me, the school was extremely good over this because if you didn't have a job immediately you were able to carry on attending and you were found something to do. In fact from my entry there were two of us not able to find a suitable job. Strangely, I was quite happy with this especially when I was told to spend two days a week, I think it was, in the carpentry shop while for the remainder of the week I was told to report to Mr. Butler the science laboratory technician. I say 'Mr. Butler' because, as most of you will recall, that sort of formality was what was expected in those days.

Science had been one of my better subjects and so I was also quite pleased with this. As far as I knew Mr. Butler's job was mainly to set out the apparatus in the laboratory before each class and make sure that it was all working properly. I think I vaguely knew that he had a little place of his own but what he used it for, apart from storage, I didn't know. Well, in due course one morning, I went along there and found that it was as much a workshop as a store and, indeed, in a corner by the door was a lathe. I am not sure but I think that by this time, early 1948, I had been to a Model Engineer exhibition or two, that was when they took place in one of the halls of the Royal Horticultural Society, so I had some idea of what a lathe was used for. After settling into the work I guess we got to chat about this and that and I must, for some reason, have mentioned that I had been to one of the Model Engineer Exhibitions in London. Mr Butler responded by saying that he did a bit of model engineering and indeed he was Chairman of the Southampton Society. I don't remember that he said much more but I felt he was quite proud of this.

He also took a great deal of pleasure in having the lathe and being able to make use of it. Sadly I cannot remember what it was. I'm sure it wasn't a Myford, it was possibly slightly larger, old-ish and with its own motor. One of the main jobs he used it for was to make test pieces for the tensile test machine the school had. As I remember these were about 10 inches long by $\frac{3}{4}$ inch in diameter with a central section finished to about $\frac{1}{2}$ inch diameter. He was turning these fairly slowly but he had rigged up a coolant drip feed and, somehow, a device to disconnect the carriage sliding feed at the required place. Thus he would set up a light cut, turn on the coolant and then get on and do other things, even to the extent of leaving going off to some other part of the building. This was, of course, straightforward to him but all new to me.

What Mr. Butler liked was to return to his room and find, say, a couple of boys who had been sent by their teacher to get something, waiting by the doorway and fascinated by the lathe working by itself. Their fascination increased when, at the set point the feed cut-out operated and cutting finished. Then, if as was likely, the boys were unaware of his presence, he was able to reach round the side of the doorway and pull the mains switch off thus stopping the motor. I sure this only happened occasionally but it gave Mr. Butler a great deal of amusement.

I enjoyed my time filling in at JTS and I don't remember being too concerned about not having a job although I guess my parents had a different view of things. However things did move on and one day a message came from the Headmaster, Mr. West, that there were two jobs on offer at University College. So on a cold and snowy day in February or March 1948 I and the other lad went off to Highfield and, wonderfully, we were both taken on and that was the end of my time of being part woodworker and part laboratory technician.

The story doesn't end there because some years later I met Mr. Butler again. Now this is where my memory really is rather uncertain and I am not at all sure of the year. I'm sure that the meeting took place after I got married and so it was in 1959 or a few years later. The occasion I am certain of, it was during some sort of hobbies exhibition held in Southampton Guildhall at which the club had a stand.

As it happened Mr. Butler was there and despite the intervening ten or more years he remembered me and we had a long chat. He mainly talked about the fact that he had retired and how this came about, In 1952 the town had opened a technical college, for students of 16 and above, using what had been St. Mary's Workhouse in St. Mary's Road, and some time after I left the JTS, Mr. Butler had been asked to help look after the science laboratory there. Presumably this meant that as it developed he was

responsible for other technicians and indeed in time he also took on similar responsibility for some other part of the college located, I believe, in East Park Terrace. This all says much for his abilities in the job but from my brief time with him I don't find this in any way surprising. Certainly the college authorities must have been satisfied with his work, and he was happy doing the job, because when he reached 65 he did not ask to retire but carried on working. This was fine until eventually someone, a lady I think he said, on the Borough Education Committee noticed they were employing a 70 year old technician and raised this in committee. The outcome was that Mr. Butler was obliged to retire. I believe he was rather put out about this!

I remember asking him if he had a lathe of own and he said that he was now living with his daughter and her family and although he had a lathe and things there was no where to set it up and use it, rather sad.

At the same exhibition in the Guildhall I can recall speaking to another member of the club who was showing two or three freelance locos of, I think 3½ inch or 2½ inch gauge. He was, or had been, a pattern maker, and from this had got into making his own castings. He spent a lot of time telling me the best places to get suitable sand for the foundry. As I recall one was somewhere in the New Forest and the other was a part of the beach at Bournemouth. Since it was illegal to take sand from either place removal had to be done with great caution!!

After I joined the club I did think to ask if anyone could remember a Mr. Butler and Dave Batt said that he could just about and that he believed that his name was Frank Butler.

Also, with benefit of many years of reading the Model Engineer and of course Brian Hollingsworth's book 'LBSC' his life and locomotives. (page 48), I wonder if Mr. Butler was one of those who had visited the track at Bursledon belonging to a Noel Van Raalte.

Now as I write this I rather regret that I never asked Mr. Butler how he got into engineering or who he had worked for previous to JTS but I would guess that he had had some good training and experience somewhere in his past. Although I only knew Mr. Butler for a short time, now with the benefit of my own years of experience, I believe that in his own undemonstrative way he was a very competent engineer and would have been a good person to be the club's chairman.

WATERWHEELS by Peter Cleare

As briefly described in a previous newsletter our holiday in the Isle of Man included a visit to the Laxey Wheel or Lady Isabella. This led to my taking an interest in the subject and although I cannot claim to have great knowledge I hope these jottings may be of some interest to readers. It also led me to think that a waterwheel might make an unusual project for a model. I do not recall ever seeing one either at an exhibition or described in a magazine. This may be thought of as more suited to a scenic railway modelling approach but could also form an interesting model engineering type of project to build a working waterwheel with its own water supply and arranged to drive anything that comes to mind.



There are many waterwheels up and down the country associated with historic mills and industrial sites. Many of them have been resurrected as tourism features. They had various applications worldwide and together with wind were the most available source of power before the advent of steam and then electric power.

Incidentally an interesting comparison between water power and steam can be seen on the Kennet and Avon canal. At Claverton water is raised from river to canal level by pumps driven by a wooden breastshot wheel. Along the same canal at Crofton a similar duty is performed by a beam engine driving the pumps. Both are restored and can be seen working on occasions.

The main types of waterwheel are overshot with water acting beyond the top, breastshot where the water acts just before the top and undershot with the water acting at the bottom. For overshot or breastshot wheels the water supply is from an elevated source such as a lake or reservoir in a nearby hill area, fed to the wheel through a leat or a pipe. Undershot wheels are normally supplied from a nearby watercourse or mill dam. In both cases a means of control such as a sluice is provided.

In Hampshire there are only undershot type as far as I am aware. We have the Eling tide mill which utilises flow in both directions, Alderholt and

several others.

Apart from Laxey I can only mention three overshot that I have come across although there are many others listed all around the country. One was a corn mill at Darley Mill in Nidderdale, Yorkshire. It was derelict when I saw it but has recently been restored to working order.

At Furnace near Aberystwyth there is a wheel which originally operated bellows supplying air to a blast furnace. This was later converted to a sawmill and is preserved as such today.



At Kilhope lead mine museum, Co Durham

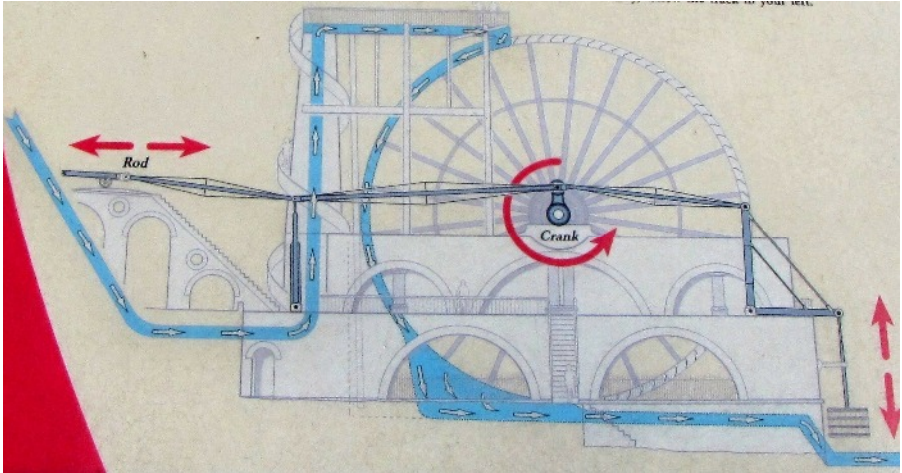
there is an overshot wheel used to power machinery for the separation of lead bearing ore. Restoration is in progress.



This suggestion is a freelance model of an overshot or breast acting wheel based loosely on the Lady Isabella. This would comprise the wheel itself the support structure, the water supply and downstream system. It could be arranged to drive a pump or other machinery.

Water would be supplied from a head tank feeding the wheel by a trough (leat?) and collected in a lower trough representing the wheel pit from which it would be returned to the head tank. The Lady Isabella is supplied by a pipe from a hillside reservoir leading to the base of a tower through which it rises to reach the short leat at the top. Its wheel hub drives a

crank to operate a long horizontal rod which transferred motion to mine pumps and counterbalanced by a large weight. The photo is of a nearby panel with a diagram showing how it works. More commonly gearing was provided to drive line shafting or grinding equipment. The rim comprises two hoops with buckets suspended between them and arranged so that the weight of water flowing into them causes rotation of the wheel. For a model some experimentation would be needed to establish bucket dimensions flow characteristics and means of control.



The design starting point would be the builder's choice of wheel diameter and width depending on space and materials available, overall size to be transported and so on. Full size dimensions and proportions vary widely and the choice would depend on the model builder's idea of what is suitable. A scrap bicycle wheel rim might be suitable sawn all around to form two hoops. Or you could decide to scale a full size prototype.

A detailed design study is beyond the scope and available space of the present article and may not be found to be practicable, (you may think of other ways of putting that. see above re lack of expert knowledge), but it is an idea!

The Back Page

This is where I get to share some of my favourite engines with you and I have always thought the Horwich Crab to be a remarkable engine especially as it was a L & Y Hughes design that was able to stave off the Midland's desire to give it as smaller boiler and other Midland fittings. A Crab in 5" was shown at Ascot a couple of years ago and the workmanship was beautiful. I would love to learn how to do work to this quality. Just look at these.

