

WHY BRITAIN WAS WORKSHOP TO THE WORLD

NEWS • FEATURES • ARCHIVE

OLD GLORY

April 2013

STEAM & VINTAGE PRESERVATION

No 278

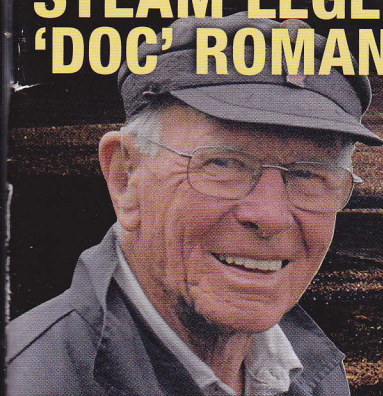
WHAT HAPPENS WHEN
FLYWHEELS EXPLODE



Where to see
Steam
this Easter

Do rallies
pay enough
for engines?

We talk to
STEAM LEGEND
'DOC' ROMANES



• Abbey Light Railway moves • Paddle steamer apprentices • Steam Sappers
• Nichols & Shepard in Sussex • Cefn Coed Colliery • Thames Barge progress

BASSETT-LOWKE'S 1:6 SCALE WORKING DISTILLERY!

£3.99

04 >

oldglory.co.uk



9 770956 592126



COULLS AND EFFECT: One man and his rollers

For many, the interest in historical equipment spills over into the preservation, private ownership and custodianship of real examples. Steam engines are clearly the most conspicuous examples of this, but for most they lie out of reach in a pecuniary sense and so aspirations of ownership turn towards the altogether more attainable acquisition of internal combustion powered vehicles, motor rollers being no exception. But for some, a motor roller is just the start of the path to running their own steam engine, and gathering a small fleet of historic working plant together.

Anthony Coulls is well known for his position in the National Railway Museum. He is also well known to readers of *Old Glory* for his serialised narrative on the restoration of Aveling & Porter steam roller No 3315. However, his interest in rollers goes back much further and No 3315 was not the only 2012 debutant in the Coulls family collection. Anthony's 1944 Wallis &

When he's not being entrusted with the nation's heritage locomotives and rolling stock as senior curator at the National Railway Museum, Anthony Coulls has a passion for motor rollers as well as steam rollers, as Beamish Museum transport curator **Paul Jarman** discovered

Steevens 2.5 ton OF/D motor roller was also returned to life in 2012 following a long restoration, which we shall explore here.

Anthony's interest in road rollers was inevitable, given his father Peter's part-ownership for a time of Ruston steam roller No 114059, the family's involvement with the Hockley Heath Steam Association, Warwickshire Steam Engine Society and attendance of events such as the steam rally of the Birmingham Museum of Science & Industry at Newhall Street. While the Ruston moved to pastures new before Anthony was born, steam was in the blood and so the presence of an Aveling & Porter

piston valve steam roller plinthed in Victoria Park, Leamington Spa, was of considerable interest. Also on display in the park, but barely noticed at the time, was Wallis & Steevens motor roller No 44970. It was the latter roller which was to come to Anthony's attention while he was in Aberystwyth.

The spring of 1996 saw a phone call to Anthony in Mid Wales. It was the message that the diesel motor roller in Victoria Park was available as a result of the decision to remove it from the park to make way for the Women's World Bowls Championship; and photographs of the roller soon

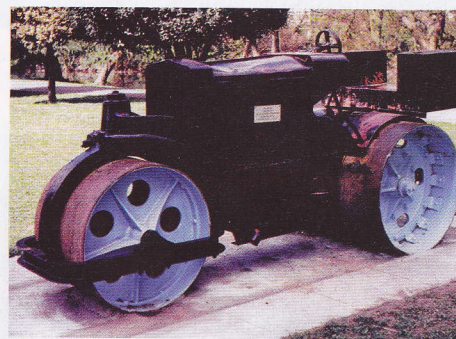
The 1944 Wallis & Steevens 2.5 ton OF/D motor roller makes its debut at Beamish, alongside Andrew Neale's Quarry Hunslet *Edward Sholto*.



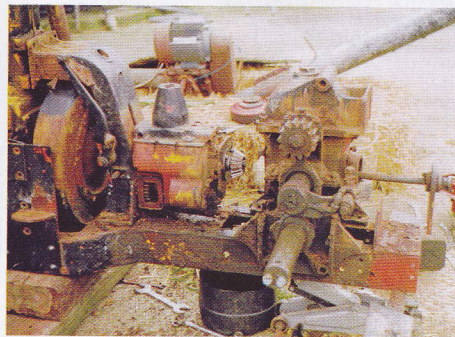
On the move, after Anthony recovered it from the park.

With his friend, Ken Milns, Anthony took stock of his new toy. The rolls had been welded to the mudguards and the steering mechanism also welded to prevent its operation. The roller was a garish mixture of playground colours and the ravages of many decades in the park were evident.

Within a month the welds had been removed and the roller could at least be towed. It was then moved, in March 1997, to a different location on the farm which included the luxury of a caravan – a retreat for when the rains came, as they inevitably did. Work started in earnest on dismantling the little roller, focused on removing the gearbox in order that it could be freed up. The W&S design cleverly allowed components to be released and slid backwards on the main chassis frame members, to allow access for repairs and servicing. This feature was therefore immensely useful in preparing No 44790 for restoration. Progress was such that by Easter 1998 the roller was able to be started for the first time in very many years. "This was a key moment in the project," Anthony recalls. "The project was now alive and I was able to make my first tentative steps along the restoration road, with Ken's able assistance and support.">



The roller when on display at Victoria Park, Leamington Spa.

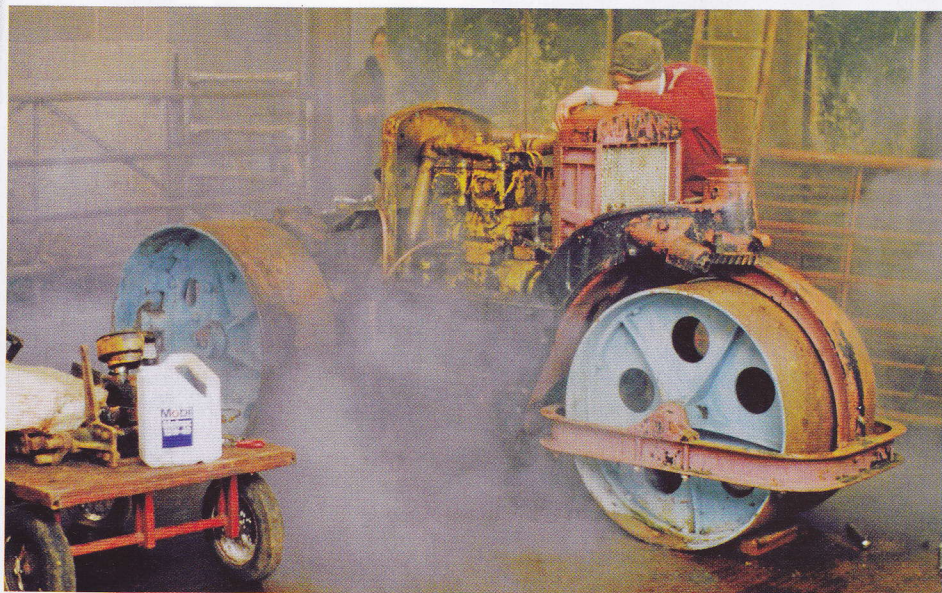


The first strip down at a friend's farm.

"Advance" LIGHT WEIGHT
MOTOR ROLLERS TYPE B

WALLIS & STEEVENS LTD.
BASINGSTOKE, ENG.
TELEPHONE: 152 BASINGSTOKE.
TELEGRAMS & CABLES: "WALLIS," BASINGSTOKE.
CODES: A.B.C., 5th Edition
and BENTLEY'S.

followed. The first challenge was to find somewhere to put the roller, solved through the kind offer of a space on a school friend's father's farm. The second was to secure the roller, which was done by making an offer to the council representative responsible for it, and which also included its removal from the park and delivery to the farm, this being accomplished late in August 1996.



Something's stirring at the farm.



One man and his roller.



Cough, cough! Anthony starts up the Wallis at Snibston.

In the summer of 1999 No 44970 joined Anthony at his new job at Snibston Discovery Park, Leicestershire. This period also saw a second acquisition when Anthony acquired a Barford & Perkins 'A' type 2.5-ton petrol engine motor roller. The purchase was made (from a cricket club – a

common place to find motor rollers where they served as field rollers) in order to save the vehicle and within six months it had moved on to a new owner for restoration.

Some progress was made on No 44970 at Snibston, but pressure of work left little time to embark on the full scale restoration required. A new push was enabled when the roller was moved to the smallholding belonging to Trevor Daw, a family friend and incidentally the home of the Ruston steam roller Peter Coulls had been involved with in the 1960s. Based near Warwick, No 44970's adopted county, Trevor indicated a willingness to carry out some further restoration work on the roller and after seeing it make a demonstration run on July 4, 2007, the full scale restoration began.

With all restorations there is inevitably more work required than anticipated, and this was no exception. Trevor carried out an extensive programme including an overhaul of the National engine (including repairs to the injectors and a new fuel pump), further gearbox repairs, shotblasting of the chassis and extensive work on the superstructure including fitting of new mudguards, fuel tank, bonnet and seat (fully upholstered). A repaint was also required and formed part of the work Trevor carried out. Some of the final restoration work was carried out in Co Durham (including the bonnet sides).

While work on 44970 was taking place, Anthony embarked on a well trodden path

for roller owners, ably guided by the Road Roller Association and Derek Rayner, that of re-acquiring the original registration number. The DVLA operate a scheme for such activities and will re-issue the original registration once evidence has been submitted by the owner to authenticate the claim on the number. This entailed research to obtain the original build sheet date, the original registration document and present the history of the individual roller to the DVLA, with authentication provided by the RRA. The successful result was that No 44970 re-acquired its registration (4347 UE) in April 2011, just in time to be insured and taxed for a road run near to Trevor's to try it out on Good Friday.

BEAMISH MUSEUM

In May 2012 the roller had joined Anthony in Shildon, Co Durham, for completion of work. After some successful tests, No 44970 moved to Beamish Museum in November 2012, to join the 'home fleet' of privately owned working plant based at the museum.

One of the pleasures of restoration is the many and varied people that it brings the restorer into contact with, and this project was no exception. "I'd particularly like to acknowledge the amazing generosity of time and support, not to mention expertise, given by Ken Milns and Trevor Daw as without them this project would have taken much longer to realise and would probably have seen No 44970 still sat in a hedge awaiting its call to the restoration shed. The Road Roller Association has also assisted greatly with access to archive material and some replacement parts from a similar Wallis roller that was broken up for spares around 2000."

Model with extra wide rear rolls giving rolling width of 6 ft.

Specially adapted for Parks, Sports Grounds, Aerodromes, etc.

Showing alternative rolling widths obtained by reversing rims on rear rolls of Model 2B—reversible rims also fitted to Models 21B and 3B.

WALLIS & STEEVENS LTD.
ENGINEERS
BASINGSTOKE

44970 – A SHORT HISTORY

Built in 1944 and of designation OF/D (D for diesel), No 44970 is of Wallis & Stevens B type design. The works number indicates that the roller is the 970th product of the year 1944. It was supplied new to the Air Ministry, and presumably saw use on airfield and apron rolling works before being 'de-mobbed' and sold to Road Drive Ltd of Leamington Spa, Warwickshire. It thus obtained its first registration in October 1960. Ian Whiting is a member of the Hockley Heath Steam Association and the son of one of Road Drive's mechanics, Graham Whiting.

Ian recalls No 44970 at work and even two specific incidents involving the Wallis, including an occasion he was allowed to drive it following repairs and another where "We had to go out and recover it from a

ditch near Norton Lindsey. It was parked at the side of the road on a hill just outside the village while doing patching work for Warwickshire County Council. On the Friday night some youths released the brakes and chocks and off it went. We went on Saturday with the firm's Series I Land Rover to pull it out – we tried but all we ended up doing was ripping the rear cross member clean from the back of the car!"

In the 1970s the roller was presented to the local council and moved to Victoria Park where it was to reside in the playground there, and there it remained until 1996 when preserved and became the property of Anthony Coulls. Its restoration was completed in June 2012, having regained its original registration in April 2011.



The Wallis poses in the early winter sunshine at Beamish as visiting Blackpool tram No 304 passes in the background.

THE WALLIS & STEEVENS MOTOR ROLLER

In the early 1930s Wallis & Stevens of the North Hants Iron Works, Basingstoke, introduced what was to become a cornerstone of its range, the Type B motor rollers in a range of weights from two to four tons.

They were fitted with a 13½hp four cylinder petrol engine driving through a four-speed gearbox which offered quick reversing in all gears, so as to reduce the dwell in changing direction and inevitable dips that would form in the Tarmac surface as a result. The rear rolls were so arranged as to enable automatic cambering, thus reducing longitudinal irregularities in the rolled surface when not on dead level ground.

With the exception of the 4-ton option, all of the rollers had reversible rims, offering alternative rolling widths and thus making the range suitable for grass rolling work as well as compaction and surface dressing. As a result many examples were to be found at work on grass strip airfields, cricket pitches and civic parks. A foot brake as well as hand brake (somewhat awkwardly operated under the left leg) were fitted, and great claims of efficiency and effectiveness were made by the proud manufacturer.

In due course a diesel variant was offered by Wallis & Stevens, this being a 15hp two cylinder National engine. Claims of 'easy starting by hand' might be questioned by some preservationists – the arrangement being to turn the whole engine and not just the flywheel when in starting configuration – this means dragging cold and thus thicker engine and gearbox oil around on the handle as well. The diesel options within the Type B range were designated O.F.D, O.F.E, O.F.F and O.F.E for the 2½, 3, 3½ and 4-ton options – O presumably standing for 'Oil'.

Ultimately Wallis & Stevens succumbed to changing markets and the decline of a home based heavy industry, a final auction of factory machinery taking place on September 22, 1981, following sale of the designs and goodwill to BSP International Foundations Ltd of Ipswich. The auction included five historic steam and motor rollers, one of which was a 1934 petrol engine motor roller. The Basingstoke connection was not lost entirely however, and today a range of W&S rollers form part of the Hampshire Museum's collection based at Milestones Museum.



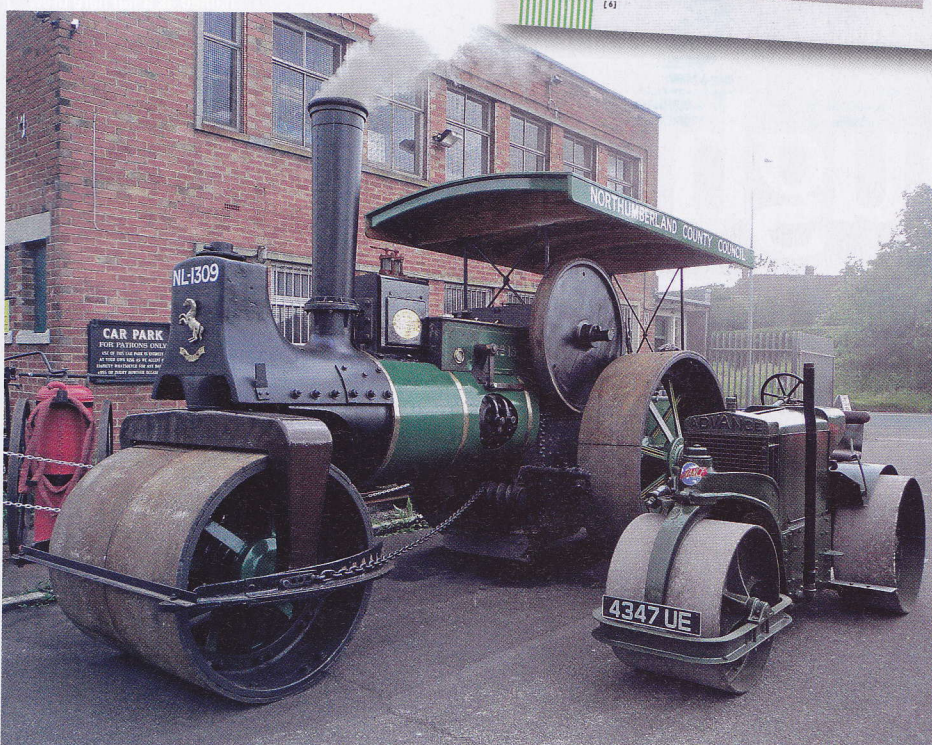
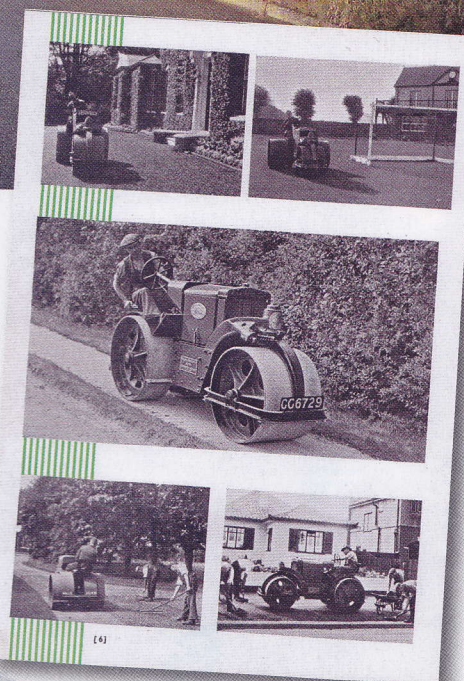
Good Friday 2011 and Trevor Daw has his first drive of the Wallis.



Out on the road at Beamish, with many years of carbon clouding the air. BR tram No 26 (aka Gateshead No 10) featured last issue, passes on the adjacent tramway.

As well as No 44970, Anthony and his family have the choice of steam power in the form of the aforementioned Aveling & Porter No 3315, which is also likely to join No 44970 at Beamish for the museum's April 11-14 Great North Steam Fair, at which there are likely to be a number of working steam and motor rollers engaged in active working demonstrations.

Meanwhile, with a fleet of two to care for, Anthony will never have an idle moment, and there's always the Fowler living van that requires restoration... ♦



Anthony's two charges – Aveling 15-ton roller No 3315 and the tiny by comparison Wallis.