
BASEBOARDS
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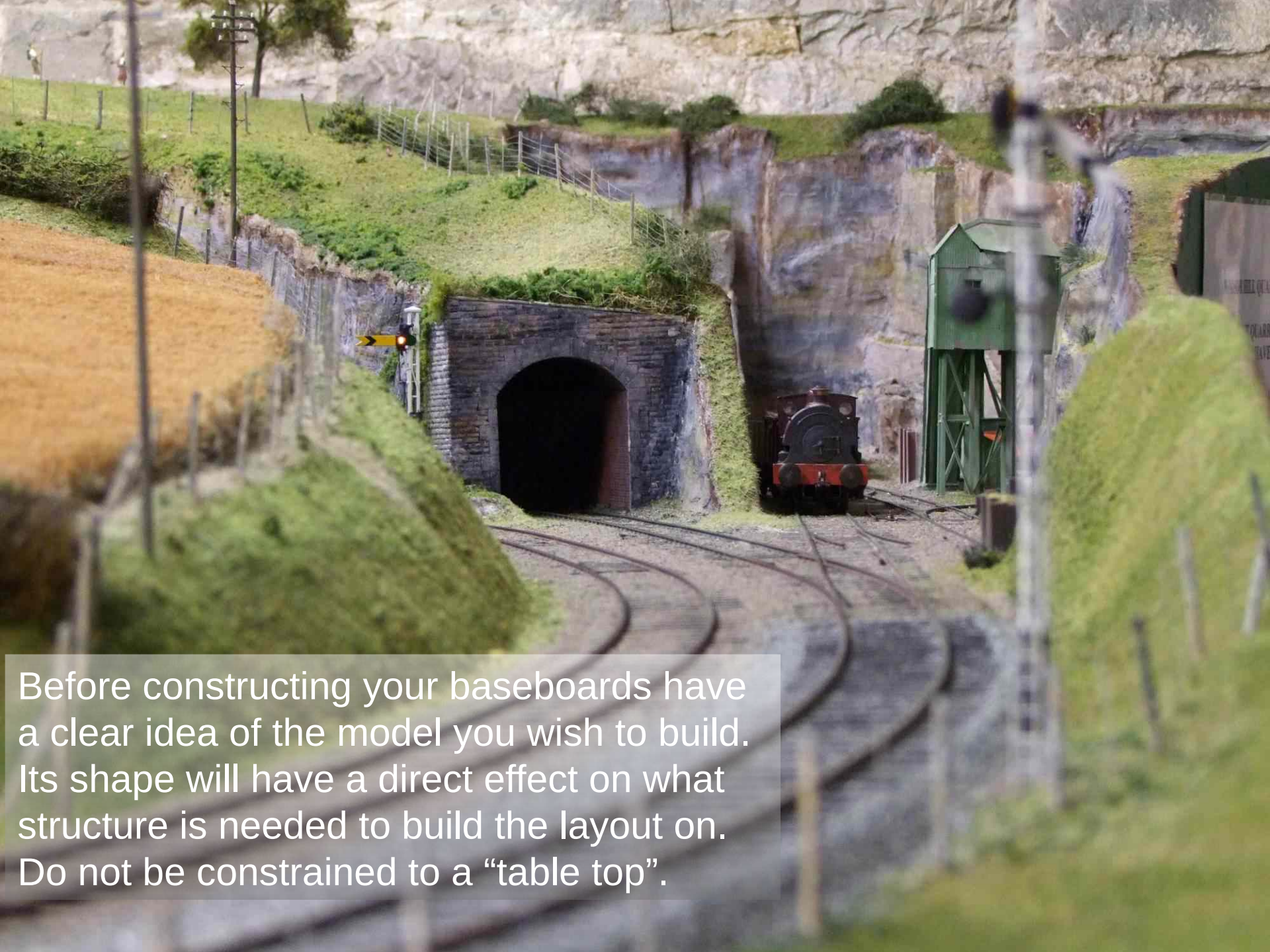
Thoughts on construction.

Things to think about.

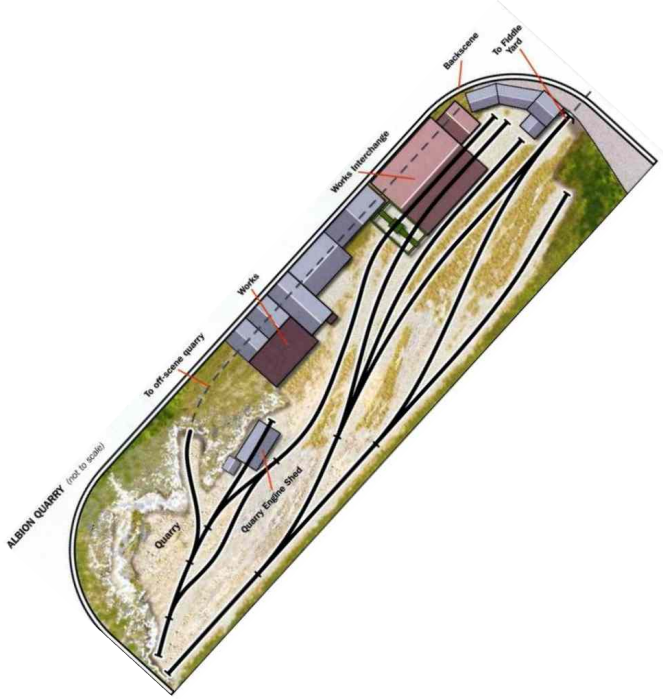
Following a prototype?
…to scale?
…reduced?

A work of fiction?
…industrial?
…urban?
…country?

How will it moved?
…in car?
…in a van?
Probably many more…



Before constructing your baseboards have a clear idea of the model you wish to build. Its shape will have a direct effect on what structure is needed to build the layout on. Do not be constrained to a “table top”.



Plan.

Plan again.

Review.

Plan again.

Satisfied?

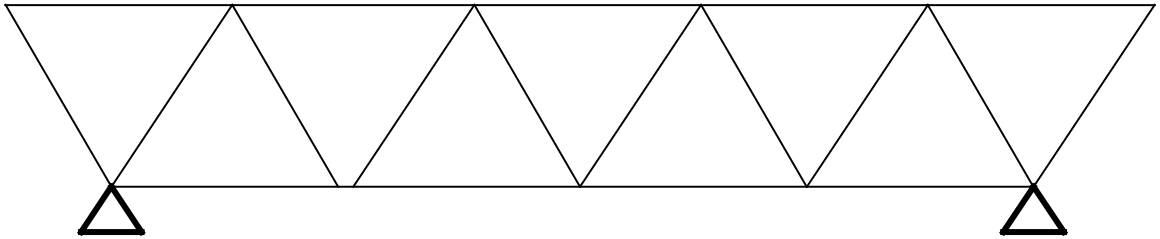
Yes

No

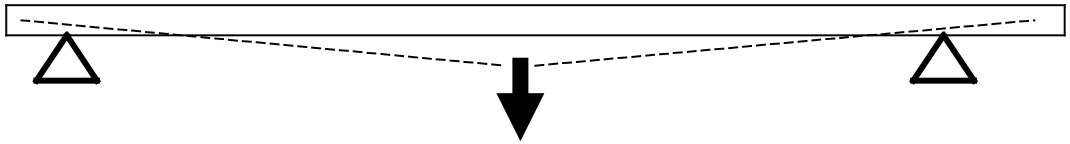
Then design the structure to build the railway on.

Baseboards are essentially bridge structures.

Copying these structural shapes into wood can be good basis for construction.



Too thin and they will deflect.



The deeper the section the stiffer they will be. This also makes more room for point motors etc.

…but thin structures can be made, look at internal doors.

Materials

Traditional box framing in timber with a ply top?

All ply?

Thick ply or thin ply?

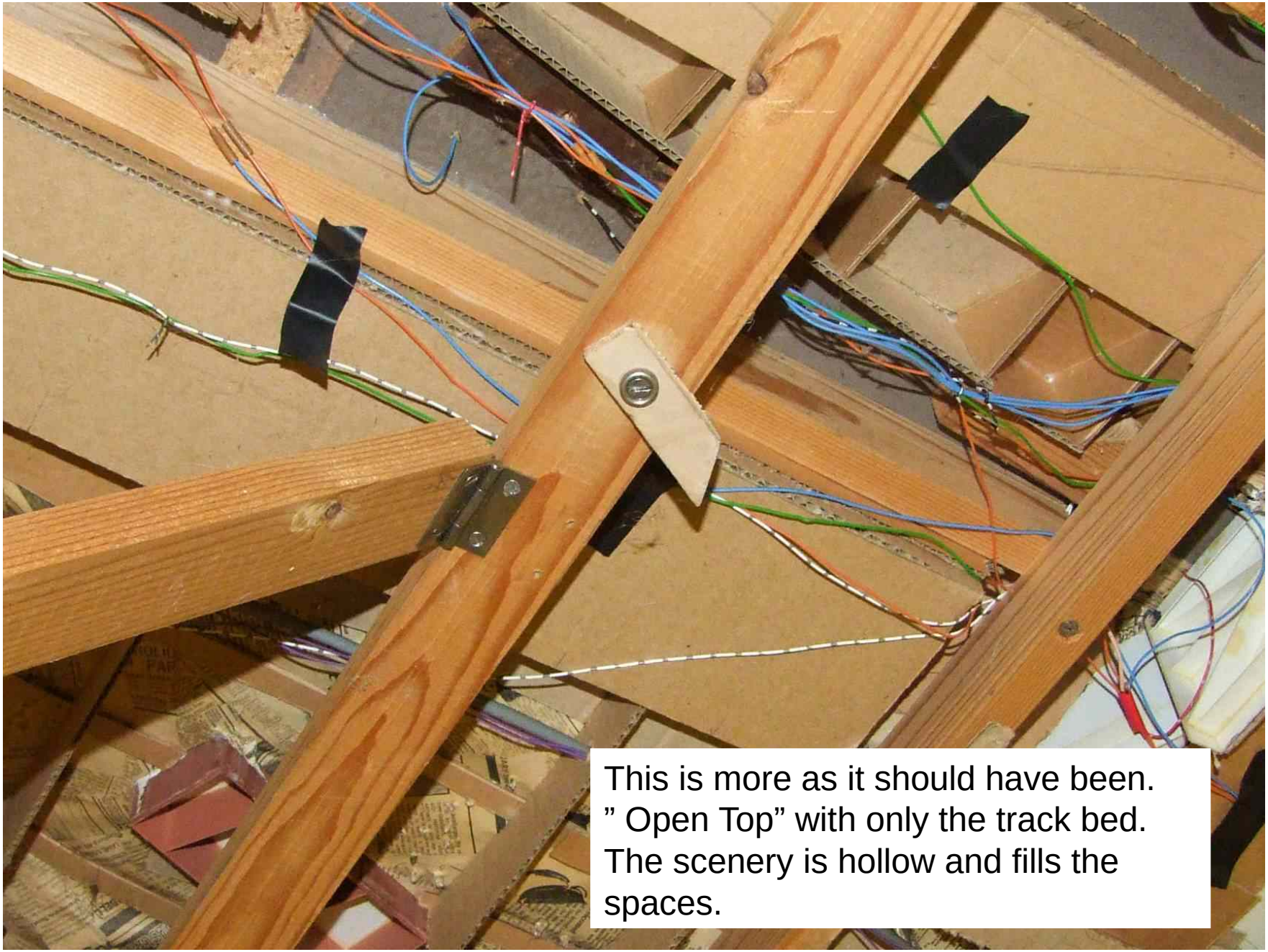
MDF?

Expanded foam?

Never chipboard!

YMRG's South Junction.

This is still “table top”.



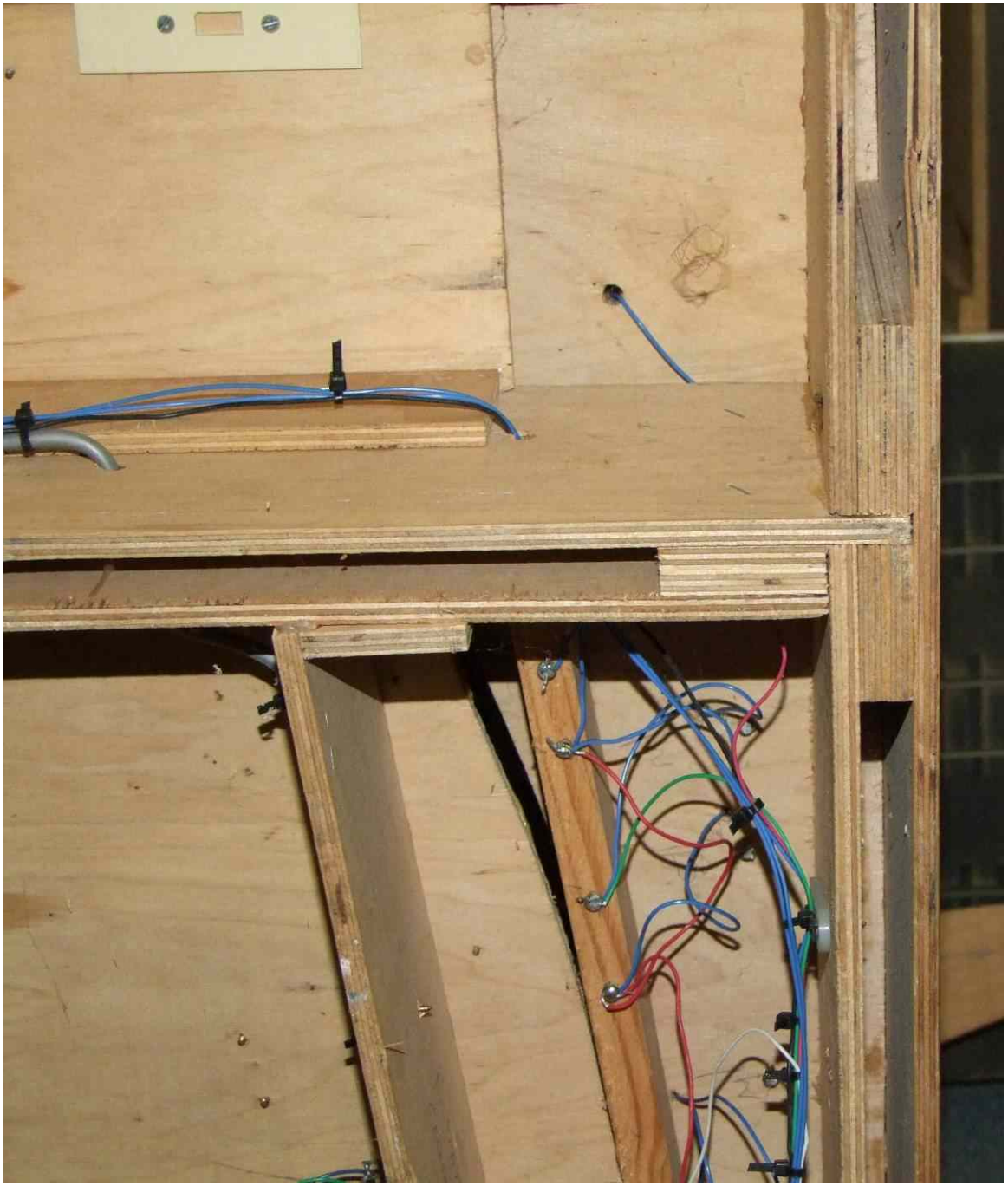
This is more as it should have been.
” Open Top” with only the track bed.
The scenery is hollow and fills the spaces.

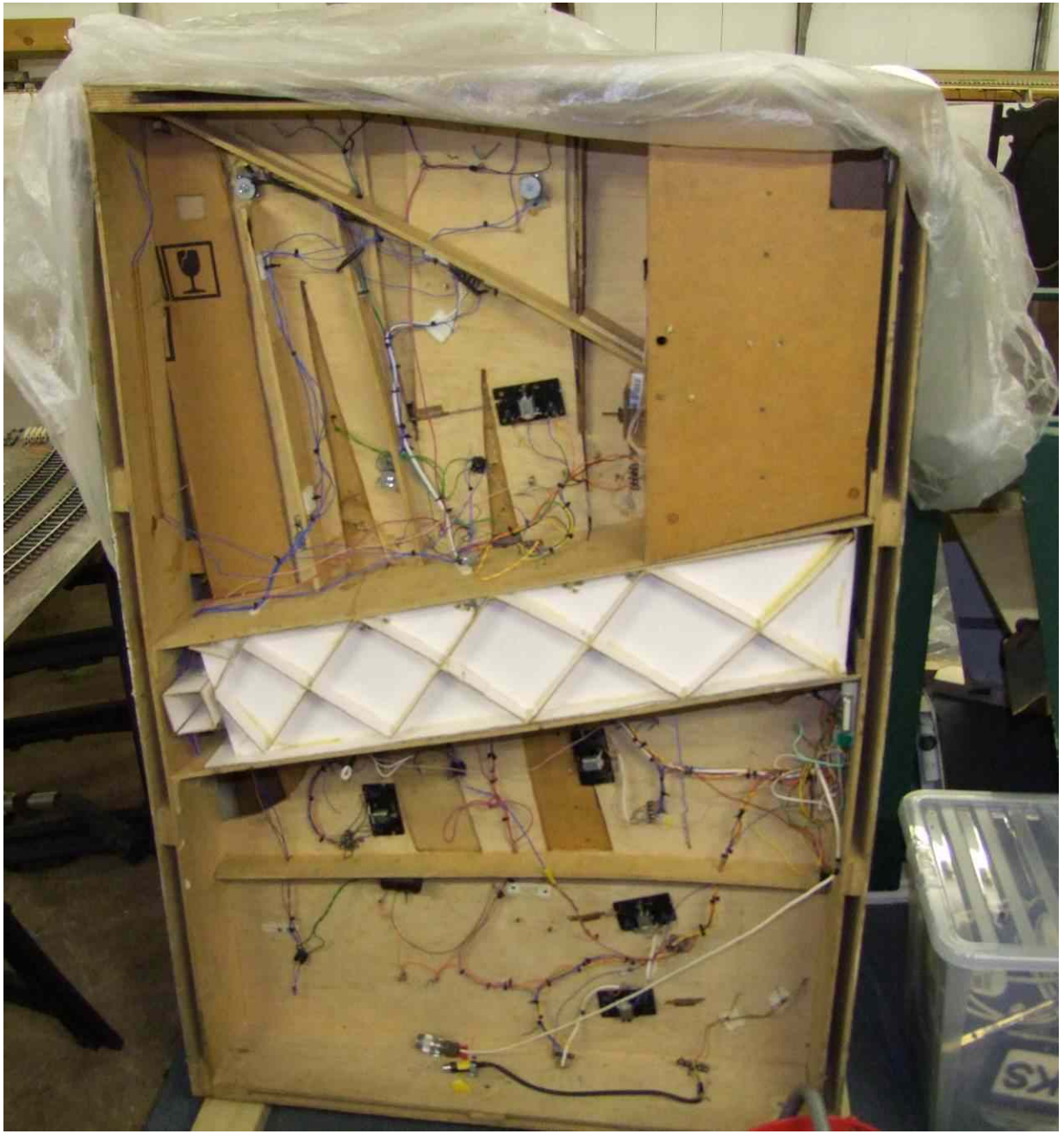

Barry Norman’s structural method.
Ply girders. Joints between the ply sides and the spacer blocks are glued and stapled.


This is nearly a complete baseboard frame!

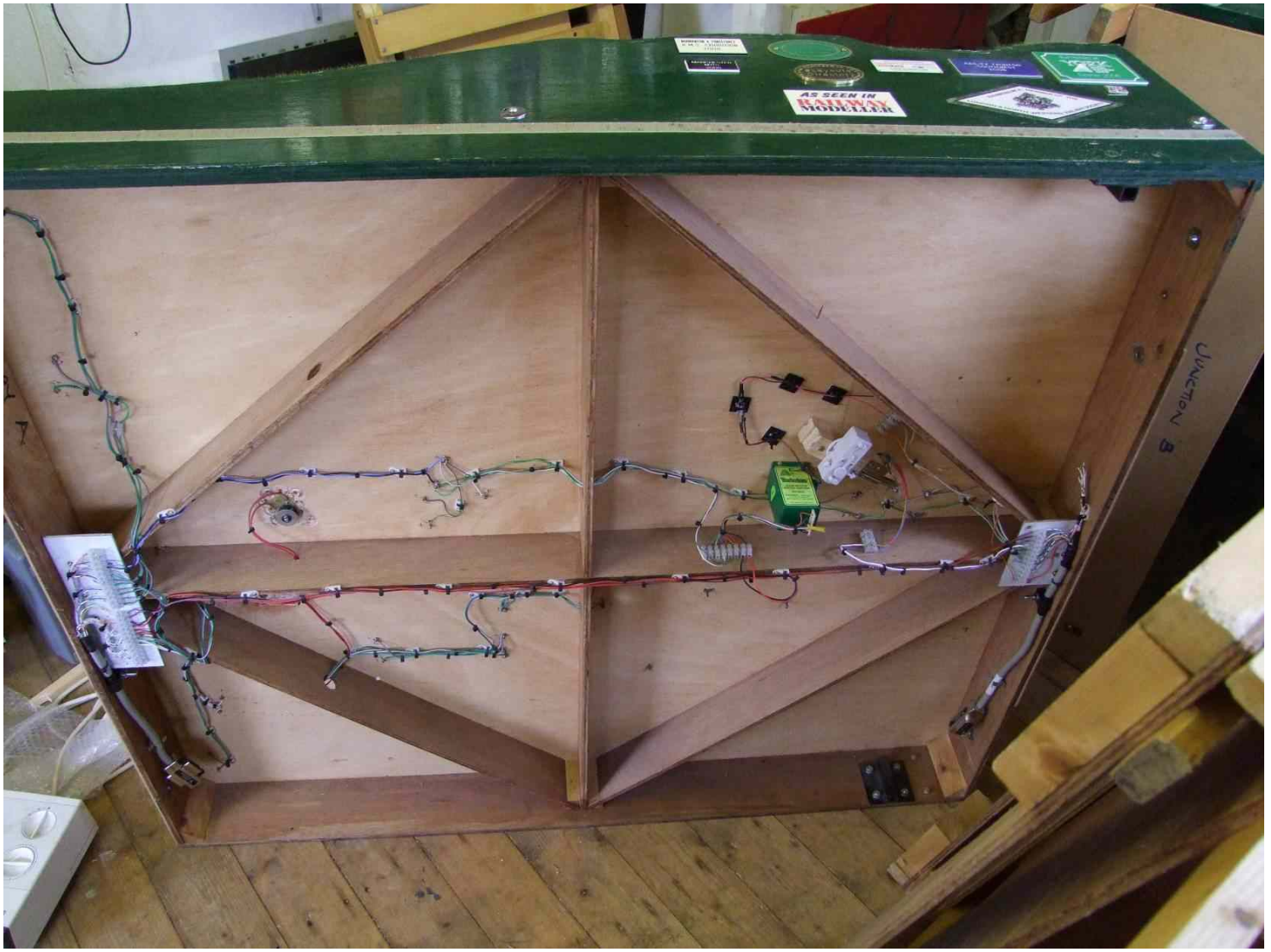
Under Gas Works

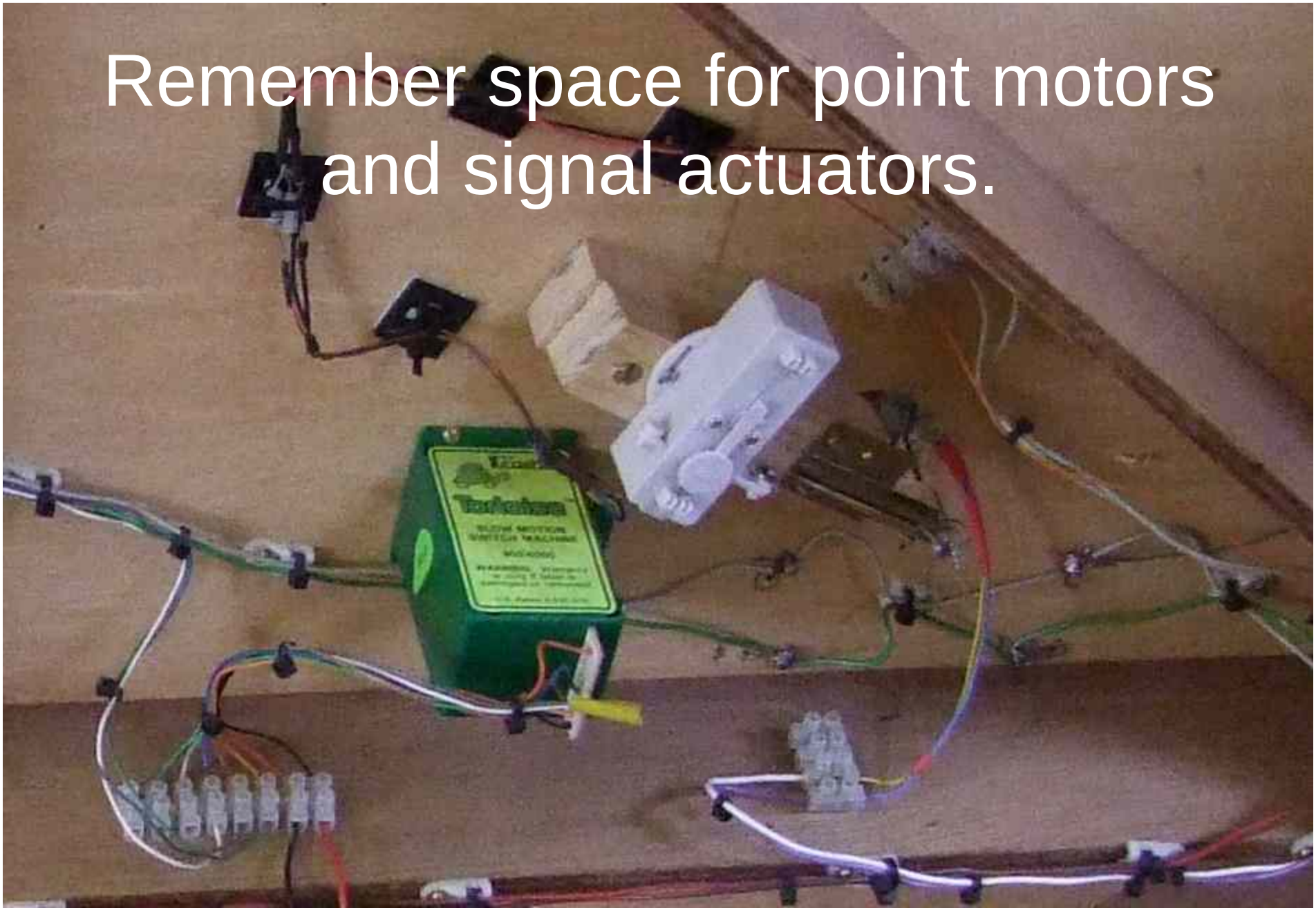
This tends to follow Barry Norman's concept but has large ply areas at different levels





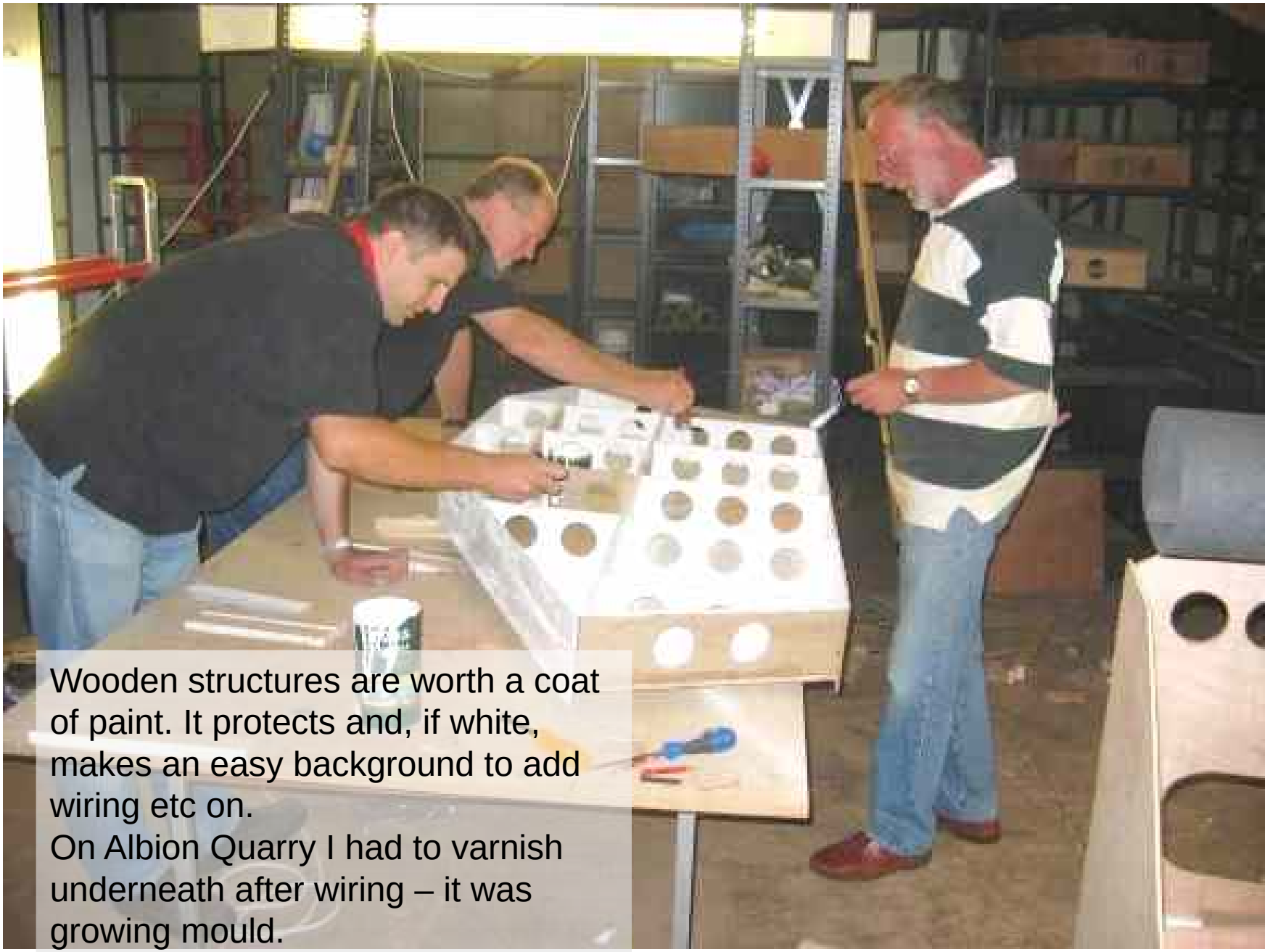
Typical board under **Albion Quarry**




Remember space for point motors
and signal actuators.

YMRG's "The Summit"

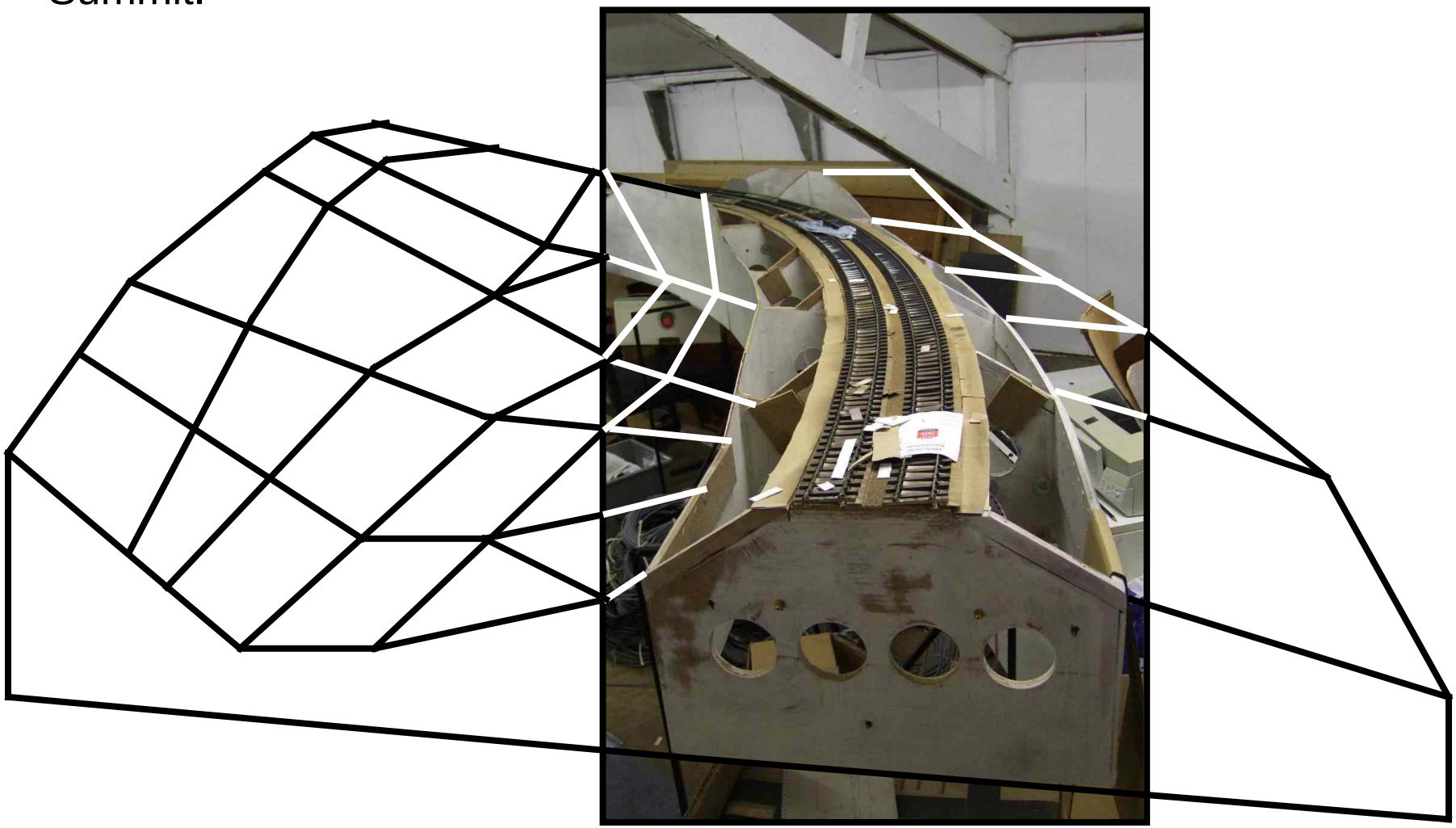
This is open top construction where the track bed is the spine of the structure with ribs to form the shape and a thin ply skin to give contour and complete the box.



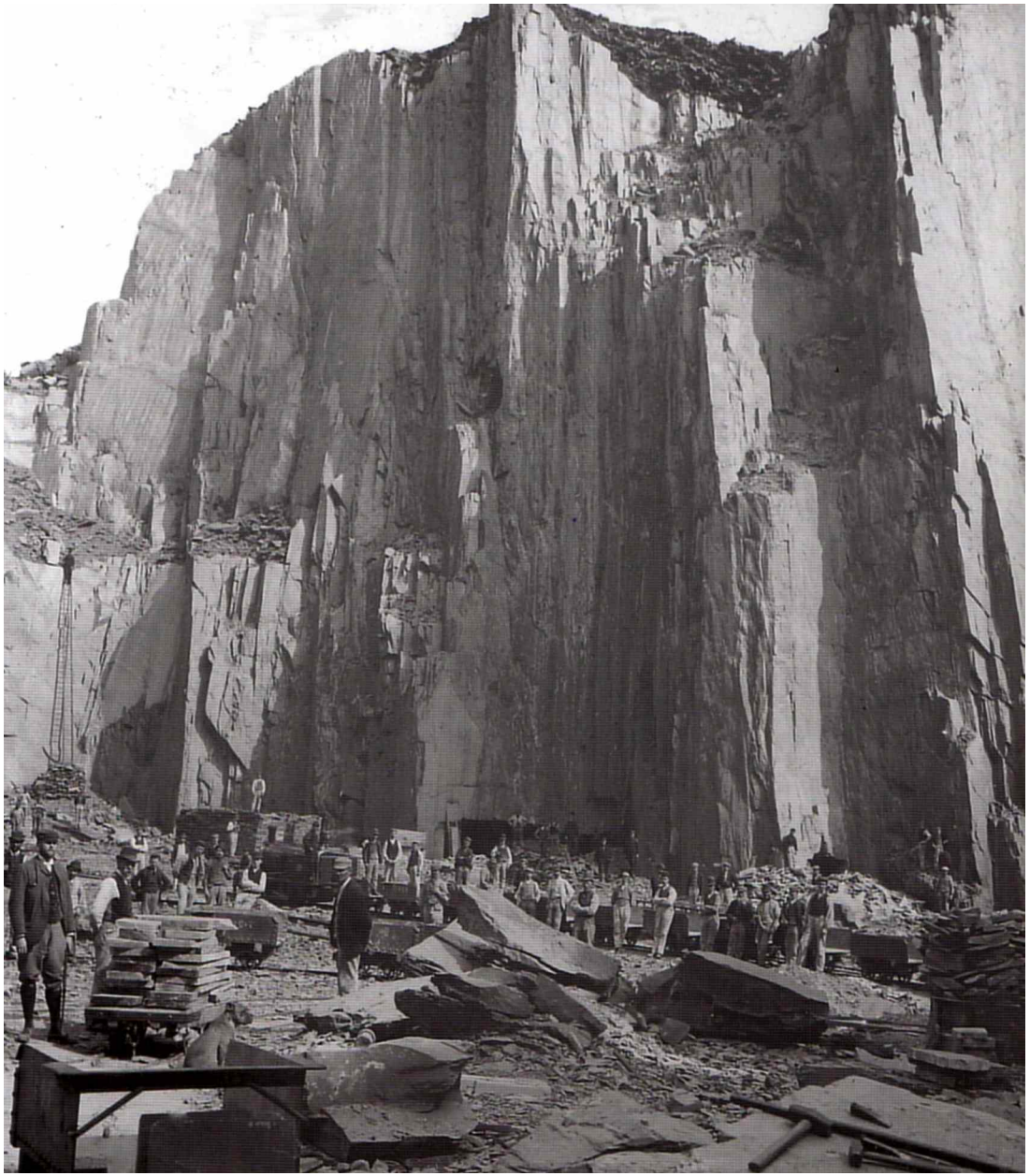
Wooden structures are worth a coat of paint. It protects and, if white, makes an easy background to add wiring etc on.
On Albion Quarry I had to varnish underneath after wiring – it was growing mould.

...but sometimes you have to think a little differently.

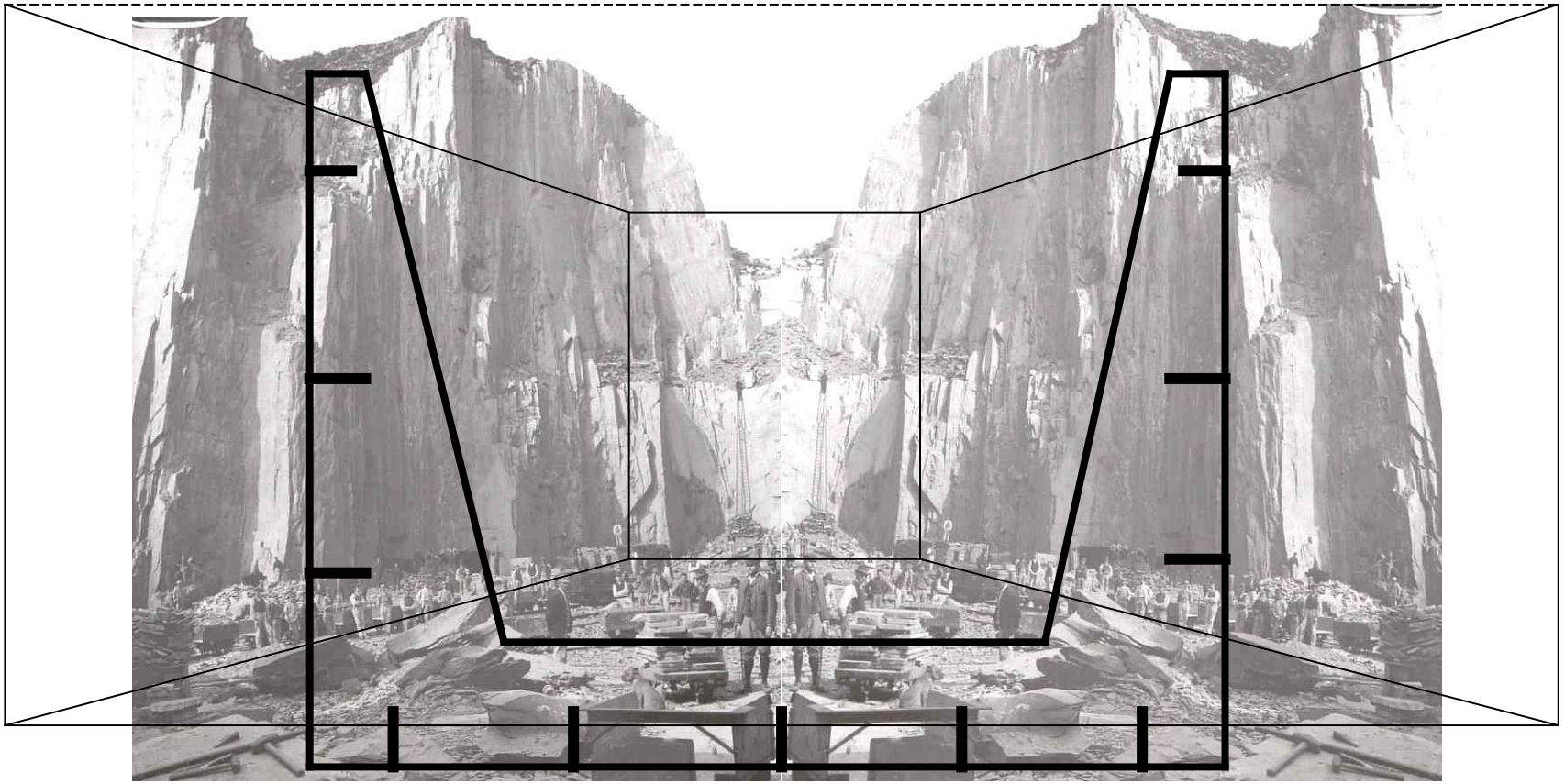
This shows how the scenery was added to The Summit.



So how do you make a baseboard for something like this?

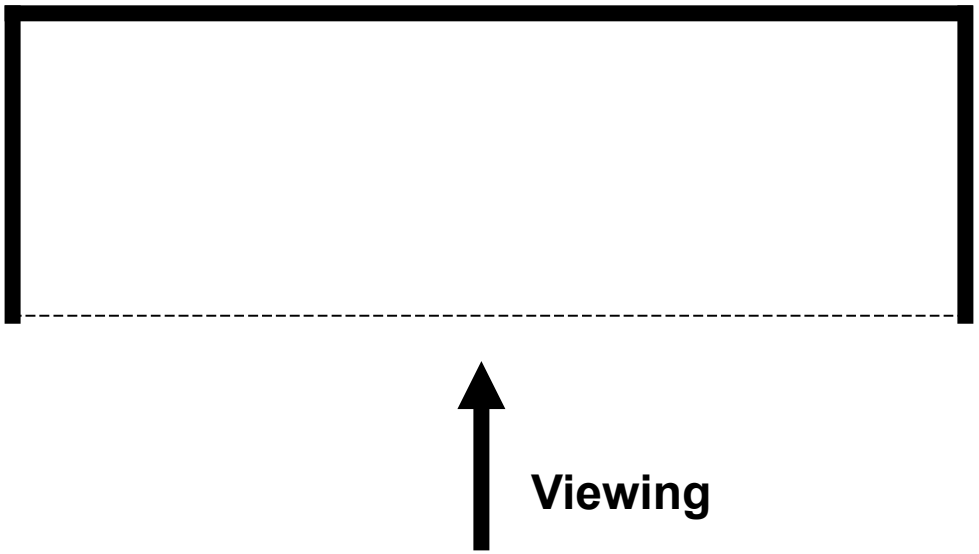


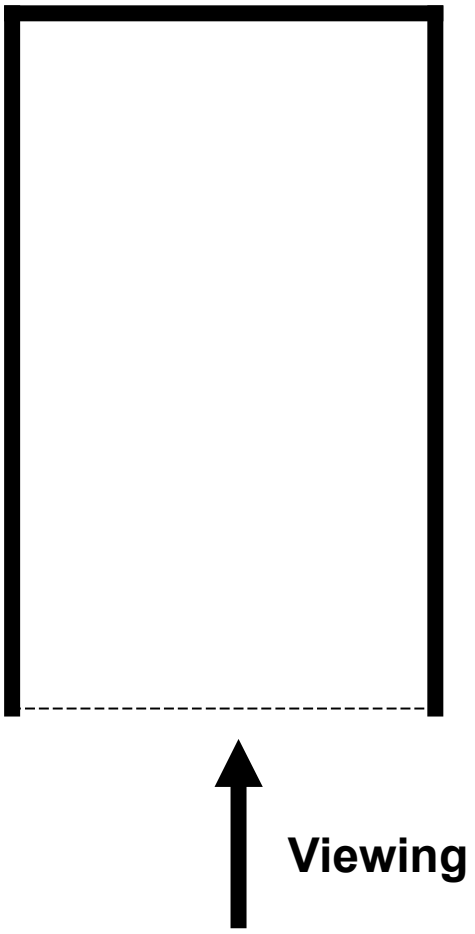
A series of ply frames and longitudinal members.
These form the basic framework and then the scenery is added in Styrofoam to give contour and stiffness.



Note.
The height of the scenery will be limited by the ability to go through standard doors! As will the width of the scene.

A deep scene can be presented in two ways by varying the aspect ratio.

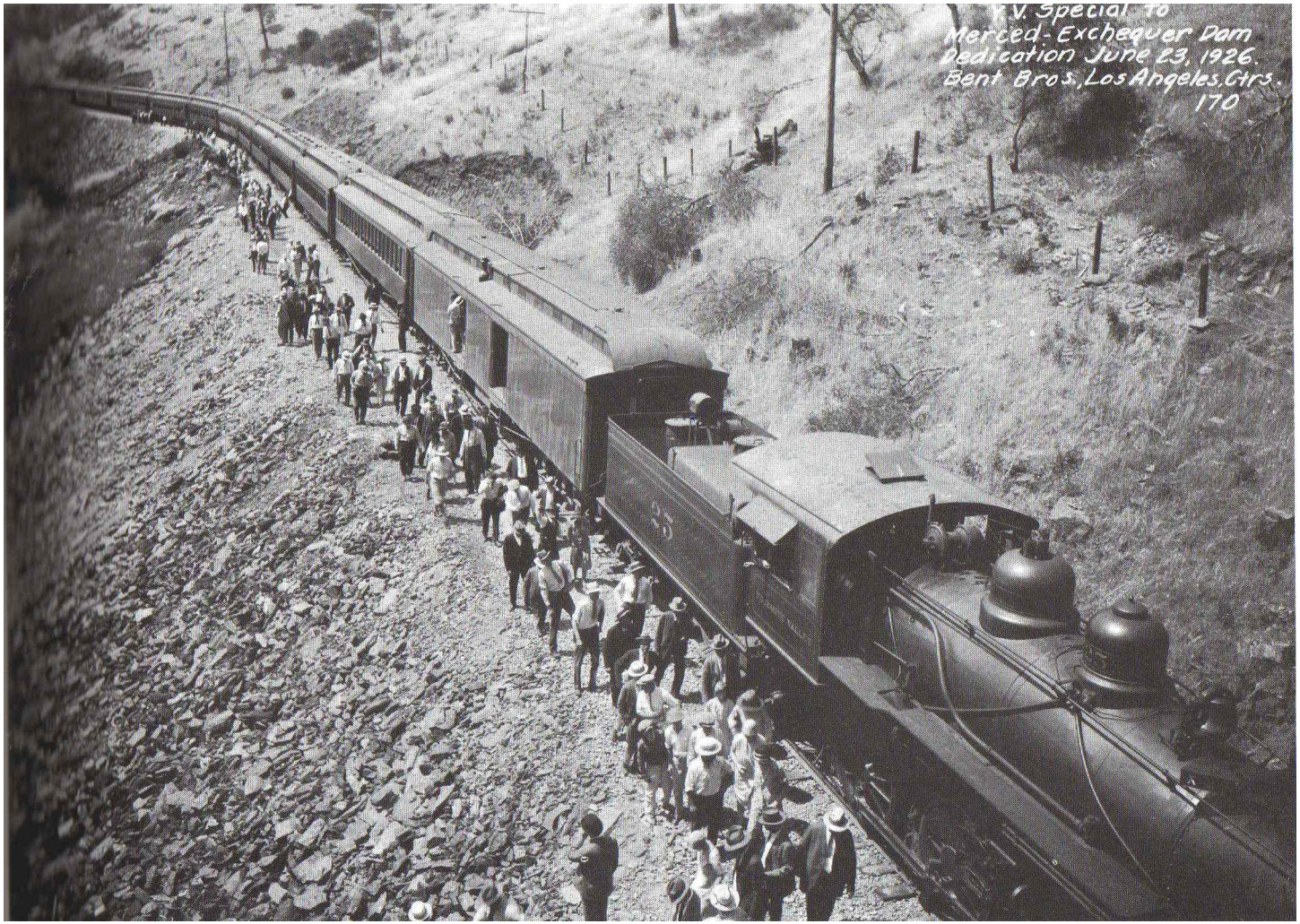


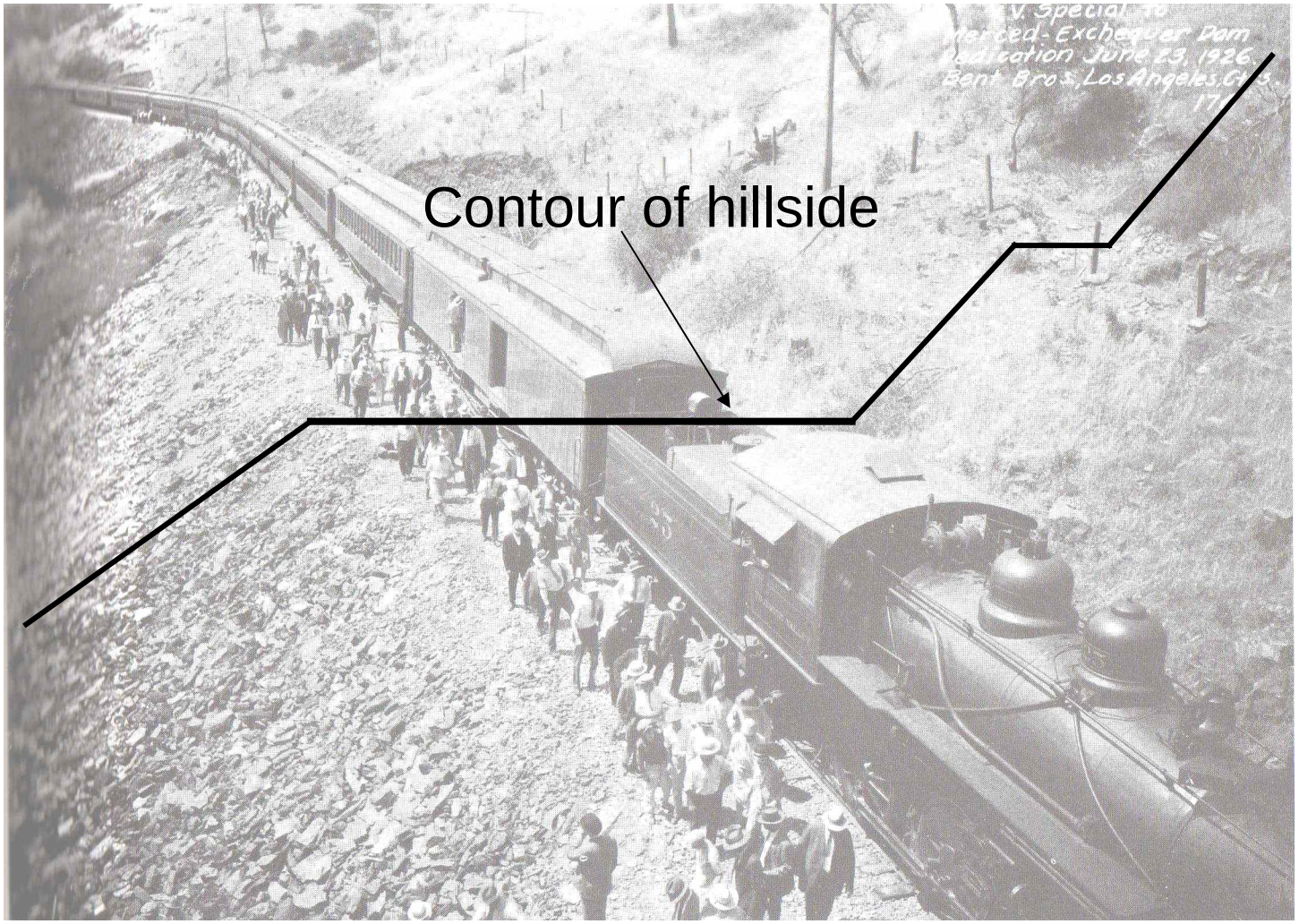


Builder’s insulation foam as a basis for a quarry.

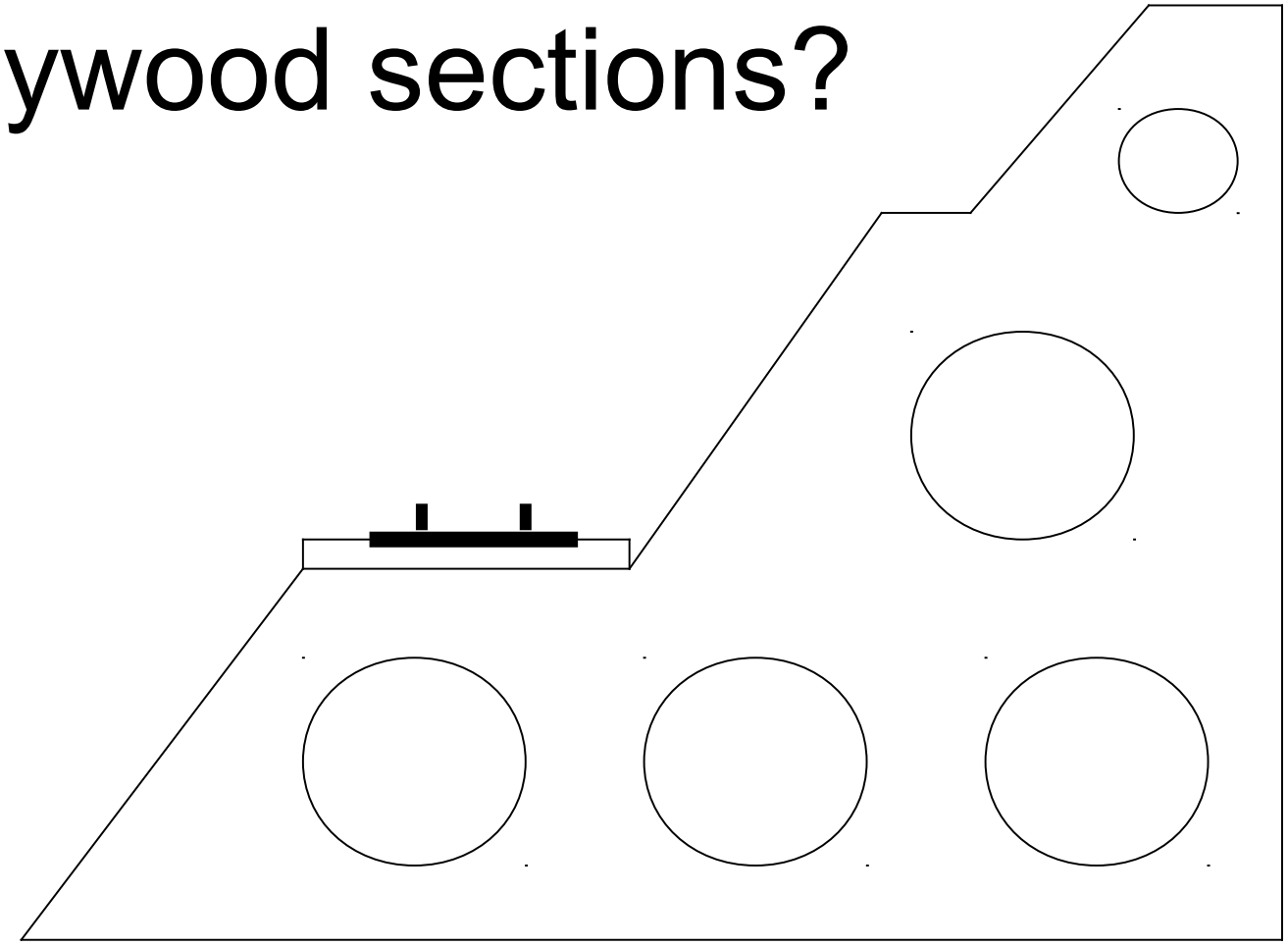
This could be Styrofoam.
Both Styrofoam and insulation foam will require protective edging in ply and support underneath.

Railway on a hillside or in a deep valley.




Contour of hillside

Plywood sections?



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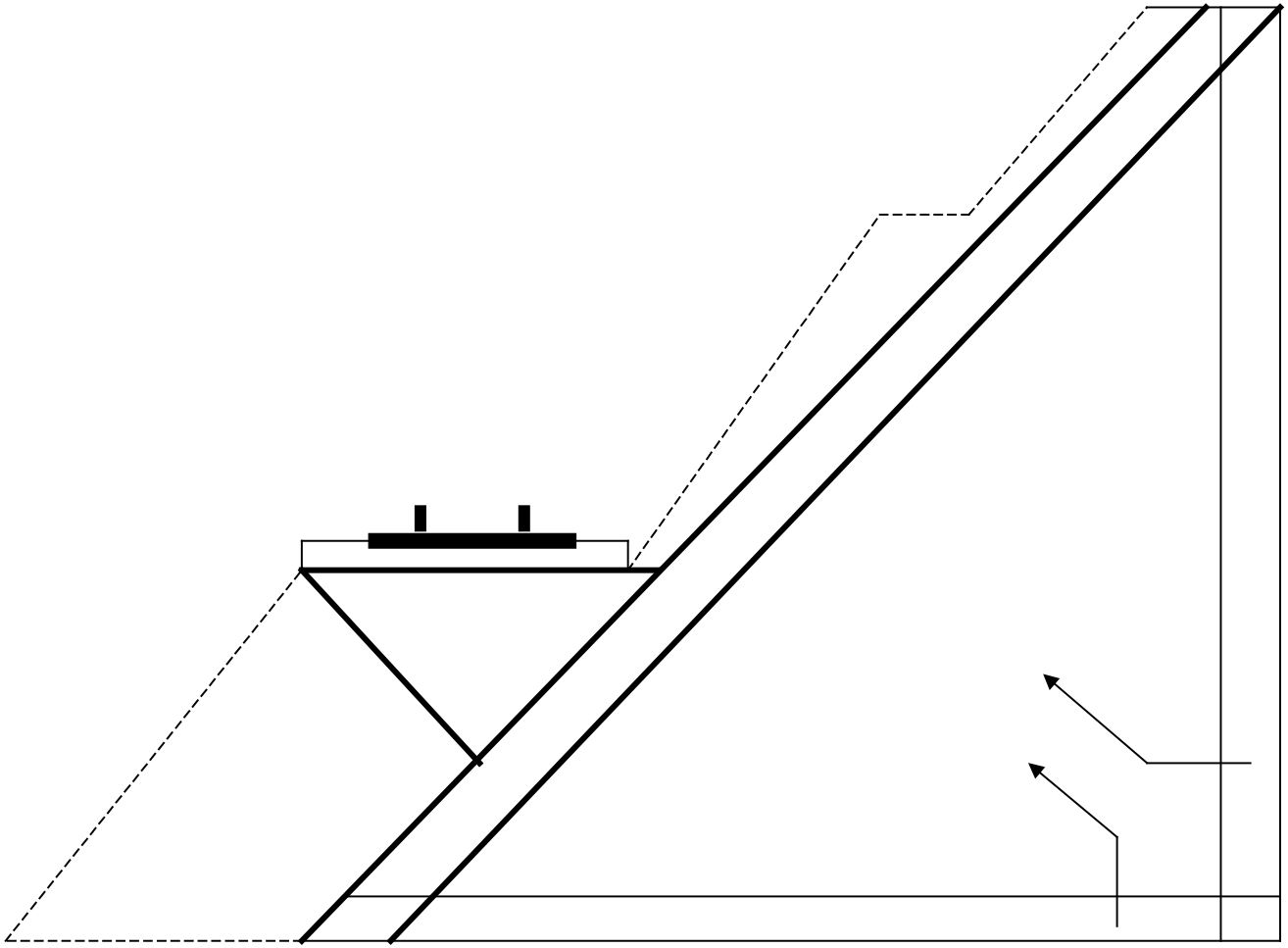
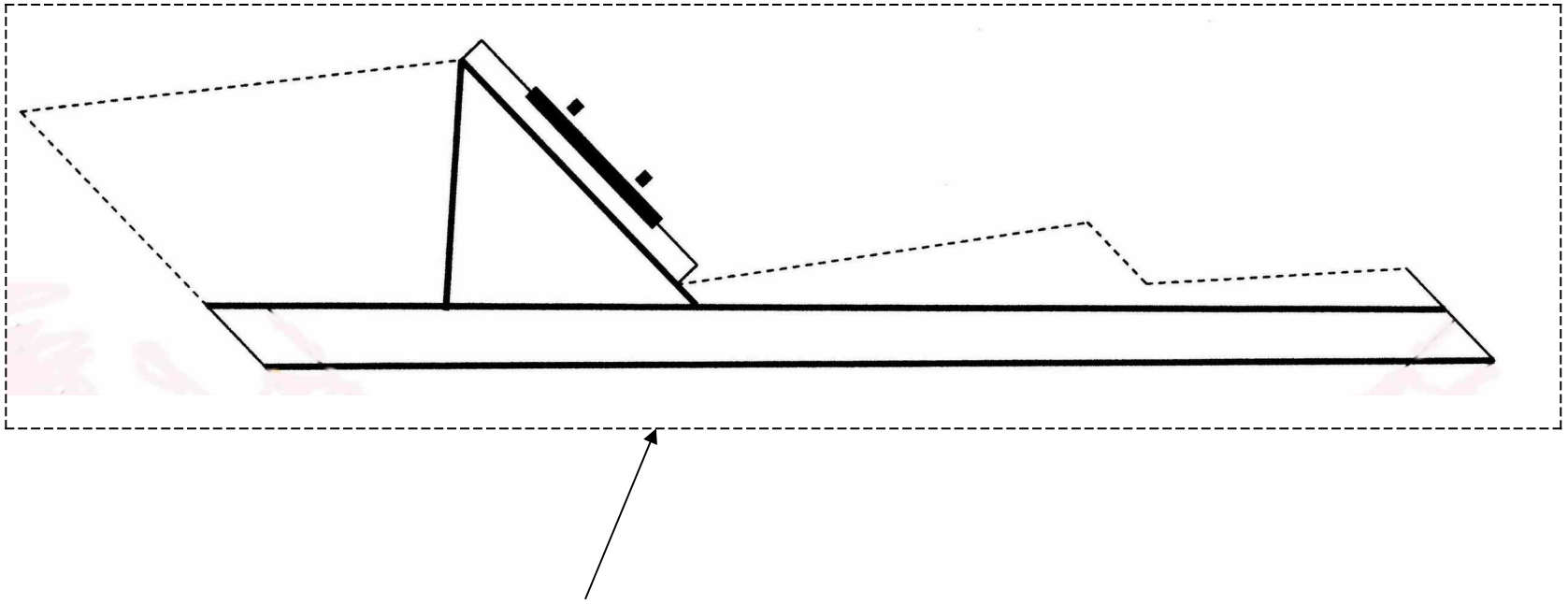


Minimum frames to give a low profile?

Scenery on a secondary structure.

Much smaller to pack away.



Packing envelope

Joining boards

Fixing

Bolt together?

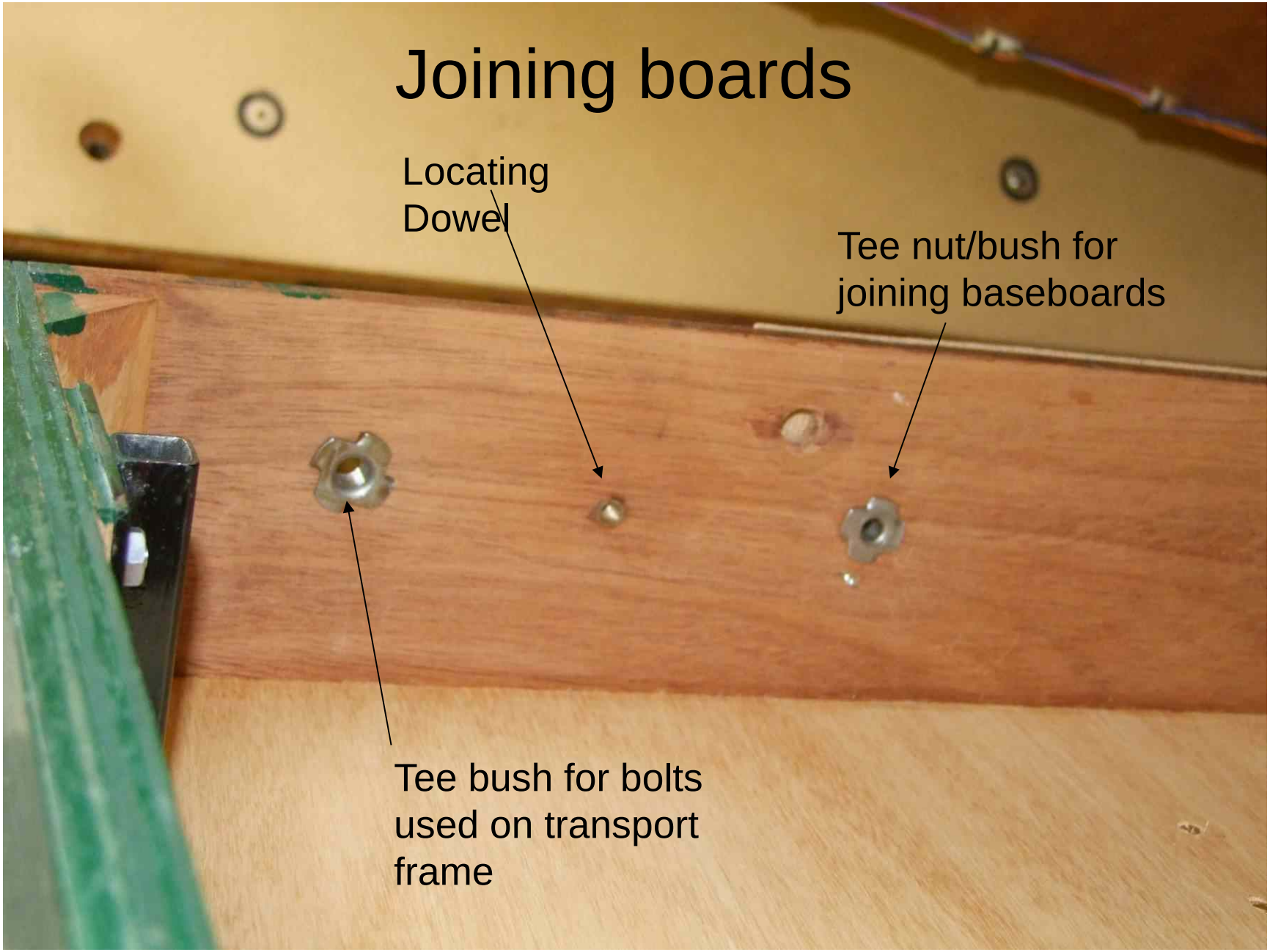
Case clips?

Location

Dowels?

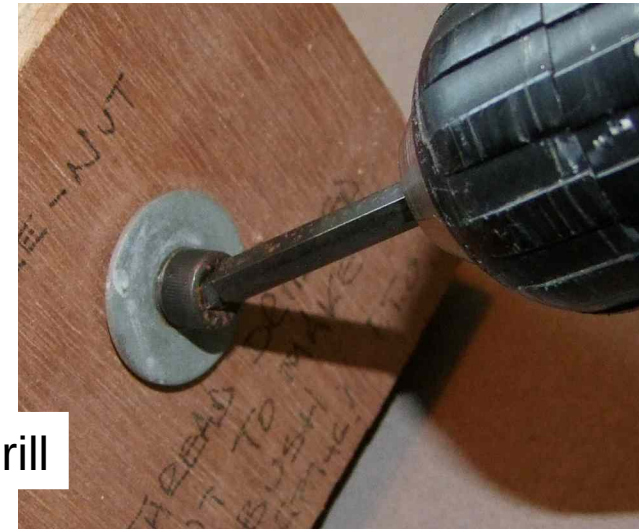
Free fitting bolts and slide to align by eye?

Joining boards



By hand – Allan key

Powered – cut off Allan key in electric drill



I standardise on M6 Allan headed machine screws for **all** joints

LEGS

What to use?

Trestles?

Integral with the layout?

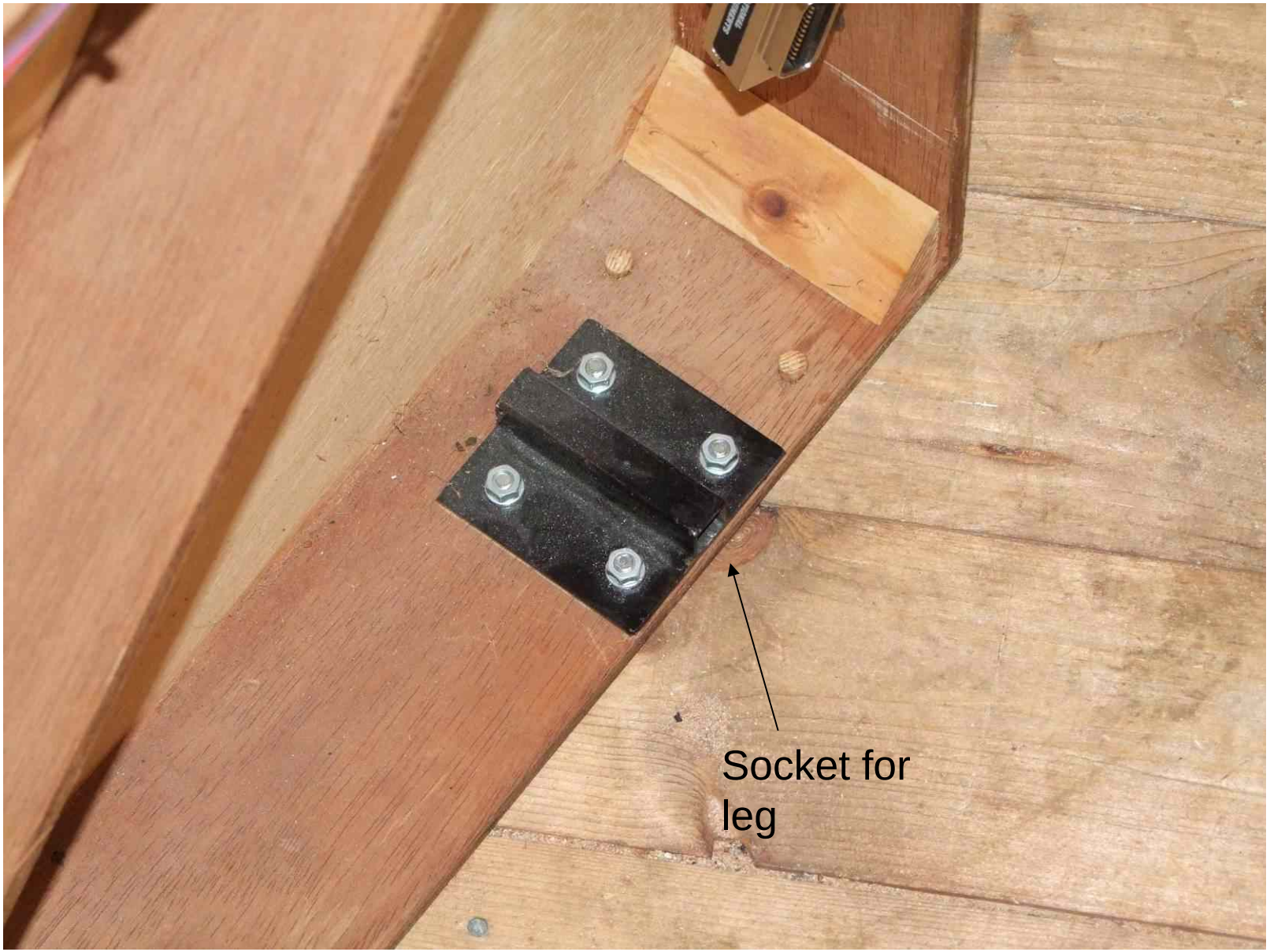
Separate?

Material?

Wood or metal?


AB
END

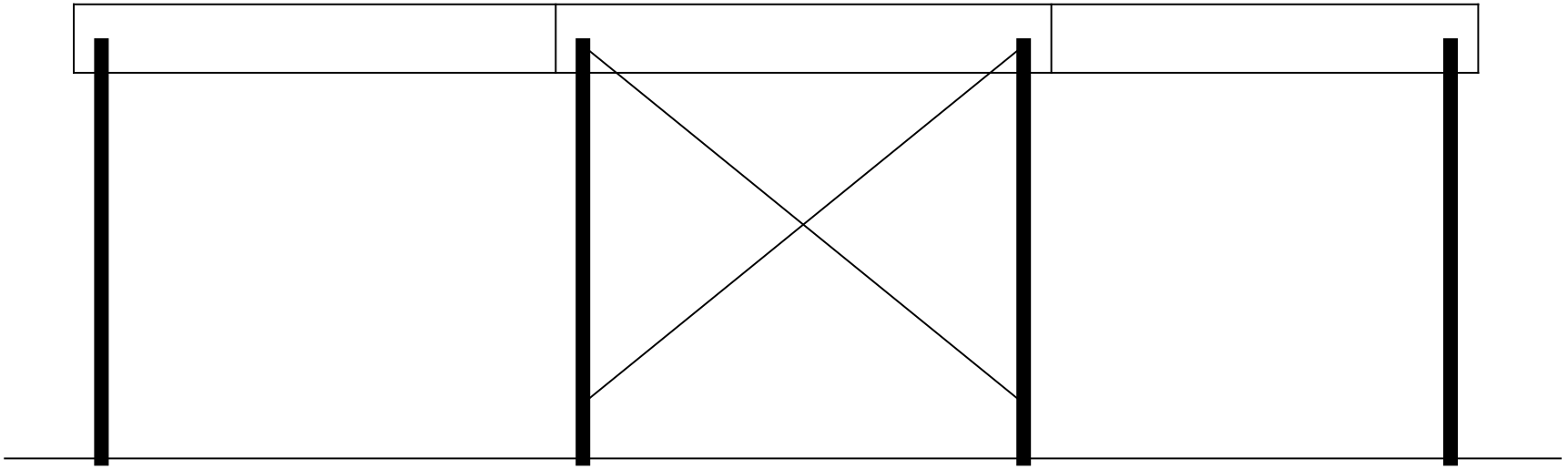

Steel legs for **Albion Quarry**


Socket for
leg

How many legs?

Not as many as you think…

3 boards – 4 sets of legs.
Middle board (could be an end board) has two sets stabilised and the outer boards have one set each and the board is cantilevered off the middle.



Lighting

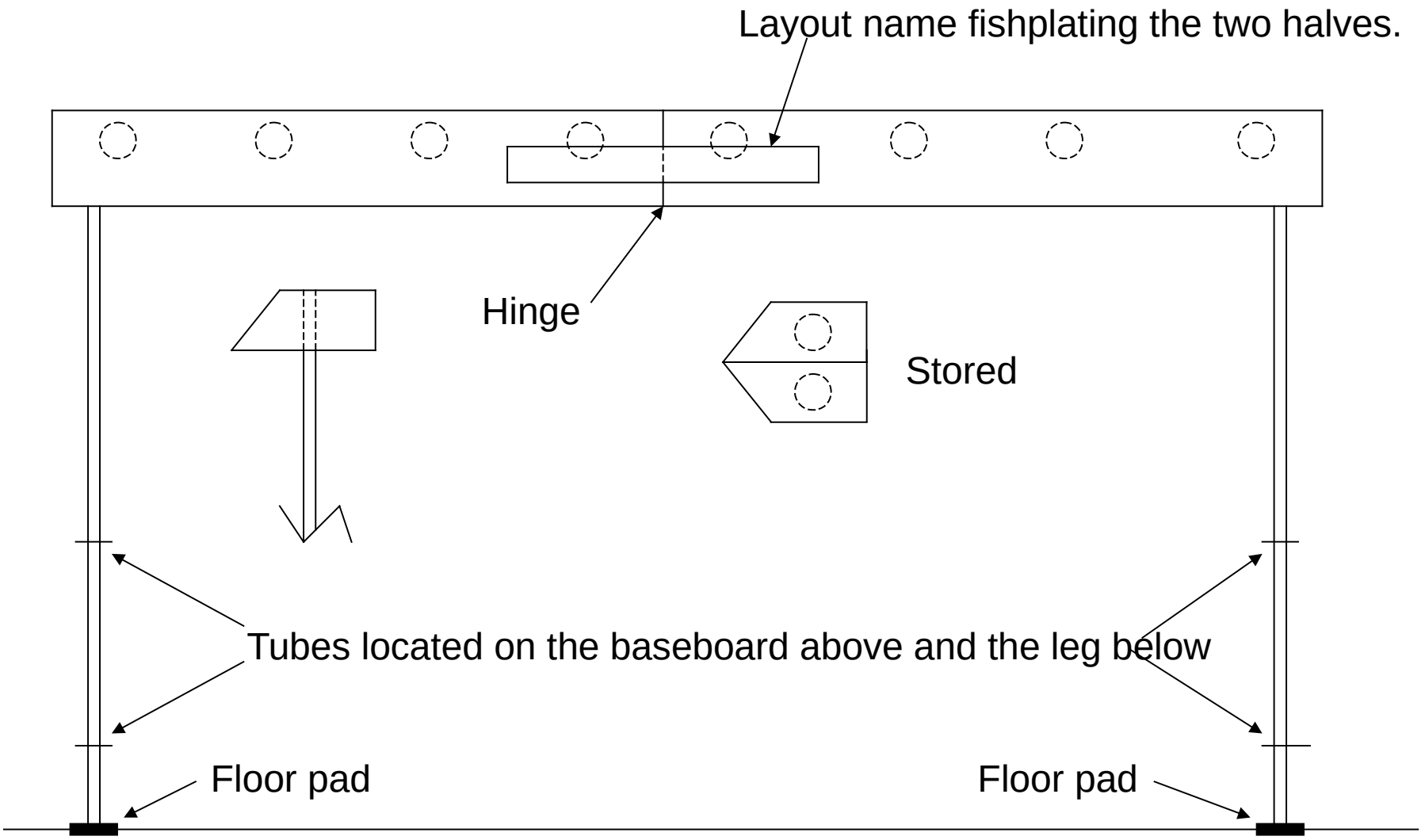
Essential if the layout is to be exhibited.

You cannot rely on the venue lighting to be adequate or the right colour!

Try to get a uniform distribution of the light.
Spotlights give uneven light.
Do not have it too bright.
Layout lights to be the same as the lighting under which it was constructed otherwise colours change.
Keep the weight down.

Albion Quarry
Lighting stored and erected

Schematic of **Albion Quarry** lighting.

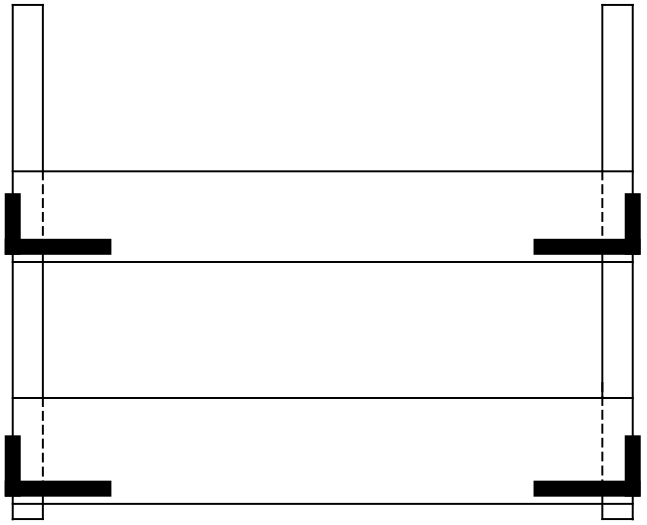


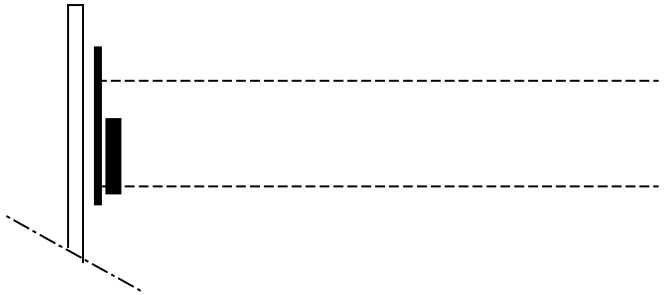
Supports from steel tubes – wardrobe rails from B&Q

Transporting the layout.

Fitting it all into a van.

Transport frames





Baseboard end protection.

Keeps rail ends and scenery from being snagged.

Essential transport

Moving a layout on wheels saves a lot of lifting or carrying no matter what the weight.

Whatever you make do not end up handling it like this!