

# Rolling

**Autumn 2018**

**Issue 174**



**Road Roller  
Association  
Journal**



# Officers and Committee

President	Mr Stephen Milns. Invicta House, Crosemere, Cockshutt, Ellesmere, Shropshire, SY12 0JS shmilsn@invserv.co.uk
Chairman	Mr Michael Goakes. The White House, Grange Road, March, Cambridgeshire, PE15 0YH chairman@r-r-a.org.uk
Vice Chairman & Steam Archivist	Mr Derek Rayner. "Invicta" 9 Beagle Ridge Drive, , Acomb York, YO24 3JH vicechair@r-r-a.org.uk
General Secretary	Charlie Swaffield. 8 East Street, Crewkerne, Somerset, TA18 7AB charlieswaff@tiscali.co.uk
Membership Secretary	Ms Alison Green. 18 Ellen Walk, Aylesbury, Bucks, HP21 8YJ memsec@r-r-a.org.uk
Treasurer	Mr Paul Wood. 17 Cormack Lane, Fernwood, Newark on Trent, Nottinghamshire, NG24 3GF treasurer@r-r-a.org.uk
Archivist	Vacant
Sales Officer	Vacant
Publicity Officer	Mr Richard Newman. 8 Church Road, East Huntspill, Highbridge, Somerset, TA9 3PG publicity@r-r-a.org.uk
Webmaster	Vacant
'Rolling' Editor	Mr Brian Gooding, Steam Heritage Publishing Ltd, Unit 1, Alfold Business Centre, Loxwood Road, Alfold, Cranleigh, Surrey, GU6 8HP editor@r-r-a.org.uk
Committee Members	Mr Paul Green. "St Winifreds" Honor End Lane, Prestwood, Great Missenden, Buckinghamshire, HP16 9HQ committee2@r-r-a.org.uk  Mr P K Smith, 6 Lenborough Close, Buckingham, MK18 1SE pkpasmith@btinternet.com
Ex Officio Motor Roller Register	Mr Andrew Watson. Willow Corner, Main Street, Marston, Grantham, Lincolnshire, NG32 2HH

Editor: Brian Gooding, Steam Heritage Publishing Ltd, Unit 1, Alfold Business Centre, Loxwood Road, Alfold, Cranleigh, Surrey, GU6 8HP

Submissions for 'Rolling' can be sent by post to the address above or emailed to: editor@r-r-a.org.uk. Please ensure emailed images are good quality Jpegs or Tiffs.

The views expressed herein are not necessarily those of the Editor or of the Association.

PRESS DATE FOR THE NEXT ISSUE IS 31ST OCTOBER

Website: [www.r-r-a.org.uk](http://www.r-r-a.org.uk)

© RRA 2018

## Chairman's letter

What a excellent show the Great Dorset was this year. Martin Oliver and his team pulled out all the stops. I thought the Roller special of 2013 was good; this year it was ten times better. The variety of engines – rollers I had never seen before, engines that were making their first appearance at the show – there was too much to see. Every engine was given a peg which in itself was an enormous task, but it worked well.

The '500@50' marquee was full of engines, static unfortunately, but looking splendid. On the Thursday evening, all those who had taken an engine were invited to this marquee for a social and two beers, which was a very nice gesture and evening. Also in the Marquee was the history of the show and a video as a tribute to the late Michael Oliver, founder of the show, who has given millions of people this wonderful event. Martin had also several of his Father's vehicles, along with his Fowler roller on show, which with the video, was very poignant and moving.

Just outside the marquee, Paul Green had set up a road making demonstration which attracted a lot of interest – the road being made, Allison cooking breakfast for the team over the brazier, and Jean, in the family's living van, making jam on the stove. I enjoyed meeting Ollie again from Denmark who, along with six others, had brought over their club's tandem roller, portable and a big stone crusher. Their club has its own low-loader and the trip over was quite eventful, with the trailer blowing out three tyres and an airbag on a German autobahn. Ollie was stranded for some 15 hours, but he was so pleased to be part of the show.

Credit must be given to all the visiting engines from outside the UK. The contingent from Ireland were in two lines, and had some lovely engines on display, as indeed were all the visiting engines. We were spoilt for choice.

The NTET held their usual Forum on the Friday evening and after opening remarks from Chairman Anthony Coulls, David Smith, the Trust's Technical Advisor, informed us that there was a problem with the water authorities over the use of hydrants and that the scheme has had a minor set back, but he, along with others, were still actively pursuing the case.

One big concern for the trust is Membership. I think I have the figures right, but out of the total membership, only 375 are engine owners. This does not help when the Trust, who act on all our behalves, are campaigning for our hobby with the powers that be, especially with all that is going on in the world around environmental issues, use of coal, etc. NTET Membership is only £30; if you have a passion for steam, please join to give more weight to our cause and preserve our heritage.

---

**Front cover picture:** *Recently restored, the Jacka family's 1912 Wallis & Steevens 10 ton roller No.7247, Gromit, is seen enjoying a run around the estate roads during the 2018 Boconnoc rally in Cornwall. Brian Gooding*

We ourselves had a social in the marquee on the Saturday evening. This was advertised in the marquee and on our Facebook page, and I also invited the roller drivers I saw. It was a very pleasant evening with approx 30 people having a good chat, something I hope can grow next year. The Cider was great thanks to David.

The sales, thanks to Charlie who had organised all the stock, did very well, and along with the sales team I had organised, we had a very successful time. We had new members join us and several renewals, all in all a very good result.

I was very fortunate that both our own rollers were at the show, along with my son's Aveling & Porter Road Loco and took part in the Aveling line up at the top of Watford Gap; 43 Avelings in total, quite a sight. There was a down side as I had booked in the Pudsey Roller as a static display but was let down with transport at the last minute. However, we did have the information board up in the marquee and several people took membership forms and one gentleman remembers playing on it when in the park.

The Guinness World Record for engines in steam was well and truly smashed with a record 472 engines being verified. There were a further 50 on site but these could not be included as they were not in steam, which was a great shame.

Special thanks to Martin Oliver for inviting us to the show, and to him and his team for all their hard work in putting on the best ever GDSF.

**Michael**

## **From the Editor**

I would like to apologise to members for the late arrival of this edition of 'Rolling'. I felt it would be better to have a post-Great Dorset Chairman's report, rather than one written before the show. Thus, Michael and I agreed to hold this edition back a couple of weeks.

It has certainly been an interesting summer, with many 'special' anniversary rallies and some superb weather in much of the country, though it is strange how the weather went back to 'normal' as August came along...

I hope you have been able to get out and about and to enjoy your rollers if you own or crew one. I have been lucky to have had some time during the past few weeks to enjoy my own and hope to continue to do so for the rest of the season, as well as giving others the opportunity to 'have a go', too.

Sunday 7th October is the National Traction Engine Trust's 'Steam it Sunday'. I hope some of you will be able to get out and about that day and enjoy a run on the roads.

Finally, don't forget this is your magazine and I would be delighted to receive contributions to help fill its pages. Anything to do with road making and rollers is clearly acceptable, especially if you have good pictures.

**Brian Gooding**



# The obvious question is – when is a steam roller not a steam roller?

**Derek Rayner**

To someone in Santo Domingo, the capital and largest city in the Dominican Republic and the largest metropolitan area in the Caribbean, this American-built roller obviously looked like a train – so they dressed it up as such – in ‘Wild West’ fashion and plinthed it at the side of the Plaza de la Bandera.

And it's not even a steam roller. But can any member advise which firm made it, please?

Illustrations of a similar type of roller entering Jerusalem have been seen on Ebay in past times and these were captioned something like ‘A triumphal entry into Jerusalem’. From memory, they were dated 1919 and featured an American flag. The roller depicted was of the same type as seen here...



*The roller in Santo Domingo on 25th February 2014. Thomas Kautzor*

## It started with an old postcard...

Andy Seeley

A Barford & Perkins advertising postcard, offered for sale on a well known internet auction site, caught my attention.

The image [Figure 1] depicted an early tandem roller with un-sprung front forks, single rear cylinder and gearing within an enclosed gearbox. The transversely mounted engine was cooled by thermo-syphon from a rear mounted tank. A large rectangular two-compartment tank was slung between the cooling water feed and return pipes on the near side. The description above rules out models D2, D3 and D4 as these had a split rear roll for use on grass, so I assumed we were looking at an E type. Unusually, a single cylinder engine was fitted.

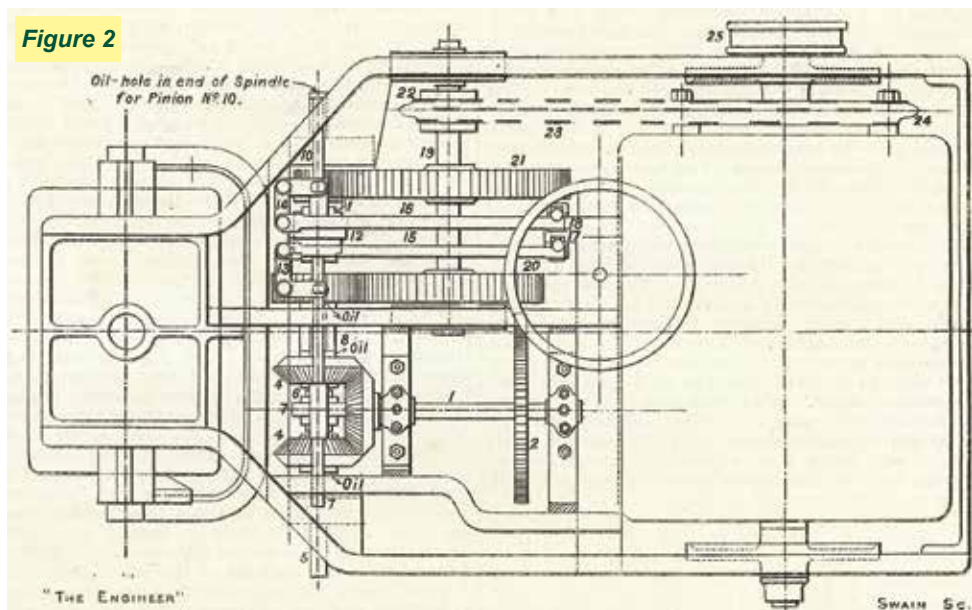
Thinking that it ought to be relatively easy to track this down, or at least narrow it down to a small number of machines, I took a trip to Lincoln Archives to view the Motor Roller Register, Volume 1.

Engines from various manufacturers were fitted to E types: the first five from Simms, a further 22 from Forman, nine had Thornycroft M/2 engines before production settled on the Albion 16hp motor. Crucially all were two cylinder.

I had initially discounted C type rollers, on account of their transmission configuration: in-line engine orientation with a spur gear first reduction to bevel gearing for forward and reverse, two speeds via the spur gear second reduction, with chain and sprocket final



**Figure 2**



Drawing H119 from *The Engineer*, 1905.

drive. All shafts and gearing were chassis mounted and exposed. This is well documented as, following its appearance at the 1905 RASE show, details of the first motor roller were published in *The Engineer* [Figure 2] and various trade publications, including *Commercial Motor* and *The Implement & Machinery Review*.

Returning to Lincoln and the Register, I now turned my attention to C types. There are twenty-one entries in Volume 1 for C types, including one C-C2 hybrid and two built to C2 specification. Of these, two are known to survive: No.5 belonging to the author and No.15 (rebuilt from No.2) restored by Bill Dickins.

Nos.1, 2, 4, 5 (C-C2), 7, 15 all had frames built to drawing No.H119 and 'Standard C' gearing. Frames for Nos.11 (C2), 19, 21 (C2), 24, 26 were to drawing F124 though the difference between these and the earlier type is unclear. Nos.58 and 61 were to drawing F115. All of these had 'Standard C' gearing. No.66 is listed as having cut steel gears in a gearbox, to drawing Q339 as do all subsequent C type rollers of which Nos.90, 99, 114 and 132 are recorded in the first volume of the Register. These last type are characterised in having an up-swept frame and sprung head-stock.

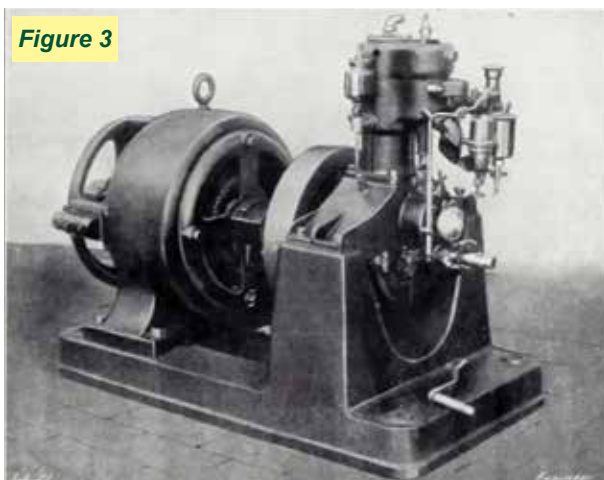
There are two further C types: No.9, which was entered in the register on 4th September 1906 (subsequently cancelled), and No.43 (rebuilt from No.9) which was sold to Winford Tower Estate, Beaworthy, Devon on 13th July 1908.

The frame for No.9 was built to drawing number Q222 and the gearing to drawing Q224. The real clue is in the description of the braking system: "band brake on top spindle of gearbox drawing T1016 and T1017". The use of the word 'gearbox' is significant.

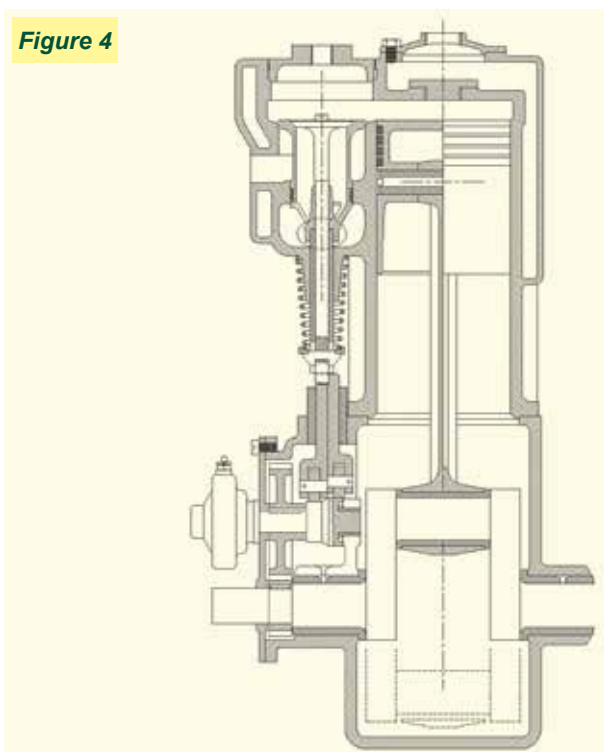
T1016 and T1017 illustrate the brakes fitted to D3, D4 and E type rollers; these drawings survive. The original engine was recorded as a single cylinder Parsons of 8hp, with thermo-siphon cooling. Built by Parsons Motor Company of Town Quay Works, Southampton, their engines had a variety of uses, powering generators, pumps, compressors and motor boats. After rebuilding, the engine was replaced with a Thornycroft B1 marine petrol motor of 4½ins bore x 5ins stroke. This engine gave 6bhp at 1,000rpm and 6.8bhp at 1,100rpm as tested on petrol by the manufacturer.

### **So which one is it – No.9 or No.43?**

Comparing the engine on the postcard with a photograph of a Parsons engine from a 1909 copy of *The Engineer* [Figure 3], we can see many features in common, including the shape of the cylinder, the exposed crankshaft-mounted governors and the vertical cranked governor rod. The only significant difference between the two images is the orientation of exhaust pipe. An interesting feature of Parsons engines was the concentric valve arrangement. Combustion by-products were exhausted via the inner valve, heating the hollow inlet valve as they passed to atmosphere. As a consequence, the inlet valve



*Photograph of Parsons engine from The Engineer, 1909.*

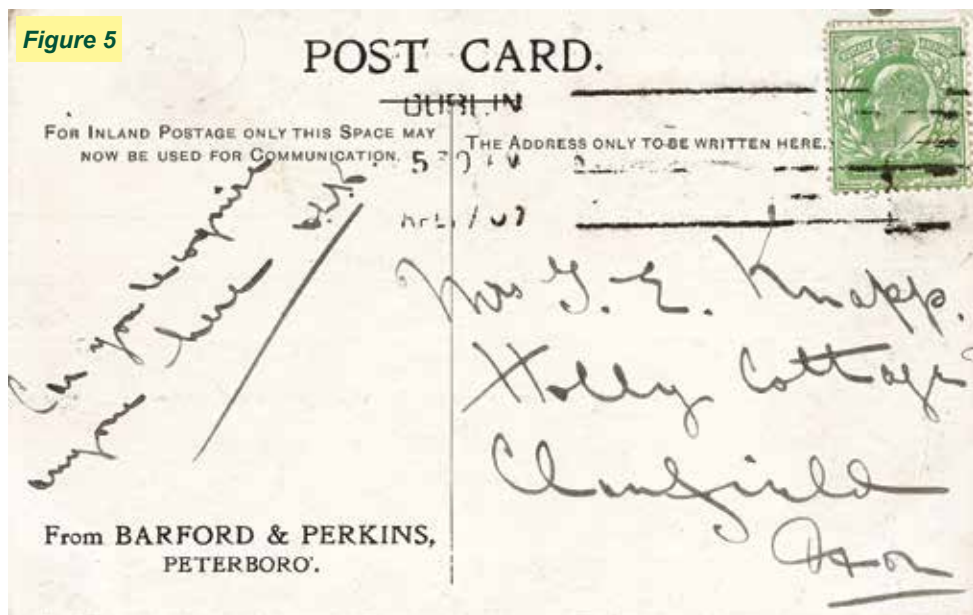


*Drawing of Parsons concentric valve from British patent number 29323 of 1906.*



also served as a vaporiser – it was claimed that these engines would run on paraffin without additional vaporising means. British patent 18799 of 1903 describes the original design whilst improvements to simplify the design and overcome deficiencies were published in patent number 29323 of 1906. The engine fitted to roller No.9 appears to be of the later design and has the same exhaust port orientation as shown in the figures illustrating the invention [Figure 4]. It is beyond the scope of this article to speculate as to why this engine was fitted or indeed why it was replaced. Then, as now, factors affecting the choice of so vital a component would have included price, security of supply, reliability and fitness for purpose.

Seated on the roller is a dapper gent wearing a straw boater. The message on the rear [Figure 5], “Can you recognise anyone here, T.E.K.” was addressed to Mrs T. E. Knapp, Holly Cottage, Clanfield, Oxon. So perhaps the gentlemen was Thomas Edward Knapp, son of Leonard Randolph Knapp. The Clanfield entry in Kelly’s 1907 *Directory of Oxfordshire* lists L. R. Knapp & Co. of Thames Valley Ironworks as “patentees (speciality, ‘Monarch’ corn and seed drill) & manufacturers of agricultural implements, & agents; engineers, machinists”. The 1911 census gives Thomas Knapp’s age as 39, so he would have been 34 when the photograph was taken. The Knapp concern was to join Barford & Perkins in the ill-fated AGE venture. So what was the relationship between these two companies and what were the circumstances that led to this photograph being taken?



*The back of the postcard.*

## Road making in Germany

One of the Association's friends in Germany, Busso Hennecke, has recently come across the accompanying illustrations in the archive of the Ibbenbüren Stadtmuseum. This medium-sized town is not far from Münster in Tecklenburger Land, North Rhine-Westphalia and has a number of museums, including a motorcycle museum and one devoted to cars of varying ages. A preserved standard gauge steam railway has a seasonal operation between Lengerich, Bad Laer and Gütersloh – the 'Teuto-Express Museumsbahn' – and this can be joined en route at Ibbenbüren.

Busso was quite delighted to find that this quartet of photos involved work very much in progress on the roads and it was being carried out by two Aveling rollers which had a major variation of styles of awning.

*All illustrations are courtesy of the Ibbenbüren Stadtmuseum.*



*Has anyone ever seen an awning comparable to this one? Beneath it is an overhead slide valve compound 10 ton Aveling roller – No.5 in some contractor's fleet. This has been retro-fitted with a locally-manufactured scarifier behind the left hand rear roll and also this 'rather fetching' arrangement of a canvas awning. A conventional Morrison scarifier is fitted on the right hand side of the roller but this, of course, would be on the 'wrong' side for normal work in Germany. A horse-drawn water wagon can be seen in the background.*



*The non-standard left hand side fitted scarifier in use. The visible roll appears to have been widened with the addition of an extra bolted-on section. There is evidence of at least two repairs to broken spokes, perhaps caused by over enthusiastic use of the scarifier on previous occasions.*



*The other roller in use on the task in hand was another somewhat more conventional-looking 10 ton ohsv Aveling – this one with a full-width 'continental-type' scarifier at the rear. The awning in this instance is also a locally produced item – but not as 'unconventional' as that on Fleet No.5.*





*The road gang spreading stone for the road's base course with the two steam rollers in the far background, awaiting their turn to roll it. A horse-drawn water wagon can be seen in the background to the left of the first Aveling roller.*



## Group G Test remembered

### Dear Editor

On the cover of the last copy of 'Rolling' Issue 173, Summer 2018' I was pleased to see a picture of Aveling & Porter E class roller No.12081 because I took my Category G driving test on this in August 2003, when the roller was in the ownership of Andrew Hall.

Some time previously I had approached my local test centre and the DVLA about taking a Category G test, but they were either unable or unwilling to give me a sensible reply. Then John Durling, of the North Staffordshire & Cheshire Traction Engine Club offered to organise tests for interested persons. Thus, the test took place from the Club's Klondyke Mill site at Draycott in the Clay, Staffordshire. Pete Paxton, the examiner, travelled out from Burton on Trent. He freely admitted that he had not examined a Category G test before but, as an ex-CEGB engineer, he was practically minded and understood the limitations of a steam roller.

Whilst waiting for him to arrive, a bystander asked me if I knew what a rectangular white backed sign with diagonal red bars represented. I did not but looked it up quickly. Whilst putting me at my ease, the examiner mentioned that he had failed his first car driving test primarily because he did not know what a white sign with red bars meant. I was able to assure him that I knew that one (but do you?). He first checked that I had the correct and signed Category B driving licence and had photo identification. Then came the eyesight test reading a vehicle number plate from a minimum of 20 metres for a new style plate.

By then the roller had a good head of steam and with L plates fitted, the practical commenced. The examiner either walks alongside the roller or waits for it to approach.

The first manoeuvre was to pull away smoothly with plenty of looking around. I have heard of people failing the driving test, including experienced steam enthusiasts, and this was primarily from not looking around enough. The roller was driven around left hand and right hand circuits, then came changing the vehicle's direction of travel and reversing around a corner followed by an "emergency stop". Of course, this is a relative term with a steam roller. All of this must be completed with due consideration for other road users and reacting correctly to road signs and markings.

With all of this successfully completed, the final part was recognition of road signs, the examiner had a ring binder file containing various signs and picked out ones for me to identify. He then told me that I had a 100% clear pass; indeed, all of the people taking their tests that day passed. The examiner was then offered a go at steering the roller; considering it was his first attempt, he was very good at it.

I am very proud to hold a Category G licence. If you are familiar with the handling of a roller, steam or diesel, and are thinking of taking the test; I would say go ahead and good luck.

**Barry Job**

PS. A white rectangular sign with red bars is a marker on the approach to a level crossing.

## Stogumber Roller

Dear Editor



I have just returned from holiday in West Somerset and stayed in a village called Stogumber (nearest towns Watchet, Williton & Minehead). Whilst out walking, I came across a 1956 Greens Griffin roller still in regular use at Stogumber Cricket Club. The club is over 140 years old.  
(<http://www.stogumbercricket.co.uk/>)

I have attached photos including the maker's plate with serial number, (DRX778) date of manufacture (1956), etc. Whilst it is a little reflective, all the details including operator instructions can be read clearly.

It is fitted with a Petter engine – type AVA2. No.3209203R. I am not sure if this would have been the original fitted but I am sure someone will confirm.

The registration is painted on and you can just make out five of the numbers/letters through faded paint. I am not sure in 1956 if it would have been a 5 or 6 digit reg. but I guess it could depend on where the licence was issued?

**Gary Frost**  
Alton, Hampshire



## Southern Counties Marshall

### Dear Editor

I enjoyed Chris Munt's contribution to 'Rolling', 'A Southern Counties Marshall', a 6-8 ton (Roller Diesel) RD1 series, works No.88530, Reg. BNJ 585, its Blackstone engine No.199760. On reading the story, I sorted through my Marshall file and drew out my old friend's details; this was Angus County Council's Marshall. It too is an RD1 series 6-8 ton, works No.88691, Blackstone engine No.199771, and like the Southern Counties Marshall, a twin cylinder. 88691 was manufactured in August 1939, despatched from Gainsborough on 25th to RJ Forester, 5-9 Weir Street, Paisley, who I understand were Marshall agents.

How fortunate it is that 88530 retains its original Blackstone engine, the Angus roller's being replaced by a three cylinder Lister engine around 1956. This engine change was possibly due to difficult starting. I can remember four men on two ropes swinging over the engine in the morning, and it was left running all day. I wonder why? Chris states twin cylinder BHU units were only produced between 1927 and 1931. Had these engines been kept in stock? The RD series was introduced in 1930, setting a new standard; the design can be truly said to have been ahead of its time.

I am not sure when the RD2 series was introduced, but Marshalls of Gainsborough still featured a RD1 series in post-war advertising, introducing their new symbol, Marshall's 'Brittannia' in a modern setting with a Road Marshall symbol on the unlouvered engine panels; see 'Rolling' issue 108.

This RD1 is also fitted with a hydraulically-raised mid-mounted roll, probably in an attempt to improve rolling quality on asphalt and bituminous materials. RD1s were well known for the poor performance of the 'steam' roller type front rolls on these materials.

Another feature of the RD1 series rollers was that they could be converted into a road haulage tractor. The front roll was removed and traction type wheels fitted to each fork, the hind rolls removed and traction wheels fitted. A belt pulley could also be mounted on the right hand side just above the clutch casing, a feature carried on to the RD2 series.

The Road Marshall RD2 series road roller was a development of the established and highly successful RD1 series. 'Reliability restyled', states Marshall advertising at the introduction of the RD2 series. So much of the past has proved to be essential for the future that features originally incorporated in Marshall rollers are now deemed generally desirable in a good roller.

The RD2 series is modern in every aspect and in view of the success of the original type, no major alterations have been made to bring it up to present day standards. The main features have been retained and certain practical advantages of every day value have been incorporated. Just as the Marshall advertisement stated, the Road Marshall RD2 series was a restyled RD1 series.

The rollers' appearance had been streamlined by the sloping tin work, and the steam roller type front roll replaced by a more efficient saddle roll. The wooden awning was replaced by a steel model, with the front supports sloped back, as was the exhaust,



the trademark fantail retained. An enclosed cab was optional; perhaps some of the first production RD2s retained the wood awning, I faintly remember one in the mid 60s!

RD2 series 91565 of 1948 production did not have vertical louvred engine panels, pointing to an early production model. Most RD2s were Perkins engined, although 91173, and no doubt others, had Fowler 3B engines. The RD2 series probably remained in production of the Road Marshall Highwayman series and ran for 25 years, excluding the wartime years for the RD.

**Eddie Valentine**

## **Is there a future?**

**Dear Editor**

I appreciate all your combined efforts on the Committee and urge you all to carry on the good work. There are some good ideas put forward in the recent 'Rolling' and new ways forward will be found.

If current social trends are indicative, it won't be long before the RRA is fully stoked with bearded hipsters keen to do their bit to preserve the nation's heritage. If motorcycle combinations can return to a position of 'street cred', then so can road rollers.

Perhaps a copy of 'Rolling' sent to the 'Have I Got News for You' team as 'Guest Publication', or other PR exercise may attract news members. A TV appeal – press release – for new members, or a ceremonial roller crushing of suitable items – empty plastic bottles, or maybe a roller running on recycled cardboard briquettes?

Crushing a world record length of empty plastic bottles would be great for PR and raising awareness of the waste prevalent in modern society. This could be a winner for the RRA if the sustainability of these old rollers is promoted publicly. (Coal may be a hard sell but maybe alternative fuels could be looked at through the RRA.) Perhaps a roller fuelled on political party manifestos would be a PR winner...

Keep up the good work. Change is inevitable and with the doors open, new committee/general members will come.

**George Johnson  
Milnathort**

# Five ages of Indian rollers

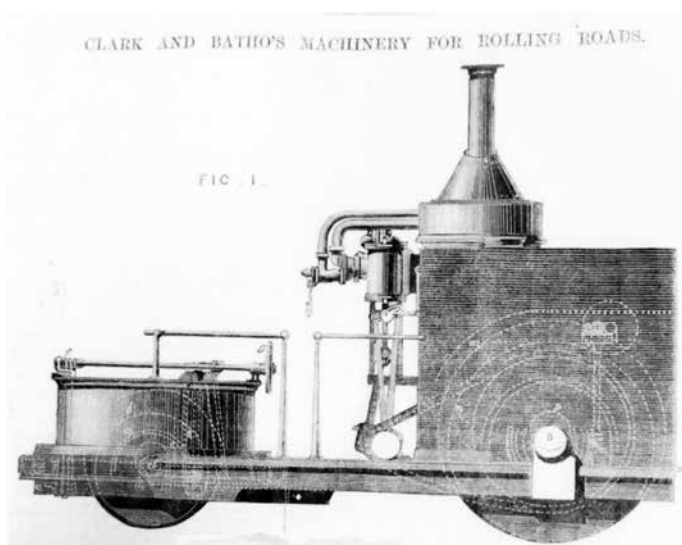
Derek Rayner

The first ever steam roller produced in Britain was exported to India and specifically to Calcutta in 1863. This was to the design of William Clark and William F Batho. Clark was the chief engineer of the Calcutta municipality and the roller had been built by Thomas Worsdell at his Berkeley Street Works in Birmingham. It had a vertically-mounted boiler and vertical single cylinder engine.

The roller worked in Calcutta and it will be realised that this is some four years before Thomas Aveling produced his first 'proper' steam roller – the 'Liverpool Roller' in 1867.

Very many other 'conventional' steam rollers were also exported to India in the years before 1900, including even a few of the somewhat different 'Aveling-Batho' design, but before or around the end of the 19th century, there was also a much simpler item produced there in the form of a very basic people-powered roller. This example was manufactured in India by the firm of Burn & Co. of Howrah, Calcutta.

*A solid 3-ton manually operated single-drum roller, manufactured by Burn of Howrah, Calcutta. This example is located in a Public Works Department compound in Malbazar, West Bengal.*



*Clark & Batho's 1863-built machine was THE WORLD'S FIRST steam roller. It was exported for work in Calcutta, India.*





*Rolling in the period before mechanisation in Darjeeling in the 1930s – largely powered by female Indian workers.*

**Courtesy DAS Studios, Darjeeling**



*Aveling 10-ton single cylinder roller No. 7756 of 1912 at the main offices of the Public Works Department in Siliguri, West Bengal. The roller originally belonged to Barnes Bros of Southwick, Wiltshire.*

It was this company which imported Garrett steam rollers from around 1905 onwards, of which at least two examples of the Leiston firm's early steam rollers still exist there – see <http://www.internationalsteam.co.uk/rollers/indiarollers.htm>

An example of one of these early rollers of the manually-hauled type in use is seen to the left.

Moving on to another age, steam

rollers from not only Rochester but also Marshalls and Garretts saw use in the sub continent. Many of these have now become derelict but others have found their way to various museums or are plinthed up in strategic locations and act as a reminder to the inhabitants of their importance and use in days gone by in helping to lay the foundations of the roads of today.

The next age relates to an interesting 'conversion' developed in the early 1950s. This was a versatile dual purpose machine which utilised a conventional tractor coupled to what can only be described as an 'attachment' to it. Being of a relatively lightweight nature, this type was popular on the Hill Cart Road – that which leads from Siliguri to Darjeeling in the north of the country. At one time a number of them could be seen in various places along its route which parallels the Darjeeling Himalayan Railway. This is an invention by the Devon firm of Twose where the tractor (which can therefore be used for other purposes) is driven up ramps and then secured on to a



*On exhibition at the Birla Technical Museum in Kolkata are Garrett 8-ton No.27251 of 1908 on the left and Marshall 10-ton roller No.78863 of 1925.*

pecially-constructed three-point roller arrangement which is then driven by roller chains from bolted-on extensions to the tractor's back axle and steered independently. As well as being made in England, these were also manufactured in India under licence.

Finally, some of the British firms mentioned had their own agents in India, with Aveling-Barford and also Marshall's forming their



*Now abandoned at a PWD depot in Siliguri is an Indian-manufactured Twose 'attachment'. The tractor is an Indian copy of a Tafe MF35.*





*A motor roller built by Jessop & Co. Ltd in India under licence from Aveling-Barford Ltd, England. It was one of two which were parked close to the bazaar in Siliguri. A plate on the roller indicated that it was sold and serviced by Greaves Cotton & Co. Ltd of Bombay, Madras & Delhi.*

own subsidiary companies to construct their own respective designs of motor rollers in India.

Aveling's original importer back in the day was Jessop's of Calcutta and it was this firm which later manufactured Aveling-Barford style 'G' series rollers, mainly of the heavy 'GD' series. Also, in respect of the Gainsborough company, the Marshall subsidiary built the Britannia roller, both products not unreasonably bearing a striking resemblance to earlier versions of both firm's motor rollers.

Perhaps not unsurprisingly, motor rollers to these pre-1960s designs are still to be found in use in various parts of India, given the wonderful ability of the country's people to apparently keep such things going almost ad infinitum.



*A Britannia-Road-Master motor roller manufactured by the Britannia Engineering Co. Ltd pauses during use at a new construction site adjacent to the main NH8 road about 60 miles south of Delhi.*

# Investigations into two postcards

Derek Rayner

A couple of postcards, one of which depicted a steam lorry belonging to the Durham Rural District Council, were sent to the author via the editor with a request for assistance in identifying what was illustrated.

It was initially established from the owner that the steam roller – obviously an Aveling & Porter overhead slide valve machine – and the wagon were engaged on the same road construction job and more importantly, the public house behind both the vehicles was the New Inn on Church Head Street, now opposite Durham University's Bill Bryson Library, just to the south of Durham City. There is still a New Inn pub there but the scene today looks somewhat different, presumably as a result of later road alterations and the pub having been rebuilt.

Investigations in the Road Locomotive Society's excellent historic records indicated that Durham Rural District Council owned Foden wagons aplenty. In fact, one would not have thought that a relatively small council of that nature would have had twelve such wagons, only two of which were positively identified by works number and registration. These two were new to the council in 1916 and 1920 respectively. The other ten were recorded as ex-'Government' in 1919 and were presumably obtained from a military disposal sale following the end of World War One.



Only one roller appears on the DRDC list, this being an Aveling ohsv 15-tonner, No.4605, which was new to the council in September 1900. This machine matches what can be seen on the postcard and by the time these two images were taken, probably in the mid-1920s, it had gained the local County Durham registration of J 6424.

One thought that has occurred as a result of this being the only steam roller recorded in DRDC ownership is that the proportion of thirteen steam wagons to one steam roller seems to be somewhat excessive, giving rise to the question as to whether the records are correct in this instance. This is especially so, as no works numbers are provided for any of the ex-military Foden examples.

The steam tipping wagon shown is not, however, a Foden. A sharp eye will observe something towards the top and front of the chimney – which is the maker's name of Clayton, as a scroll, fixed in that position. The thirteenth wagon on the list is therefore Clayton & Shuttleworth No.48438 which was supplied to the council via RTH Bradley of Wearhead which firm apparently were agents for the council. It was new in February 1920 – FE 3089.

The Aveling roller continued in service with the council until departing to the West Riding of Yorkshire by December 1946, it having been sold to the firm of Briggs & Partners of Elland for use at their Hartshead Colliery site and is noted as still being owned by them in 1950.

• *Pictures courtesy of Michael Richardson, local historian and author of a series of books of photographs of Durham City and the surrounding area, curator of the Gilesgate Archive.*



*Sporting a beautiful canopy, made by the owners in their joinery business, Martin True's Aveling & Porter roller No.6692, Danny, takes a break in indifferent weather at Boconnoc. **Brian Gooding***

