

Newsletter of The Leeds Society of Model and Experimental Engineers

Volume 26 Issue 2 April 2024



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Front Cover

Steve Russell's Gauge 1 BR Brake Van

From the Chair

Jack Salter

There has been a lot going on in Leeds SMEE since my last From the Chair.

We have held our first two, weekday Breakfast Outings, and these attracted a good turnout of members. Nigel's report on the visit to Goole Docks is available on the club website and there is a shorter report on our visit to Doncaster Museum in this newsletter.

What impressed me with both visits was the expertise on the most obscure subject matter which our guides, quietly and confidently shared with their fellow members — we are a good bunch! I would like to encourage fellow members to join in future outings, suggest a venue or even organise a visit.

We are trying out having a longer programme of evening meetings this year, running into the summer. If this proves popular it is something we can repeat next year. I note that I am down as the speaker on the final mid June Wednesday when folk will be away on their holidays.

Another new feature this year is a Spring Jumble Sale on the 17th April, these are always popular, I suggest that you start sorting out your saleable junk (treasure) straight away.

One of our enthusiastic members identified and spoke to the owners of two possible future track sites, these have been visited and discussions held, I am unable to report further until these have been evaluated at next Tuesday's Committee Meeting.

Some might have read reports of Microsoft taking over half of the former Eggborough Power Station site. Mark is finding out if this redesign of the site layout might leave a corner for us. Please can I remind members to continue to look out for potentially suitable sites we are looking out for land or buildings, ideally designated for community, recreational or educational use, around 2 acres.

Before I sign off I must encourage members to attend portable track events, John Hunt has the list of dates and venues for 2024 with him at all of our meetings.

Quality, not Quantity, at Trophy Night

There were more trophies on offer at Leeds SMEE Trophy Night on 6 th March than there were entries (writes our Trophy Correspondent).

Before the judging of the entries, Acting Chairman Nigel produced some Work on the Table, a fixture for drilling and reaming the connecting- and coupling-rods for his *Invicta* locomotive. He was adamant that this did not constitute an entry for an award as an expertly-wielded large frying pan awaited him on his return home if he arrived with another trophy to dust this year. Acting Chairman Nigel reiterated the award eligibilities, which are:

Wanless Trophy: Formerly for the best junior effort, then "First attempt" and latterly for any Member's current project.

Geoff Haythornthwaite "One-Off" Trophy: For an entry not made to any published design.

President's Cup: Awarded for the best Non-Steam entry by former President Ted Tait.

There were just two entries this year; Steve Russell entered a Gauge 1 BR Brake Van, (he's not very tall) and Charles Appleyard a spot welder to his own design.

Steve explained that he had built the brake van to complete a train; he had a photograph of such a brake van at the end of a train of bogie vehicles, hauled by a Class 20 Diesel. Having completed the b rake van



he was now able to recreate the photograph in miniature. The brake van had been built partly from a kit of laser-cut parts, but it had been suitably embellished and now had working lights front and rear. Charles then gave a brief resume of how he had reworked a microwave transformer by rewiring the secondary coil. He had been able to use some welding cable for this purpose, as it had the very necessary flexibility to be coaxed into tight places without undue difficulty. He had tested it out and it was limited to spot-welding 0.8mm thick steel. He showed some test pieces in various thicknesses that he had successfully welded. It delivered a lot of amps -600, I believe, but at only 2V or so.

It had been necessary to make new and longer arms for the electrodes, and he stressed how he had ensured that the spring in between the arms was well-insulated, as otherwise it rather short-circuited the electrodes and became merely a device for softening springs. He had made the case from sheet aluminium, which he had welded up with those Aluweld rods which have been demonstrated at Model Engineering exhibitions for some years. It had been very easy to do and he was congratulated on the professional appearance of the box.



Nigel was able to award the One-Off trophy to Charles for the spot welder, as the Brake Van was deemed to be ineligible.

After a show of hands, the Wanless Trophy was awarded to Charles and the President's Cup to previous winner Steve.

Nigel then pointed out to Charles that as the Wanless Trophy was now full of names, it was a condition of the award that Charles devise a reworking of the trophy for his name to be engraved on it, as well as for names of winners in future years.

Visit to Doncaster Museum February 2024 Jack Salter

The suggestion from Martyn Chapman at a Committee Meeting that, perhaps occasionally, instead of members meeting for breakfast at the Golf Club on a Monday that we could combine breakfast with a visit to a place of interest was enthusiastically accepted.

Martyn organised the first visit to the railway collection at the recently rebuilt Doncaster Museum, considering this to be a suitable venue for a winter visit.

Colin Bowes visited the museum and pre arranged breakfast, so ten members were able to sit together on a long table.



from the NRM and incorporates the extensive loco name plate collection from the former Doncaster Gramm^ar school.

After breakfast members viewed the museum, followed by a talk by a museum volunteer on Industrial locos, illustrated by name plates from the collection.

Members thoroughly enjoyed the visit and appreciated the efforts of those involved in the planning (including distributing details to members!).

Future trips are being organised.

Any suggestions for venues for Breakfast Outings are most welcome, especially if the suggester is willing to be involved in the organisation!



The new museum includes the facility to display two locos on loan

Pushbike - A Winter Project

Rodger Thompson

Since lockdown used up a lot of projects waiting in the wings so to speak, I needed something that would pass a bit of time this winter, but would not take up too much space. The chance of an old pushbike fitted the bill and would be fun to add to our displays in the summer.

This is not a restoration by any means but an attempt to create the look of a 1940's military bike, for a reasonable price and have some fun doing it. I picked the bike up over Christmas and brought it home in the back of the car (the not taking up too much space already showing dividends)

First job wash it down and see what I had, for this I used paraffin as it cleans, de-greases and evaporates off in a reasonable time. When this was finished I found the paint to be in a nice dull looked after but work weary condition. This is how I wanted it to look for my project, it's difficult to realise that a lot of our equipment was new in the Forties not 80 years old, so getting a finish that's right for what you want is important. Anyway I was happy and it saved a complete strip down and repaint so happy days.



Next I ordered a few goodies off the internet, grips and a seat being the first for very reasonable prices. The original grips didn't match but 2 short reproduction ones looked the part.







The plan was to repair the old saddle but on finding a broken spring and the condition of the seat I decided to make one out of the two I now had. I only bought the new seat on spec as it was for sale at £12 and worth a gamble. This paid off as I used one new spring and the cover on the old frame and got to work with the leather dye, polish and oil (watching the repair shop for inspiration) to give a worn but looked after effect.

The next job was replace the small rear rack with a reproduction one, well made for the money but needed finishing off with a file on the slots, painting and ageing to match the Bike frame. Three screws and it was on and looked enormous at first but I've got used to it.



A Swiss front head lamp and built in dynamo was won on E-Bay it's of the period gives the bike a nice quirky look mounted on the forks. It also matches the rear light mounting bought together with a tool kit holder.

A French company came up with a Period reproduction pump with wooden handle and the correct new stock sprung clamps. These have leather jaws to protect the paint and allow the pump to be mounted on the cross bar. I was lucky with these as they were the last they had.

Getting a bell was fun all the original ones I could find looked full of rust and I'd nearly abandoned the idea, when I found a large vintage one

which suitably aged will do the job. A lot of the so called original ones with Swastika's are Hindu not 1940's. I should have made a killing when I worked in India.

So what have I learned from this project?

Well if you get the donor bike for the right price and in good condition you can complete the project on a reasonable budget. If you're prepared to use reproduction or period (40's/50's) pieces the build is quite cheap. A warning here Sit up and beg steel frame bikes are making a comeback so old fittings are disappearing off the shelves of shops. There isn't anything in my bike that is held on by more than 3 nuts/bolts so when you find your Holy Grail original bit it's an easy job to change it.

Well it kept me out of mischief for a few weeks. Now all I've got to do is remember how to ride one!



Subs 2024

I have still not received subscriptions for 2024 from a small number of Members. Please send your Hon Treasurer some dosh to keep him happy -

either in his hot, oil-stained hand or via cheque payable to Leeds SMEE or Bank Transfer to

City of Leeds SMEE Sort Code 05-07-62 A/C 25136516.

Please let him know if you do this so he can send you a membership card - a cheerful purple colour this year - without delay. Nigel lives at 7 Swale Crescent, Garforth, Leeds LS25 2JA if you've forgotten. Thank you!

Nigel

In the Factory with Grog Willis

This week's factory visit is to Proskitt's Carrot Factory. Our first port of call is to the Baby Carrot Department. I was surprised to find out that Baby Carrots are not harvested all year round. Our genial host Mr Proskitt explained that at certain times of the year, especially towards the end of March, they have to make them from much larger ones to satisfy the demand.

Here in the first photograph you can see a finished Baby Carrot emerging from its machining operation.



There is quite a bit of technology involved in the cutting tools used. Initial trials used a spade bit, but it was rather inclined to dig in:



They also did some ultimately unsuccessful trials of a cutting tool with more rake. "It had been designed by a chap called Brock Lee, but he was a bit green and didn't really fit in with our ethos here," said Mr Proskitt.



Initially, after machining the Baby Carrots to the correct diameter and length, they were cut off from the stock using a pair of stout scissors, formerly the property of Mr Proskitt's Dad. These scissors were of course referred to as Pa's Snips.

Latterly a superior method of parting off has been achieved by the use of Scandinavian toolmaker Sandvik's inserted carbide parting tool system. "It works well because the carrot material is a bit Swede-ish", explained Mr Proskitt.

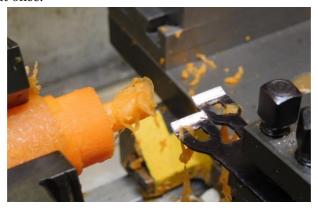
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"What happens to all the carrot turnings?" I asked him.

"Nothing gets wasted," explained Mr Proskitt. We collect it all up and send it off overseas to be melted down and made into more carrots. It's collected by ship from the local dock, Carrots Wharf."

"We're now developing methods for different materials," Mr Proskitt continued. "We tried out what we call our hoe-hoe tool to machine two diameters at once."



"It didn't do well, though; although it would just about work on carrots, it just ended up mangling the wurzels. And it just refused to turn ips."

"We do several versions of the Baby Carrots; the quality control is such that we need to be very careful about the diameters of the Baby Carrots we supply to Waitrose, as their customers are more discerning:"

A batch of Baby Carrots is shown here (right) being prepared for Sainsbury's, who are quite happy to accept more variation in the Baby Carrot dimensions.





The photographs here show how the diameter is checked, the eccentricity is assured, and how the Waitrose Baby Carrots are machined to a precise taper.

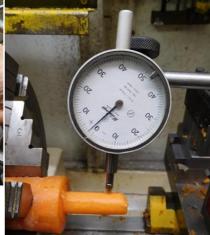
The amount of swarf and the bar end shows why Baby Carrots are so much more expensive to buy than the Standard versions. Another major operation is Sliced Carrots – and the Sandvik tool is shown here parting off slices.

I thanked Mr Proskitt for his most interesting tour of his factory.

Well that was exciting, wasn't it? Next week we visit a Silverskin Onion factory, and see how they CNC machine them from standard sized onions. So that Shallot for this week.

Produced by: George B Troot.

Directed by: R A Dish





Dates for Your Diary - April.-.July 2024

3rd April 5" Gauge Invicta, (part 2) 19:00 - 21:00 Darrington Golf

Club by Nigel Bennett

8th April (Monday) Drax Sports and Social Club

Breakfast 09:00

Pre Season Portable Track Checks 10:00

Boiler Testing (booking advisable) 10:00

17th April Spring Jumble Sale 19:00 - 21:00

Darrington Golf Club Bring Goodies and Cash

1st May The Theory of Structures 19:00 - 21:00

Darrington Golf Club

by Barry Thurgood

15th May Boilermaking 19:00 - 21:00

Darrington Golf Club

by Geoff Shackleton and Martyn Chapman

5th June Hydraulic Riveting 19:00 - 21:00

Darrington Golf Club

by Geoff Rogers

19th June An Engineers Visit to Taiwan 19:00 - 21:00

Darrington Golf Club

by Jack Salter

Society Officers and Committee

Chairman Jack Salter
Treasurer: Nigel Bennett*
Secretary Judith Bellamy

Committee: Martyn Chapman*

Mark Batchelor Geoff Rogers*

* Denotes Boiler Inspector plus

Steve Russell*

Portable Track Co-ordinator

John Hunt