



# West Wiltshire Society of Model Engineers Newsletter

Issue No. 4 March 2019



## Calendar

### March

- 2<sup>nd</sup> - Saturday Steam Up. 10am-4pm
- 6<sup>th</sup> - Lecture - Rack Railways. 7:30pm
- 16<sup>th</sup> - Saturday Steam Up. 10am-4pm
- 20<sup>th</sup> - Lecture - An Appreciation of Drummond Lathes. 7:30pm

### April

- 3<sup>rd</sup> - Annual General Meeting. 7:30pm
- 6<sup>th</sup> - Saturday Steam Up. 10am-4pm
- 14<sup>th</sup> - Open Day & Wessex Vintage Day. 10am-4:30pm
- 17<sup>th</sup> - Members Exhibition & Social Evening. 7:30pm
- 20<sup>th</sup> - Saturday Steam Up. 10am-4pm



## News

### We Need Your Help Please



Wessex Vintage Day – 14<sup>th</sup> April

Open Day – 5<sup>th</sup> May

Family Open Day – 2<sup>nd</sup> June

Open Day - 7<sup>th</sup> July

Wiltshire Model Steam Gala – 14<sup>th</sup> September

Steam & Scream – 27<sup>th</sup> October

Santa Special – 7<sup>th</sup> December

Volunteers are needed to put on these events and to attend events with the 5” portable railway. To help with events on our site put names on the appropriate sheet in the club house or to help at an away event contact any committee member.

### Membership Renewal

Your 2019/2020 membership renewal is payable at the AGM on 3<sup>rd</sup> April. Membership is likely to be in the region of £40 but this will be decided at the AGM. Anyone who cannot attend the AGM please send their renewal to Barry Statham.

### Family Day Request

A request for any old lego, duplo, meccano or any other types of construction toys. We would like to have a stand at the Family Day on 2<sup>nd</sup> June where kids could just sit and play at making things. These toys have value, as even at car boots and online they are not easy to get hold of. If anyone has anything they think may be relevant please contact Michelle Richardson.

### September Show Update

We have a new Facebook page set up for our September show. It is called ‘Wiltshire Model

Steam Gala’. It holds all of our open day dates as well as updates about traders and exhibitors who have already agreed to come. Could all members who use Facebook please like our page and then help us to share these events as they get closer. We are really finding that spreading the word on social media is helping us to gain a regular following for our events.

Does anyone take part in any craft activities and would like to have a stand at our September show? We would like to offer something for partners and children to buy as well as the train enthusiasts! Cards, gifts, toys, jewellery.... please contact Michelle Richardson.

### Our Chosen Charity for 2019



Originally chosen by the show sub-committee and now adopted by the main club committee, we are pleased to announce our chosen charity for 2019 – Hope for Tomorrow – this is what they do:

Hope for Tomorrow is a dedicated charity, bringing cancer care closer to patients’ homes via our Mobile Cancer Care Units (MCCUs). As a cancer charity, we understand that time is a crucial factor for patients, and in 2007 we launched the world’s first ever MCCU to bring vital cancer care closer to patients, enabling them to spend more time with family, friends and loved ones.

We develop, build, provide and maintain MCCUs to support patients who are going through Chemotherapy by alleviating the stresses and strains of travelling for appointments, along with reducing hospital waiting times.

We work in a unique partnership with the NHS helping to ease capacity challenges at hospital trusts. We now have 10 MCCUs operational in

Gloucestershire, Somerset, South Wiltshire, Hampshire, East Kent, Lincolnshire, Cornwall, West Suffolk, East Essex and London/ Surrey, with two reserve MCCUs in place to ensure continuity of service during the maintenance schedule. We also provide a Nurses Support Vehicle with each MCCU, which allows the nursing team to travel to and from the daily treatment locations.

Since the launch of the first MCCU in 2007, the charity has saved patients a total of over 2.5 million miles and over 200,000 hours of travel and waiting time.

## *Roller Rebuild* (Part 1)

By Dan Jones

### ***'Rebuilding an Aveling and Porter Steam Roller No. 11296 of 1925'***

Some members will already know that I have recently undertaken a new project (on top of my existing and lengthy to-do list - something most of us are guilty of!), of rebuilding my 1925 Aveling and Porter steam roller.



Figure 1 - Aveling and Porter No.11296

I've been playing with steam models of various descriptions for a few years now, taking my grandad's (Peter Jones) 4" scale Fowler traction engine to various events throughout the South West. I have also been involved with full-size road steam, helping at a yard with running their collection of engines, getting involved with a few

bits of boiler work here and there and running a traction engine and saw bench display at local shows. However, the dream was always to own a full size steam engine of my own and in 2016 that dream became a sudden reality. On the 30<sup>th</sup> July, 2016, at 18 years of age, I purchased Aveling and Porter steam roller No. 11296, "De Rode Leeuw"; the engine is a C-type, meaning its single cylinder with piston valve and is rated at 8 tons (Unladen Weight) (Figure 1).

A brief history of No. 11296:

No. 11296 was built in 1925 by Aveling and Porter in Rochester, Kent, as part of an order by a Belgian road rolling contractor, Kon. Mij. Wegenbouw. of Utrecht- wegenbouw means road building in Dutch. The original specification sheet from Aveling and Porter says that No. 11296 was built to the plans of C-type, with water lifter, injector and a crank driven water pump. The roller spent its entire working life with this contracting firm, unfortunately I can't read Belgian/Dutch so its history while working in Belgium is a mystery to me, but I'm sure somebody out there knows- an investigation for a later date. I believe the roller was sold straight into preservation in the 1960s to a well-known early preservationist Ge Van de Pol in Holland. Between the 1960s and the 1970s, No. 11296 was rebuilt to a running and presentable condition, accumulating a paint job, a bit of brass work and a name- "De Rode Leeuw" ("The Red Lion" in Dutch). The roller also changed hands to Mr Jean Tilmans, who exhibited the engine at various shows in Belgium and Holland, including the fantastic Dordt In Stoom bi-annual event. As the owner got older, he preferred his more leisurely Stanley steam cars, resulting in No. 11296 being left to stand in the shed since the mid-2000s. In early 2015, David and Michele Goddard of Bromham, Wiltshire, were informed that the roller was up for sale and a deal was subsequently agreed and No. 11296 was brought back to England almost exactly 90 years after it left the country. It stood unsold for a year until I managed to conjure a deal and buy it.

So, how does a modern-day 18 year old afford a steam roller I hear you cry? Well, I bought one that was knackered of course...!

Where the real story begins....

Warning- slightly technical detail below



Figure 2 - Welded firebox stay, outside surface of hornplate

Before I bought the engine, it had a cold test carried out on its boiler. It was very obvious that a new firebox was needed as at some point during its working life or early preservation, the original screwed/riveted firebox stays had been removed, a new bar then put in the stay hole and welded around the end on the inside of the firebox and around the other end on the hornplate to hold it together (figure 2). Also at some point during its working life or early preservation, new plates had been welded into the firebox walls, where the plates had presumably been frosted and consequently bulged or had gotten thin over the years of having standing water left in the boiler (figure 3). The tube nest in the firebox had also been cut out and welded back in (figure 4), the reason for this will be told during a later instalment!



Figure 3 - Inside firebox showing plates "let-in" and welded stays

The front tubeplate would also need replacing as the wash-out plug that is installed by Aveling and Porter had been removed and the threaded hole had been welded up, presumably due to the material around the plug getting thin. It is generally considered today that any weld on a pressure vessel that is structural or has pressure loading should have appropriate paper work to validate the worthiness of the joint, paper work

which wasn't with the roller (as it never would have been carried out "back in the day") and therefore all the welded bits would have to go.

So I knew what I was letting myself in for to an extent, and with the sort of work that needed to be done, I agreed a price with David and Michele that was within my price range (just about!) and the engine was mine. I'm very grateful to David and Michele as they allowed me to keep the roller where it was at their yard in Bromham (a 10 minute drive for me), use their extensive workshop facilities to carry out the work that was going to be required and show me how and what to do and why. All of these things help to keep the price down and as a lot of you will understand, boiler work on any scale is not cheap or easy and my budget can only stretch so far! No. 11296 was left at the back of the shed in the warm and dry until I was in a position where I was ready to do something with the engine. I decided that in December I would pull the engine out, fit the mud lids and man hole cover, put in the fire grate and put the ash pan on (a heavy and dirty job I can assure you!), and fill the boiler ready for a final play before starting work on the boiler. So on the 17<sup>th</sup> of December 2016, the final fire was lit and the family arrived for a play in the yard on my new steam roller- a good day was had by all, always better when there's a full size chime whistle in front of you to mess about with!



Figure 4 - Firebox tube nest cut out and welded back in, details to follow in Part 2

After all the fun, I went back up to the yard on Christmas Eve, shunted the roller to the corner of the yard and knocked in the mud lids, let the water out and sheeted it up for the duration of the winter. On the weekend of the 18<sup>th</sup> and 19<sup>th</sup> of February 2017, the roller was pulled up to the work shed and the strip down was commenced....

....Details of the strip down to follow in ***Part 2!***