

**CLASSIC TOY
TRAINS**

10 LAYOUT MISTAKES TO AVOID!

WHAT TO AVOID WHEN BUILDING YOUR EMPIRE

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Let's face it: Mistakes are part of life, and toy train enthusiasts aren't immune to them.

If you build a layout, you'll make mistakes. Guaranteed. Does that mean you're best off to stay in your armchair, trains on the shelves, pining for the day when you'll finally figure out how to build the perfect layout? Of course not!

Go ahead and build a layout, so those classics or modern jewels can stretch their legs and remind you of what so captivated you about the hobby in the first place.

But before you do, read this list of mistakes to avoid. It's drawn from experiences of CTT staff members past and present. It's not a list of every possible mistake, of course, but it does include some of the most glaring. (Which we've usually learned the hard way.)

1 NOT FINISHING THE ROOM FIRST

When you're eager to run trains, it's tempting to put off finishing the ceiling, lights, wiring, or even the flooring or walls in your layout room, which in most cases began life as an unfinished basement, attic, or garage. However, once you get your layout bolted together, you won't want to go back and hang that drywall, drop that ceiling, or wire those lights, and if you do, the process will be a nightmare.

Finish the room before beginning your benchwork, at least in those areas that you won't be able to reach later. A layout room doesn't have to resemble the Hall of Mirrors at Versailles or the lobby of the Ritz, but finished walls, and maybe even some carpet, will help make it a more hospitable environment for you.

2 BAD BENCHWORK

This "mistake" actually has two extremes: wobbly benchwork and "bomb-shelter" benchwork. The key is to build your layout's foundation adequate to the task without needlessly wasting your time and money.

It's tempting to make benchwork that's similar to your dining room table, with legs at the corners and no cross braces. However, you probably don't routinely crawl onto your dining room table to retrieve a stray boxcar or plant dozens of miniature trees.

Build your benchwork more like a railroad truss bridge, using angled braces to help support the legs. While you're at it, check to make sure you're not leaving your plywood top unsupported for long spans. Eventually, it may warp and weaken, and

when it does you don't want your body to be the straw that broke the layout's back. Finally, move the layout's legs in from the corners. Your shins will thank you.

On the other hand, why overdo it? Benchwork that's heavy in the wrong places adds little, if any, benefit to your empire, and the cost per square foot is certainly higher. Remember, you're building a layout, not a bomb shelter.

Legs made of 2 by 6s are too large for almost any layout situation – 2 by 2s are adequate. Likewise, unless you're spanning more than 8 feet unsupported, an L-girder made of a 1 by 2 strip screwed and glued atop a 1 by 3 strip is more than adequate. (L-girders look just like an "L" in cross section; one board forms the upright side of the L and the other forms the base of the L. When screwed and glued together, it's much stronger than you would think.) For boards that run parallel to the ground, a 1 by 4 can usually substitute for a 2 by 4.

3 WRONG MATERIALS

Plywood tops for toy train layouts have remained the standard for at least 50 years, with good reason. The competition can't beat it.

Homasote board is a good sound deadener but a lousy stand-alone substitute because it has almost no structural strength. Masonite board might make a nice, curvable backdrop, but try using it for the top of a layout and your trains will be so loud you'll want to run them from the backyard.

While you're out buying plywood, pick up a few boxes of screws and a big bottle of carpenter's glue to help you piece your layout together. (Nails are not the best fas-

teners for benchwork, because they're hard to remove and have a tendency to loosen with vibration.)

If you're really unfamiliar with building benchwork, there are several good books that cover the basics, including *How to Build Model Railroad Benchwork: 2nd Edition* by Linn H. Westcott (Kalmbach Publishing Co., no 12175).

4 INADEQUATE LAYOUT WIRING

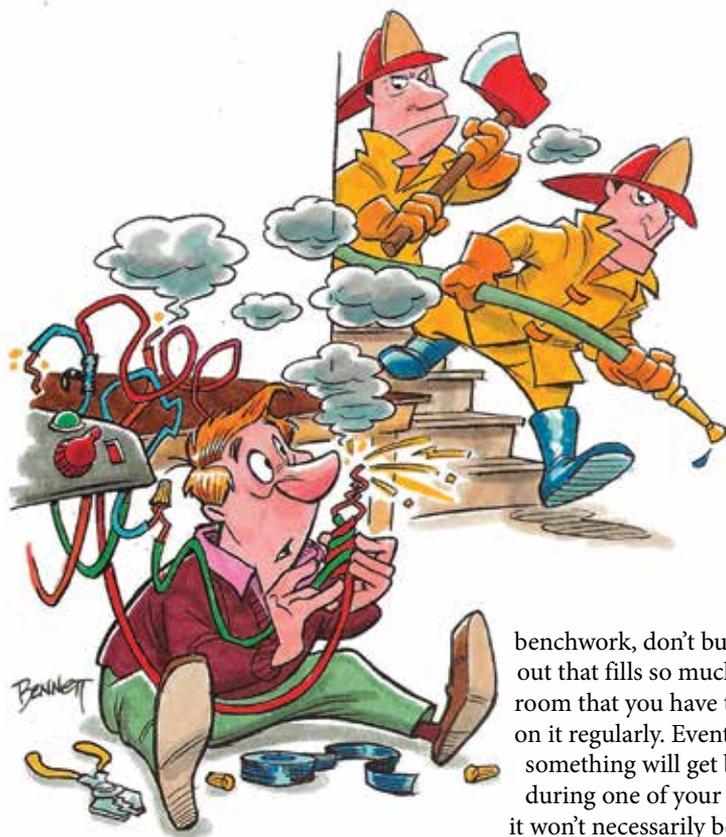
The number of ways you can go wrong when wiring your layout almost equals the number of errors you'll make on a typical income tax form.

Some examples? Using small gauge wires or electrical switches that can't handle the load, wiring your layout on one circuit, not color-coding your wire, running your wires willy-nilly so they resemble a rat's nest, and twisting your wires together at the joints rather than soldering or using appropriate connectors. Choose any one of these approaches and you'll be sorry. Choose two or more and you'll regret not sticking with that Marx wind-up. (Or perhaps you'll find it becomes your most reliable motive power.)

Find a good wiring book, such as *Greenberg's Wiring Your Lionel Layout, Vol. 1 and Vol. 2* by Peter H. Riddle (Kalmbach 1991, no. 10-7555 and no. 10-7560) and follow its directions. You'll be glad you did, and so will the fellows down at the volunteer fire department!

5 NO TRACK PLAN

You don't have to become the next Bob Sherman or John Armstrong, but it's worth spending some time thinking about the kind of layout you want



before you start building it.

Ask yourself a few questions. Where on the traditional-to-hi-rail continuum do you want the layout to fall? Do you like accessories? Do you want lots of track? Do you want to attempt realistic railroad-style operation, or do you just want to run trains around loops? Do you like to build scenery, or would you rather just unroll a backdrop, shake out some ground foam (or unroll some carpet), and call it a layout? No one particular plan is right for everyone, but a little bit of thought beforehand can bring a lot of pleasure later.

6 TRACK DIRECTLY ON PLYWOOD

This is another entry in the “act in haste, repent at leisure” category. Taking the time to add roadbed of some sort will pay off visually, especially if you favor an important element of realism.

You can use Vinylbed, cork roadbed, a track-and-roadbed combination system like MTH Realtrax, strips of carpet pad, or other types of roadbed. Remember, except in yards or on a few Plains States branch lines, real railroad tracks are elevated a bit, so that’s how trains look right to us.

7 INACCESSIBILITY

If you don’t have easy access to all parts of your layout, you’ll eventually regret it. Even if you’ve built strong

benchwork, don’t build a layout that fills so much of the room that you have to climb on it regularly. Eventually something will get broken during one of your trips, and it won’t necessarily be on the layout. Avoid the pain!

Even though they’re normally associated with the scale guys, shelf-type or shelf-and-peninsula layouts really do work well, especially if you’re using O-72 or larger curves. Use a scenic divider or backdrop with one of these plans and really watch those scale-sized trains come to life. If you don’t want to or can’t use a shelf-type plan, a pop-up hatch is worth considering. While they do help, no one who has crawled all the way over to one and then realized he forgot a tool would ever call them ideal.

8 ONE TOO MANY TRACKS

The sharp curves our trains can round and the number of great accessories available can make adding one more siding irresistible. But don’t give in to this temptation.

Many a layout has gone from a coherent whole to a chaotic mess because an additional siding or two removed any sense of realism, or even made the layout hard to operate. Often that last siding requires a switch located right next to a curve, or a switch placed so that the main must take the curved route. If you just have to have the newest accessory and your layout’s already full, either bite the bullet and replace an existing accessory or use this as a reason to add extra surface area to your layout.

9 BAD VIBRATIONS

Big trains make big sounds so unless you enjoy the constant roar (and have family members who concur) do everything you can to deaden the vibrations.

Roadbed helps, and carpet padding or foam floor underlayment helps even more. Avoid screwing your track tightly to the benchwork – consider holding it in place with silicon caulk – and think about using rubber ties or loose rubber ballast. Consider acoustic improvements to your layout room, such as carpet, a drape around the layout, or a dropped ceiling with acoustic tile. Even slowing down your trains – admittedly, a scale influence – can help keep the din down to a low roar.

Do it right and you’ll find you can really enjoy that new sound system or actually talk to someone while the trains are running. Plus, you’ll no longer register on the seismograph down at the university when you fire up a Big Boy!

10 A TIGHT FIT

If you run your track right up against a backdrop or out to the edge of the layout, you’ll have a difficult time making a scene look convincing.

Leaving even a few inches for scenery makes an enormous difference, and it also leaves more clearance for hefty equipment. On a smaller layout, you can add a bit of operating safety by making a fascia along the front edge that extends up an inch or so, but keep in mind that three or four inches of foreground space creates a better scenic effect.

If you have tracks on multiple levels, the layout will look a lot better if it doesn’t have a continuous sheer cliff or retaining wall separating the levels. You can opt for a forest, a gentle hillside, or a backdrop to create a more esthetically pleasing layout.

We train guys sometimes look at the locomotives so closely that we miss the distractions, such as the walls, windows, or water heater. If you want to know what your layout looks like to others, take a few snapshots and look at them. You may be surprised what you see.

Even someone who has memorized this list of mistakes is prone to repeat them, find a new one, or both. None of us associated with CTT is perfect either. And you know what? We still have fun with trains. You can, too! **CTT**