

GRAND SCALES ON A BUDGET

BUILDING THE "JIMMIE"

By J. Chris Allan

During my college days in the early '80s I worked as the summer midweek engineer for Erich Thomsen at his 15" gauge Redwood Valley Railway in Berkeley, California. Although I was the solitary employee on site (increasing business requires two or three employees these days) Erich would often stop by to check up on things.

Some of our conversations would turn to the subject of the ubiquitous person or persons who would express interest in starting their own railway using Erich's 5" scale equipment. Would-be builders would generally remain interested until they became aware of the complexity and price tag for a 4-6-0 or even a 2-4-2. Because of this Erich always had an idea in the back of his mind for simple equipment the newcomer could start out with, such as an 0-4-0 and four wheel riding cars. Erich got as far as sketching a rough side elevation of this locomotive.

Years later I took it upon myself to follow through, designing equipment for either a small start-up operation or the casual weekend "railroad baron" who doesn't own a ranch sized piece of property.

This article will touch on my design for a low-cost "Jimmie" riding car, utilizing few castings, or no castings if so desired. [Self promotion: I have drawings available for either version at reasonable cost, as well where to obtain most of the castings.]

Most of the the frame members of the car utilize stock dimensional lumber readily available, saving on re-sawing costs. The exceptions are the End Sills and Intermediate Sills. Re-sawn Intermediate Sills are only used in conjunction with pedestal castings and journal boxes. If for reasons of cost you would rather use commercially available pillowblock bearings, these sills may be of a standard dimensional size as well.

Should you not want to use new kiln-dried lumber, find a local supplier of used lumber. Reclaimed material is usually better than the "home center" grades anyway, and definitely has more "character". I used clear Douglas Fir for my car, which is almost as structurally



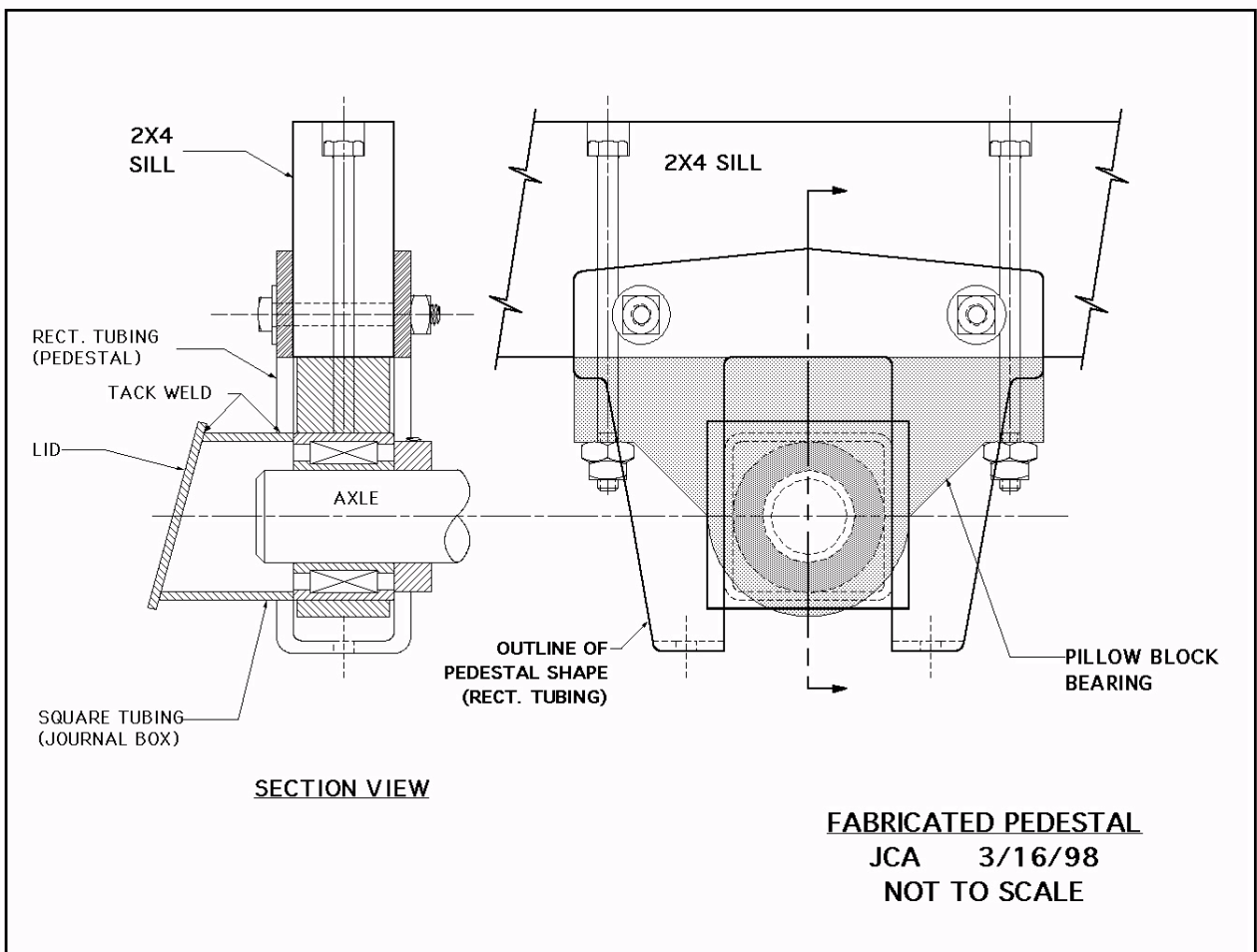
sound as oak, but if your line is not in daily operation, just about any type of wood will work. The clear lumber for my Jimmie was definitely the lion's share of the little over \$500.00 total cost, but that was my choice.

A project such as a miniature railway requires 5 percent mechanical ability and 95 percent scrounge ability. Always be looking for low cost material and parts you can use down the road, or trade other parts or services for. You may not immediately need or know what to do with a particular find, but chances are someone else will later, and that person may have a surplus of 300# brass steam gauges! (I can dream, can't I?)

A resourceful person can produce acceptable results with a bare minimum of equipment, say a drill press and a hack saw. Of course it will take a little longer with such limited tooling, but if you are in a hurry you

can always trade "favors" with friends or local shop owners to speed up the process. I personally prefer quality to quantity.

The ironwork on my Jimmie is a combination of castings and readily available bar stock. RVRVY alumni Gerry Hanford and I produced a pedestal pattern of our own. I continued to collect car castings over the years such as wheels, journal boxes and couplers as I came across them. For example, the wheels on my car were obtained (with permission) from another railroad's scrap pile. They are four of the original chilled iron tender wheels off of 2-4-2 #4. This long-term approach isn't for everyone, but I like the realistic appearance of castings. To get your car on the rails, acceptable facsimiles of most car parts can be created from scrap bar stock and rectangular tubing. (See fabricated pedestal detail below.)



Wheels may be turned from mild steel round stock or flame cut rounds. Sometimes the local flame cutting shops will have lots of extra "drops", or leftovers. Many of these are rounds of suitable size and can be obtained at scrap prices. I used a 10 inch car wheel on my Jimmie. To turn wheels of this size may require calling in a few favors if you do not have access to a lathe with enough swing. Here in Southern California, I work as a special effects machinist for the film industry, which coincidentally, gives me lunch-time and after work access to larger machinery. Should you plan on using pillow block bearings, axles can be turned from just about any type of steel. On the other side of the coin, if you want to use roller bearings in a cast journal box, that is a bit more involved, but not impossible for the novice.

I purchase hardware from a local surplus warehouse by the pound. All of the nuts and bolts for one Jimmie ran in the neighborhood of thirty dollars, including some hard to find square hardware. These types of stores are also good sources of

bearings and used machinery. If this is not an option where you live, research the location of one of these places and arrange a family vacation. Anaheim is quite pleasant in the summer!

Our plans call for at least six of the Jimmies and an 0-4-0 tender locomotive to start. If our commercial operation becomes a reality, and business seems stable, then we will consider building larger eight wheel riding cars, and relegate the Jimmies to work train service. The "Grand Scales on a Budget" approach to building will allow even the first timer to get "on the rails" in short order. Ideally, rolling stock built quickly and cheaply need not look that way, with a little extra attention to detail the final result is visually pleasing and quite safe. Get on the rails however you can, you can always trade up later!

[Chris Allan (no relation to Frank Allen) has years of experience around "Grand Scale" equipment, and he's full of good ideas. With enough encouragement perhaps we can talk him into a series of construction articles about his 0-4-0.]

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