
7 A Portfolio of Model Steam Locomotive Photographs

As there is no suitable collective noun we suggest an 'encouragement' of photographs of model steam locomotives built by Clarry Edwards and Peter McCabe.

M&GN 4-4-0 No 7.

Winner of the Chairman's Cup 1988. This has two cylinders with slide valves between the bores operated by Stephenson's link motion. The boiler has a single flue with cross water tubes and is spirit fired. Working pressure 85 psi (5.7 Bar). (Photo Paul Bason)



M&GN 4-4-0T.

Two outside cylinders with the slide valves between the frames operated by slip eccentrics. Water and spirit carried in tanks separate from the locomotive. (Photo Paul Bason)



Eastern and Midlands 2-4-0.

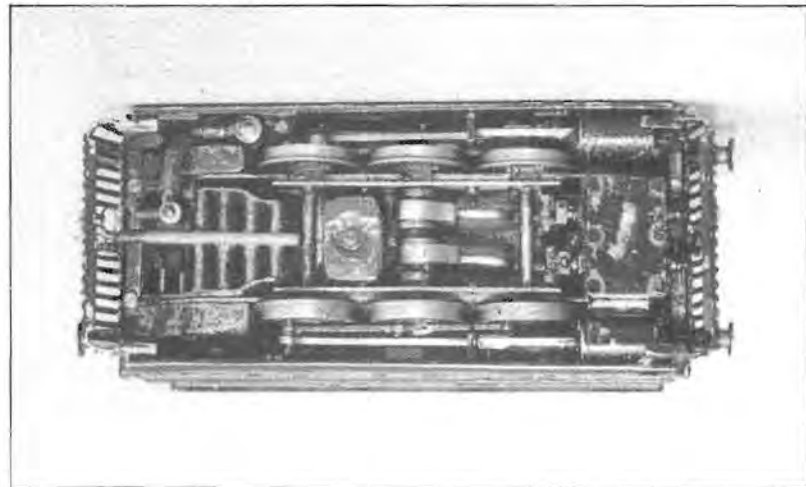
The motion details are similar to the M&GN tank described above. This model is 25 years old and still has its original Woolworth's paint finish. (Photo Paul Bason)





Wisbech and Upwell tram engine.

This has a loco type boiler with a dry sided firebox and five small flue tubes. Water and spirit are carried in the van. The under side view shows the cylinders and motion, consisting of two cylinders 1/4" bore by 11/32" stroke and slide valves operated by slip eccentrics. (Photo Paul Bason)



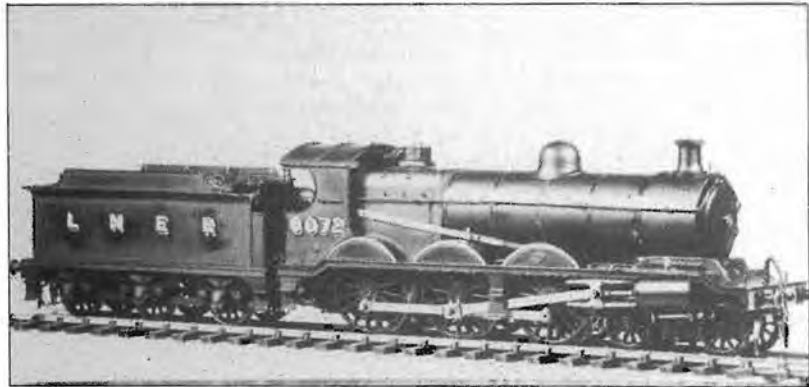
M&GN rebuilt 4-4-0 No 52.

This model has two inside cylinders with valves on top driven by Walschaerts' valve gear. This engine is 30 years old and is a very reliable runner. (Photo Paul Bason).



LNER B5 4-6-0.

A fairly simple but robust engine intended for hard work. This has two large cylinders, slide valves and slip eccentrics. The boiler is a loco type with dry sided firebox and five flue tubes. (Photo Paul Bason)

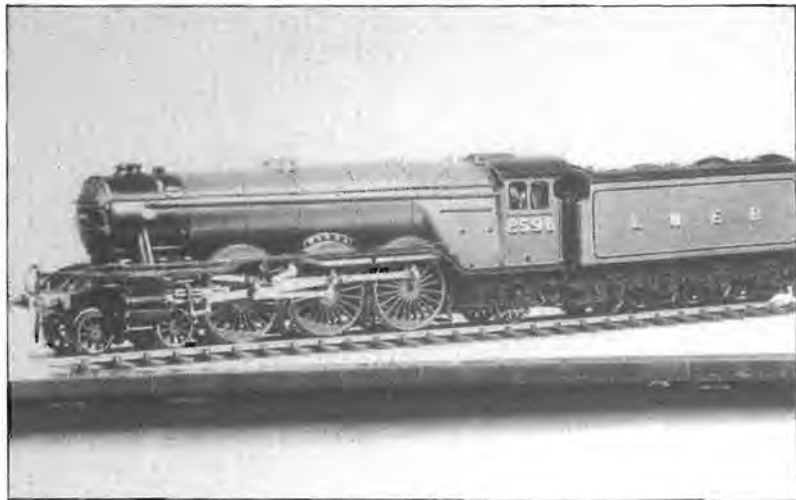


A view of the cab fittings of the B5. Some are working and some are dummy. Note the two 'injectors'; the one on the left is actually the blower valve while that on the right is the check valve where the feed water enters the boiler. The handle on the cab floor operates a drain cock on the steam chest. (Photo Paul Bason)

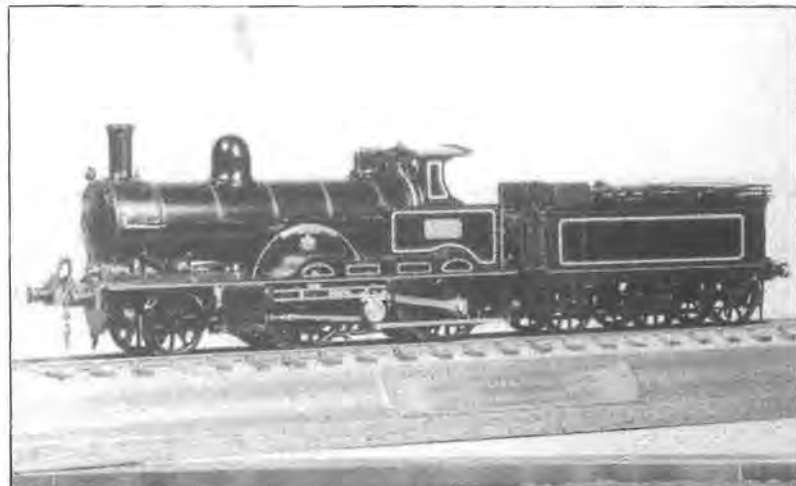


**LNER A3 Pacific.**

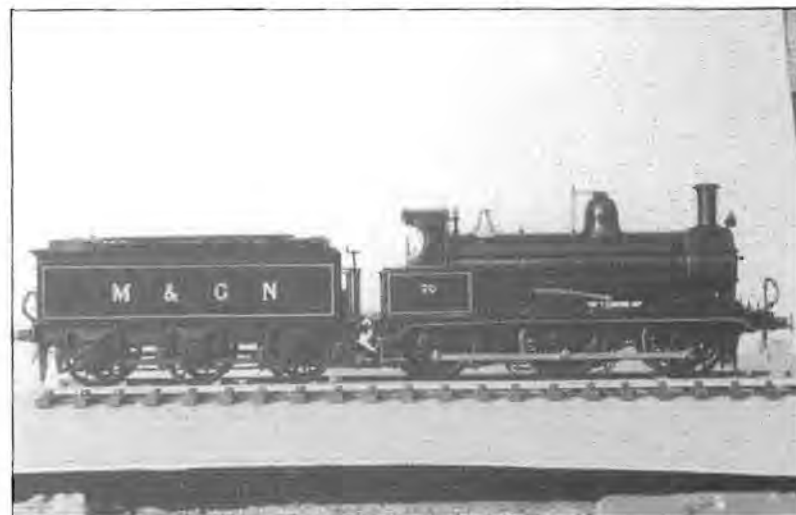
This has three cylinders and outside Walschaerts' valve gear. The centre valve was originally driven via Gresley 2:1 gear but this was found to be too springy, (shades of the full sized locomotive) and it is now driven by a form of Marshall gear. Loco type boiler. (Photo Paul Bason)

**Webb 'Dreadnought' 3 cylinder compound.**

This is a working compound with two small high pressure cylinders and one large low pressure cylinder. The valve gear is Joy's outside for the high pressure cylinders and slip eccentric inside for the low pressure cylinder. Like the prototype it is a poor starter but once on the move it is very powerful. (Photo Paul Bason)

**M&GN 0-6-0,**

Winner of the Chairman's Cup 1989. Like the M&GN 4-4-0 described earlier, this has two cylinders with slide valves between the bores operated by Stephenson's link motion. The boiler has a single flue with cross water tubes and is spirit fired. Working pressure 85 psi (5.7 Bar). (Photo Paul Bason)



LNWR 'Prince of Wales' class.

Awaiting painting. This has been built as close to the prototype as possible with two cylinders and Joy's valve gear. Since the photograph was taken the locomotive has been painted and exhibited at the Model Engineer Exhibition where it won a silver medal. (Photo Paul Bason).



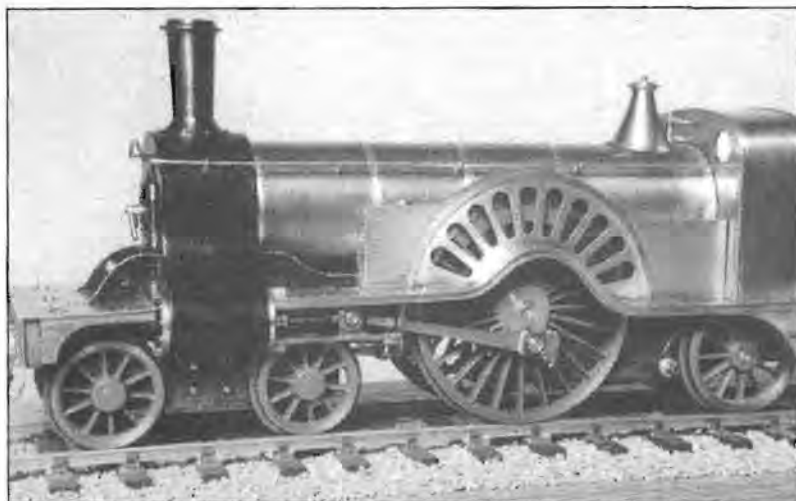
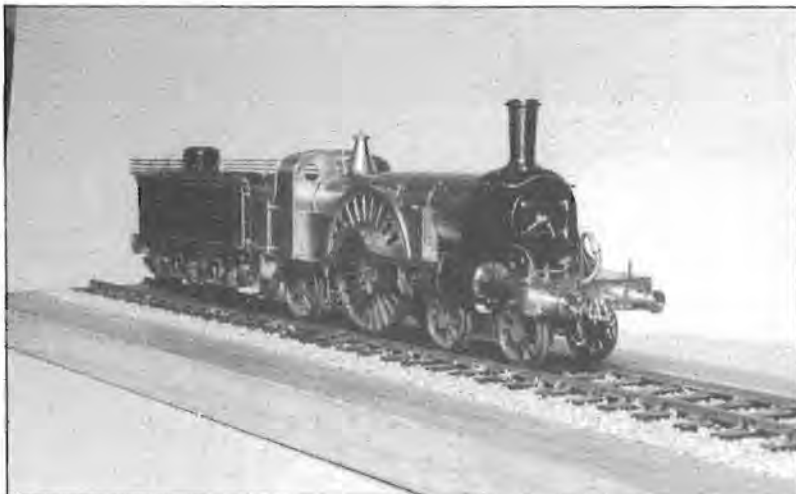
Patrick Stirling's 4-2-2 No 5.

The boiler is a novel design being butane fired from the firebox with two fire tubes in the boiler carrying superheater tubes. The smokebox door can be opened and has a mica window which allows the fire to be observed when lighting up. The regulator can be manually or radio servo operated.

The two cylinders have slide valves between the frames driven by fully notchable Stevenson's link motion operated by a latching reversing lever in the cab. The chassis is fully sprung and arranged so that maximum traction is applied through the drivers.

The tender carries a transparent butane tank with flow valve, radio receiver, servo and miniature battery.

The locomotive will run for six minutes with a train of eight bogie vehicles on one water filling. A refill via a special filling valve and nozzle, visible at the side of the fire box in the close-up view, can be carried out quickly and the locomotive can be away again within thirty seconds. (Photo Peter McCabe)





Royal Scot Class 4-6-0

The Kings Dragoon Guardsman Radio controlled butane fired with three cylinders and Walschaerts valve gear. The valve gear has special radio control to give extra 'chuff' as the train begins to move. The tender has an electronic water level indicator using Light Emitting Diodes (LEDs) and a battery; a

polycarbonate 'see-through' butane tank, (viewed through openable bulkhead doors); two servos and a water tank with handpump beneath the dome. The second servo regulates the butane burner. Most parts, such as the boiler, cylinders, burner and tanks are fabricated from raw materials. (Photo Peter McCabe)



King Arthur Class 4-6-0

Merlin, (awaiting nameplates). A new engine only steamed a few times but capable of hauling 14 or more carriages for over half an hour without refuelling. The boiler design is unique, having virtually a totally enclosed burner system not unlike the Davy miner's safety lamp. No blower system is required and steam is raised in 3 1/2 minutes after light up. The butane flow is easily controlled so that the train can be run

on the state of the fire rather than by the regulator, so that no steam is wasted. The tender carries the butane tank which has a novel system of filling to ensure a proper fill of fuel in any weather conditions with the minimum spillage of fuel during transfer. Water for an hours run, supplied by a vertical hand pump, has been provided. Space has been retained to allow eventual fitting of Radio Control servos and coupling system. (Photo Peter McCabe)