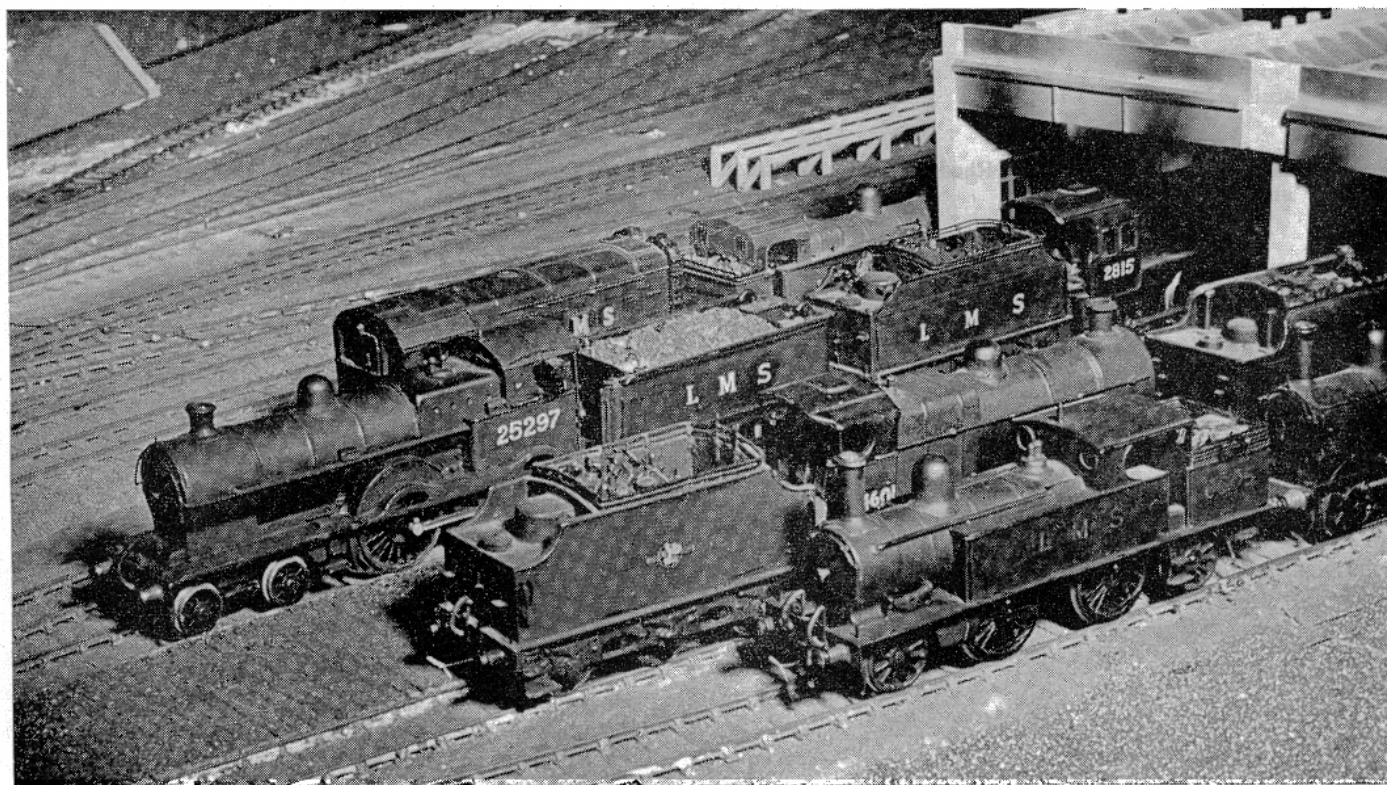


CENTRAL CHESHIRE

by Don Rowland

How to design and construct your layout



A Model Railway News SUPPLEMENT



No longer on express work *Sirocco* is demoted to working an up parcels train past Wistaston Sidings. A coal train stands in No. 1 loop.

Front: Sunday afternoon at Rhuddall Heath: no smoke, no foreman, no spotters and not a trace of green paint anywhere in sight.

Genesis

To set about describing one's layout one should logically, begin at the beginning. Trouble is, with the Central Cheshire it is hard to pinpoint the actual beginning. There are several possibilities.

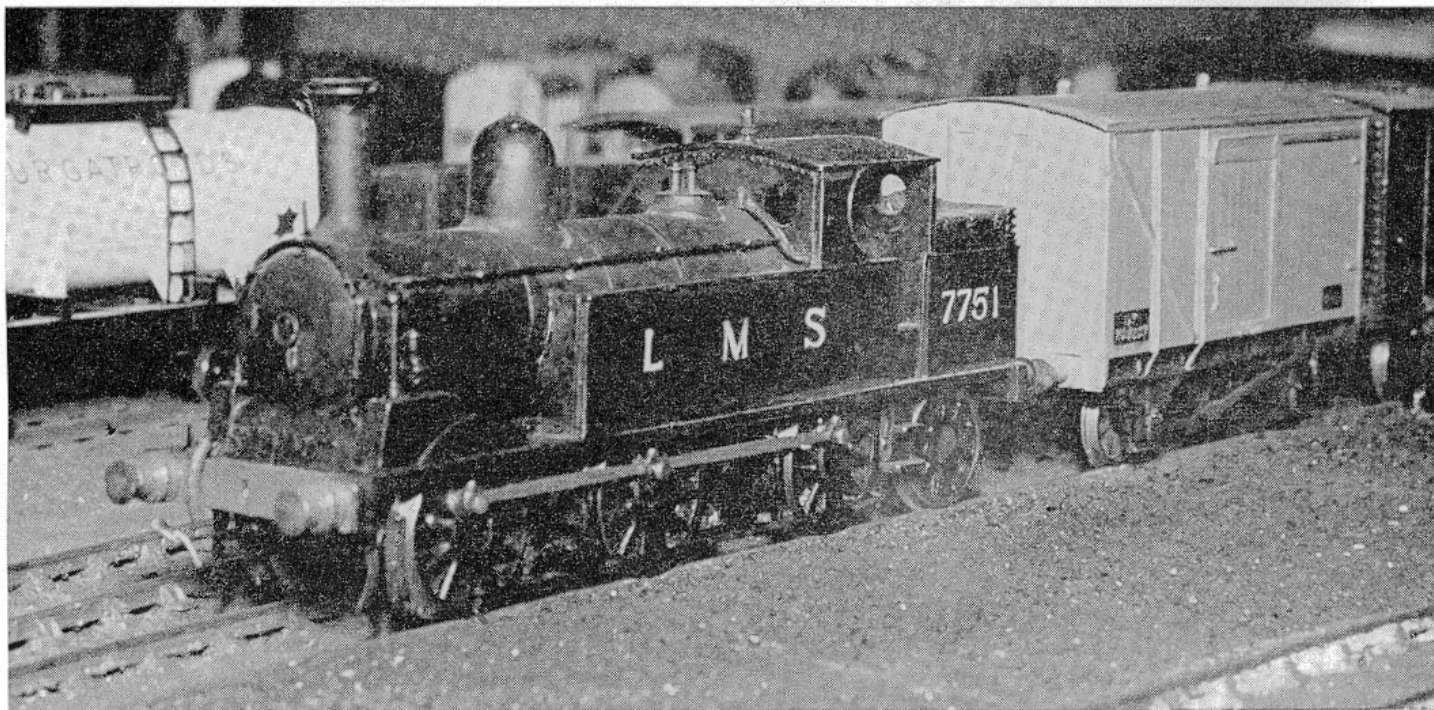
Christmas Day 1938 (oh dear!) could be a convenient starting point for it was on that day that a very excited small boy received a Hornby-Dublo train set and what is more it was electric and not clockwork. On Boxing Day I managed to play with it myself. It was of course, LMS. Parents knew that I had no time for the other lines. I must admit though that when I saw the prototype loco 6917 in Lime Street station some years later I was a little bit disappointed to find that it was older and more long-funnelled than my model. The present layout still incorporates one item from that train set, but that is another story.

1955 could also be a starting point. On getting married some modellers have to give up their layouts but for me the opposite was the case. No longer was I confined to building the odd wagon in my 'digs'. Shortly after getting married my wife and I moved into a bungalow which, by sheer coincidence, happened to support a large loft. It is that same loft, ten years later, that houses

a far from complete Central Cheshire railway.

The years in between 1938 and 1955 were not entirely wasted. Many hours were spent sitting watching trains and observing operation of the railways. A shed-bashing phase caused me to travel up and down the country quite a bit and in the course of my trips I got an idea of quite a few station layouts. Although I very much doubt if I realised it at the time, it was during these years that the layout was taking shape. But, although I had accumulated a fair amount of prototype knowledge, I had little experience of the craft of railway modelling.

The Edinburgh & Lothians Miniature Railway Club was founded in 1951 at the instigation of Mr. W. Loch Kidston. I joined almost immediately and as a result met some first-class modellers from whom I was able to learn a great deal about the hobby. The Club layout I was able to use as a practice range which was invaluable experience. About this time too my good friend Ken Northwood invited me to help him with his North Devonshire layout. Whether I was any help or not I don't know, he is far too polite to say, but thanks to learning from his experience I am sure I have saved a tremendous lot of time in building my own layout.



On local pick-up goods 7751 shunts Wistaston local yard. Brake van and several wagons have been left standing on the main line.

It was through him that I was able to meet Mr. Fleetwood Shawe and this gentleman's Irthing Vale layout (MRN April 1955) with its long freight trains and superb performance set me a future standard. Also through Ken Northwood I met John Charman who, at this time, was building a layout whilst living in a caravan. I'm glad to say that although we now live at opposite ends of the country we still keep in contact.

Finally I must mention the Christmas Exhibitions organised by the Manchester Model Railway Society. It was the Dog Track at the 1954 show which persuaded me to forsake OO and go in for EM. I must thank them for their practical demonstration of what was possible in EM, worth, dare I say it, a dozen articles.

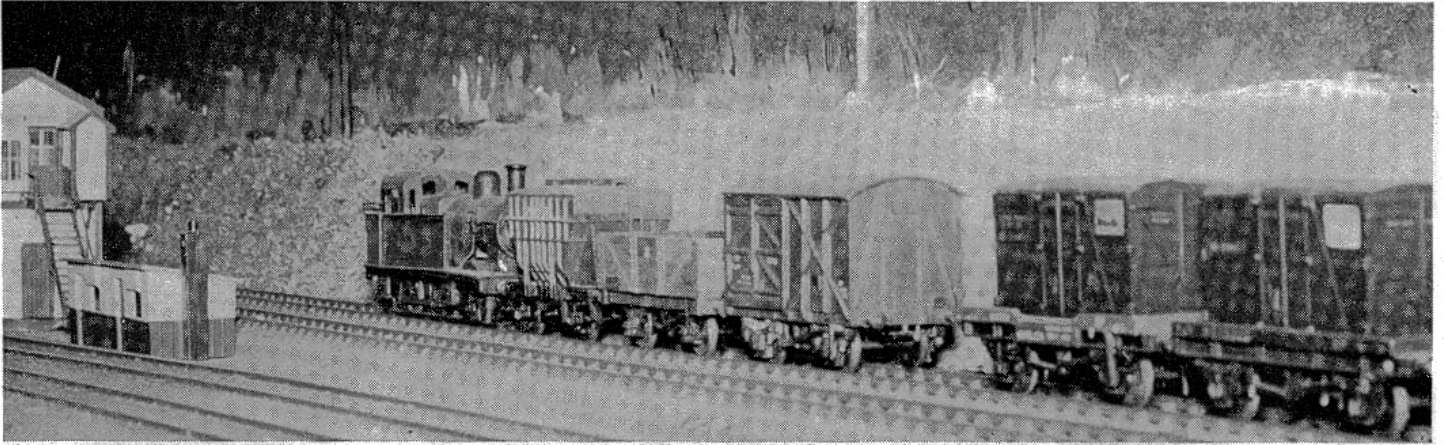
These sources of inspiration have been recounted in some detail for two reasons. First there is a desire to acknowledge some of the help I have received from other modellers. Secondly I have tried to show that the ideas behind the Central Cheshire evolved over a period of time. Once the size of the loft was known it was merely a matter of shaping ideas to suit the space available. Thus it has not been felt necessary to re-think the layout, rip it up and start all over again: in fact I have

made only minor alterations to the plan I drew up some ten years ago. Heaven knows, there's little enough to show as it is. How much less there would have been if I had chopped and changed I hate to think.

The basic principles behind the layout were, and still are, as follows:—

- (a) It must be railwaylike.
- (b) It must work.
- (c) It must look right.
- (d) It must follow LMS (Western Division) practice.

Alas, being a mere mortal I am only too conscious that only varying degrees of success have been achieved. So far as (a) is concerned, despite my efforts, some of the things I have done would I feel sure be frowned upon by professional railwaymen—and the signalling isn't started yet. With (b) I am afraid I'm not quite satisfied, but I doubt if I ever will be. (c) of course is a matter of opinion but there is always room for improvement. As for (d), a lot depends on the period one models and the information available. So far as the latter is concerned membership of the LMS Society and the Historical Model Railway Society has been a great asset.



Jinty 7603 on the Wistaston Sidings shunt loses off a couple of loaded Conflats. A Triang conversion some nine years ago 7603 is now so worn she often sticks on dead centre. It makes for interesting driving.

Planning

Once we had moved into our home and done at least some of the hundred and one jobs such a move entails I was able to get upstairs and plan the layout in detail.

There were also the problems of flooring part of the loft, insulating it, lighting it, supplying power and so on, but as they were by no means unique I will not describe them here.

I decided on a broad plan to be implemented in stages. The floor area was measured and a general track plan was prepared. The purpose of this plan was to get a rough idea of the disposition of the various units which would go together to make up the layout. At this stage, provided areas were known accurately, it was not necessary to draw up all tracks in detail.

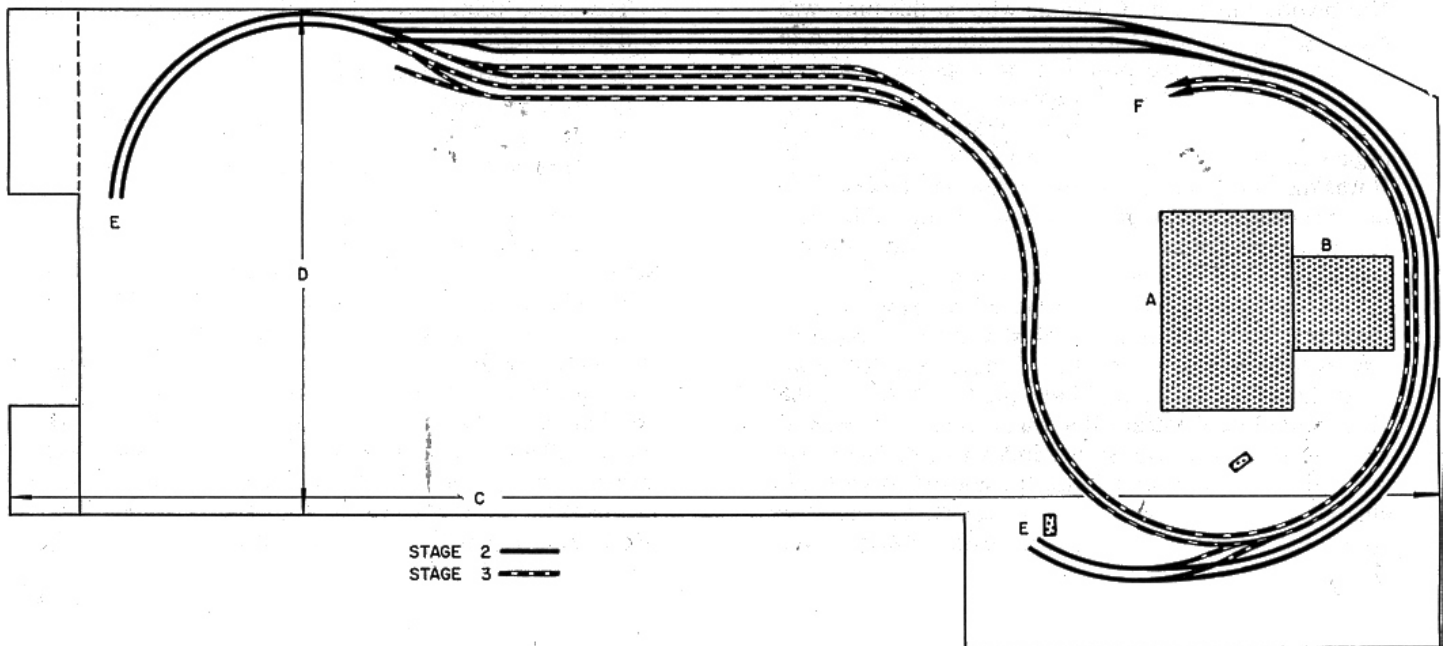
The result of this work is shown in Figs. 1 and 2. Assuming a basic baseboard height of 3 ft. 6 in. gave an

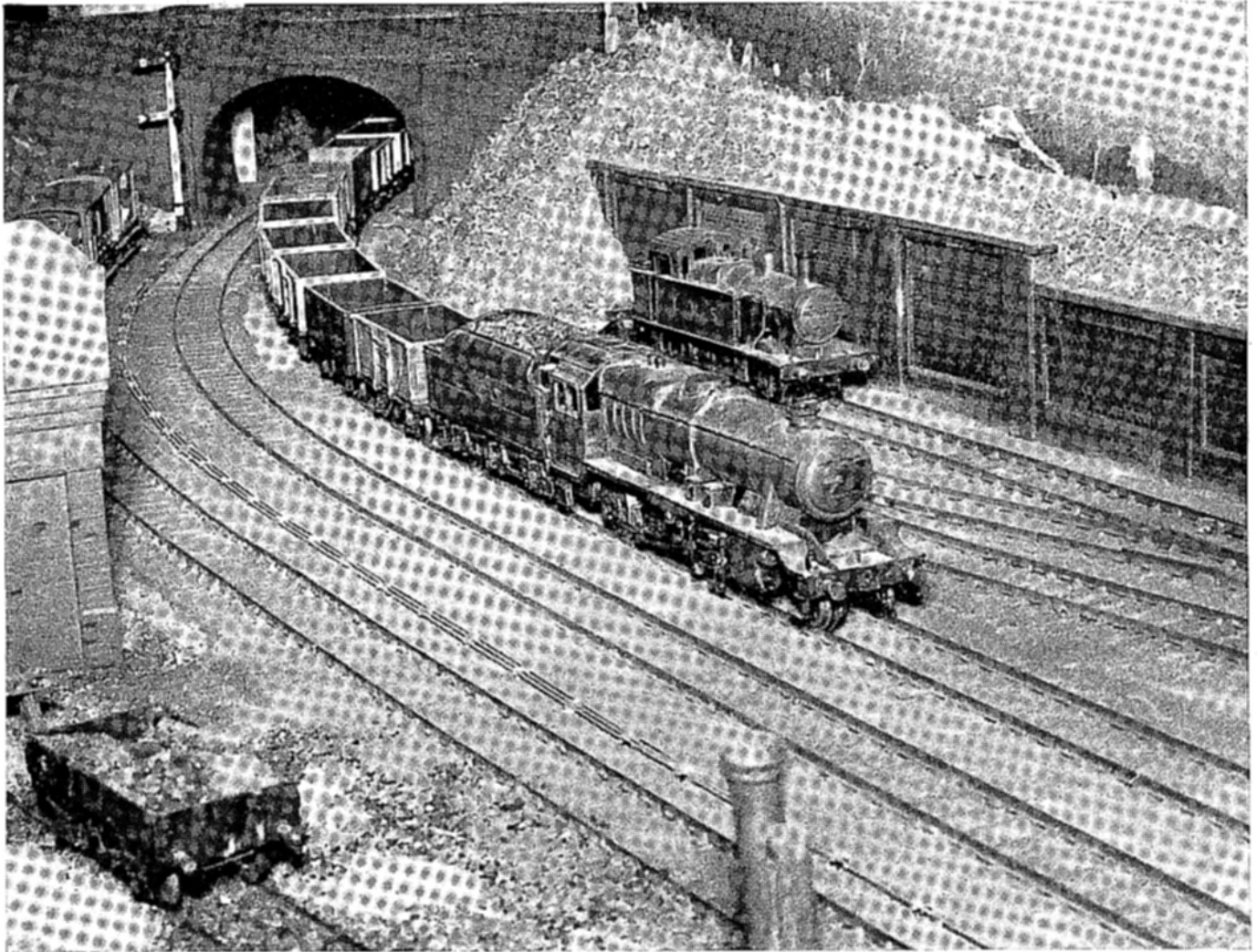
area of 24 ft. x 8 ft. 6 in. available, less obstructions. The crucial point was the space behind the chimney and by careful juggling it was possible to get 4 tracks at this point. This in turn fixed baseboard height and also helped to set the pattern of the layout. The other consideration was the pattern of operating requirements.

First I wanted a terminus from which to operate a simple passenger service. Not ginormous main line trains but 6-7 coach semi-fasts and some locals. There would also be a fairly extensive goods yard to generate local goods traffic in reasonable amounts. Since there was to be only one terminus, trains would work on an out-and-home basis and this entailed a reverse loop.

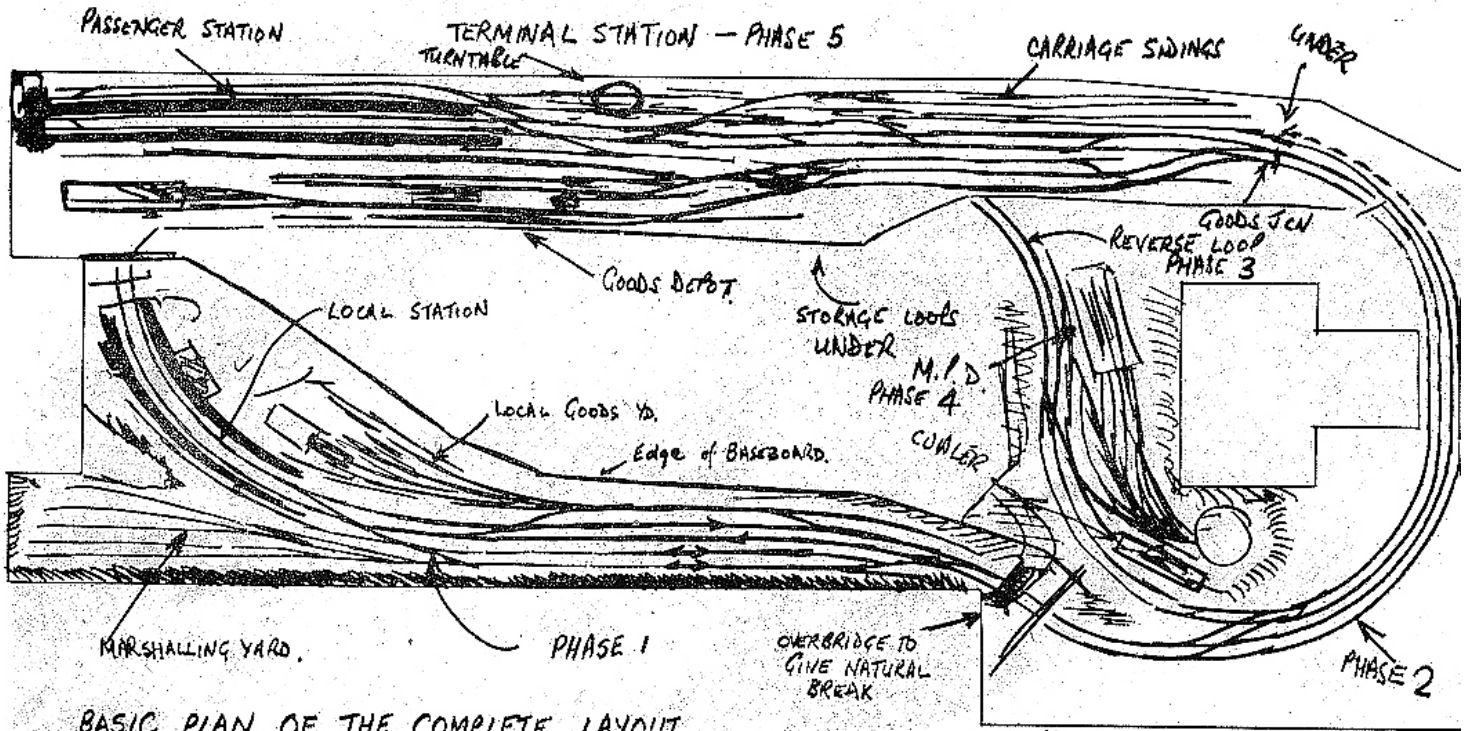
The second essential was a marshalling yard. It would have been nice to have modelled Basford Hall but life is short and pockets are shallow. So something smaller

Fig. 1. The home of the Central Cheshire—a plan of the loft. Area available for the layout is that within the line. A/B are obstructions—water tank and chimney respectively. Length C is 24 ft., width D is 8 ft. 6 ins. The drawing is actually the detail drawing made for Phase 2/3. Phase 3 tracks are the dotted line. Wistaston Sidings (Phase 1) extend E-E whilst tracks at F lead to the terminus in Phase 5.





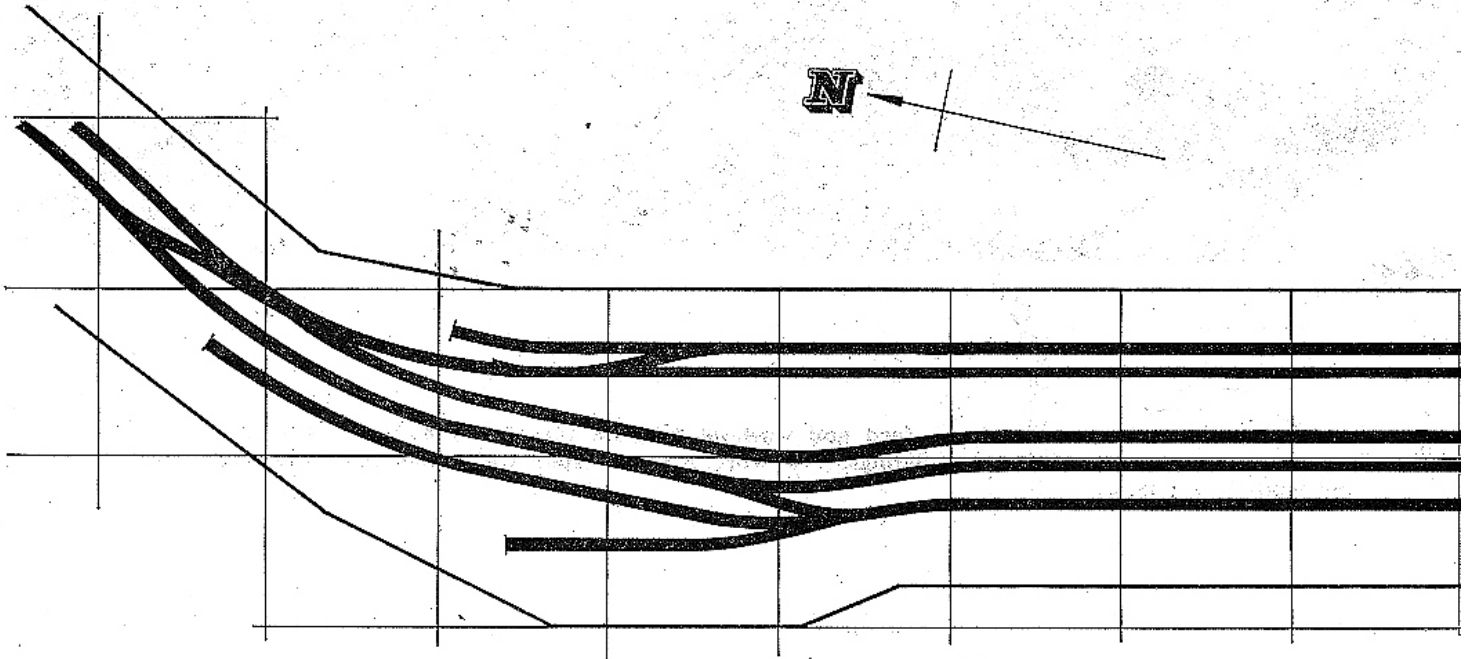
With evidence of leaks around top feed and washout plugs, a very grimy 8307 hauls a through train of empty wagons past Wistaston Sidings. No work here for 7603 which has dealt with all shunting and waits in the neck.



BASIC PLAN OF THE COMPLETE LAYOUT.

Fig. 2. (above) Many sketches like this one were made before the final version emerged. Tracks are sketched in generally and are fixed only when the detail drawing for the phase is made. M.P.D. for example will probably have four roads leading to turntable but final layout is not yet known.

Fig. 3. (below) Phase 1 completed. This covers the local goods yard, the marshalling yard and a local station. Each square represents 1 sq. ft.



was planned with two or three reception roads and a capacity of about 70 wagons. Since my desire was to run freight trains with a few passenger trains to get in the way the yard would be the hub of the layout. To accompany the yard I have added a wayside station with a small goods yard. Operationally one could compare the result with Tebay as of old, a small yard for interchange and examination of through freight trains with a local station and goods yard thrown in.

The locomotive depot was to be sited away from station and yard in a position convenient for both but which would give rise to some very interesting, but highly uneconomic, light engine working. Here one could quote a parallel situation at Warrington (Dallam) shed between Winwick Quay sidings and Bank Quay station.

Finally to couple the three units together I would require some main line and storage sidings. The result of these deliberations is shown in Fig. 2 where the notes give some idea of what is what.

I spoke earlier of doing the job in phases; indeed with such a project phasing is the only answer if one is to play with the layout at all before it is completed.

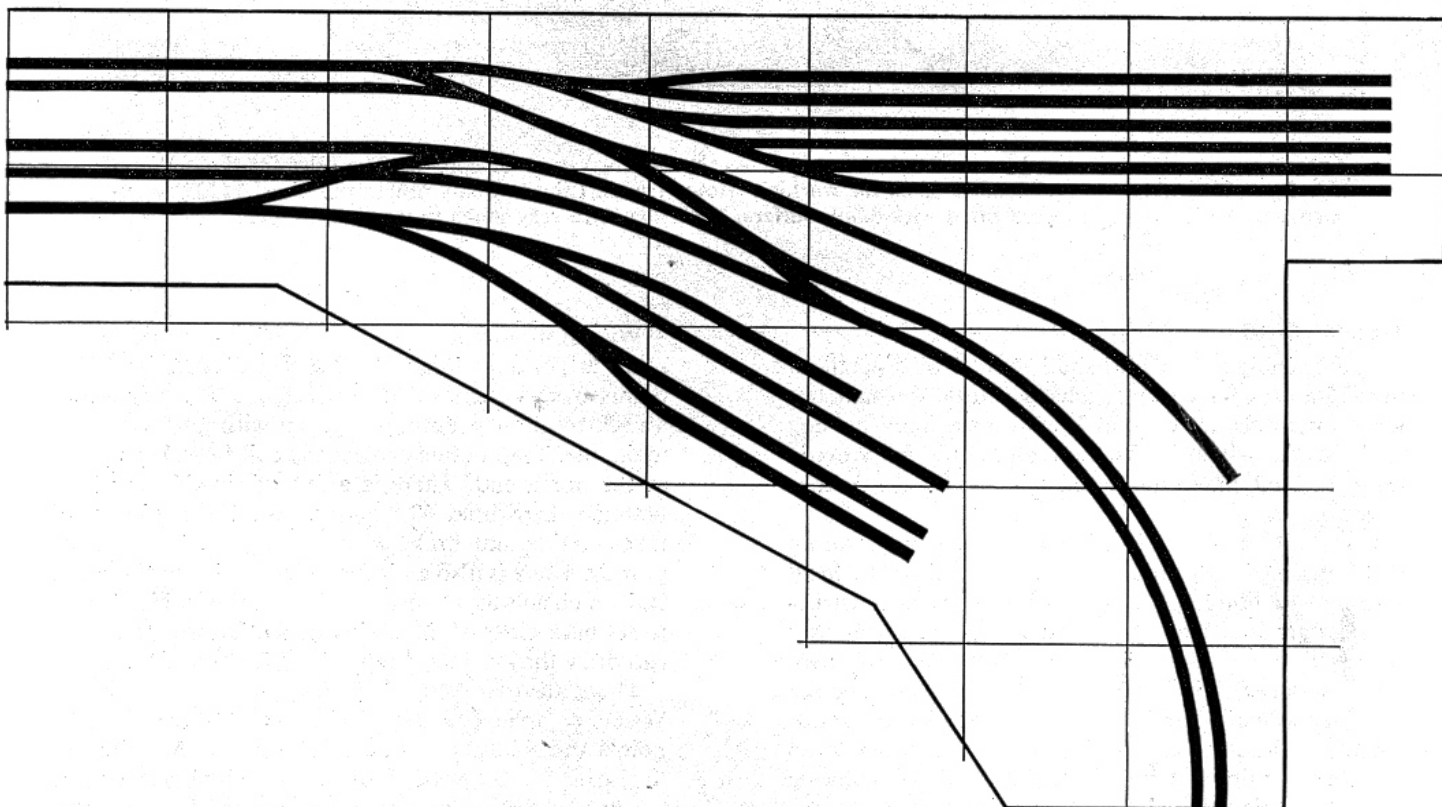
Construction was planned in five phases as follows:—

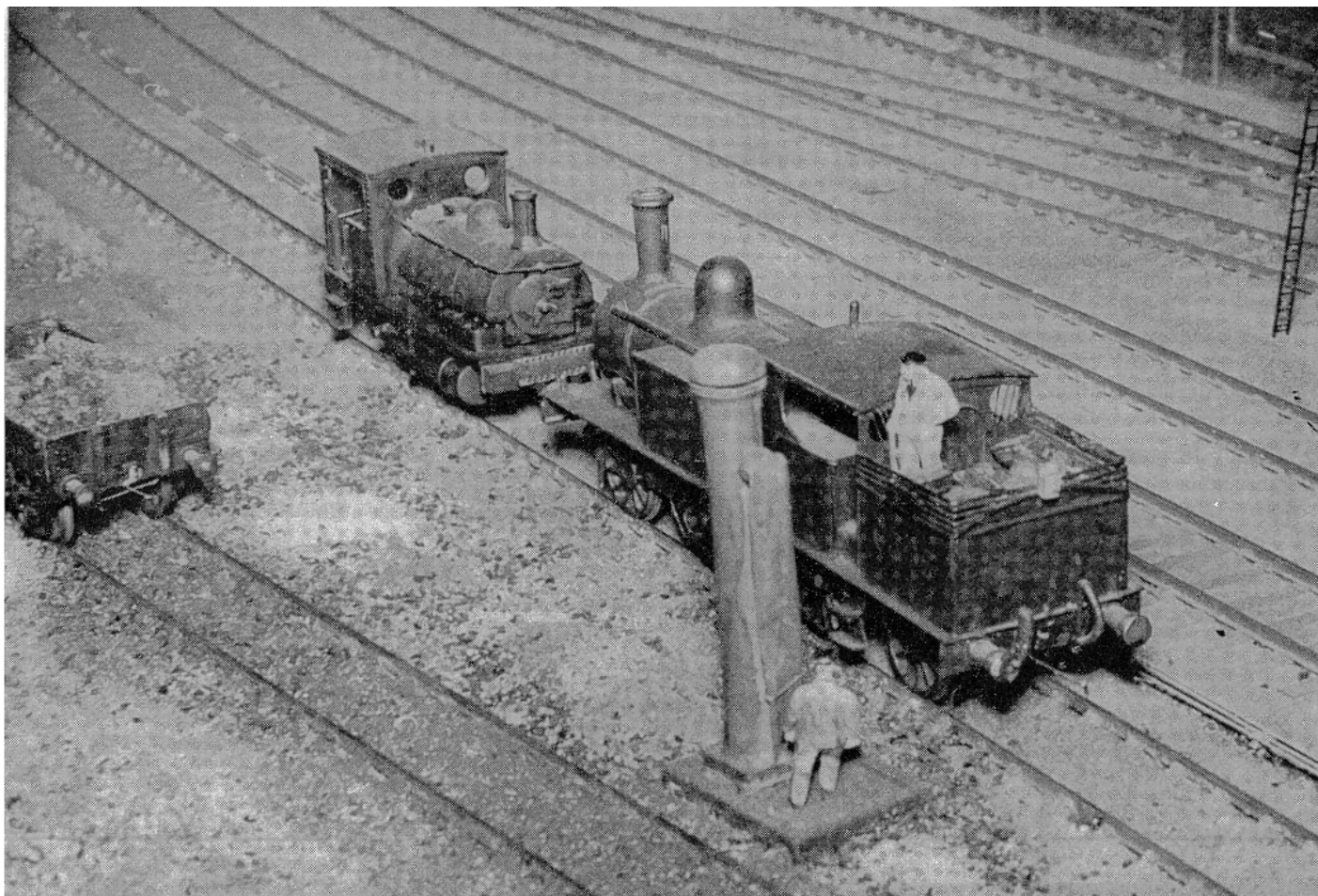
1. Marshalling yard and local station.
2. Complete the circuit and install loops.
3. Reverse loop.
4. M.P.D.
5. Terminus.

To date Phases 1 and 2 are complete and the descriptive part of this article will deal with them. Maybe in another ten years I will be able to describe a further two phases.

Perhaps I should point out that phasing covers only baseboards and track. Construction of locomotives and stock proceeds independently (and in some cases far ahead) of trackwork. So far as scenery is concerned I am a bit of a shocker. Kind (non-LNWR) friends have pointed out that even the Premier Line did not run through uncharted wastes of Weyroc so right now I am trying to put things right as the photographs will show.

That is the Genesis of the layout together with an idea of what I am planning to achieve. From here on it is a description of what has been done so far.





The fireman waits whilst his driver unhooks the bag from the ex-LNWR water column. The filler for these Webb 2-4-2Ts was in the bunker. 6605 is fitted for working Motor trains. Like so many others the 'Pug' 11221 is ex-Airfix but unlike a lot has been fitted with dumb buffers. Both locos are very much in working livery.

Description

In describing the layout I shall go into some detail on those features which are perhaps a little unusual but where methods are normal I shall make only passing reference. Baseboards, for example, are $\frac{1}{2}$ in. Weyroc on 2 in. \times 1 in. framing and will receive no further mention.

Fig. 3 shows what is in effect Phase 1. There is an up and down main line and on the curve is sited the local station. The buildings for this are still under construction but are sufficiently far advanced for me to say that they will be of the LNW wooden-framed, wooden-panelled variety with wooden platforms as well. To the west of the main line is a small four road local goods yard with shunting neck and trailing connections to up and down main. A small siding leads off the shunting neck and this is used by the motive power people. Trackwork is complete but again the scenic side is not.

To the east of the main line lies the marshalling yard

Wistaston Sidings. The two arrival-cum-departure roads are bi-directional and can be entered over facing points from both up and down main. No. 2 road has a neck to allow shunting to go on without fouling the main line. Trap points protect the exit from both roads at the north end. There is a fan of six sidings which between them hold 68 wagons. No. 1 reception road takes engine and brake plus 22 wagons, No. 2 same plus 20. There is also an independent siding at the south end which acts as a trap and allows trains in No. 1 road to set back clear of the main line so that the yard pilot can draw them forward into No. 2 for shunting.

There are two methods of track construction in the Wistaston area. The first applies to all tracks except the points and sidings in the marshalling yard. My aim was to create the impression of good well-ballasted track where sleepers are not 9 in. proud of the ballast and the rail is 12 in. above the sleeper tops, (that just wouldn't do for the LNW postcards, would it now?).

When laying new track I know from the plan roughly where the track should go and where the ballast should end. I get three or four yard lengths of nickel silver rail, fishplate them and solder them together checking that they are nice and straight. Next I lay pieces of 3 mm. ply on the baseboard and mark them out to represent the limits of the ballast. This is where the rail comes in. By laying it on the ply and pinning the ends, I can use it as a template to mark out the edge of the ballast. The great advantage is that the rail will thus take up a natural curve, one that looks right and therefore, to me, is right. The ply is removed, cut to size and edges chamfered and pinned down in position. On top of this I paste wallpaper, either plain or finely embossed and overlap it on to the baseboard. All this gives a good level base for laying sleepers and rails. Sleepers, 4 mm. \times 36 mm., are cut from Bristol board in their hundreds using a photo trimmer. They are then laid in a jig (Fig. 4) to get correct spacing and a strip of masking tape is used to make sure they keep this spacing. By now the wallpaper has dried so we go back to the long rail to mark out the position of the sleeper strip. The sleepers are glued down one strip at a time. When they are dry we again use the long rail to mark out the position of the inner rail. Here the advantage is that it will take up pretty much the same curvature each time.

For all trackwork, bar the up and down main, I have used chaired bullhead rail having retained supplies of the old C.C.W. chairs which, although oversize, look very realistic. They are spaced out and glued to the

sleepers, being pinned every third one. For main lines I use F.B. rail with 4 \times 5 mm. Bristol board baseplates on each sleeper. The rail is glued to the plates and pinned about every four sleepers. A small trace of glue is used to simulate the fastenings on other sleepers. The whole of the track is then given a coat of track colour.

There remains the job of ballasting. For ballast I use sand which is dyed various shades. For the bit of track at Wistaston up starter where engines might be expected to stand and drop all sorts of things on the track the ballast is almost pure black, whereas at the north end where points and crossings have just been re-ballasted it is very fresh, almost white. The method gives track which looks quite realistic and yet (oh joy!) is cheap to build. Points are all hand-built following the same methods except that around the frog I sink $\frac{1}{2}$ in. No. 1 brass screws into the baseboard and solder direct to them.

Method No. 2, used for the sidings which are tucked away at the back where they are not so easily seen, is gloriously simple but much more expensive. It consists of buying Firmway points and track and laying them directly on the baseboards. Then a very milky mixture of plaster of paris and water is poured over them to give a representation of a very uneven ballasting, or even

Fig. 4. The sleeper spacing jig. The photograph shows a length of sleepers in the jig already tapered prior to removal with a further length removed and laid aside.

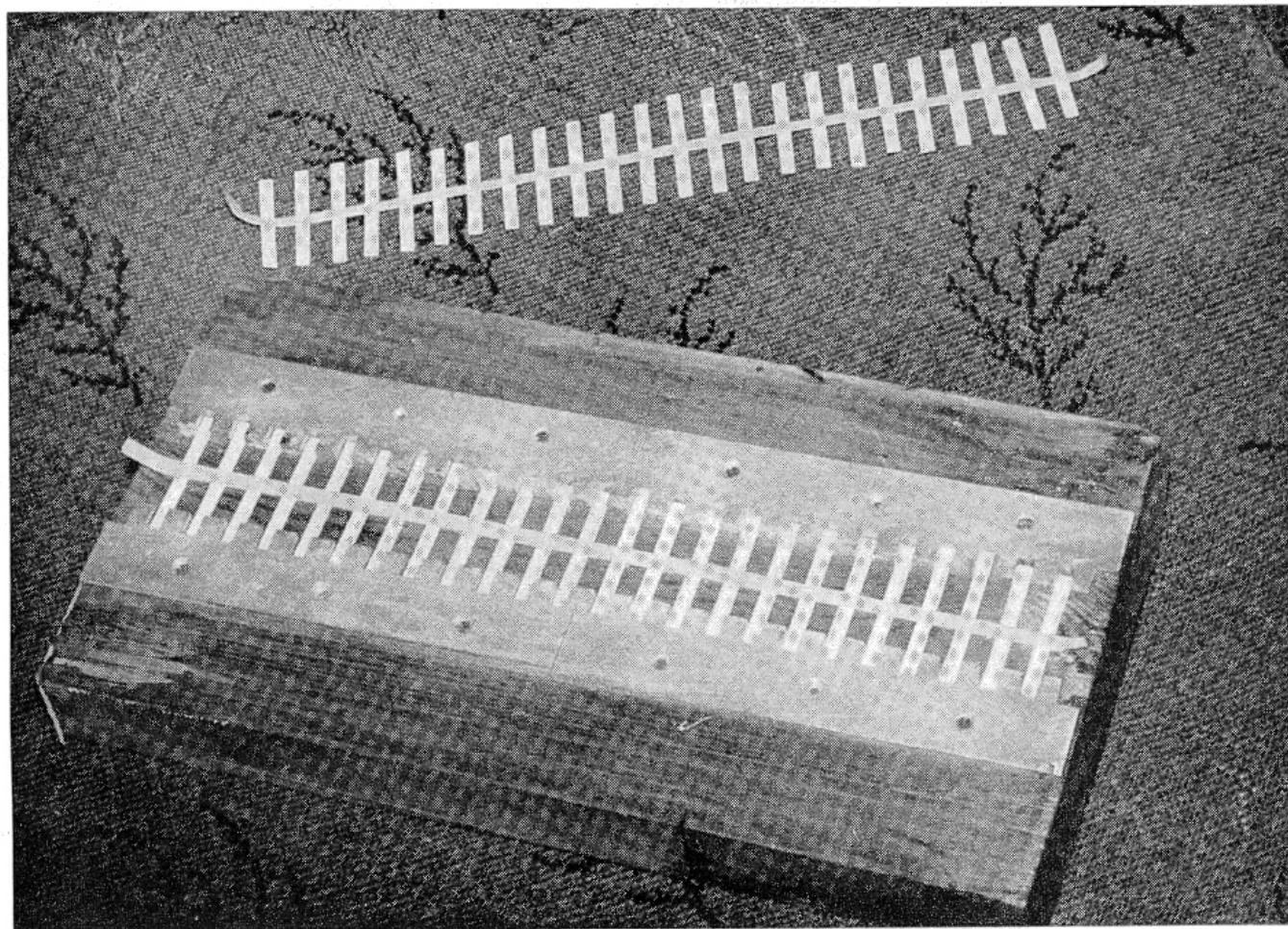




Fig. 5a.

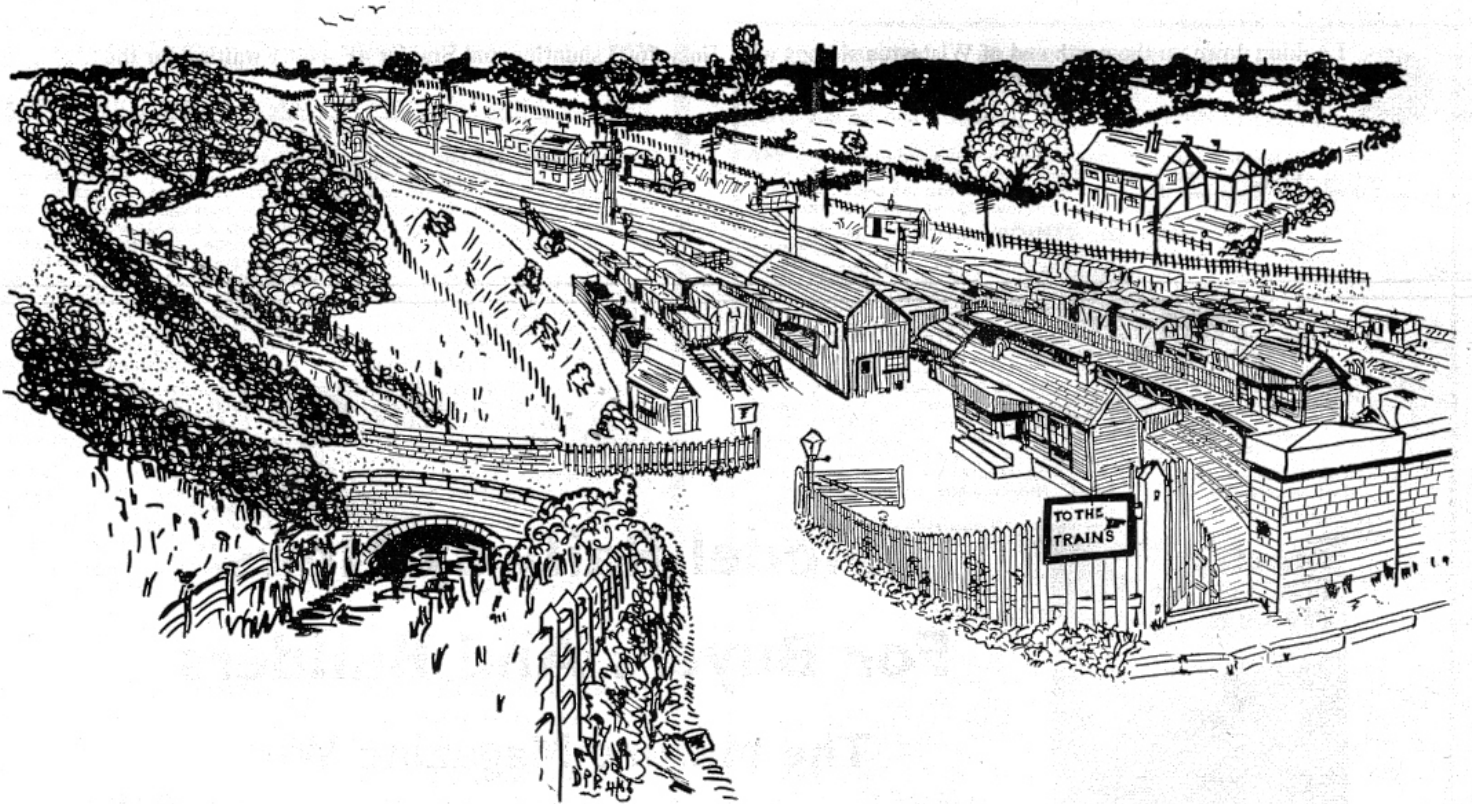
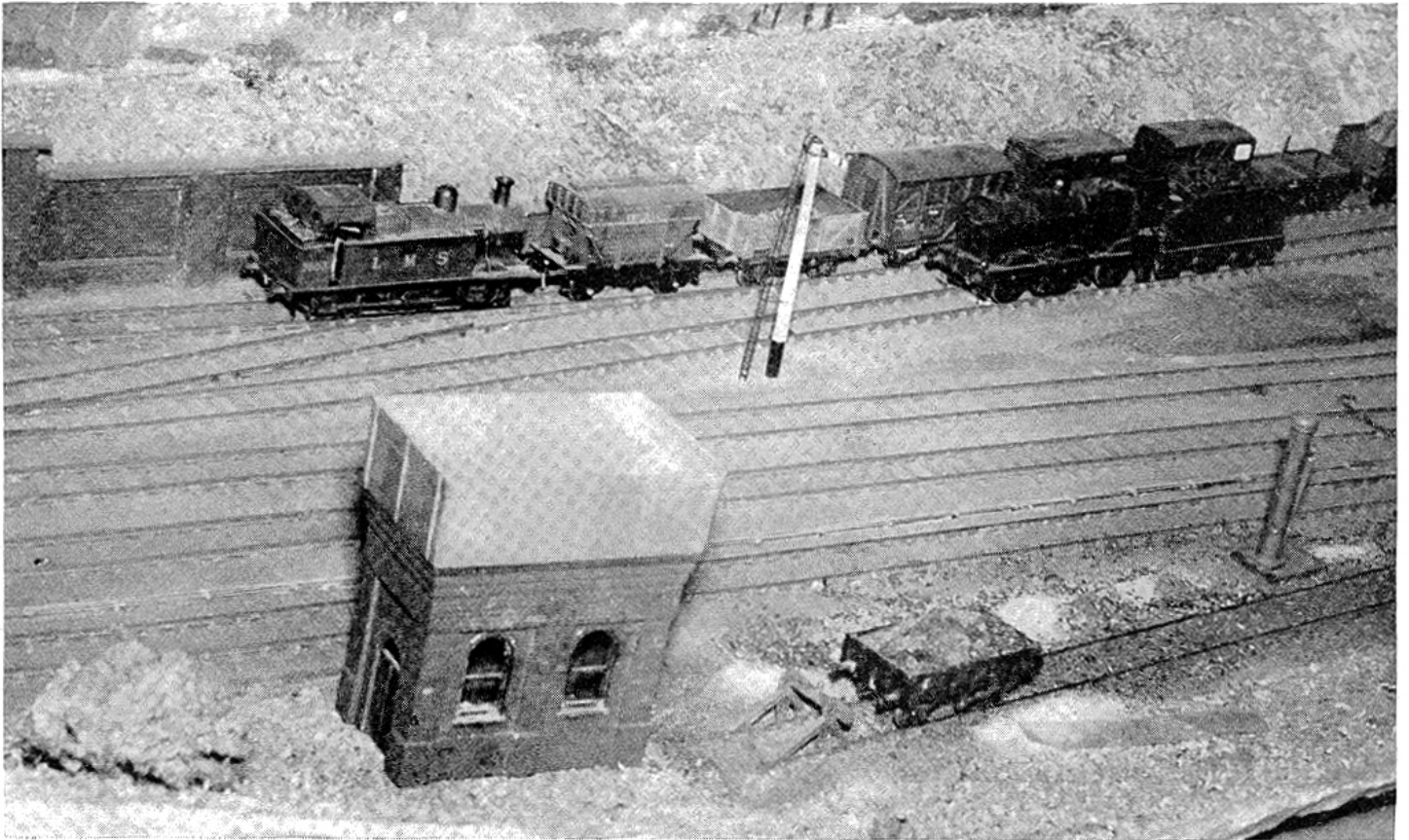


Fig. 5b.



Looking down on the north end of Wistaston sidings with Jinty 7603 shunting and Stanier 4F 44601 waiting for the road to go off L.E. to the shed.
