

I have been greatly indebted to a number of correspondents who have kindly supplied information which has enabled this article to be prepared, particularly Messrs. F. E. Box, W. E. Hayward, R. Lloyd-Holt, H. J. Pritchard and G. F. Tull.

Previous articles on the Lynton & Barnstaple Railway rolling stock appeared in the following issues:—

Part 1.—(1) March, 1951.* (2) April, 1951.*
Manning Wardle Locomotives.

Part 2.—August, 1951. Third Class Coaches.

Part 3.—November, 1951. Coach Details.

Part 4.—February, 1952. Composite Brake Coaches.

Part 5.—October, 1952.* 4-wheeled Goods Vehicles.

Part 6.—May, 1953. Bogie Wagons.

*Out of Print.

British Railways Apprenticeship Scheme.

Every boy who starts with British Railways as an apprentice trainee is given an attractively illustrated 32 page brochure which not only helps him to understand the particular course of training he will undergo, but points out its relationship to the other courses and indicates the general railway background against which he will work.

The Derby Locomotive Works Training School covers theoretical and practical training as well as physical education in the well equipped School Gymnasium. Every boy selected for employment as an apprentice spends twelve months in the Works Training School prior to commencing an approved apprenticeship in the main workshops.

For the ambitious boy there are now open many avenues of promotion, details of which are published in the brochure.

Copies of the brochure are also supplied to parents and educational authorities seeking information about the apprentice training scheme.

Part 15.

A Gauge 0 Steam Loco for Beginners.

By "1121."

It is important that the cylinder block should be correctly positioned in the frames and the diagram (Fig. 74) shows just where it goes. The main thing to watch is that the piston-rod gland screw shall clear the leading coupled axle, and that the centre-line of the piston-rod shall be truly in line with the centre-line of the driving axle; we show how this latter point is checked by means of a straight-edge. Assuming that your cylinder is made to the correct dimensions, the centre-line of the piston-rod will be $\frac{1}{8}$ in. above the under-surface of the block, and subtracting half the diameter of the axle from this $\frac{1}{8}$ in. gives the $\frac{7}{32}$ in. dimension between the underneath of the axle and the top of the straight-edge, which can be measured with your rule or checked with inside calipers, if you have any small enough.

The cylinder is kept in place by means of the tool-maker's clamp right over the frames, and when you are sure it is in the right position spot through the holes in the frames into the cylinder block and steam chest cover respectively with the No. 43 drill. Then remove the

clamp and take out the cylinder. Unscrew the steam chest and cover, and continue with the No. 51 drill into the block, right through the steam chest cover, and tap both 8 BA (Fig. 75). Temporarily attach the steam-chest cover to the inside of the righthand frame with two short 8 BA countersunk brass screws, and carefully saw and file the inner ends of these off flush with the inside of the cover, as you don't want them sticking through inside and getting tangled up with the valve. All this being done, the cylinder-fixing holes in both frames can be countersunk, remembering to give the tapped holes a touch with the countersink if necessary to clear the screwheads.

If you would like a further check on the position of the cylinder block in the frames before you spot through

Fig. 74. Locating the Cylinder in the frames. Note that the $\frac{3}{8}$ in. dimension is between the bottom corner of the front cover, and the inside of the buffer-beam.

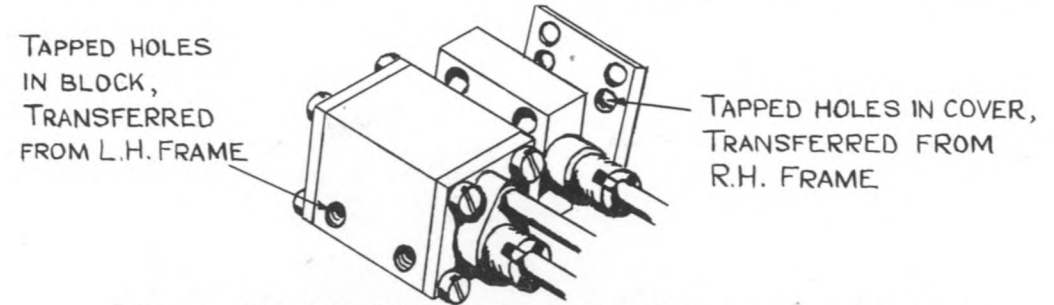
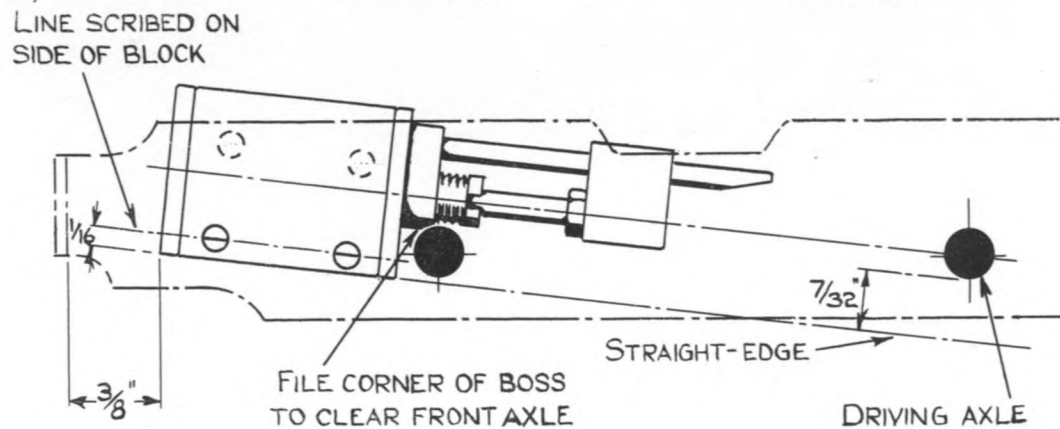


Fig. 75. The fixing-holes in the Cylinder-block and Steam-chest Cover.

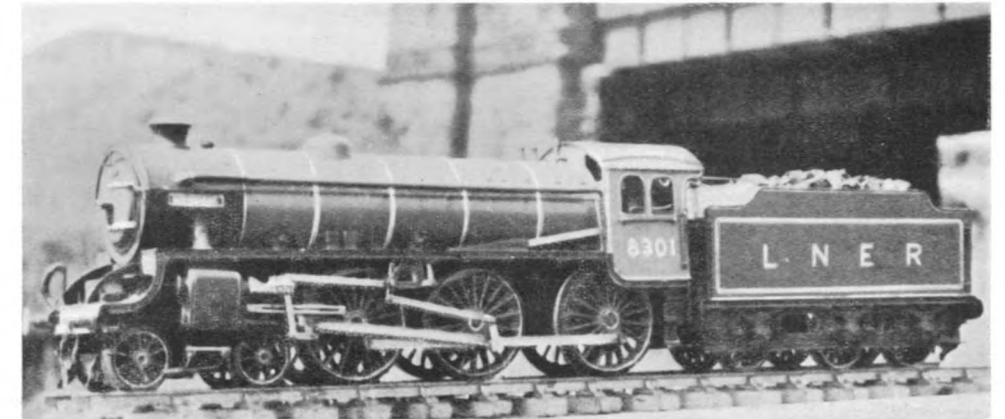
with the drill, you can scribe a line along the side of the block which goes next the lefthand frame, at $\frac{1}{16}$ in. from the bottom face of the block. The two screws on this side should come approximately on this line, so that

when you are getting the block clamped in you can look through the holes in the frame and see that the line goes approximately across their centres. This line is indicated in the diagram, to give the idea.

A 7 mm. Scale Ex-L.N.E.R. Class B.1 Loco.

By

J. B. CLEGG.



Some time ago a friend suggested that I should model a B1, as it would be a simple prototype for a beginner. After completing the model I am inclined to disagree with him.

This engine is 7 mm. scale (stud contact) and driven by a Romford motor, which is a credit to the manufacturers, in that it can be varied from a crawl to a scale speed of 120 m.p.h.

The frames and the whole of the superstructure, with the exception of the boiler is made from nickel silver, which I found to be an excellent material to work with. The boiler is made from brass tube salvaged from an old telescope, the thickness being only $\frac{1}{64}$ in. made the soldering of the boiler mountings, etc., a piece of cake. The beading round the tender and cab windows was made from copper wire filed half flat and soldered in place.

Now came the difficult part—the cylinders and motion. I cut the cylinders from solid brass—never again! In future they will be fabricated from plate. Ever tried soldering solid cylinders to thin frames? The desired

result was achieved after a lot of "sweating" over the gas ring.

The moving parts in the motion work are secured with 'Hobbies' brass pins, soldered behind and the surplus length cut off. This proved more satisfactory than screws at they tend to work loose.

Finally, just a few words about the painting. The model was given two coats of flat paint and then lined out with a mapping pen and Indian ink. Some modellers prefer a ruling pen, but I find a mapping pen more suitable. The boiler bands are thin strips of white paper, lined out and glued to the boiler. The lettering was blocked in white ink and then given a coat of yellow poster colour. When the whole thing was dry a thin coat of semi-gloss varnish was applied.

In conclusion I should like to take this opportunity of thanking B. R. Wing for his excellent photograph and H. F. Darnbrough for the developing and enlargement. A natural background seems to have a wonderful effect on a model.