"BLUE PETER" RAILWAY LAY-OUTS AND SCENERY

We hope that this leaflet will be of some help to you in getting the maximum amount of enjoyment from your model railway. We have divided it into three main sections - The Baseboard, Track-laying and Wiring and Scenery Construction. At the end, there is also a section on our own "Blue Peter" lay-out.

If you require more information than we have been able to give about railway modelling, we suggest that you ask at your local model shop for the "Railway Modeller 'Shows You How' Booklets". Should you have any difficulty obtaining them, you can write direct to Peco Limited, Pecoway, Station Road, Seaton, Devon. The books cost 15p each plus postage and packing.

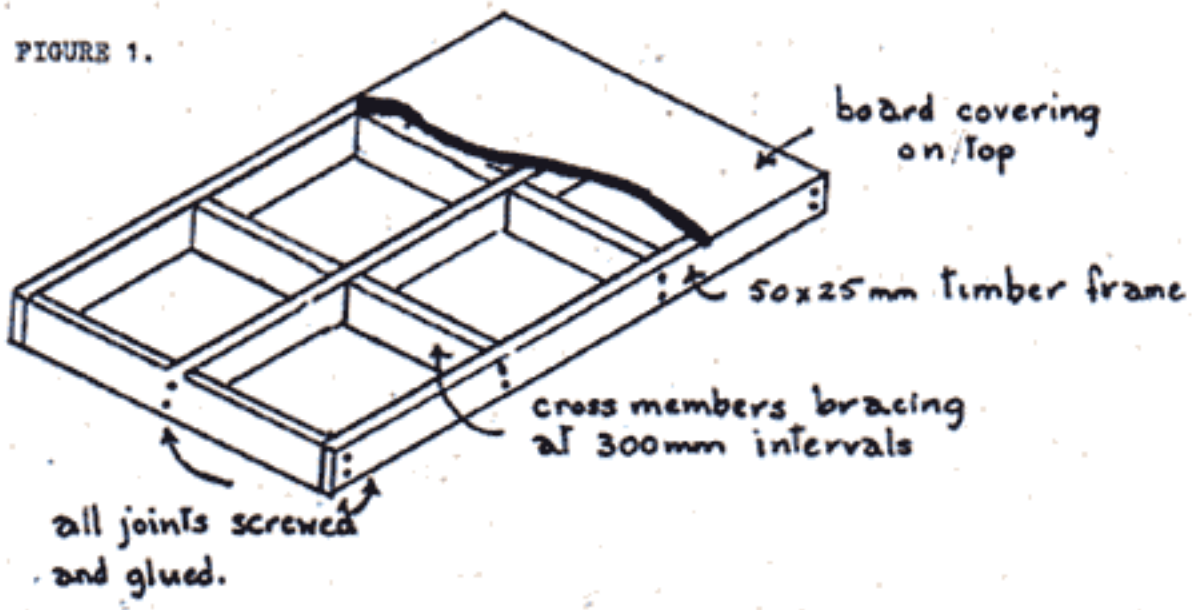
THE BASEBOARD

When you first got your model railway, you probably started by laying it out on the floor and we are sure that you will find it easier to put your lay-out on to a baseboard. This will prevent fluff from carpets becoming entangled in the wheels and motors of your rolling stock and engines, as well as grumbles from the rest of the family!

It is most important to have a strong, rigid baseboard so that you can ensure the smooth running of your trains. The framework should be made up of 50 x 25 mm. planed timber and the top covered either with 12 mm. wood fibre insulation board or "Sundeala".

If you are going to have the lay-out in your bedroom and are going to need to dismantle it during term time, it is easier if it is made up of separate tabletops. The ideal size for each unit is 1.2 x .6 metres. FIGURE 1 shows the way to make one of these units. The timber is butt-jointed and then glued and screwed. We used Evostik Resin W glue and 50 mm. No.8 countersunk wood-screws.

FIGURE 1.



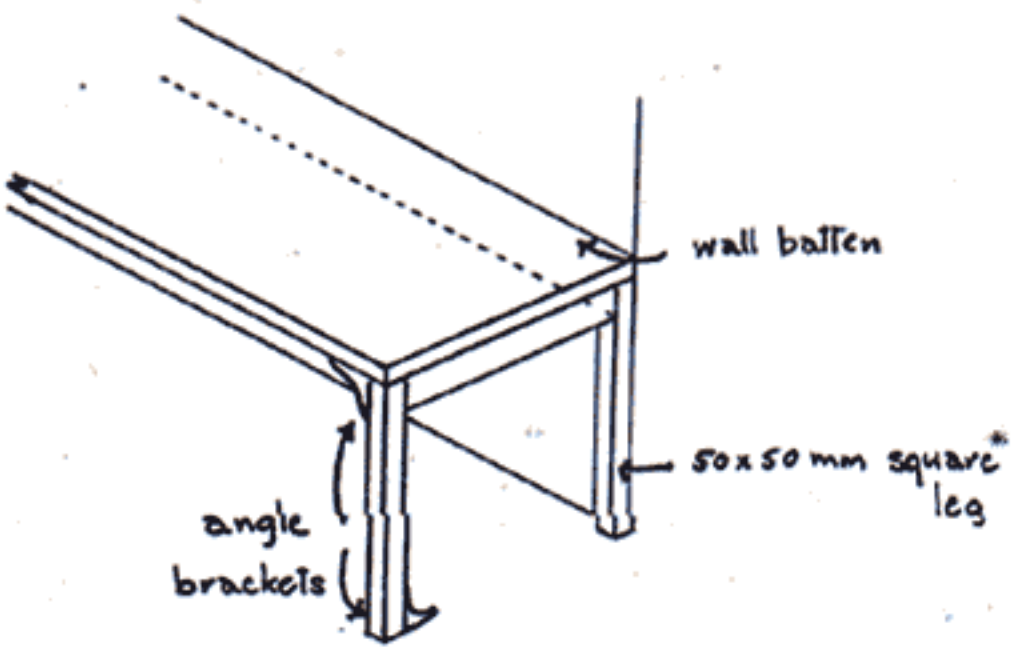
The board top should be secured to the framework using nails and some glue.

If you are building a permanent lay-out - in the loft for instance - you can make the baseboard units larger, but always make sure that you never leave more than 300 mm. between the cross-members.

The best way to join your units together is to use metal flap-back hinges, replacing the pins with new longer ones. These pins can easily be removed for dismantling.

There are many different ways of supporting the baseboard. The legs in all cases should be made of 50 x 50 mm. planed timber. FIGURE 2 shows the best way to support a permanent lay-out on a wall, using a wall batten and a 50 x 50 mm. square leg, half jointed to the frame and braced with angle irons top and bottom.

FIGURE 2



Have a look at a trestle table to see how to build a satisfactory support for a free-standing lay-out. Always remember that you must be able to reach every part of the table-top with ease - and be able to lean against it without the whole lot collapsing on the floor! The "Blue Peter" lay-out has a hole in the middle and you may find this idea well worth copying. You will find detailed instructions for making a similar baseboard at the end of this leaflet.

TRACK-LAYING AND WIRING

There are two basic forms of track - the Hornby standard track sizes and lengths and the flexible track which you buy in metre lengths and then bend to shape. We suggest that as you normally get standard lengths of track in a Hornby train set, you start building your lay-out using additional lengths of this track. Hornby are now producing flexible track that matches their System 6 track and you could use this to join any awkward sized gaps in your lay-out. Again, the best advice we can give you is to follow the maker's instructions.

The next stage is to plan and lay your track on the baseboard. Nobody can tell you which track plan to adopt, as it depends on the shape and size of your completed baseboard and on the amount of track you can afford! If you are building in a loft or cellar, you can start with a simple oval and expand from there, using more baseboard units and track as you need them. In a bedroom, you could, perhaps, have a small permanent lay-out in one corner of the room and then, during the holidays, put up more baseboard units round the walls on which you can lay out a branch line.

You will be able to pin your track down quite easily on the "Sundeala" or wood-fibre insulation board. Ask at your local model shop for track pins - about 25p buys a packet of 100. Pinning is the best method of fixing and if you also use a foam rubber underlay, your trains will travel smoothly over the rails. If you have to take the track up, either to dismantle the lay-out or to re-design your original plan, it is very easy just to pull up the pins and start again.

When the time comes for you to do the wiring on your lay-out, we can give you no better advice than to follow, VERY CAREFULLY, the instructions given with your transformer and train set.

Transformers are all fitted with cut-out devices which make it almost impossible to damage any electrical model seriously, but if a motor does emit a loud buzzing, switch off immediately at the mains and ALWAYS unplug BEFORE checking. A "Railway Modeller 'Shows You How' Booklet" called "Wiring the Lay-Out" gives a great deal of helpful information.

TWO DON'TS

1. DON'T over oil - this is the main cause of faults to engines.

2. DON'T take the motor to pieces. If the problem seems insurmountable, take the engine to your nearest dealer, but if it seems to be a bit slow, follow the instructions given for cleaning in your Manual.

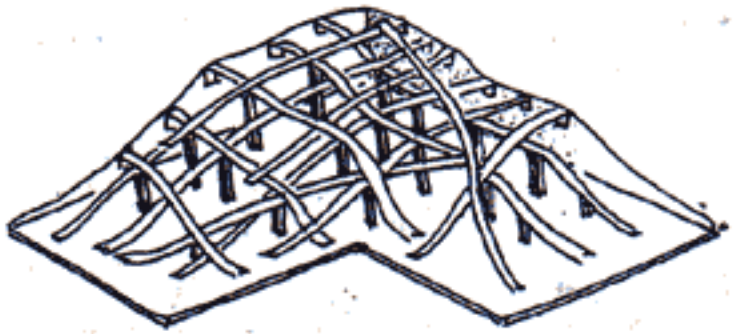
SCENERY CONSTRUCTION

The first step to take in making your "train set" into a "model railway" is to paint the baseboard - a matt green undercoat over the whole area is very effective. The area around the tracks themselves should be given a light pasting (wallpaper paste is ideal) and sprinkled with a ballast. You can buy bags of cork granules from your toy or model shop. When the ballast has dried into the paste, brush off any surplus. Be very careful not to get any paste on the track - if you do, clean it off immediately.

You can buy lengths of trackside fencing or you can make your own using matchsticks and cotton. Push the matchsticks into holes drilled into the insulation board. If your baseboard has to be taken down, remember that you will have to have breaks in the fencing at the baseboard unit joins.

If your baseboard is a permanent one, it is a relatively simple matter to landscape your model. To build a small hill you will need some boxes - the sort that your extra goods wagons and carriages are packed in are ideal. Stick them down with the larger ones in the middle - don't worry too much about the shape. Join the tops of the boxes together with strips of card and stick them down. FIGURE 3.

FIGURE 3



Cover the whole mound with a layer of crumpled newspaper and then with old cloths or rags. You then have to cover the whole area with a thin layer of Polyfilla. Mix the Polyfilla, according to the instructions on the packet, in an old bowl and then spoon it over the cloth. Let it run down the sides of the hill and fill any nooks and crannies. When it has dried out thoroughly, you can paint it.

For a furrowed field effect, carve and mould the drying Polyfilla. You can also carve the plaster to give a quarry-like look to a cliff face.

If your board is portable, this will necessarily limit the amount of this type of scenery, but it is possible to build small "portable hills" on odd scraps of insulation board which can be moved to any position.

When building scenery it is important to remember not to make any part of the track inaccessible or difficult to reach. Do take care not to get any Polyfilla on the track.

TREES

Trees can be bought, but here are two methods for making your own.

Ⓐ : Either twist together wires of different thickness. thus

or Ⓑ use lengths of old housewiring cable stripped of insulation Thus :—

Then following A or B stick on small pieces of torn plastic.

paint Foliage and Trunk

Hedges can be made from lichen or lumps of dyed foam rubber. To make your fields more realistic, sprinkle them with dyed sawdust - obtainable from your local model shop - while the green base paint is still wet.

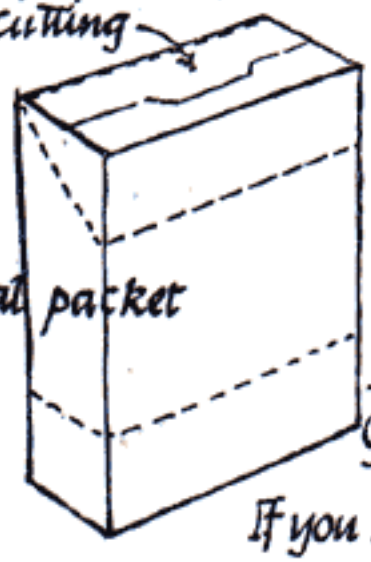
BUILDINGS

You can either make your own model houses or buy kits - the Superquick range are very realistic and are much cheaper than the plastic kits. They can be obtained from your local shop.

You can also make your own buildings from empty packets and boxes and the following diagrams show you how to make a farmhouse and outbuildings.

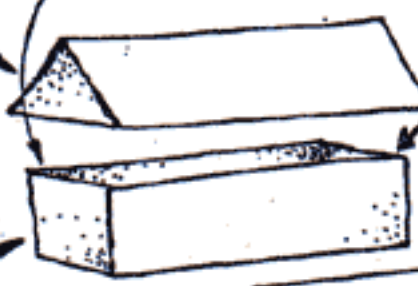
BUILDINGS

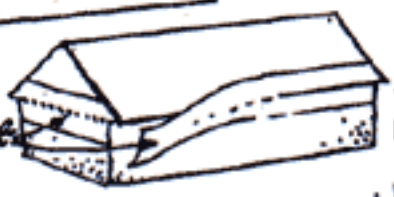
Stick flaps down again before cutting



Cereal packet

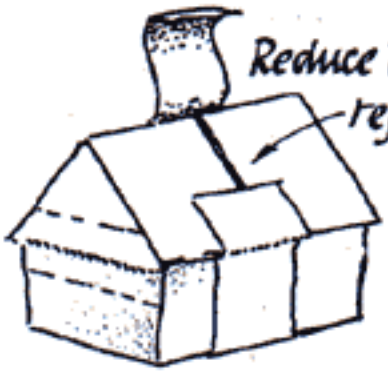
Walls fit inside roof



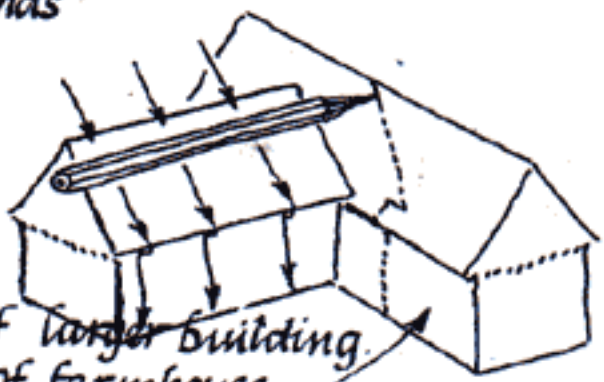


Gum brown paper tape

If you have no sharp knife, cut roughly first then trim to line with scissors.

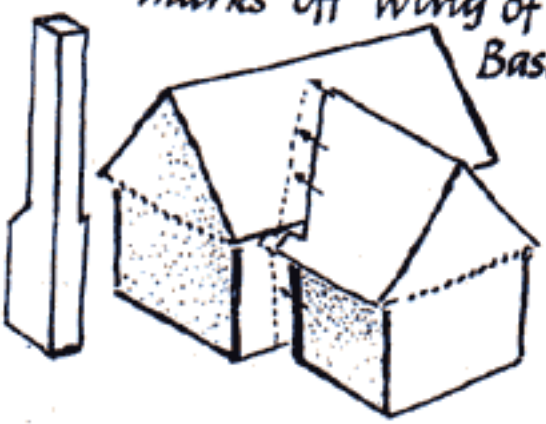


Reduce to required length by cutting away middle. rejoin ends



Pencil slid down roof & wall of larger building marks off wing of farmhouse

Basic building made from smaller packet



Chimney carved from balsa wood

Finished Farmhouse.

Wing is joined on with brown paper tape.

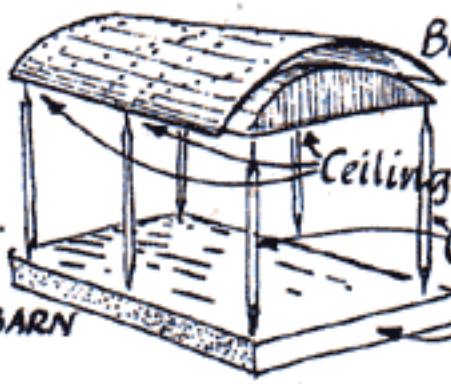
Squeezybottle is cut on dotted lines.

1" Square stuck on top makes vent.

odd small buildings are made from scraps

SILO

Cardboard strips



Barn is similar to main block of Farmhouse.

Ceiling tile or balsa cut to fit

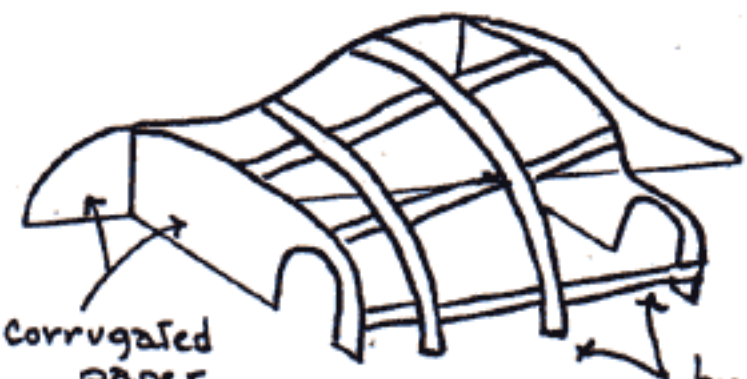
Cocktail sticks cut to size

Ceilingtile or balsa

TUNNEL

DUTCH BARN

This is made in the same way as the 'hills' on the basic lay-out. On a base of cardboard, arrange a cardboard foundation to form the shape of a mountain and tunnel. The mountain can be any shape and size you like and the slopes are a criss-cross network of brown sticky tape. Make sure that the tunnel is big enough for the coaches to go through if your tunnel is going to be on a bend. Also make quite certain that it is large enough to get your hand inside so that if a train comes off the rails, you can get it out! Complete the tunnel in the same way as you did for the hills. Just before the Polyfilla sets completely, you can stick in some small trees. When the Polyfilla is thoroughly dry, cut the cardboard base still showing, around the edges of the mountain and under the tunnel so that you can place it straight on to your track. Paint the whole model with poster, emulsion or undercoat paint.



Corrugated paper

brown sticky paper

THE "BLUE PETER" LAY-OUT

This lay-out was built especially for us and because it gets moved around the television studios quite often, the baseboard is made out of very heavy timber and the whole model takes eight men to carry it!

The track we use is Peco "00" brass Flexible Streamline which we bought in metre lengths. It is, therefore, impossible to give you an exact equivalent number of Hornby straights and curves. We laid the track on foam underlay, which you can buy in packets of two, each piece being two metres in length. Our engines and rolling stock are all made by Hornby and Wrenn with one notable exception - No.532 Blue Peter. This locomotive was built especially for the programme. The real Blue Peter locomotive is owned by the Blue Peter Locomotive Society and is on display at the Dinting Railway Centre, Dinting, Glossop, Derbyshire.

We use "Scalespeed" Controllers which give us a great deal of control over our locomotives; Fleischmann switches to isolate various sections of the track and Graham Farrish Liveway Points. There is also a Hornby turntable which we have sunk into the baseboard and an elevated section leading to the "Blue Peter" suspension bridge. You can buy many different types of bridges and viaducts from your local stockist. The station was built from Superquick Kits - the Country Station Kit, the Island Platform Kit and the Island Platform Buildings Kit.

On the next page you will see a track plan of our lay-out - the Key to the plan is below:-

KEY

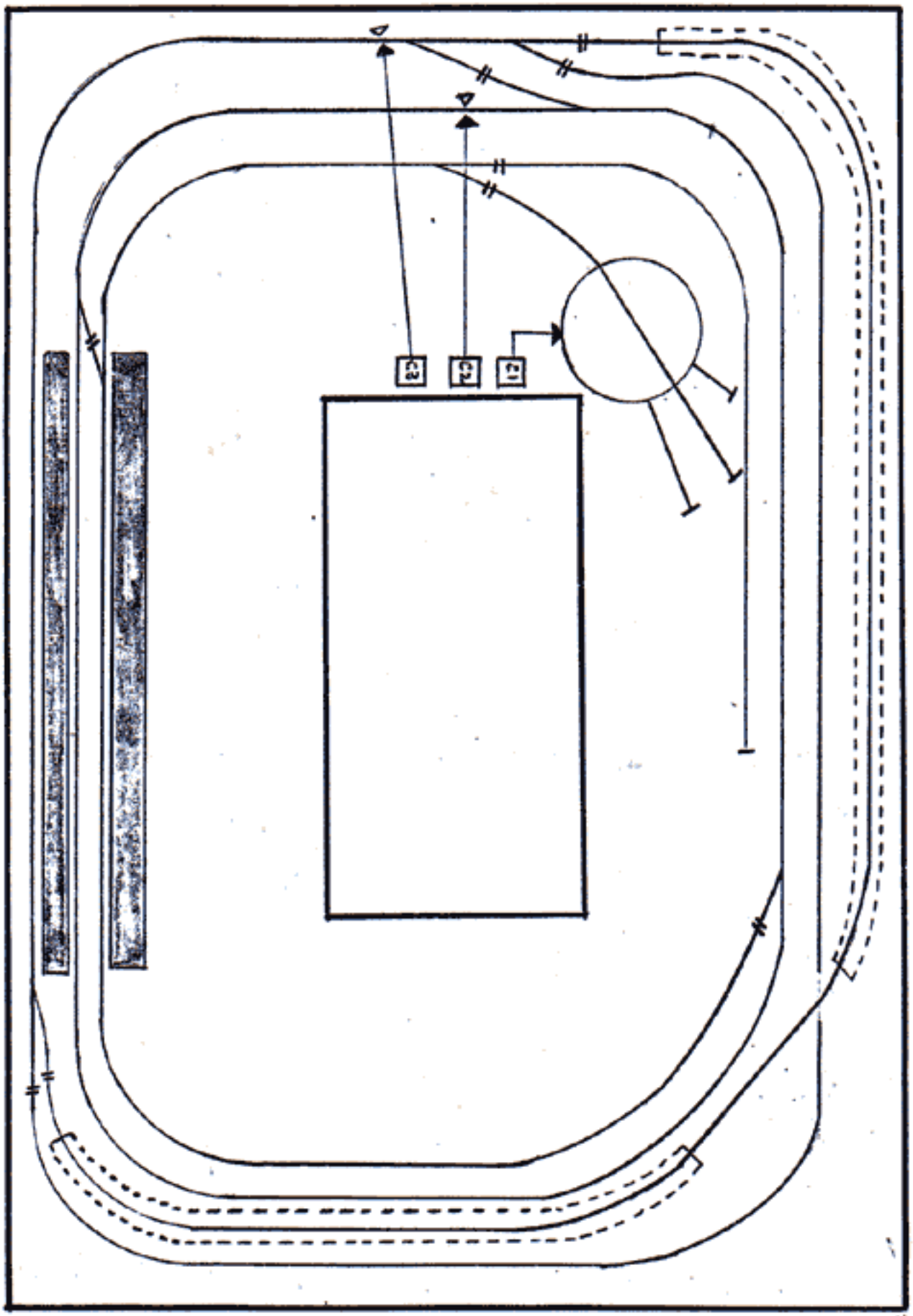
CONTROLLER

FEED POINTS

EMBANKMENT TO BRIDGE

INSULATED SECTION

STATION PLATFORM


C3
C2
C1

THE "BLUE PETER" BASEBOARD WITH A HOLE IN THE MIDDLE

Space is the biggest problem for most model railway enthusiasts, but a folding table can make a permanent lay-out possible.

Figure 1 shows the board with scenery and track firmly fixed to it, in the lowered position with the supporting legs down. When the board is in this position, the lifting rope can be stowed away out of sight.

Figure 2 is the plan of the underside of the board. It is made up from two lengths of 2,4 x ,6 metres blockboard 25 mm thick and two pieces 600 x 600 mm. The joints are made from 50 x 25 mm timber. Remember that the legs must be exactly the same length as the height of the supporting shelf, otherwise the table will not be level when lowered. The hole in the centre of the board is very essential as it allows even a very short person to reach any part of the lay-out very easily.

The supporting shelf has a considerable amount of weight to carry and must be fitted very firmly to the wall and strengthened by shelf brackets (figure 3) The shelf brackets should not be more than 600 mm. apart.

The width of shelf which is also made of 25 mm blockboard, depends on the height of the buildings and scenery. A good working width is 300 mm. Remember to keep the shelf empty otherwise the scenery at the back will be crushed when you raise the board.

The supporting legs are hinged for folding on the outside edge of the board (see figure 1). A knee-joint is then screwed on to brace the legs in the downward position (see figure 4)

The hoisting gear is quite simple and the double or single blocks, depending on the weight of the table, can be obtained from good hardware shops or sailing shops. The rope should be as strong as a good clothes line and you will need 5,5 metres for a single block or 11 metres for a double block.

One end of the hoisting rope is hooked on to the centre of the outer edge of the board. It then runs up to the ceiling as shown in figure 1. Depending on the width of the board there are two ways of fitting the stop and upper block. Figure 5 shows the stop fitted directly to the ceiling. Figure 6 shows the stop fixed to the wall in a high ceilinged room. In both cases the stop must be the same width as the supporting shelf. Finally, a cleat is fitted to one end of the supporting shelf so that the lifting rope can be tied off securely when the board is raised.

The dimensions of the board as shown in figure 2 are for a medium sized room. Obviously the size of the board can be varied considerably to fit any room.

One important point to remember is that all track, buildings and scenery must be screwed down firmly and they must not be more than 300 mm high. Another point is that all rolling stock, locomotives and vehicles must be taken off the board before it is raised!

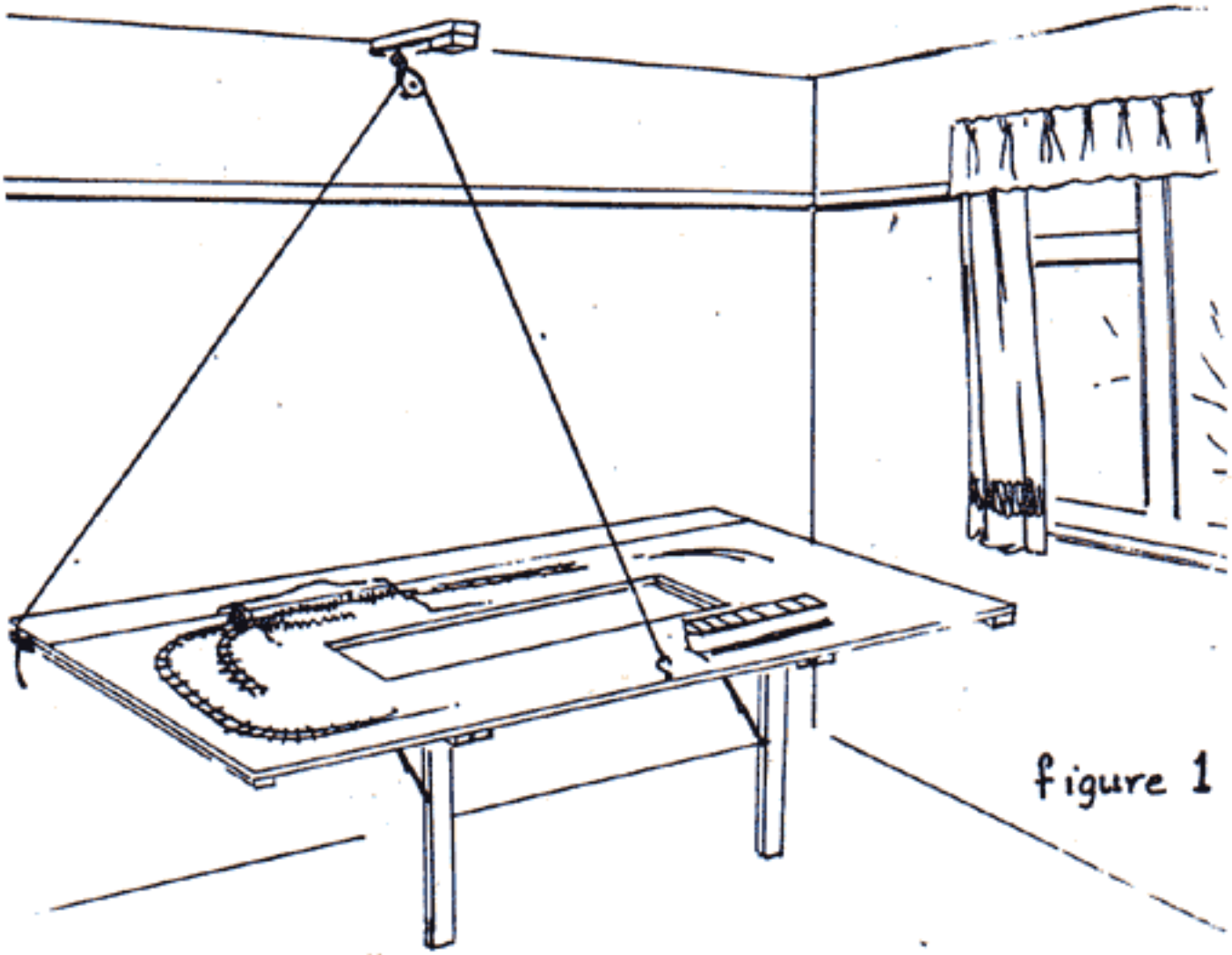


figure 1

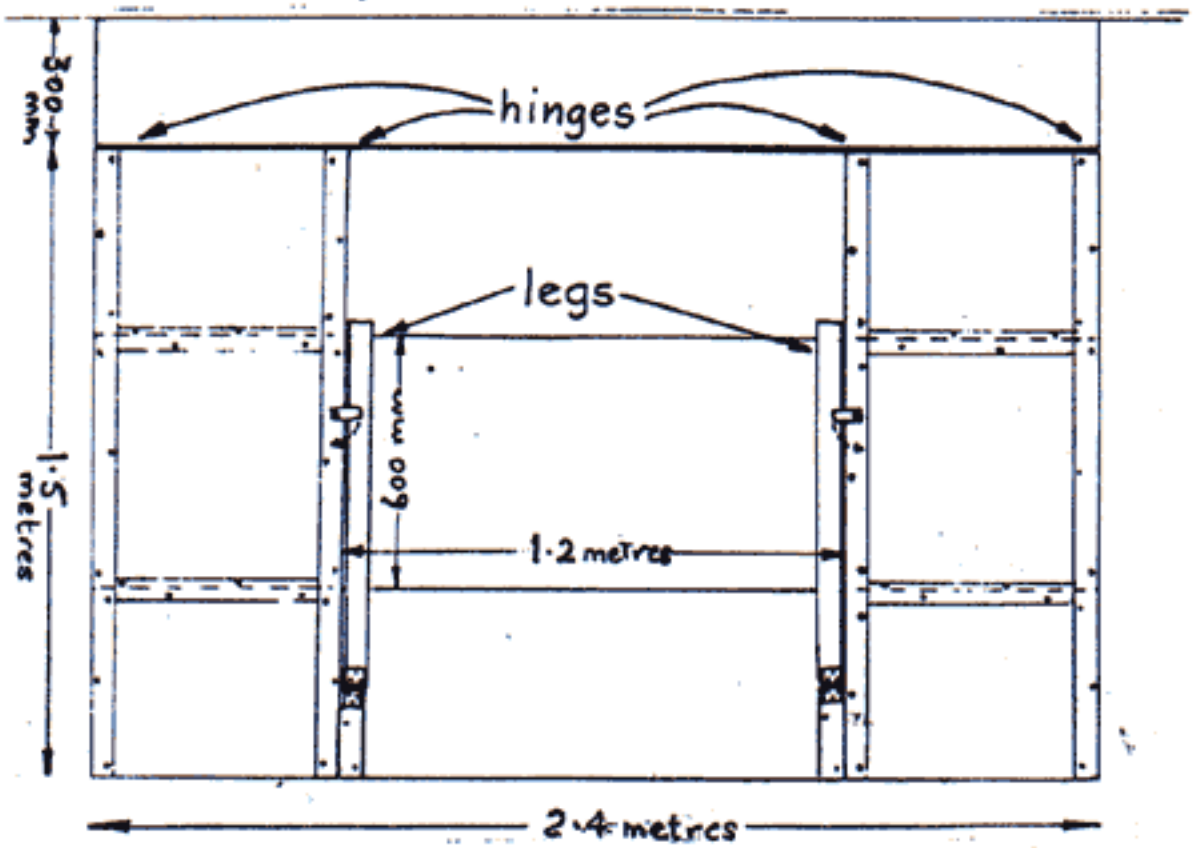


figure 2

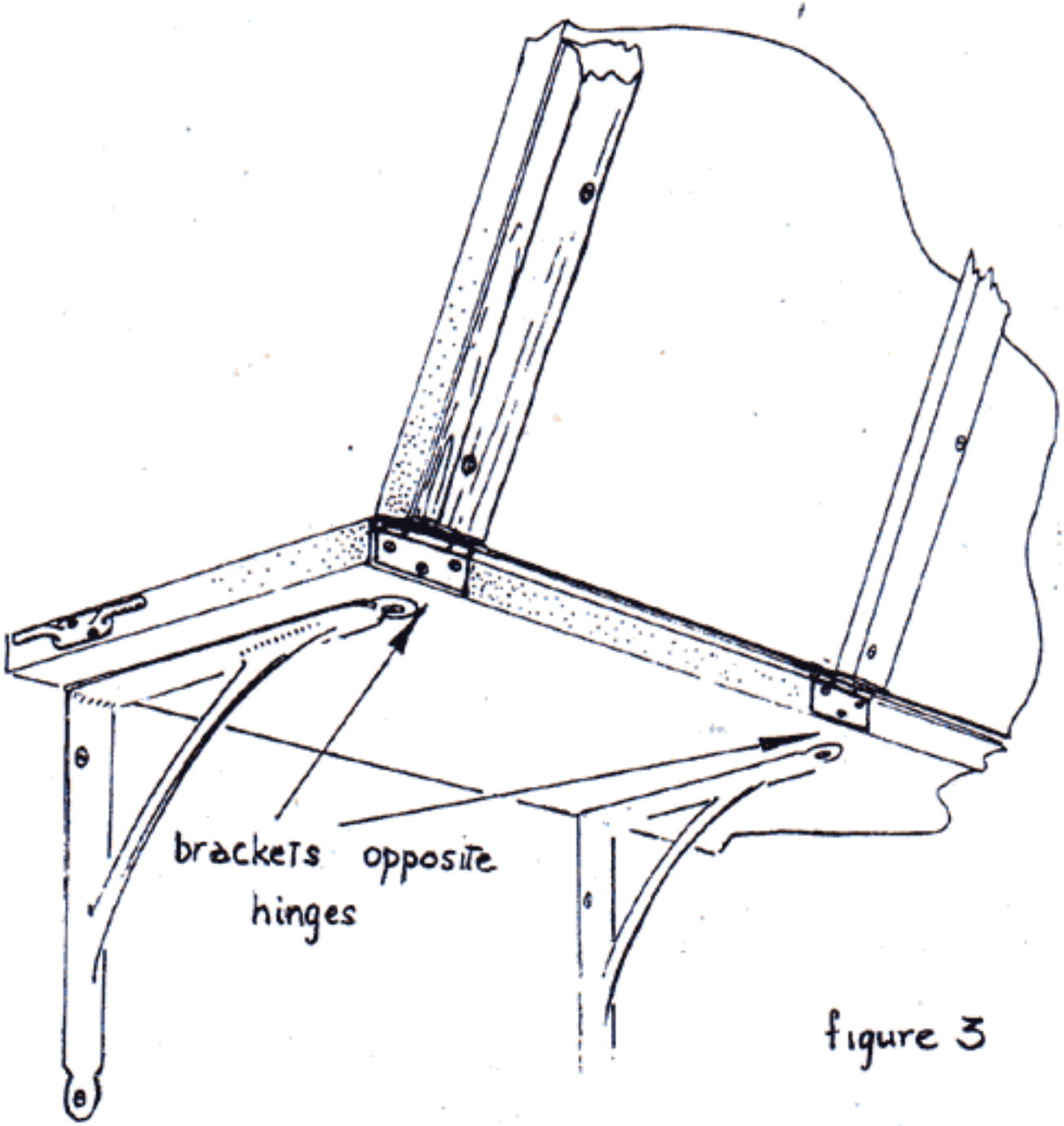


figure 3

figure 4

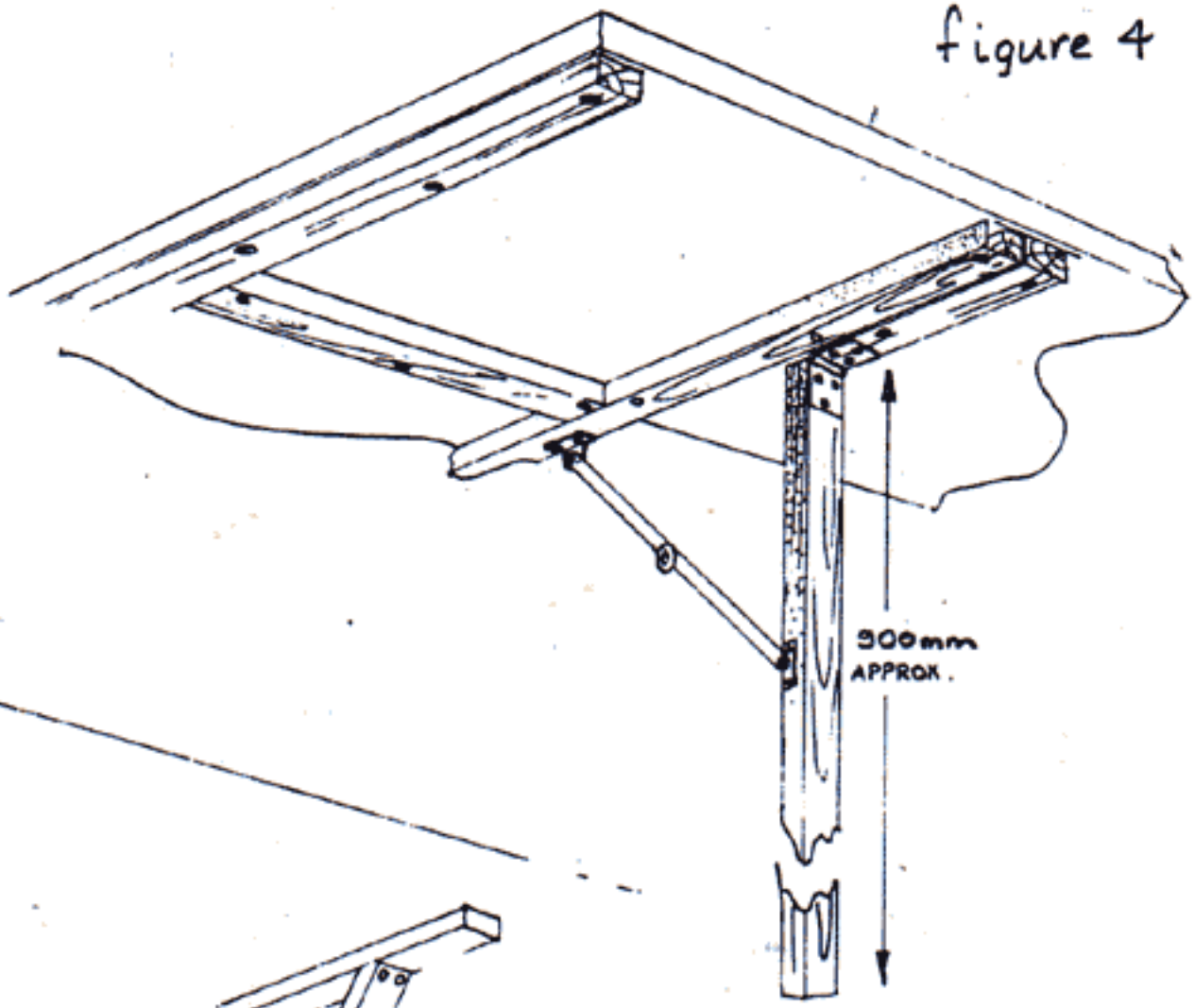


figure 5

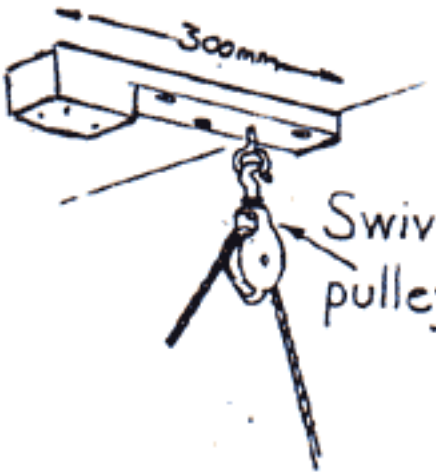


figure 6