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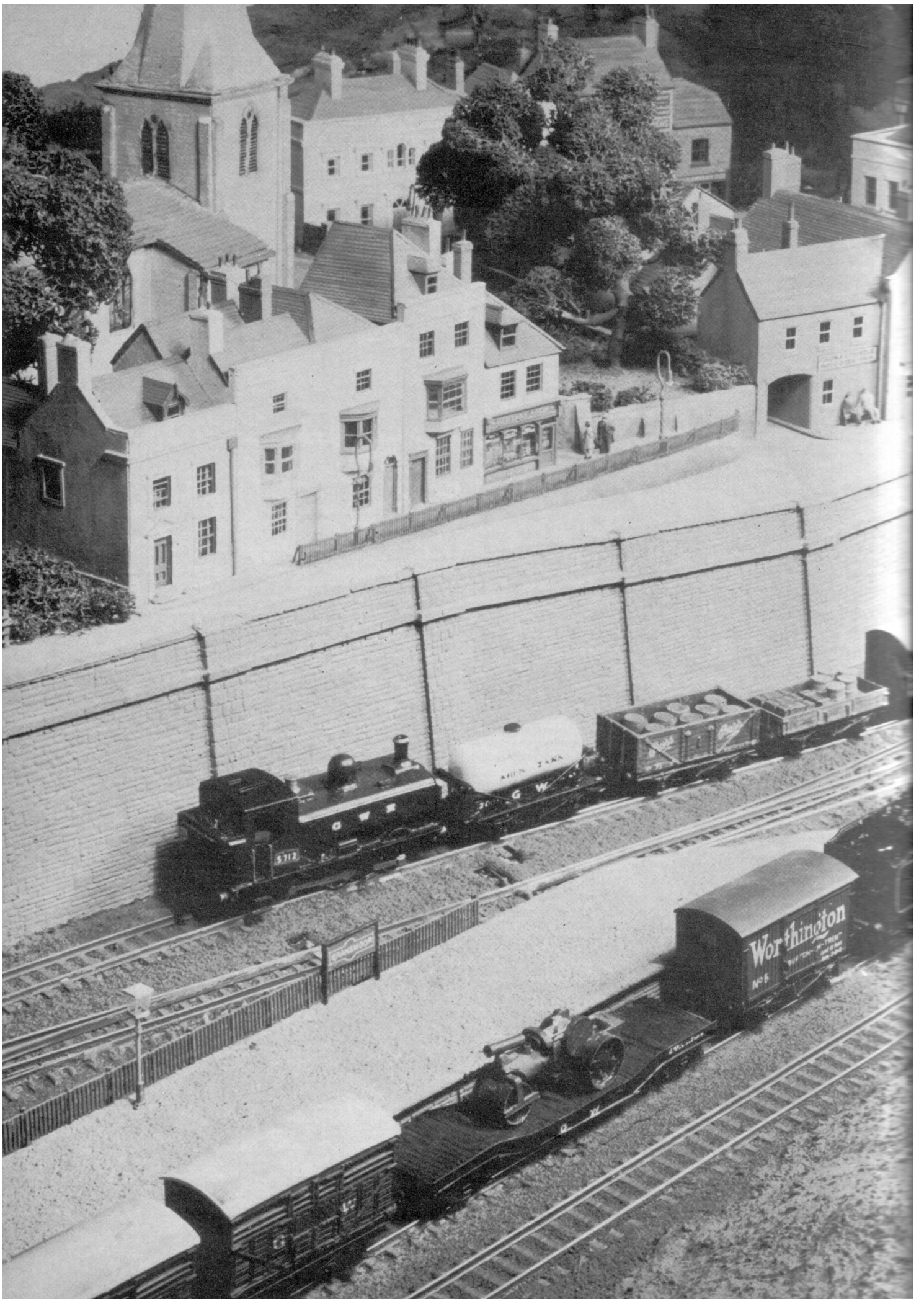
HOBBY MAGAZINE

INCORPORATING
MODEL RAILWAY NEWS

TRACK PASS TO
GRANSMOOR
CASTLE

*MEET
BAMBURGH—
THE FOURTH!—
AND THE NEW
BOOST TO
WELSH STEAM*







Church Street, Gransmoor, with railway cutting in the foreground. The group of buildings facing Church Street, including the 'Crown and Thistle', are based on prototypes at Weymouth quay-side. Brian Monaghan made the pictures.

Gransmoor Castle last appeared in print some two years ago*, since which time it has been almost completely rebuilt, so that what appears on these pages is, to all intents and purposes, a new layout. Only the castle itself and the canal section remain of the original layout. However, before examining this rebuilding operation in more detail, and the reasons behind it, it may be helpful to briefly describe Gransmoor Castle.

*Model Railway Constructor, Jan. 1974

TRACK PASS TO GRANSMOOR CASTLE

The Manchester Model Railway Society's N Gauge Layout



John Harden (left) and Rob Holgate overhaul a control panel on the fiddle-yard side of Gransmoor Castle. Bob Moodie (seen above, left) and author Mike Raithby tackle point construction. A complex piece of trackwork for a future extension is in the foreground. Dave Kenton and Ian Dunning mechanics, Colin Robinson and Martin Huselbury overseers. They're a fussy lot in the maintenance department.

The main element consists of a double track main line serving Gransmoor, a small town nestling in the hills, somewhere generally in the Pennines. The town is dominated by its castle, now sadly in ruins, from which the layout takes its name. At Gransmoor a single track branch line leaves the main lines and, after running parallel to them for a distance past the canal and lock, swings off into the hills, climbing to a terminus at Drylesthwaite. There is considerable interchange traffic from the branch and its function as a junction explains the apparent size of Gransmoor station. There is an intermediate station on the branch at Wealdsend, with passing facilities on the single track. Wealdsend station, like Drylesthwaite, is, in the best railway tradition, somewhere in the hills at a considerable distance from the village it purports to serve. Wealdsend and Drylesthwaite are typical small branch stations, although both enjoy very good train services, particularly during exhibition demonstrations.

Readers may recognise the place names used as those traditional to a long series of layouts, in a variety of scales and gauges, connected with the Manchester Model Railway Society.

In reality, of course, the main lines are in the form of an oval with an extensive fiddle-yard behind the distant hills on the backscene, from whence there is run a varied sequence of trains through Gransmoor.

The rebuilding of the layout, referred to earlier, was undertaken as the group's ideas of what it wanted from the layout crystallised, largely as a result of exhibition appearances with the former Gransmoor. The formulation of objectives is a necessary part of modelling, being the basis behind the choice of scale, prototype, and general appearance, in addition to details such as track plans. Whilst not wishing to become involved in the theory behind model railway layouts nor to set down rules for others to follow, it may be informative (if not amusing!) to examine the objectives of the group in rebuilding Gransmoor Castle and the implications of those objectives on the layout itself.

The main objective may be summarised as the layout being constructed as a group exercise to exploit the possibilities offered by 'N' gauge in illustrating, in the exhibition layout, a section of railway running through scenery. Although this objective is easily stated, it immediately produces a whole series of principles applicable to the construction of the layout. Whilst various principles are examined in detail in isolation below, all are in fact closely inter-related.

An Exhibition Layout

The fact that Gransmoor Castle was intended from the outset as an exhibition layout has imposed requirements of spectator interest, reliability, and a good overall standard of display, in addition to more immediately practical criteria such as height above floor, demountability, deadlines for work on the layout, and so forth. Exhibition appearances with the old layout were invaluable in both aspects. From discussions of visitors' comments and attitudes, critical viewing of the layout from the 'public' side, and, frankly, from comparison with other layouts at exhibitions, it is quickly possible to see those features capable of further development, and even easier to see those features requiring improvement or abolition.

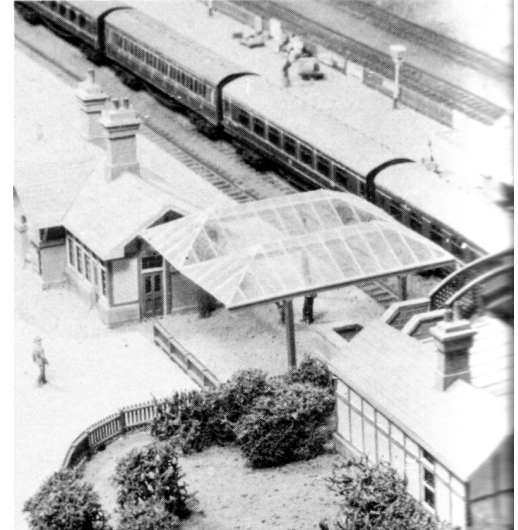
Although scenery well executed may hold spectator interest, this requirement is usually met by the trains themselves, and by the system of operation employed. Probably the most attractive aspect of operation in 'N' gauge is the opportunity to run proper scale-length trains as a main line. No more pretence that five coaches constitutes an

express, nor fifteen wagons a goods train. Twelve coach passenger trains and forty wagon goods trains delight the exhibition public (whose immediate reaction seems to be to start counting!). Thus a double track main line, of as long a length as possible, was an obvious choice; with a fiddle yard to supply a sequence of such trains. A straightforward oval configuration suited the requirement to simplify the trackwork side of the layout, to allow full scope to the scenic side. In addition, by keeping the main lines as simple as possible their apparent length is increased. For additional spectator interest the branch line was incorporated, along with some development of the goods and interchange facilities at the main station. In this way a reasonable number of trains may run at any one time, whilst the whole remains feasible as a section of railway, with emphasis on Gransmoor as the junction station. The track plan was generated by this intended form of operation, both in its general form and in its detail. Gransmoor has a branch bay platform independent of the main lines to enable the branch to be worked as an individual unit; the goods facilities at Gransmoor are similarly self-contained enabling shunting to be undertaken clear of the main lines, but are approached by facing connections, facilitating interchange; and even Drylesthwaite has been intentionally made interesting to shunt to justify a further operator. However, a compromise has had to be struck between the track plan dictated by the envisaged method of operation and that required by prototype practice, to ensure that the result gives the impression of a real railway rather than a bowl of spaghetti.

The system of control panels was similarly generated by this intended form of operation. Full cab control is available, for the maximum degree of flexibility, but the normal pattern of operation calls for the five controllers to be

performed. This may appear to be stating the obvious, and it may appear to be largely a matter of luck as to whether such devices are required (The famous 'Gremlins'), but it is possible to design a layout for reliability, largely by assuming that everything that can go wrong will do so.

The basic pre-requisite of good running and reliability is a good solid and level base, a feature which is not easy to achieve in an exhibition layout which must be de-mountable. The baseboards for Gransmoor follow traditional lines, being of Sundeala or chip-board faced timber frame construction, but the supporting framework consists of an independent structure made up of 1in. square hollow steel section leg frames and similar main runners. It is therefore possible to erect the supporting structure and to level



allocated as follows: Up main line, Down main line, Gransmoor goods yard, Drylesthwaite station, and the lower branch from Gransmoor to Wealdsend, including the latter station and the bay at Gransmoor.

However, spectator interest is maintained only whilst the layout is working properly, regardless of how good the rest of the layout may be. The public will accept no trains running only if it is obvious that no trains are supposed to be running. Resort to soldering irons, files, or even large hammers does not hold spectator interest, no matter how well

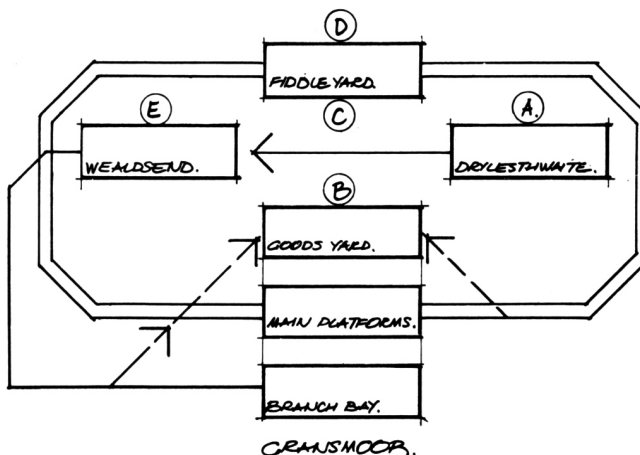
it by means of a spirit level (the legs feature adjustable feet to facilitate this operation) prior to the baseboards being put into place. Thus the baseboards should always fit together in the same relationship, yet the whole system is de-mountable.

Once the baseboards are solid and true, the next consideration in achieving good, reliable running is the trackwork. Whilst the situation is eased in 'N' gauge, despite its small size by the general steam-roller qualities of the wheels and their deep flanges, trackwork must nevertheless be level and in good

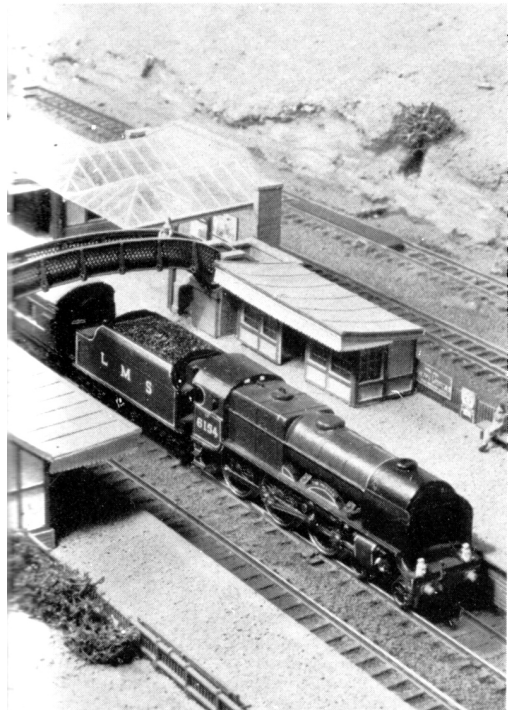
Operating Diagram

The diagram right indicates the normal pattern of operation used for exhibition purposes, together with the allocation of controllers for this purpose. Arrows indicate normal interchange of trains, but it should be noted that such interchange is done on a single controller only, making use of the cab control facilities. Thus, for example, to cross a goods train from the branch to the goods yard at Gransmoor all relevant track sections would be switched to controller 'E' to enable the branch controller to run the train.

alignment. The decision to use scratch-built track on Gransmoor was largely taken on the grounds of economy, but it has resulted in



Gransmoor Town: the main street seen from the railway bridge. In the original print of that shown far left you can see the contents of Messrs Bain and Clayton's store. The peace of Gransmoor Station is temporarily shattered as LMS parallel-boilered Royal Scot No. 6154 *The Hussar* thunders through with an express. The coal train seen below hauled by Stanier Class 8F and passing a train of empties headed by a Fowler Class 7 0-8-0 depicts a popular feature of the railway at exhibitions.



solidly constructed track with points which have live frogs. It is frankly amazing that although modellers go to tremendous lengths to ensure electrical continuity they accept short lengths of plastic rail which can do little to increase reliability. To assist in achieving level track, it has been rigidly pinned to the baseboards and ballasted after laying (with a mixture of sand and Polycell wallpaper adhesive).

On the basis that things will go wrong, point motors (Hammant and Morgan) are positioned at the rear of the layout behind the backscene, and operate by means of wires in tubes linkage to the points. Access is thus available for maintenance and operation can be done manually in the case of an emergency. To further improve access facilities we are now rebuilding H & M motors with the top deck reversed so that the switch contacts, used for reversing frog polarity in the live-frog points, are on the uppermost surface of the motor instead of being hidden away within the 'works'.

Things will also go wrong with the electrics, of course, for which reason we have attempted to keep the wiring as simple as possible, consistent with being able to do the switching moves required by the pattern of operation. In addition, wiring is being standardised as far as possible so that as soon as they are familiar with the standard pattern of wiring as many members of the group as possible are able to correct faults, without having recourse to a specialised 'electrician'.

Having taken steps to construct a layout with inherent spectator interest, and having taken as many 'anti-gremlin' precautions as

possible, the end result must still be displayed. The aspect of display is more than quality of craftsmanship in the models, or the dressing up of the layout in scenery, important though these things are. It is quite possible to achieve a good exhibition model by means of display techniques, even though the model may be less than perfect, but a perfect model poorly displayed will be ineffective.

Since the intention of Gransmoor is the illustration of a section of railway and not the demonstration of modelling techniques by showing models in the course of construction, care is required to ensure that the layout is complete, even though it may not have been completed. By the same token the fiddle yards are well screened from the remainder of the layout—everything on the 'public' side of the layout should contribute to the impression being created.

Experiences in various dark exhibition halls, many of which seem to have positively cathedral-like interiors, have shown the value of good lighting, but even in a well-lit exhibition hall some directional lighting from spotlights brings the layout to life and adds impact. However, the part played by visual aspects is considered more fully below.

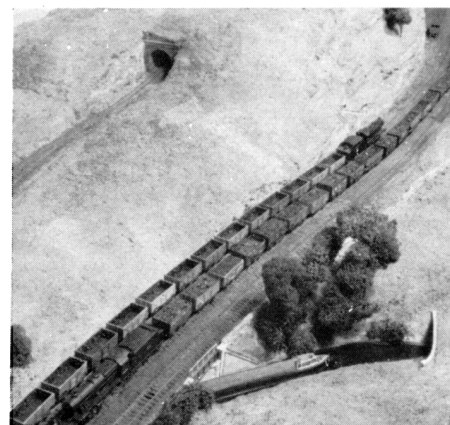
A Railway Running Through Scenery

Visual considerations probably come above all others in the design and construction of the layout, implying not only a certain standard of modelling, but the creation of an illusion capturing the atmosphere of the prototype. The fact that what is created is an illusion should be emphasised. It is too easy, unfortunately, to assume that if a layout is an accurate portrayal of a particular prototype it will automatically capture the atmosphere of that prototype. The illusion, however, requires selection from the prototype and the exaggeration of its salient features. For example, everyone knows that real railways are fenced-off from their surroundings for their entire length, but slavishly copy this in model form and all illusion of distance is lost—odd bits of fencing in places where they serve to concentrate interest or add detail are far more effective. It is probably true that what is excluded from the layout is as important as what is included.

The atmosphere of a railway derives as much from its setting as from the components of the railway itself. Imagine all the railway components from, say, the Settle and Carlisle transferred to the rolling pasturelands of the Midlands. We have tried, therefore, to pay considerable attention to the setting in Gransmoor; although we have yet to achieve the ultimate in which the tracks emerge from the fiddle yard in a tunnel and return to the fiddle yard still in the same tunnel!

Generally we have tried to create a setting or series of settings by the use of patches of concentrated detail to provide centres of interest or 'scenes'. The creation of such scenes comes more naturally in the larger scales, often as a matter of necessity due to

space limitations, and frequently the layout becomes a single scene, but in 'N' gauge it is possible in a layout of the size of Gransmoor to create numerous scenes, and the problem

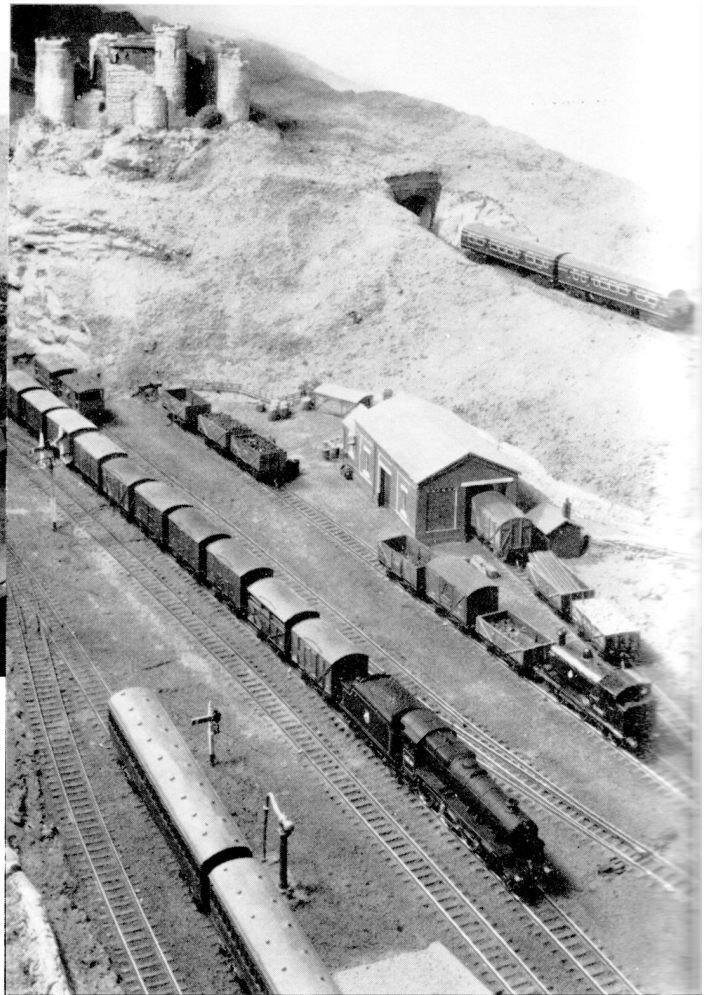
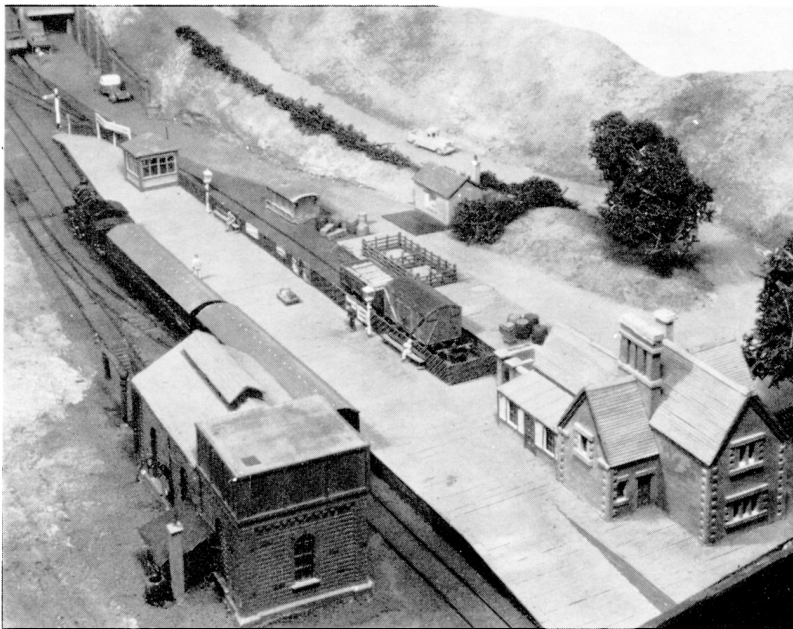


APPENDIX: STOCK

Rolling stock used on the layout is the property of the group members, but the following are generally available:

Britannia 4-6-2	Minitrix
9F 2-10-0	Anticipating Minitrix— Britannia body on 2-10-0 chassis
Standard class 5 4-6-0	Converted Peco Jubilee
Royal Scot 4-6-0 parallel boiler	Converted Peco Jubilee
Rebuilt Royal Scot	Converted Peco Jubilee
Patriot 4-6-0	Converted Peco Jubilee
Rebuilt Patriot	Converted Peco Jubilee
Jubilee 4-6-0	Converted Peco Jubilee
Black Five 4-6-0	Converted Peco Jubilee
8F 2-8-0	Converted Jubilee, using Atlas 0-8-0
Austerity 2-8-0	Converted Fleischmann 2-10-0
7F 0-8-0	Scratch built, Jubilee mechanism
Ivatt class 2 2-6-0	Minitrix
Ivatt class 2 tank 2-6-2	Minitrix
Fairburn 2-6-4T	Peco kit, Arnold chassis
Fowler 2-6-4T	Peco kit, Arnold chassis
4F 0-6-0	Improved Lima (width reduced, etc.)
3F 0-6-0T	Lone Star body, Farish chassis
L&Y 0-6-0ST	Modified Beaver kit, Farish chassis
Austerity 0-6-0ST	Converted Farish
A2 4-6-2	Converted Minitrix continental
B1 4-6-0	Ian Kirk kit, Jubilee chassis
V1 2-6-2T	Ian Kirk, Minitrix chassis
J52 0-6-0ST	Beaver kit, Farish chassis
K3 2-6-0	Scratch built, Jubilee mechanism
Castle 4-6-0	Converted Jubilee
County 4-6-0	Converted Jubilee
Pannier 0-6-0PT	Farish
B4 0-4-0T	Peco/Wills kit
Brush Type 4 (class 47)	Modified Anbrico kit, Atlas chassis
Class 50 diesel	Anbrico kit, Atlas chassis
B.C. & W.V. Type 2	Minitrix
Warship	Minitrix
Metro-Cammell 2 car d.m.u.	Scratch built, Atlas chassis

In many instances there is more than one example of the loco class available. The diesels are not normally used for exhibition running, other than the d.m.u.



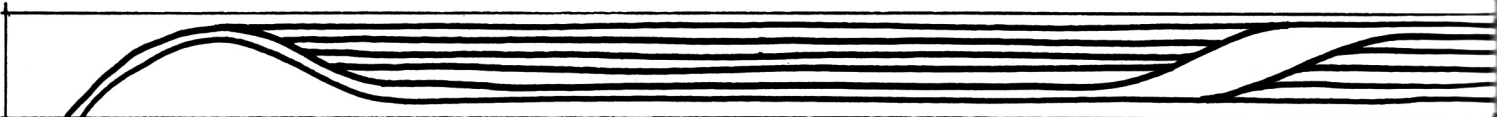
is then encountered of how to separate them to give the illusion of scale and distance. In Gransmoor we have restricted the general scenery to open moorland in an attempt to provide this foil to the areas of concentrated detail, such as the town, the canal, or the stations themselves.

On the same basis the colouring of the scenery has been played down to assist in the effect of scale and distance. Bearing in mind the earlier comments on the creation of an illusion, and with a defiant disregard for the fact that a blade of prototype grass may be green, the colours used consist of an olive green-brown, yellow ochre, burnt Siena, Prussian blue (but only when mixed with the burnt Siena) and black. The resulting colour has become known within the Society as 'Gransmoor's improved dirty green'.

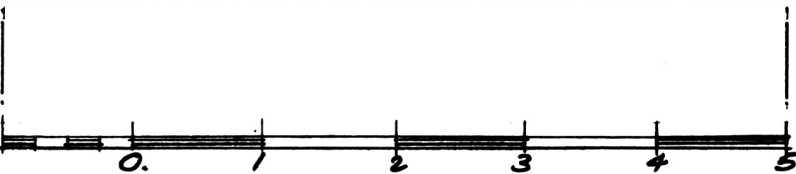
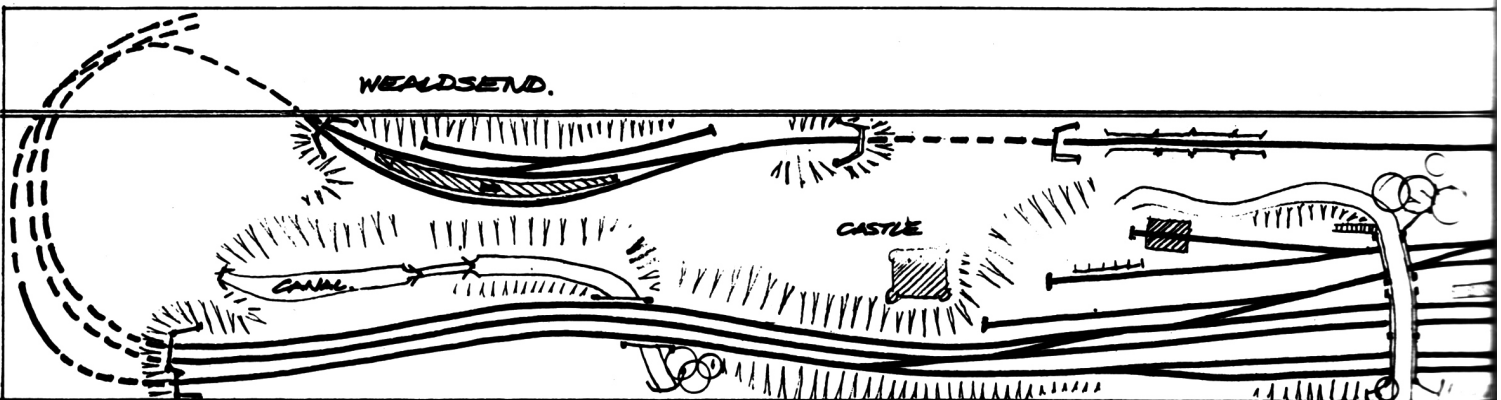
Buildings have been used to provide the basis of settings, both in Gransmoor town itself and in the groups of railway buildings, such as at Drylesthwaite or Gransmoor stations. For this purpose the most important aspect is not the modelling technique used, but the choice of prototype and the grouping of the buildings into scenic set-pieces. Prototypes for buildings have been selected on the basis of their 'visual interest' content and, although a certain amount of artistic licence has been employed, as far as possible the complexities and

The midday train to Gransmoor awaits clearance for departure from Drylesthwaite. The train, seen above left, consists of LNER Class V1 2-6-2T with a Gresley two coach articulated set. Above: A semi-fitted freight approaches Gransmoor behind a Stanier Black Five, while ex-L&Y saddle tank No. 51408 shunts wagons in Gransmoor Yard. In the background a Metro-Cammell 2-car diesel railcar set heads for Drylesthwaite.

CONTROLLERS.



FIDDLE YARDS.

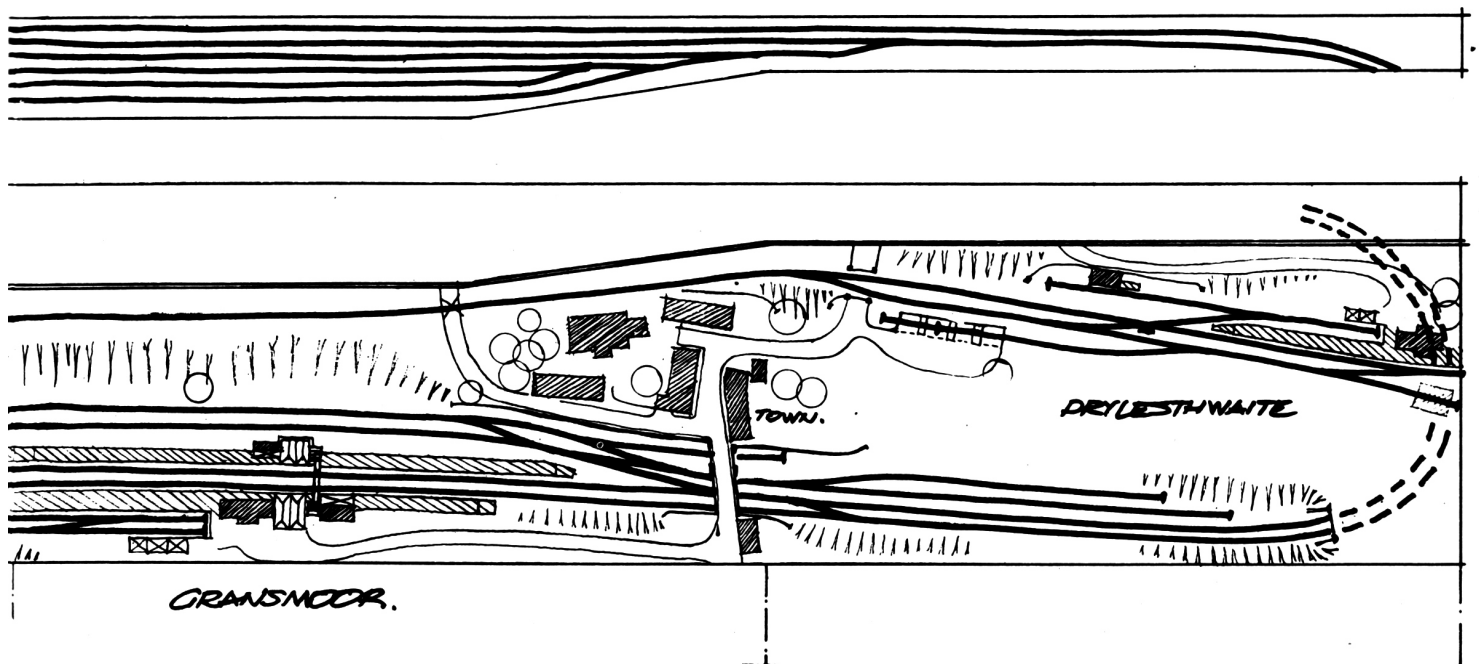
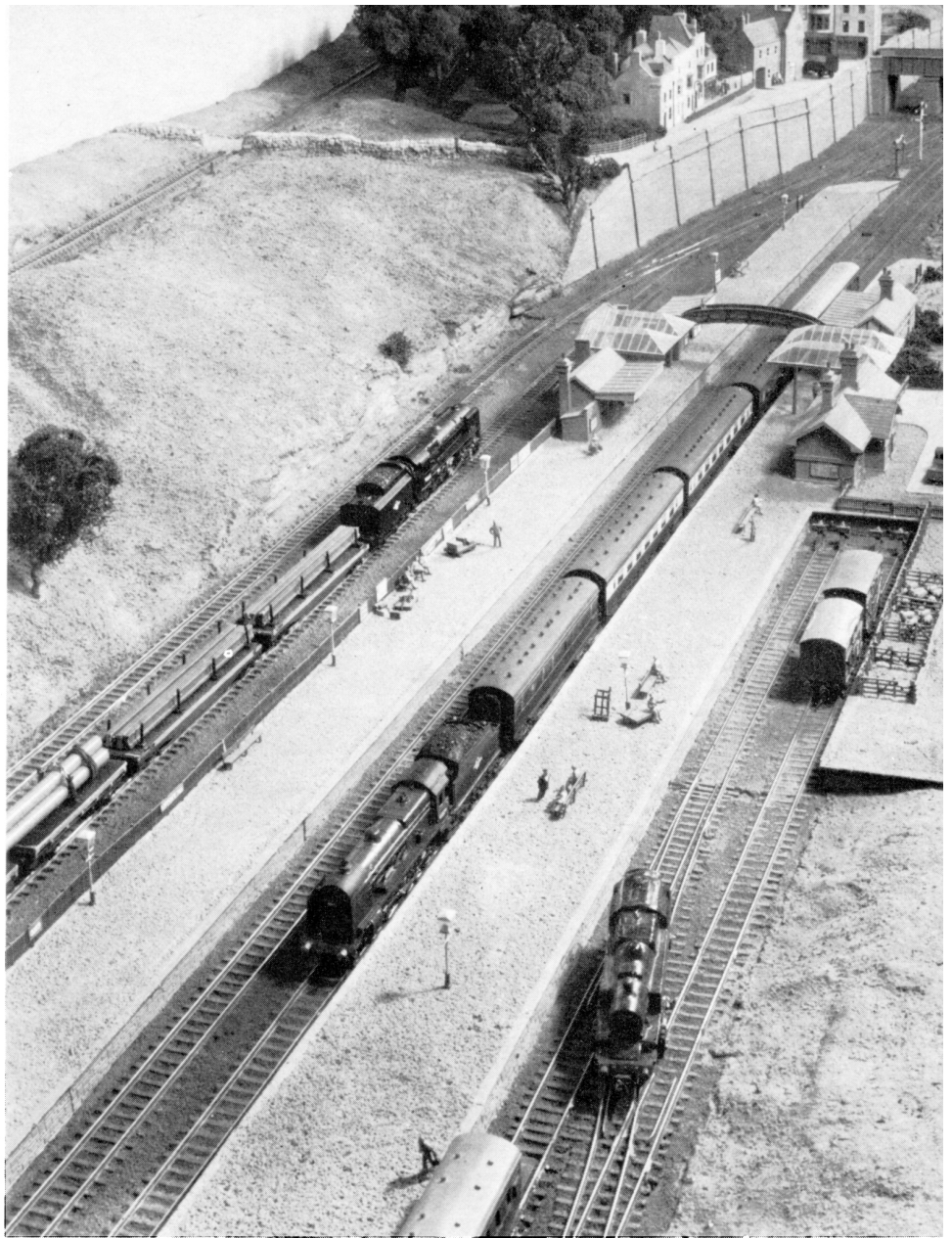


A general view of Gransmoor Station. Patriot Class No. 45539 E. C. Trench drifts to a halt as a Class 3 2-6-2T runs round its train in the branch bay platform ready for departure to Drylesthwaite. In the background a 9F waits with its goods train in the goods loop. Note how the builders have resisted the temptation to clutter the scene, illustrating a classic lesson in railway modelling; space is sometimes the best commodity for creating realism.

intricacies of the originals have been incorporated. Such an approach requires more effort on the part of the modeller, but the extra detail achieved is more than worthwhile. Buildings abounding in little dormer windows, roofs at peculiar angles, or odd chimneys really come to life: each small extra bit of detail adds to the atmosphere. Again, colouring has been used to unite groups of buildings, with the range limited to Autumnal shades of red-browns and yellow ochres.

Railway buildings obviously contribute a very particular atmosphere to the layout, and care taken in their selection pays dividends. The railway buildings at Gransmoor are all of Midland Railway origin. The station itself is based on Matlock, chosen as being suitable for the general upland setting and as having great scope for visual interest in that it consists not of a single building, but rather of a group of buildings and awnings, all of differing styles and periods, with the footbridge to tie the whole group together. Drylesthwaite station is similarly Midland in origin, with the station building based on Swannington (Leics.), although many of the buildings here are more what the Midland might have built rather than what it actually did build—based on atmosphere rather than on prototype, if you like. Just to add further interest, Wealdsend has a totally different feel, being based on GWR practice.

In a way the principles applying to the scenery are also applicable to the railway itself. As far as possible we have tried to plan both trackwork and scenery together, to avoid a situation in which attention is only turned to the scenery once the trackwork has been completed, and to ensure that both flow in together as a whole—part of the same scene. Hence, for example, the station throat at Gransmoor was designed in conjunction with the town itself, with the trackwork constricted to allow a scenic break (formed by the road bridge) to the broad



sweep of tracks; and the coal-drops siding at Drylesthwaite was added to form a suitable scenic feature in conjunction with the road underbridge at the Gransmoor end of the station. Generally the trackwork has been laid in a series of sweeping curves to complement the scenery, and individual details of track have been submerged beneath a layer of ballast and uniform track colour, so that only the rails stand out, giving the impression of distance and forming a background to the trains.

Since the emphasis is on a complete railway it is useful to think in terms of trains rather than a collection of individual models of items of rolling stock: an approach ideally suited to 'N' gauge where the eye can take in forty wagons and a locomotive as a complete train, unlike say 'O' gauge in which attention is focused in detail on each vehicle of a train. The sweep of a long train through Gransmoor, or the crawl of the branch push-pull train up the gradient to Wealdsead is of greater importance than the number of rivets on the 8F's tender. That is not to say, however, that individual models are unimportant, but their importance is of the same order as that of the details on the buildings in adding to the overall effect. In fact, much of the stock used on the layout is scratch built, normally on commercial chassis, or is very heavily adapted from commercial products, so that a Peco Jubilee may appear as anything from a parallel-boilered Royal Scot to a tender behind a scratch-built 7F 0-8-0, or even a GWR Castle. (We attempted, without success, to get the builder of this last loco to name it 'Gransmoor Castle').

A Group Exercise

The previous sections have looked at the principles applied to the building of Gransmoor in terms of the layout itself, but there remains one further important principle. The building of the layout, as a club layout, is a group exercise, undertaken of course for relaxation and enjoyment. We may have been fortunate in the group having a common objective and thus being unified in intention if not in the means of implementation. However, we have all gained considerable experience in building Gransmoor, largely from each other within the group. Two lessons in particular may be extracted from that experience.

Firstly a lesson which may be summarised in the phrase 'have a go'. It is amazing what can be achieved if one just tries. Being a group project helps in that there is plenty of encouragement to other members because there is bound to be at least one 'idiot' around to take the plunge. Perhaps the most striking example is the scratch-built track used on the layout. No member of the group had attempted scratch-built track before in any gauge, indeed most did not even know how to solder, but two members spent the whole of one Saturday building a sample point. Although the trial point produced, of which the builders were so proud, was later committed to the rubbish bin as useless, we have never looked back and today virtually all the trackwork on the public side of the layout is scratch-built.

Secondly, beware the so-called expert. A group of acknowledged amateurs learning between themselves by trial and error works well in that there is no-one to discourage them from trying, making their own mistakes, and learning. This is not to say that we cannot learn from the experience of others, but there are great dangers that this can develop into relying on 'experts' rather than learning from them. In a group layout such as Gransmoor it can be disastrous if there are elements of the layout which only the 'experts' in that element can understand.

This aspect of learning from one another is one of the most rewarding aspects of group working. The attitude may be summed up in a quote from one of our members: 'I joined MMRS to learn how to do things and have finished up teaching you lot!'

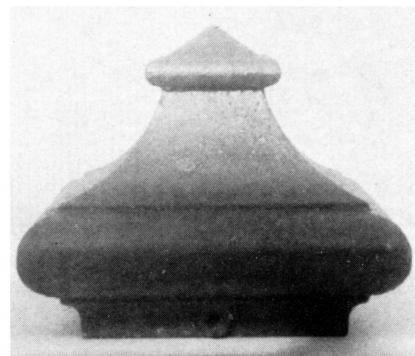
So much for Gransmoor Castle and the objectives behind it. The extent to which these have been achieved I will leave for the reader to judge from the photographs. Suffice it to say that we can still go much further along the lines set out: the main lines do not appear to yet give as great an impression of distance as they might, Gransmoor town could use some further development to visually unite the town with the station, the fiddle yards are not really adequate for exhibition use, and there is always

work to improve the reliability of the electrics. Who knows, we may finally achieve an ambition by taking our objectives to their logical conclusion by modelling a long length of double track main line running through countryside—nothing else.

Finally, our thanks are due particularly to Brian Monaghan for his excellent photographic work, and to our own 'O' gauge group for their tolerance of the eccentrics working in the 'mice gauge' in the midst of their layout in Dean Hall.

FINIAL FASHIONS

by
IVOR VAUGHAN



The advantages of club membership are numerous. The writer recalls with pleasure the acquaintances and friendships built up; the assistance and advice freely given over many years from pre-war days by modellers whose names have grown in stature as the years roll by and their products attained a high degree of perfection. Many, alas, are no longer with us, but their models remain as an inspiration to the rest of us.

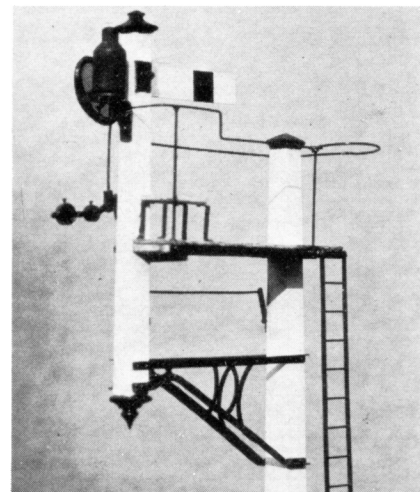
Another aspect of club life is the challenge to improve one's modelling as one examines the work of fellow members, sometimes with admiration, sometimes with the feeling that one might do better. This is a great incentive, particularly when keen modellers challenge one another; some very nice examples have been made as a result.

The writer himself was involved in such a challenge some years ago when he had the temerity to criticise the ladders fitted to Geoffrey Pember's beautiful signals. It was at a Model Railway Club Easter Exhibition. The challenge came when the suggestion was put forward as to how the ladder should have been made.

Geoffrey produced a photograph of a certain signal and threw down the gauntlet with the remark, "Make the ladder and I will make the signal."

The ladder was made while working on the Demonstration Stand at the show. The rest of the story was told by Geoffrey in his description of the model in *MODEL RAILWAYS* for May, 1972.

Describing his model in some detail, Geoffrey made reference to the particular Great Eastern finial, later after grouping



Geoffrey Pember's 7mm scale GE signal showing the Vaughan ladder.

used by the LNER as a standard for replacements; and he made what was considered to be an error by stating that it was also used by the LB&SCR. It was the intention to question this immediately but the opportunity to do so did not arise. An attempt is now being made to rectify this with the aid of these photographs to clarify the position.

Both items depicted are in the writer's collection. Photo No. 1 is a close up shot of the Great Eastern cap, photo No. 2 is of the wooden pattern used to cast the one for the LB&SCR. This was given to me many years ago by my old friend, the late Francis Hambleton, to whom I am indebted for many items of signalling interest, both material and documentary.

These photographs will, I hope, clearly show the difference and prevent any model signal of either railway being crowned by the wrong finial.

