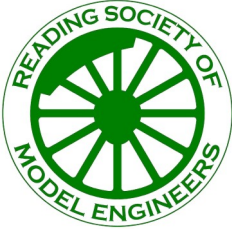


Reading Society of Model
Engineers
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Charity Number 1163244

The Prospectus

January 2021



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Free to members



A long wintery journey for a Carlisle based Class 5 45317 passing Wembley Central on the up slow line on 2nd February 1963 during the prolonged freeze up of that year.

Photo John Billard

**VIEW FROM THE CHAIR
IT HAD TO HAPPEN
BUILDING A CLAUD
LONG EVENINGS
ANALYTICS**

A VIEW FROM THE CHAIR

John Billard

The view ahead is sadly obscured at the moment and smoke deflectors will be of little help to us. Essential care and maintenance is being carried out at the club site for which thanks to those hardy souls from all of us are due. This means that we will be in a good position to resume our full activities as soon as we are able to. The guess is as to when that might be.

In December, for members who were able to, there was a Zoom presentation by Peter Jennings on the Gloucester and Warwickshire Steam Railway and a detailed worms eye view of their Merchant Navy pacific No 35006. Thank you very much Peter and we would be pleased should any other member like to take up this idea for us in the near future let me know.

In the meantime I can do nothing but wish all at RSME a happy and better New Year. For any member or their family who is unwell I convey from RSME kind thoughts for a full and speedy recovery.

AN EXTENSION HAD TO HAPPEN! by David and Lily Scott I have too many lathes. In a strange way it involves a washing machine.

Yes, one day ours stopped, mid wash of course and a new one to us via computer was collected from someone in Wantage. This was just after the lathes had been collected and their three friends the filing machine the power hacksaw and the very heavy fly press. How heavy was a washing machine? The longest part of the day was trying to find a cash machine that worked for £75... Two of our usual ones were down.



Yes. You guessed it, our garden needed digging out to accommodate a now planned extension. Much had been done previously but this would take us almost up to our flowering cherry tree which was staying. Hardly any roots on this side but most of the branches. We managed about a foot of filled skip every day ish tailing off as we got towards the top. Well trampled down and you

get your money's worth. Such a superb catch 22 with us having to use buckets to get through the garage. Then needing a cement mixer to help build a retaining wall!

As work progressed new steps would be cut closer to the house eventually becoming quite grand. We were deep into sub-soil and the hot season so the concrete breaker came out in the cool of most evenings. Thursday nights were good! The





steps are still very solid even when wet. I had some heavy duty blocks so these got stuck down and some lighter ones got used up in the middle. Carefully measured beams were placed and screwed next. Lily is good at diagonals.

On rest days more pondering was done and a

carefully measured garden door set formally french was ordered. The not so old set would be getting fitted in the new construction coming back as a long window this time. More space taken in the garage... will it ever be cleared? One long job was the scarf joint to extend the middle roof beam. This had twisted in the original so had to be followed for ease and strength. The glue had just dried and we had 4 days of rain! The outer frame was easy with help from Lily and a collection of clamps.



The ceiling was slid up quite quickly and screwed in place. I did two sections and insulated from steps and existing roof. Then two more and more insulation. This time fighting with cherry branches. Over this, this time Multifoil was stapled and taped in place just in time for more rain. The West or Newbury wall helped to dry the site out a bit. This having our first window where the fence dips in line with next

doors dug out bit. This wall will have two lathes against it the Raglans. My now third will be sold only because I don't need three of them.

On very rainy days we found four spaces within the garage and utility room in which to paint the outer boards with a very sticky black rubbery paint. Lovely stuff washed out of brushes with ease but let it dry on your hand and days later it was still there. Never in the history of construction has the computer weather radar been so closely observed.

A third skip joined us and also got filled with rubble while we were in the mood, all work on models stopping during.

To be continued

BUILDING A CLAUD Part 1

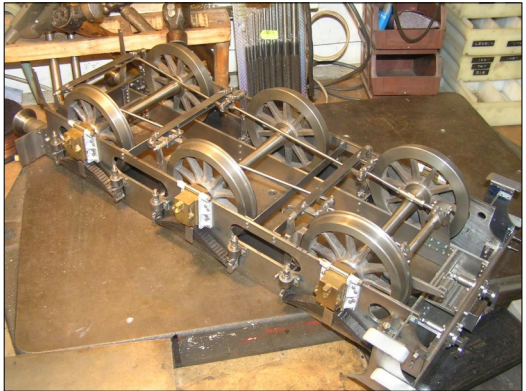
by John Billard

It was some time ago that I saw the ex LNER B12 4-6-0 running on “Steam on the Met”. I thought that this would be a good choice for my next 5-inch gauge project. However, on further reflection I decided that a similar Great Eastern Claud Hamilton 4-4-0 might be better being slightly smaller but also of a type that no longer exists an aspect that appeals to me.

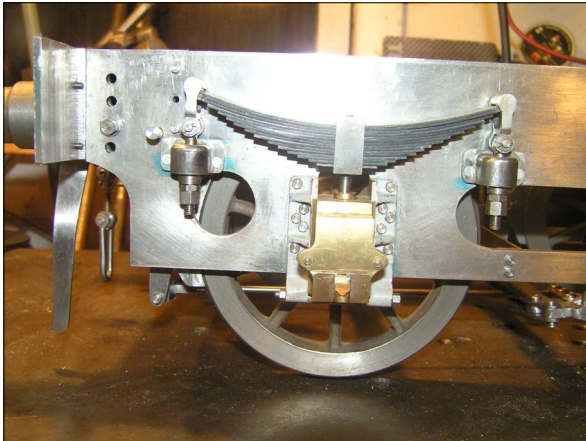
This was back in 2000. So, what so what has happened since? Today I have a virtually completed tender and engine frames erected with springs and driving and trailing axles. In the lengthy interim there had been familiar long distractions, other lengthy projects, and duties elsewhere in plenty causing silence in the workshop.

However, back to the Claud. Examination of the Martin Evans drawings in Model Engineer revealed some issues. It seemed that this was more a Maid of Kent in new clothes, a fine engine but not a D16/3. Major differences included smaller wheels, incorrect frame profile and valves over the cylinders with indirect drive Stephenson valve gear. The drawings were basic, and this led me elsewhere for information. The Great Eastern Society have been more than helpful in providing a wealth of detail including works drawings.

As a then newcomer to 5-inch gauge I thought that making the



tender would be a good introduction. I had to go no further than the North Norfolk Railway as the tender running with the B12 is close to that required. So, we joined the Midland and Great Northern Society and that gave me all the access required.



Just a word or two about the full-size engine. I have chosen to replicate No 62613 as it was, being the last in service, in October 1960. It is regrettable that it did not survive long enough to be preserved and



even then it was a narrow thing; the East Anglian Traction Engine Club is said to have been offered it for £1,500; they had the money but turned it down. To be exact, No. 62613 is a “Gresley Rebuild of a Super Claud” being designated D16/3. The class was popular with enginemmen and was extensively rebuilt over the years; not that there was much wrong with it when it was

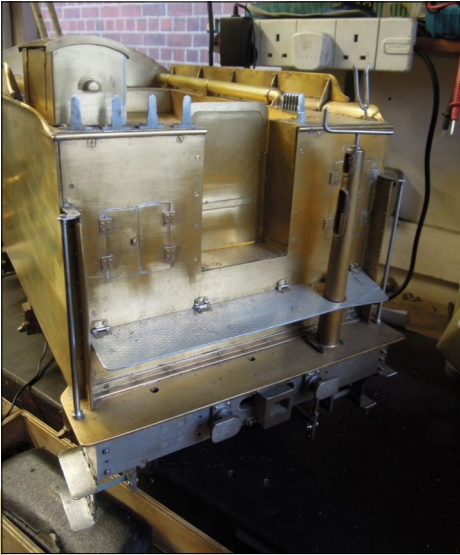
introduced in 1900. It was to keep up with increasing traffic requirements. This culminated in a nine inch piston valve version for several engines. It is of interest that these were not among the final survivors as the increased power eventually did for their frames. No 62613 had an LNER type Gresley round top superheated boiler but retained the GER design cab, decorative side framing and slide valves to the end. Attractive, I think. I hope that one day my version of 62613 will steam again.

Interesting problems that I have resolved include creating a correct frame profile, obtaining suitable castings for the driving wheels (7 ft in full size) while none were available from suppliers, redesigning the valve gear from indirect to direct drive and creating a boiler design to satisfy the RSME boiler inspectors. There was also a dilemma to be resolved after I completed the tender. I hope to explain how I did it though it will be a while before I am proved right on the track!



Starting with the tender I really had no choice but to revert to the drawings kindly supplied by the Great Eastern Society the most useful being those by Beyer Peacock who provided the 1923 batch of B12 4-6-0s for the LNER to the GE design. This was together with the full-size version running with No 61572 on the North Norfolk Railway. By a stroke of luck (I had plenty of those) I was pointed to an identical B12 tender frame and wheels located in Holt goods yard. All this gave me the most I wanted to continue with construction. I had thought that the B12 tender was the same as that which ran with the Clauds (but see later).

I will not go into detail at this stage. The wheels I had already had in stock, cast from my own pattern by Stuart's at Henley on Thames. This was from an abandoned project and fortunately they did the job. For the rest it was really a question of taking measurements from the drawings and full size, my



own on-site sketches and multiplying the inches by 0.0884. I believe that the outcome is a good representation and includes compensated brakes exactly as original. The GE Society also produces some particularly useful dimensioned drawings available on line of engine details such as buffers, lamp brackets, tool boxes etc. As I am reproducing the engine as it was in October 1960 the water scoops has been removed from the class by then thus saving a job.

The tender tank is from 16-gauge brass. I made a rod for my own back in following the full-size construction by incorporating internal space for footplate cupboards etc. This meant

that finally securing the tank top created some hidden watertight compartmentation. This was a real headache. It leaked like Niagara at first and subsequently. Our friend Nigel Penford, expert in most things, suggested a form of bathroom sealer and that was the cure.

At this stage, with what I thought was quite a good tender, and feeling quite pleased with the result, (nearly 20 years having elapsed, remember) I found quite a major error. More of that next time!

To be continued

SOMETHING TO WHILE AWAY THE LONG EVENINGS **by Terry Wood**

A few years ago I toyed with the idea of building an oscillating piston steam engine capable of pulling a person along on a trolley. I have seen some historical photos of such a design but these days they are only used in model steam traction engines such as Mamod so I decided to build a loco with a lot of bits of metal I had lying around just in case it didn't work. I had an old brass fire extinguisher body that I got from a car boot sale for not a lot of money because the brass label was missing from it so it wouldn't interest a collector, this I used as the boiler seeing as it was designed to be pressurised.

I also had an old pressure gauge made of brass which looks as if it came off an old foot pump although it does go



up to 100 psi so I had the makings of a water tube boiler. A problem with an oscillating piston engine is that it can run very fast but doesn't produce much in the way of torque this meant it would require some kind of gearing. I started looking around for something suitable when I realised I had the gearbox out of a big old photocopier that had given up the ghost at work the only problem was the gears are plastic and steam engines and plastic do not mix well.



So I fitted the crankshaft right at the back well away from any heat and right above the back wheels which had the final drive attached to it. The next problem was building the actual engine. I had to attach the crank to the gearbox via a flywheel so the piston would be hanging over the back so I decided to do just that and make it look a bit like Stephenson's Rocket, so the design got stranger and stranger.

To be continued.

ANALYTICS

**Where WP looks at some pictures taken by the editor
Wembley Central 1st June 1963**



The station opened as Sudbury in 1842, four years after the London and Birmingham Railway had opened. It was renamed Sudbury and Wembley on 1st November 1910 and Wembley Central on 5th July 1948. It was completely rebuilt as part of the electrification works in 1965 when a concrete raft and shops were built over the top. There is currently restricted

access to the platforms and passengers are only allowed down when a train is arriving. This is because of the semi-underground nature. Think Birmingham New Street but with trains passing at 100 mph +.

John's picture shows an English Electric Type 1 loco on a siding adjacent to the bay platform on a parcels train. By this date there were 3 EE Type 1s based at Camden (1B), 10 at Willesden (1A) and 22 at Devon's Road Bow

(1D). It is probably safe to assume that the 22 based at 1D would be mainly employed on Great Eastern and LTS work, London Docks, Cross London Freights etc. So the one in the picture is probably one of the Camden or Willesden ones.

The two white disc headcode indicates, and I quote, “ Parcels, fish, fruit, livestock, milk, or other perishable train composed entirely of vehicles conforming to coaching stock requirements; empty coaching stock (not specially authorised to carry class 1 code) ”. That seems to cover it! Note there is no yellow warning panel on the Type 1.

The parcels vehicles appear to be as follows :-

Four wheeled General Utility Vehicle (GUV). 923 of these were built between 1959 and 1961 at Earlestown, apart from the prototype 94100 built at Doncaster.

Hidden.

LMS full brake (B) Built at Wolverton between 1925 and 1928

As no 1. Note doors open!

Hidden

As 1 and 4. Note at least one door open!

The platforms
were gas lit in
1963.



Photos author,
62613 via in-
ternet

Please write for Prospectus. Photos welcomed.

**Comments by RSME members on any subject appearing in
Prospectus are welcomed by the editor.**

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The deadline for the February issue is 18 January. This is the final date.

Contributions may be submitted in hard or soft copy to the editor.

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