

RAILWAY OF THE MONTH

Isle of Man in miniature

Jim Lawton describes the 4mm. scale model of the I.O.M.R. system

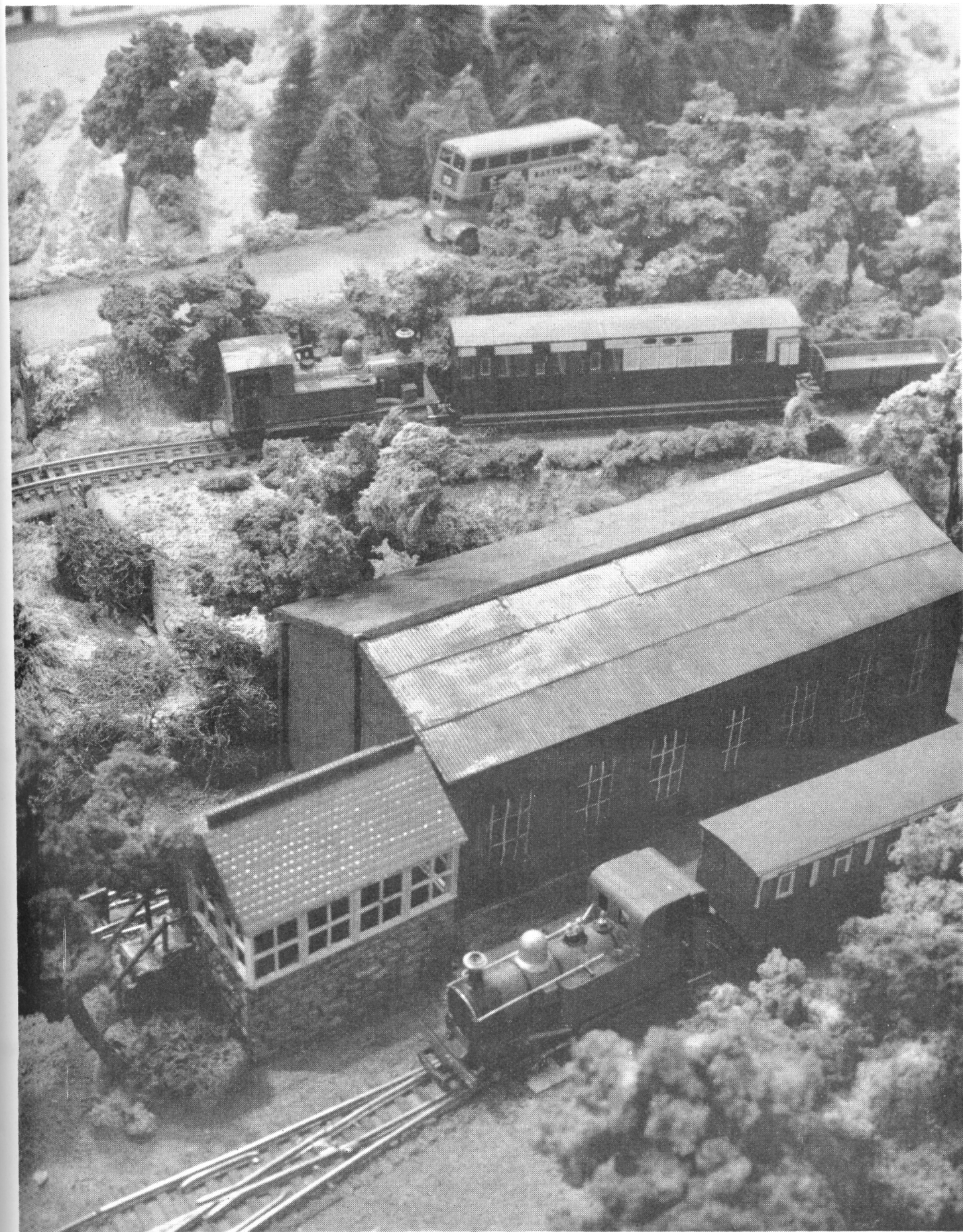


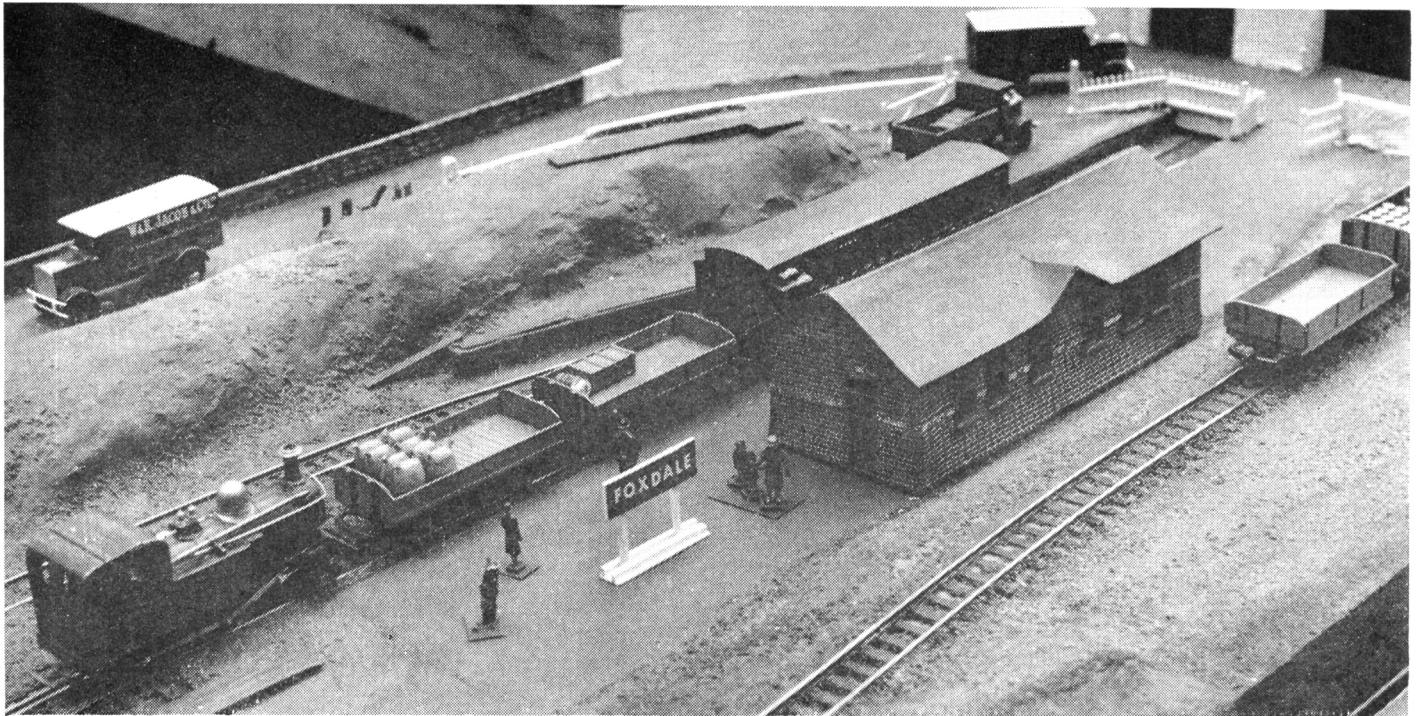
ONE of the commonest questions people ask me in relation to this layout is "What made you choose the Isle of Man Railway as a prototype?" There are many answers to this question, and here are some of them. The I.M.R. is the only surviving example of a three-foot narrow-gauge railway left in the British Isles, and therefore the only one to which one can turn for real live prototypes of rolling stock, motive power and buildings. Furthermore, as most of its motive power and much of its rolling stock was built in Manchester, of which I am a native with family connections who were actually engaged in building these locos for the railway, can you wonder that I should choose this in preference to any other narrow-gauge system? If these are not reasons enough, let me say simply that I am in love with the Isle of Man.

For over ten years this layout has been a pipe dream, but not, I may add, just an idle one. During this time I have visited the island whenever possible and taken lots of pictures and made many notes and records. Each time I have returned with the resolution more firmly fixed in my mind that one day I would build a layout based on the Isle of Man Railway. Many were the discussions and plan-drawing sessions with Jim Edgar in his upper room, where all the difficulties were considered, suggestions made and rejected, and, I may add, lots of cold water poured over the project from time to time. But I still kept on doggedly planning, collecting information and taking photographs, confident that one day I would realize my ambition. The only thing that was holding me back at this time was lack of space at home. Then came the advent of TT gauge, with the appearance on the market of several small motors. Jim, George and I decided to try out this scale, and whatever were the motives of the other two mine was simply to gain experience with this new set of components with the idea of applying them later towards the fulfilment of my ambition. Techniques involving scenic work, electrical circuits, the joining of individual layouts together to form one large layout, lighting for exhibition purposes—all were worked out during this period.

I was not idle in other directions either, as I was searching for a suit-

TOP OF PAGE: awaiting the clear at Port Erin. BOTTOM OF PAGE: passing a typical Manx farm on the approach to Ramsey. FACING PAGE: sylvan scene near St. John's. In the foreground, the Ramsey line from Douglas, with carriage shed in the right centre. In the background, the Foxdale branch climbing to the flyover.





able house where I could have my own railway room. In July 1963 I found the ideal house for my purpose, and so the balloon went up. I informed my two partners that I was at last going to make a serious start. They smiled indulgently and took no notice; after all, I had been drooling on about this thing for years, and quite candidly they just thought me a harmless nut case who had an Isle of Man bee in his bonnet.

My associations with the island have for the last few years been centred on Ramsey, so this terminal was chosen as the base for my railway. The plan at this period was a rather modest affair involving Ramsey, Kirk Michael station, and the viaduct at Glen Wyllin. This plan, which would have made a very attractive layout, was never fulfilled, although I still hope to include these features at some future date.

When it became apparent to the members of the M.M.R.S. that I was really serious and was ready to make a start something seemed to happen. Before I knew where I was I had several offers from other members to join in the project. One at least came as a complete surprise, as he had never shown any interest in the smaller scales, always maintaining that O gauge was the smallest practical size in which to model. My two original partners had by now come to the opinion that if they could not beat the silly beggar they had better join him. By now we were seven, and it was obvious that an overall plan would have to be devised, and so one Sunday early in March 1964 we all met at Bill Tate's home and had our first board meeting, as a result of which the present plan was evolved. Then began what is probably the most intensive piece of activity the society has ever known. Ken Ball was responsible for this, for he informed us that he wanted the layout for the Macclesfield exhibition in October, so we had barely seven months from plan to exhibition. It is a great credit to the team that this was accomplished.

part of the project. I managed to make a rather rough model of "Caledonia," which was used as the test engine during building and subsequently has proved an excellent engine in service, having many more track miles to its credit than its prototype. Then I tried my hand at a Sharp-Stewart 2-4-0T, and Jim Edgar tried out one or two ideas for a Beyer-Peacock engine. These ideas came to naught, but hope was not lost. Easter was approaching and the Westminster affair held by "the other lot" was due to take place, so a day return ticket was booked and a visit paid to that kindest of all model railway manufacturers George Mellor. A word in his ear, a drawing sent through the post, a visit to Manchester to see how we were progressing, and George was on the job too; he even sent his draughtsman over to the island to get some measurements at first hand. With the last of our worries disposed of we set to work in real earnest, and by Whitsuntide the society put the headquarters hut at our disposal so that we could make the joints between the various sections. While all this activity was going on Ken Ball had persuaded Collin of the Macclesfield group to produce a very fine model of "Mannin."

Problems

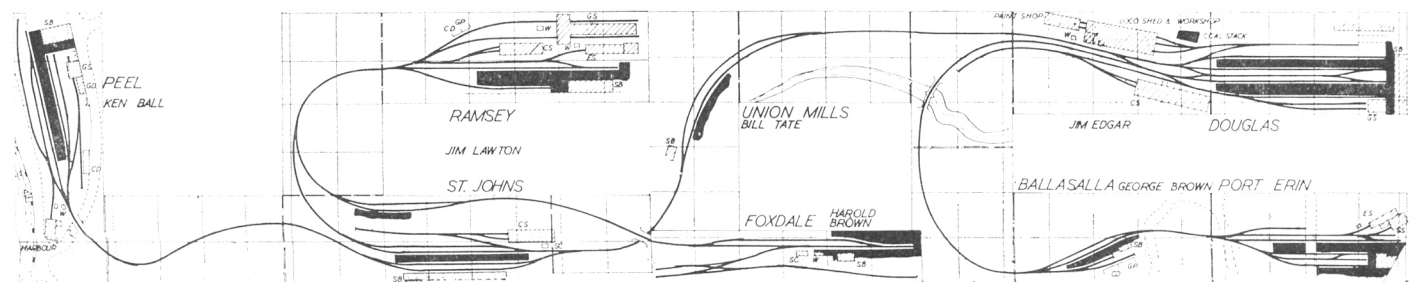
Between spells of intensive modelling, various problems arose which required ironing out and regular meetings of the board were called at my home. Methods of producing rolling stock were discussed, some of which were described in the December issue of the RAILWAY MODELLER. Another snag cropped up at this time when Tri-ang suspended the production of clerestory-roofed coaches, from which we were making Isle of Man coaches. However, Don Borcham came to our rescue and

TOP OF PAGE: *Foxdale terminus. "Foxdale coach" on end of train. FACING PAGE TOP: Douglas terminus. Peel train about to depart, Port Erin train just arrived. FACING PAGE BOTTOM: St. John's. Douglas—Ramsey train in middle, Peel—Douglas train at rear, Foxdale train just visible on extreme left.*

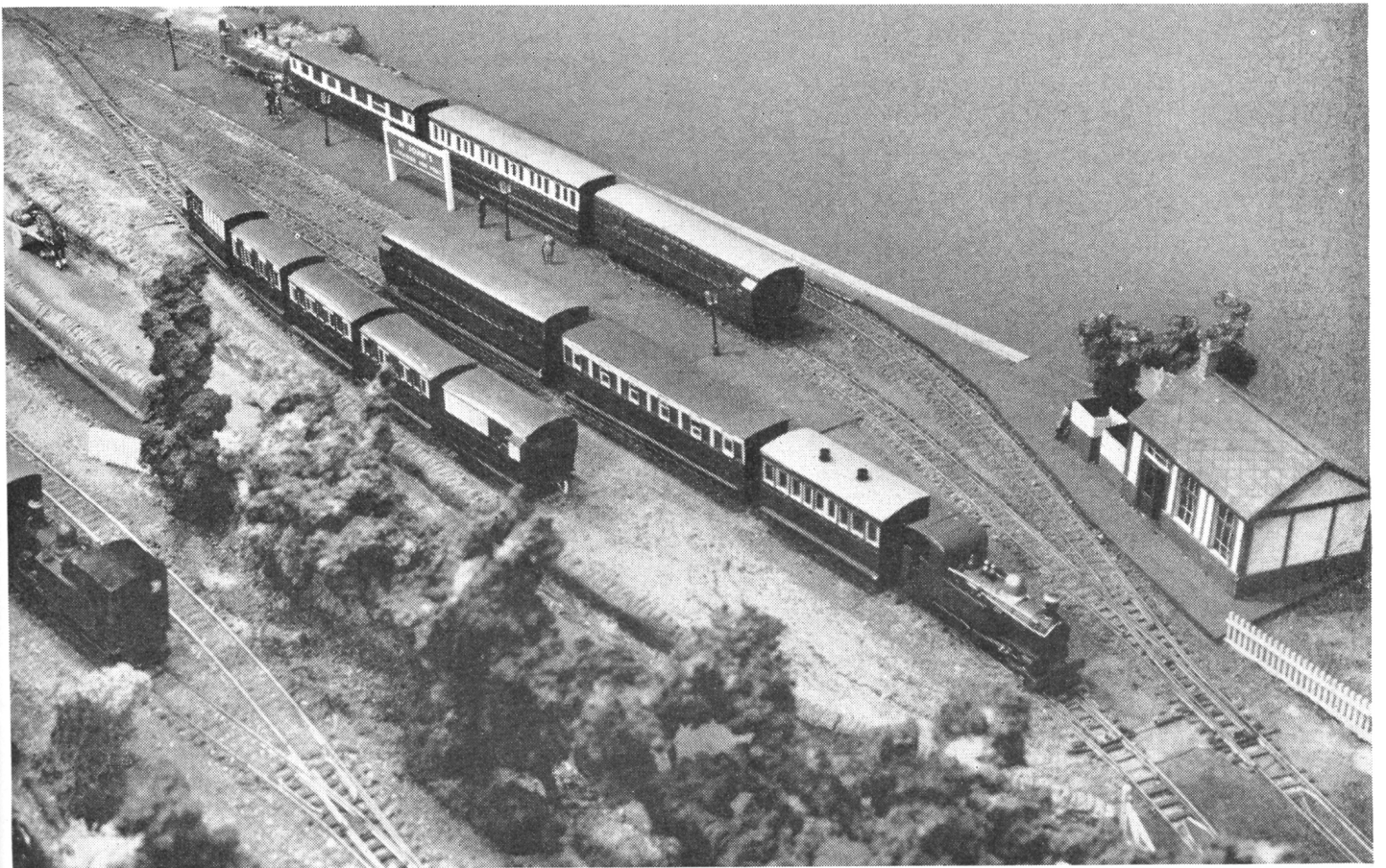
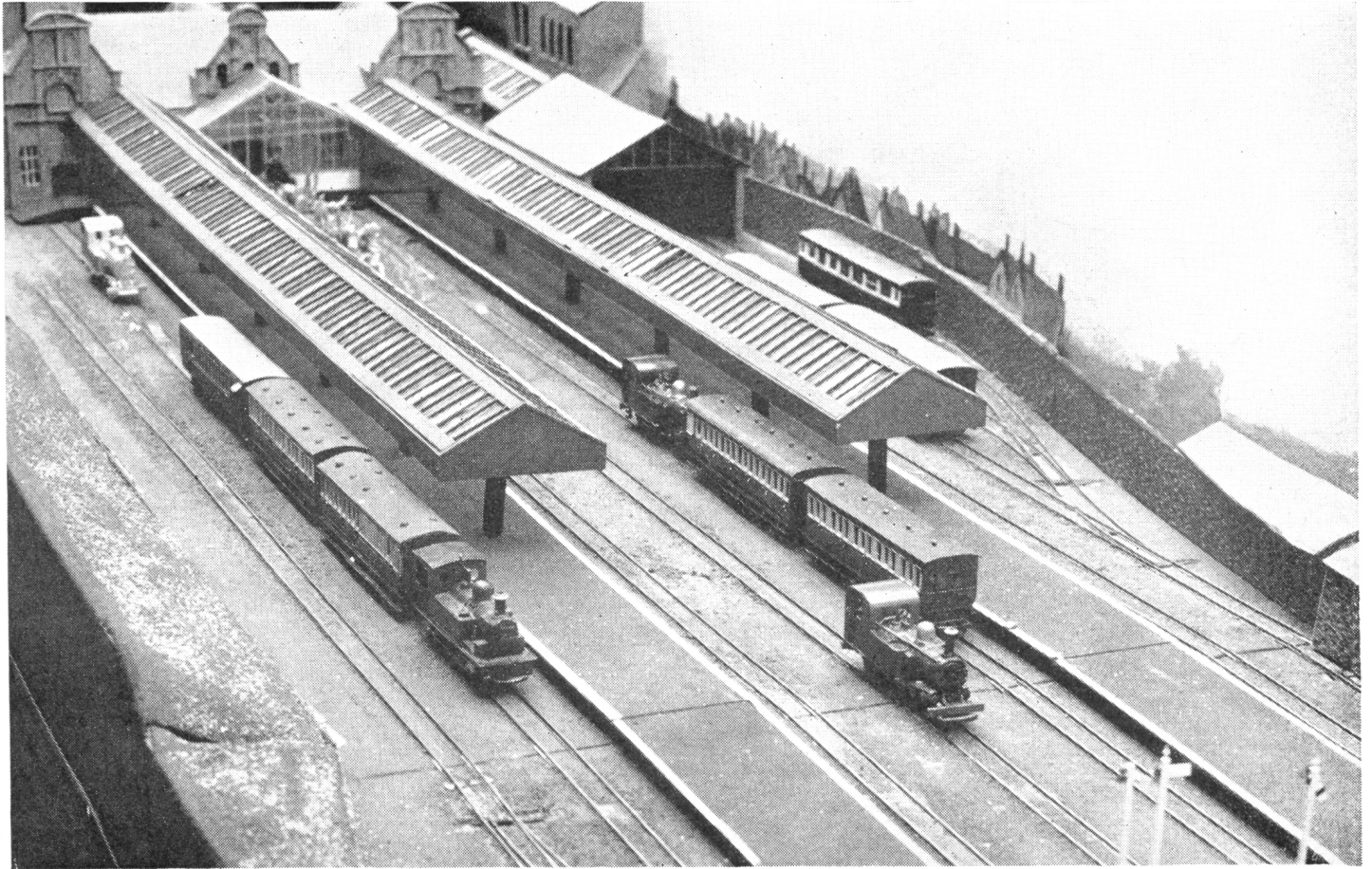
Locomotive power

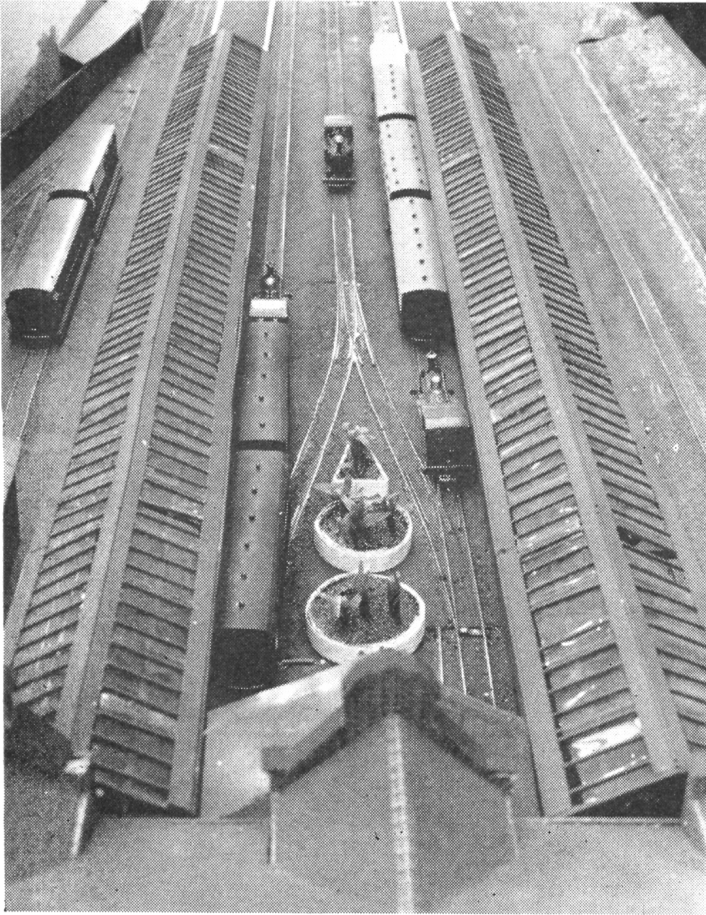
Although work was going ahead on baseboard construction and tracklaying we had still not perfected a design for a loco, and several of the group were beginning to get a bit worried about this all-important

PLAN OF LAYOUT



This plan is based on the original (and only) plan, and deviates in places from the model. Peel is not yet fully modelled, hence lack of photographs.





lent us the whole of his Isle of Man rolling stock for an indefinite period—a very generous offer which was very much appreciated by the group.

So much for the history of the layout. Before passing on to various details about construction methods I must pay tribute to all who have been involved in the production of it, not the least to our wives, who have forgone plans for home decoration, etc., and have provided hospitality and refreshment at the various board meetings. Altogether the production of this layout has been the result of team work involving many people both directly and indirectly, and I think it no exaggeration to say that this has been the most enjoyable project in which I have been involved.

Baseboards

Baseboards have 3in. x 1in. frames covered with $\frac{3}{8}$ in. Sundeala board. This latter material is much superior to the usual softboard. It has a smooth surface which is ideal for tracklaying and is rigid enough to require battens only every eighteen inches instead of the more usual twelve inches; furthermore it will hold screws and nails much more firmly than softboard but is soft enough to take the hard work of out screwing and nailing. It has all the advantages of softboard and hardboard without any of the disadvantages. The track and points used were all GEM products laid in the usual way, except at Douglas, where the rail was spiked direct to the baseboard, without sleepers. I do not think this would be successful on any other material than Sundeala board. The reason for laying the track like this in Douglas is that in the prototype the sleepers are absolutely invisible and Jim Edgar did not see the sense in laying sleepers in order to cover them up. As traces of sleepers do appear on other parts of the system the rest of us spiked the track down loosely with flat-headed pins and covered with ballast. We all had our own methods of ballasting, but the easiest method was to apply a liberal coating of p.v.a. adhesive, made by Dryads and obtainable at most craft shops, followed by a sprinkling with cork dust, budgie grit or sawdust of various grades according to the type of ballast required. After twenty-four hours the surplus ballast was brushed off. The track was left a further couple of days to let the adhesive thoroughly harden, and then I took a small screwdriver with a specially sharpened end and ran it along the bottom of the rail, afterwards using it like a chisel on the side of the rail. If you are patient about this and give the glue time to harden it will come away easily, rather like shavings from a plane.

Stone and brickwork

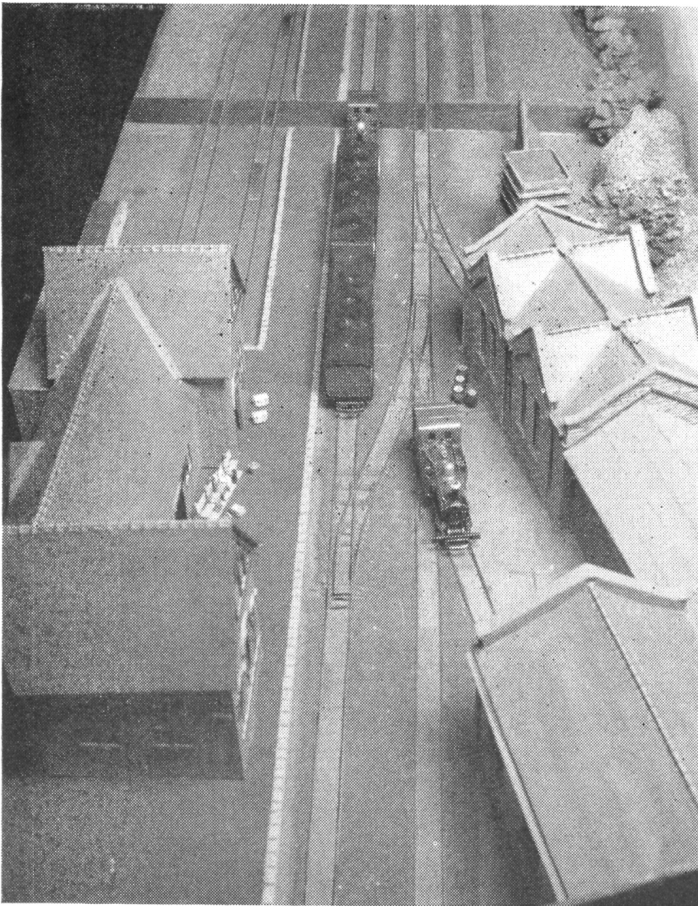
There are two other things on the layout which came in for a lot of questions as to how they were done, namely the stone and brick work on various buildings and the stone walls. The brick work was mentioned briefly in the December issue, but I thought that a fuller description would be appreciated. The brick and stone work was produced on a material known as scraperboard, which is a stout card covered with a layer of plaster. The method is to scribe the correct kind of brick or stone work on to the card. There are special scribing tools which can be bought at craft shops, but I use an old compass point or the back of a discarded craft knife blade, according to the type of brick courses I wish to simulate. If white or grey mortar is wanted the card is painted before the scribing takes place; in the case of the latter cigarette ash is rubbed into the scribed lines. When stonework with deep-set courses and dry wall buildings are wanted the board should be painted first. Various kinds of masonry need different painting treatment. Pastel shades such as those which appear in brick buildings should be painted with water-colour, but materials such as granite, gritstone, etc., are best produced by using oil paint from the "Humbrol" range. One particular colour which I have found particularly useful is tarmac—now, unfortunately, unavailable. If anyone knows where I can still get hold of some I would be very much obliged for the information. The colour should be thin and flowing; treacly mixtures only block up the scribe marks. It should also be applied at random and the various colours should be made to run into each other and not to end in sharp lines. When using certain oil paints it will be found that the plaster face soon dries up the paint, and the remedy is to dip your brush in turps or white spirit and wash it over the work. This is also the method used to wash in the colours. With water paints water will perform the same function as the turps.

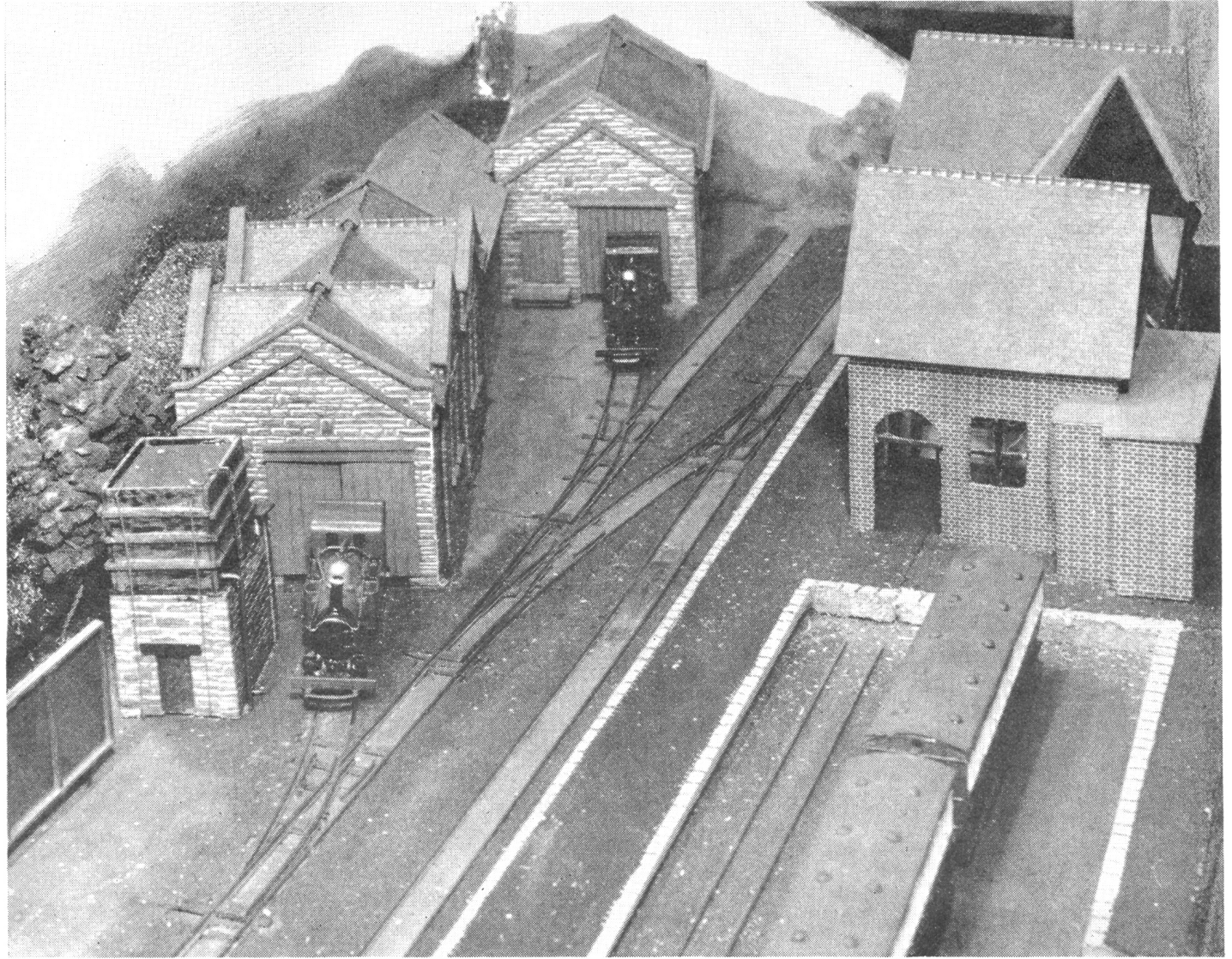
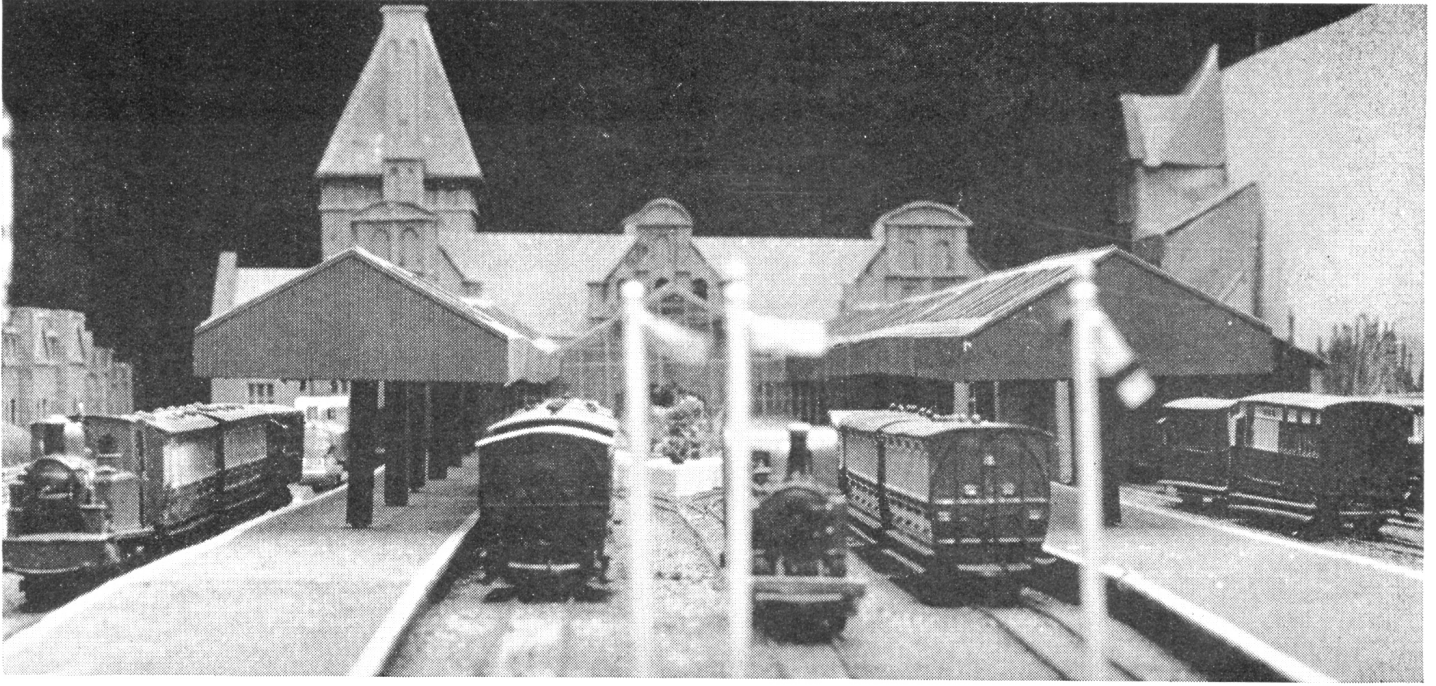
All my buildings have bodies of $\frac{1}{8}$ in. obechi, which is easy to work but much stronger than balsa wood. Where I have covered them with scraper board I have bonded them together with either p.v.a. or "Evo-stik," both equally effective.

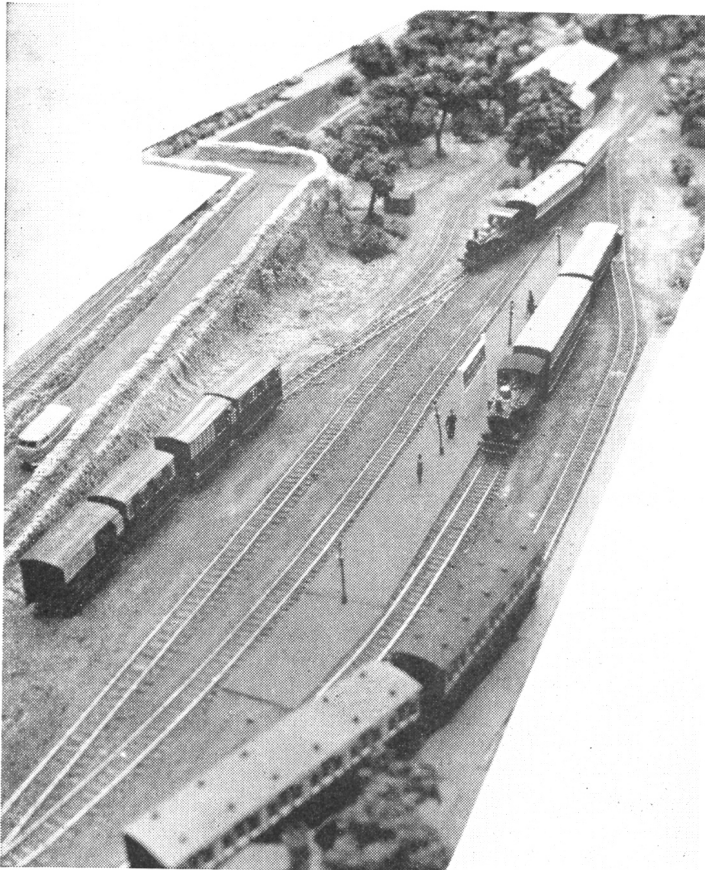
Stone walls

The stone walls are made from "Pyruma" cement, the method being as follows. Take a lump of the cement between the palms of your hands,

TOP: aerial view of Douglas. BOTTOM: aerial view of Port Erin. FACING PAGE TOP: a busy scene at Douglas. FACING PAGE BOTTOM: a quiet moment at Port Erin.







with an old craft-knife blade. Incidentally, this is an excellent way of using up old blades. The next step is to make vertical incisions in the wall, and when these are completed the horizontal lines are scribed at random along the wall. To paint the wall a weak solution of dark grey water paint or diluted indian ink will give a very pleasing effect. Do not paint the wall until it is really dry, and do not get the cement too wet or the scribe marks will not show and the wall will tend to fall over. The lime in the cement tends to bleach the wall after a while, but a brush over the paint again will cure this. If limestone walls, such as those found in Derbyshire, are wanted it is not necessary to paint them, as the cement itself is the correct shade. It will sometimes be found that cracks appear in the walls during the drying. These can be filled up with cement, but a very realistic effect can be gained by filling them up with lichen or some such material to represent vegetation. The advantage of making walls by this method is that they follow the contours of the ground like the real thing. Just one tip when using the two foregoing methods, have a look at the thing you are modelling and take a few photographs. There is always some "Charlie" at the exhibition who knows how it should have been done!

Scratch-built coaches

Apart from the coaches we made from Tri-ang coaches I made a couple by the method which Don Boreham describes in his book *Narrow Gauge Modelling*. Don has given me permission to describe this method for the benefit of readers. Those who already know this method will detect one or two small modifications. The only requirements are a sheet of thin manila card about the thickness of a postcard, some shellac, a hard pencil, a straight-edge and a sharp craft knife. Four laminations are needed for a coach side, two for the roof, four for the ends and eight for the floor. The method of marking out is as follows. Take a sheet of card and mark out four spaces, one above the other, with a margin of at least 5mm. all round, as in Fig. 1. Draw in the coach side in the bottom space only, then scribe along line A on the top side, line B on the under side, and line C on the top side. Now fold into a concertina as in Fig. 2. Please note that it is not necessary to mark out the coach side in any of the other spaces. We are now ready to start cutting. Fold side one over the top of side two, and remember when cutting out windows, etc., to insert the knife into each corner first, as this prevents the knife from slipping and damaging the panels. If you do inadvertently do this the only remedy is to start again, as the score marks show up badly when the vehicle is painted. When the first side has been cut it will be seen that the second sheet will now have score marks in the appropriate places. Next fold the second side over the third, but place a piece of card between the two sheets, as the third sheet has smaller window spaces and drop-lights. Continue cutting along the scribe marks on sheet two. When this has been completed, take the protective card away and draw round the inside of the spaces, marking in open windows, etc., according to fancy. You are now ready to finish your cutting, so place card three over card four and continue as at first. The glazing material is then placed between layers three and four, and all sides are stuck together to form a laminated coach side. If the coach is straight-sided it is only necessary to place it in a press, but if a tumble-home is required my method is to shape a piece of wood to the required profile and to secure the coach side firmly to the wood by means of bandage; when all is dry trim off the margin. A note on painting: where the inside frames of windows are a different colour from those on the outside it is much easier to paint them before the coach side is stuck together. If the coach sides are identical a second sheet can be laid under the first and the two sides cut together. If, however, the vehicle is mirror sided cut them separately, using the first sheet as a template by turning it over to give it the mirror effect. I have found out an easy material from which to make the panels: toothpaste tube. To flatten this place the opened-up tube on a sheet of glass and stroke it carefully with the edge of a ruler until all the creases are out, then cut off thin strips the correct width with a sharp knife. Do not cut with scissors, as the material will curl and when straightened will be found to be distorted. This material has the advantage of staying where it is put and not flitting about. If the gauge is too heavy, gentle beating with a block of hard wood will soon reduce it to the required thickness.

In conclusion I must pay tribute to the team who have worked with me to produce this layout, for without them this project would have been impossible. Let us hope that those who read this article will share some of the pleasure. If you wish to increase that pleasure I suggest a trip to the Isle of Man with the family, when you can all enjoy the railway at first hand. Do not worry about the wife; she will like it too. The railway passes through some marvellous scenery. Do not forget, "Go aboard in the British Isles" for your next holiday. I have no shares in the Isle of Man either.

TOP: aerial view of St. Johns. FACING PAGE TOP: booking office and level crossing at St. Johns. FACING PAGE BOTTOM: Ramsey terminus. Photographs by Brian Monaghan.

after moistening them slightly, and roll it into a sausage, then wet the site where the wall is to go. Flatten the roll of cement to the required thickness and then press it firmly into position, wetting the index finger and smoothing it along the bottom of the wall, which ensures that it is in firm contact with the base. The stones along the tops of these walls are always set vertically. In order to get the effect first scribe a line the correct distance from the top of the wall horizontally (this varies, of course, according to scale) and then scribe in the vertical top stones

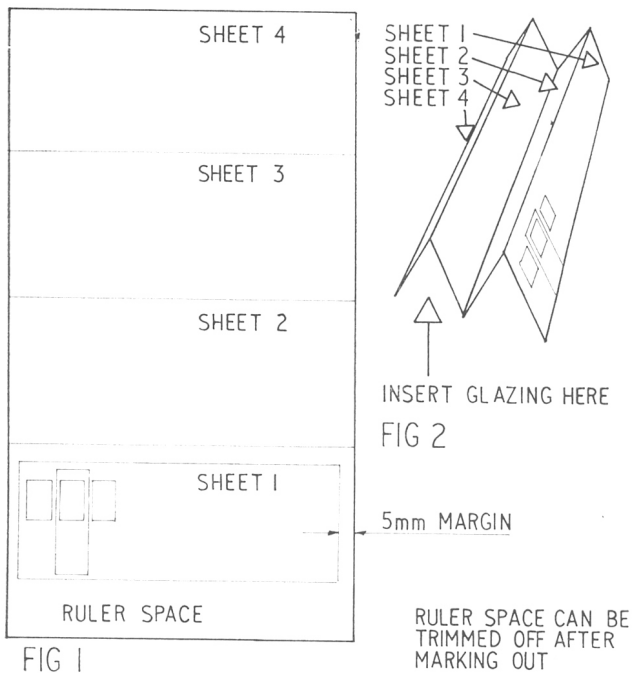


FIG 1

RULER SPACE CAN BE TRIMMED OFF AFTER MARKING OUT

