



T Green & Sons road roller No 2135 of 1925, bearing its age-related registration of BF 4966.

Out of Africa

It was after an initial restoration by ex-pat Keith Stevens of Kwa Zulu, Natal, South Africa (who was featured in OG 233) that Leeds-built T Green's DCC roller No 2135 was delivered to Sandstone Heritage Trust, Eastern Free State. This was towards the end of 2003 and the roller was to spend a further three years here, appearing at various events.

It was during this time that I put a proposal to Sandstone Estates, that it be shipped to the UK, initially on loan, with a view to it perhaps becoming permanent at a later date.

Then one day in July 2007 my wife, Helen, and I went to an open day at Pertwood Farm in Wiltshire, an organic farm run by the daughter of Sandstone Trust's Wilfred Mole. We were told that Wilf and his wife would be there, so as well as having a great time, this was my opportunity to speak to him about No 2135.

So imagine my total amazement when I was told that No 2135 was here in the UK – at the

premises of Graham Lee at the Statfold Barn Railway near Tamworth!

And so it was that on 27 July 2007, after being introduced to Graham by Wilfred, we set eyes on No 2135 for the first time since seeing her in Africa in late 1998.

Wilfred returned to South Africa and after much email correspondence with Wilf, he said that I am 'free to do with it what I want'.

The idea was to have it in steam for next season's rally circuit around Cheshire and I instructed Graham Lee to undertake an initial boiler test with his inspector and to let me know what needed to be done, after all there were a number of issues and differences in

requirements from the SA to UK boiler inspectorate.

A boiler tube was removed and sent for metallurgist tests. The results were positive and the boiler inspector's check on the barrel and firebox were also positive.

The injectors and clacks were checked, the pressure gauge was replaced, as was its pipework. The dry inspection was done and No 2135 was fired up. The safety valves were checked and the boiler inspector was happy.

On 22 May 2008, with my friend Alan Porter, we arrived at Statfold Barn to be greeted with the sight of No 2135 in the yard awaiting our attention and I laid her first fire.

I oiled up and checked the engine. All Graham's work was of a very high standard, only requiring some more packing on the steam valve and one of the two small gauge glasses. The Penberthy injector picked up on 80 psi and the water pump picked up immediately.

However Graham and his lads did warn me that there was considerable 'wear' in the engine and that it would make a 'lot of noise'.

I slowly backed No 2135 to the water tap, filled up the tender, took some photos and decided that that was enough. There were too many rattles for my liking and the engine bearings were found to be worn.

We decided to ship No 2135 up to Cheshire, which was accomplished on 11 June 2008. Under the cover of the barn the following two weekends were spent cleaning her and assessing the work that was necessary to bring her to safe operation.

Having spent all her working life in South Africa, an age-related registration plate was needed and with the help of Derek Rayner of the RRA the necessary official paperwork were submitted to the DVLA. In response the DVLA sent their inspector to Cheshire and having satisfied himself that No 2135 was a steam roller, the paperwork was fine, except they required a Customs & Excise clearance form, as it was deemed an 'import'!

Further assessments and decisions had to be made. Two made-to-measure gauge glass protectors, plus new red line glasses and rubber cones, were purchased and duly ordered from Chanter Biomed of Bradford.

Next to be tackled was the injector steam shut-off valve which was loose; this required a new pin in the connection rod and spindle. I also tapped holes for the number plates in readiness for fitting quarter-inch BSW 1/2in long machine screws.

At the primer paint stage all new nuts and bolts were fitted but the main problem was the gear pinions and keys on the crankshaft. On inspection all four keys were loose and not screwed into the keyways! All the screws had either been lost, never been put in, or had sheered. So this mechanism was stripped for detailed measurement and assessment and Les Rushden of Charles Leek & Sons engineering specialists of Leek, Staffs, was called in and the crankshaft was out and off to the machine shop.

Now anybody that has had to remove a crankshaft in a barn, with a chain block and tackle and a hydraulic jack and some scaffold will know what had to be done. After jacking up and left rear roll removal, a platform was built with scaffolding onto which, after the gibhead key was removed, (and I say that quite nonchalantly) the flywheel was removed, and lowered onto the platform, enabling us to safely remove the crankshaft at our leisure.

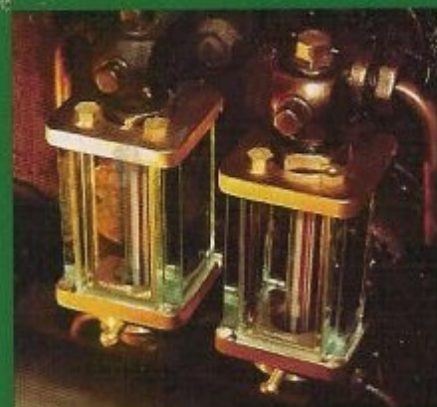
During the rear roll removal the brake mechanism had also to be removed. This being done attention turned to disconnection of the eccentrics, water pump and connecting rods. All were duly marked prior to dismantling and stored safely. The crankshaft was then removed, by chain block, and carefully lowered on to two axle stands to await pick-up by Leek Engineering.

Meanwhile progress on the paperwork front was slow. On 4 October 2008, some 16 months after No 2135 landed on these shores a milestone agreement was reached between Wilfred Mole and Helen and myself. This agreement, together with the customs clearance documents, enabled me to satisfy the DVLA and to at last obtain the registration mark.

The crankshaft was picked up in November 2008 and Leek's had it returned just before Christmas. The regulator handle had somehow been bent like a banana, this was stripped and



The firehole door was removed in order to re-align it.



A wise precaution in case of an accident – new water gauge protectors in place.



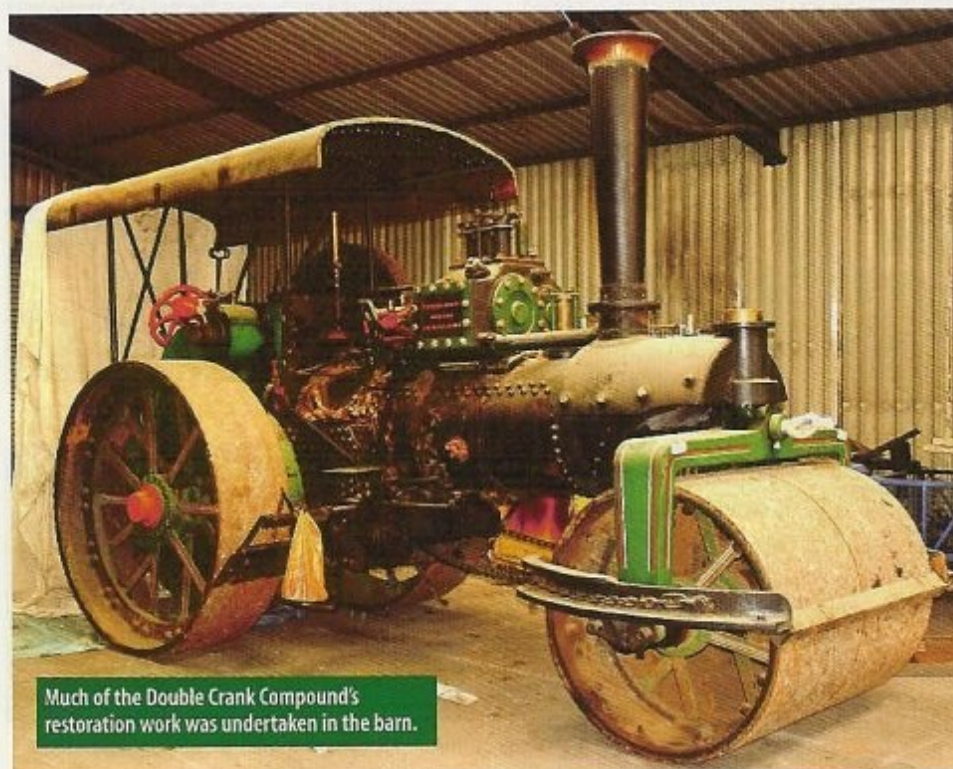
The four keys were a poor fit on inspection and, after re-working by Leek's, they were made good.



Having been lifted out of its bearings, the crankshaft is on the floor with part of its gear change mechanism.

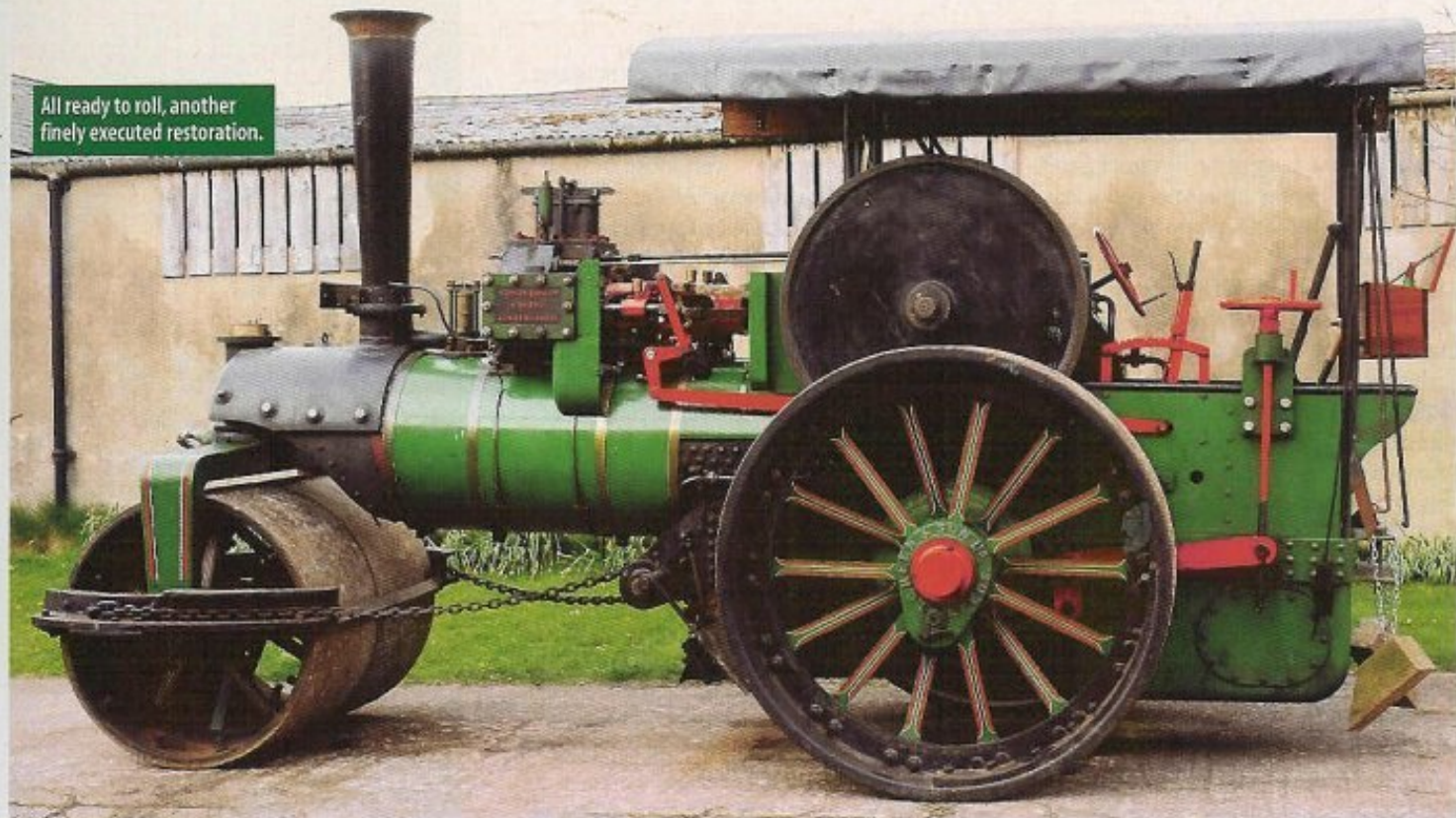


The first fire. Phil had a small 24in coal shovel made and engraved its handle 'T Green 2135'.



Much of the Double Crank Compound's restoration work was undertaken in the barn.

All ready to roll, another finely executed restoration.



taken to a friend with a forge where it was heated, straightened and then cleaned and reassembled.

Into 2009 and although it was a freezing January day Helen and I raised the crankshaft by trusty chain block back into its frames and bearings. I had then to set up the bearings before any further assembly could be contemplated. I had to file approximately one eighth of an inch off one key, as it appeared to bind on the bearing housing. This done the crankshaft was lowered into place and the main bearing nipped tight.

The gears were a superb fit on the crankshaft, but on assembling the selectors, the high-speed selector was too stiff and needed easing.

By early February we had, with some small difficulty, replaced the left-hand rear roll and its brake mechanism, set the flywheel adjustment

and lightly tapped home the gibhead key.

The reassembly of the eccentrics and big ends was then undertaken, with the air somewhat blue on occasions as we collected a few scratches and bruises.

No 2135 was beginning to look like a steam roller again.

The firehole door was removed to shim the hinge, which had dropped, and to make and fit a retaining clamp for the 'snick latch'. The footplate was cleaned, scraped and lightly oiled, and all nuts and bolts tightened.

It was now approaching the end of February and with No 2135 already 'winterised' I decided to prepare for boiler inspection and steam test.

As the boiler was already empty, I removed the manhole and mudhole doors and drained any water from the system, including the water tank. The fusible plug was also removed and a

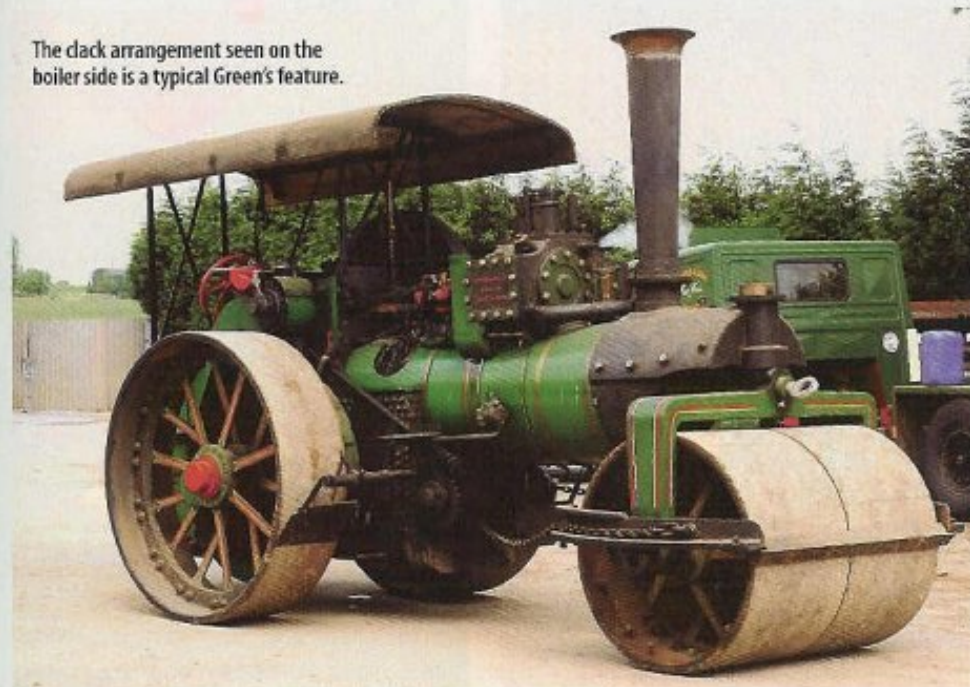
spare, plus a set of boiler joints, was ordered.

Some attention was given to the felt on the roof and it was painted with black bitumen. The crankshaft was also painted gloss red. In the meantime brackets were made for a full length running board, and the timber purchased.

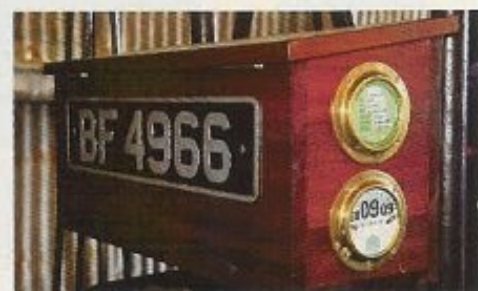
It was thus 22 months after No 2135 set foot back in the UK that she was ready for an inaugural steaming, after many hours of hard work and graft. This steaming took place after the boiler inspector visited on 24 April. Steam was raised slowly and all joints were monitored. Some small steam leaks were nipped up and before too long the safety valves lifted. The boiler inspector was happy, and 2135 was passed for another year.

May I thank my long-suffering wife Helen and our many friends who have helped with No 2135 along the way. ■

The dack arrangement seen on the boiler side is a typical Green's feature.



Steam lifting at last!



The new toolbox, with tax, insurance and age-related registration plate added.