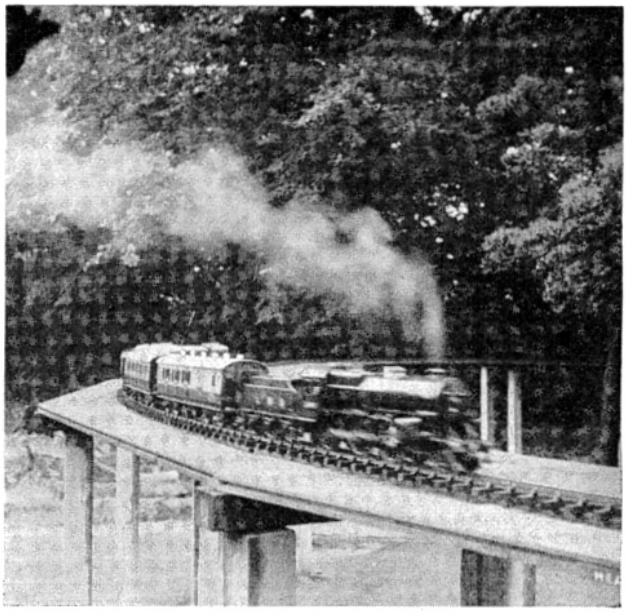
ELECTRICAL FIRING & CONTROL OF GAUGE 1 LIVE STEAM LOCOMOTIVES

by G.M.T.



THE January, 1960 edition of the "Link", in commenting on the 1959 December Exhibition of the Manchester Model Railway Society, contains the following quote:—

"The outstanding impression one received at the Corn Exchange this time, was of a great number of layouts working and working fairly smoothly. Smoothest of all in every sense, seemed to be the GMT affair. That this ambitious invention should be projected so soon into an exhibition hall and give no trouble—at least we saw or heard of none—is a tremendous tribute to the enthusiasm and workmanship of Messrs. Getgood, Mills and Thompson."

The only real trouble experienced by GMT was their sore thumbs and those of willing helpers who wound up the "gauge one" clockwork locos incessantly in order to augment the service provided by the one steam loco—*Sir Gilbert Claughton*—to maintain adequate entertainment to our "paying guests".

The layout was on baseboards, each six feet long, designed by GMT, but constructed by a firm of local joiners. One half of the layout consisted of track taken from Arthur Bridge's layout, and the other half, of new Bassett-Lowke's track parts.

The layout ran with the controller at one end (Merrills Bridge Station) and the remote control buttons incorporated as a fixture on a baseboard at the other end (Coppenhall End Station). The layout was similar to the existing one, but was 60 ft. long, as compared with the present 66 ft. The new layout has two additional 3 ft. baseboards, one for the tunnel and one for Coppenhall End.

The Claughton at the 1959 Exhibition ran continuously for one hour on one filling of the boiler, running round the five coaches at each end. We never quite achieved this again. The rest of 1960 was utilised in tests on Arthur's outdoor layout and the conversion of a Bassett-Lowke Crab.

We did not exhibit in 1960. The Gauge One Association put on a wonderful show instead. Bob Hines and Francis Dobson stayed with Bob Mills in Manchester and we demonstrated the Claughton to them on 6 ft. of track in the GMT workshop. She was so worn out it took all her effort to move herself.

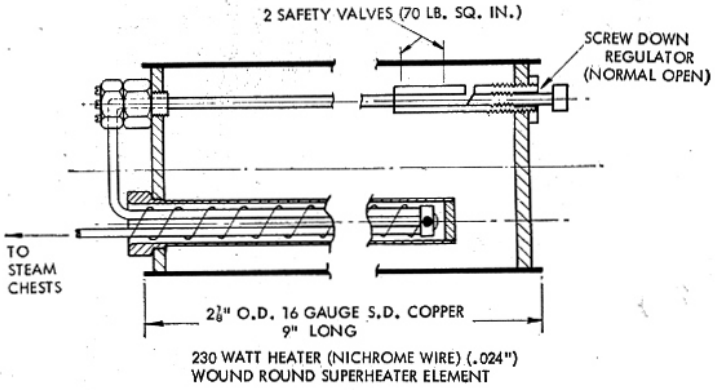
We knew she was on her last legs because she had previously hauled the "last train" on the outdoor layout prior to Arthur Bridge dismantling and moving house.

The last train was one we will never forget—she could not pull a passenger train up the 1-110 from the terminus, so, like her prototype (in similar condition), was relegated to a freight train as was the wonted practice of LNW. She left the terminus in a cloud of steam, literally pouring from all possible sources at the front end and safety valves, plus characteristic wheeze—struggled over the summit and then toddled off to the end of the line. There was only one thing to do—strip her down—fit packing glands to the piston rods, turn grooves in the piston and pack them. At the same time we modified the four amp heater by winding our own round a pukka "superheater bend", which fitted into a tube blanked off at the "firebox" end and screwed into the boiler with the same ⅜ in. gas threads as used on the original heating—the idea being to minimise condensation.

This was a huge success and the Crab was fitted with an identical boiler. In fact this has now become our standard boiler—the Royal Scot having one similar, but about one inch longer. (See diagram 8.)

The next instalment will describe the actual controls, also the layout used. We have been promised periodical reports from GMT.

Caption shot shows the Crab ascending the 1 in 70 part of the viaduct. All photographs in this series have been by I. Vaughan.



Right: Diagram 8 showing new boiler.