

On Her Majesty's Service

WASC 1785

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gauge locomotive had a German NAG 12/14-h.p. engine driving via a Heywood & Bridges friction clutch to a Wicksteed four-speed gearbox, all gears being separately engaged. A Greenly-design reverse gear was fitted. Final drive was by an axle-mounted bevel gear, both axles being externally coupled by coupling rods. The locomotive apparently was outstanding for its time: while being used as a workaday unit hauling supplies to Blakesley Hall it was able to draw 4½ tons up a 1 in 30 incline at speeds above 30 m.p.h. Latterly an Austin 7-h.p. engine has provided the power.

Closely following this almost at the other end of the country is one of two surviving Ruston & Proctor four-wheel paraffin locomotives, built at

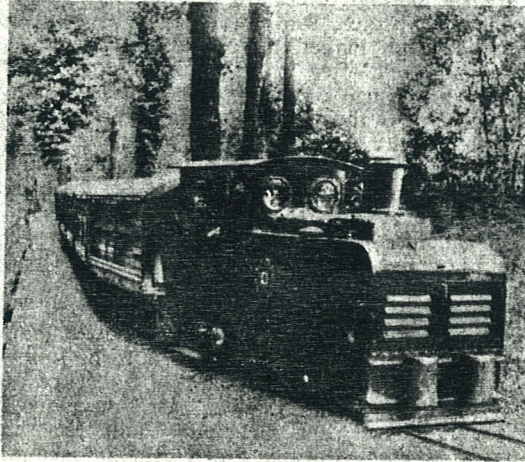


Photo: Brian Webb collection

Ruston & Proctor four-wheel paraffin locomotive, probably at Enfield Lock during the first world war, with lady driver. One of these single-cylinder, chain-driven units, of metre-gauge, is preserved at Longfield, Kent

Lincoln during the first world war for use in munitions works. By a fortunate chance locomotive 50823 of 1915, the first of its type, was left rusting away in a West of England quarry until acquired for preservation at a private site in Longfield, Kent. The design was almost a copy of the German Deutz-built locomotive, but was powered by a Ruston ZRH horizontal engine with one cylinder giving 10 h.p. The engine was petrol-paraffin—started on petrol, having a magneto for ignition, then switching to paraffin once underway. The engine drove onto a transverse crank shaft across the centre of the locomotive, above and between the axles, a heavy flywheel being located at each side. A Johnstone coil clutch and two-speed gearbox was fitted, with final drive by heavy chains. These locomotives worked at factories in London, Faversham, Holton Heath, and Enfield Lock, and at Admiralty depots, in many cases being driven by women crews. The survivor is of metre gauge but others varied between 1 ft. 6 in. and

2 ft. 6 in., and both inside and outside frames, depending on track gauge, were used.

The same Kent site has a veritable fleet of small locomotives of various makers, including some Baguley/McEwan, Pratt machines of 1917/18, built at Burton-on-Trent. Baguley was probably the first serious specialist in petrol locomotives, and gained impetus by absorbing the old established McEwan, Pratt business, which did some excellent work from around 1905/6. Baguley was world leader with hydraulic transmissions, and exported petrol-hydraulic railcars before the first world war.

Fortunately, concerted effort has secured a goodly range of Baguley-built locomotives for posterity, one of which took its place last year in the S&D 150 Celebrations at Shildon. This machine, No. 680 of 1916, is a standard-gauge 0-4-0 petrol-mechanical now with Baguley 60-h.p. engine and Baguley transmission. It worked at Liverpool, being restored by its owner, W. & R. Jacob & Co. Ltd., biscuit makers of Aintree, in 1967/8 before presentation to Beamish Museum in Co. Durham. Locomotive 680 was one of three very similar machines built between 1915 and 1918, being originally powered by a White & Poppe four-cylinder engine running at 900 r.p.m. The transmission, of Baguley patent type, incorporated a cone-type clutch and two-speed gearbox, giving speeds of 3½ and 6 m.p.h. Final drive was by a spur drive and jackshaft unit and side rods. It was delivered when built to Richard Johnson & Nephew Limited, and passed to Jacobs in 1919, receiving a new Baguley engine in 1927. Named *Jacob*, it is normally to be seen at the Dinting Railway Centre at Glossop, to which it is on loan.

Shugborough Museum near Stafford has a larger 0-4-0 petrol-mechanical of Baguley make (800/1920), which was rescued from the London Brick Company in Cambridgeshire in 1968. This was one of Baguley's largest standard-gauge petrol locomotives, and was completed in April 1920 for a customer who failed to take delivery, leaving it on the maker's hands until sold to London Brick in 1933. Powered by a four-cylinder 100-h.p. Baguley engine running at 1,000 r.p.m., it had a transmission incorporating a Baguley duplex clutch, Baguley two-speed, constant-mesh gearbox to a transverse drive shaft, with bevel reverse above the final drive jackshaft, drive to the wheels being by rods.

Most Baguley locomotives had a cylindrical bonnet which fitted over the engine and transmission and housed engine coolant and fuel, an arrangement which suggests erroneously to observers that the firm was trying to impersonate a steam locomotive.

Baguley did, however, take advantage of this idea when it entered the miniature railway market in the 1920s and 1930s. These locomotives may be seen and ridden behind at Alton Towers and Trentham Gardens, in Staffordshire, and at Wicksteed Park, Kettering, while a sixth locomotive is to be seen on the private line of the Rev. E. R. Boston at Cadeby, Market Bos-

Mc. This is the item of which I spoke a week or two ago
 For 'Enfield Lock' read 'RQPE'?

Ke B