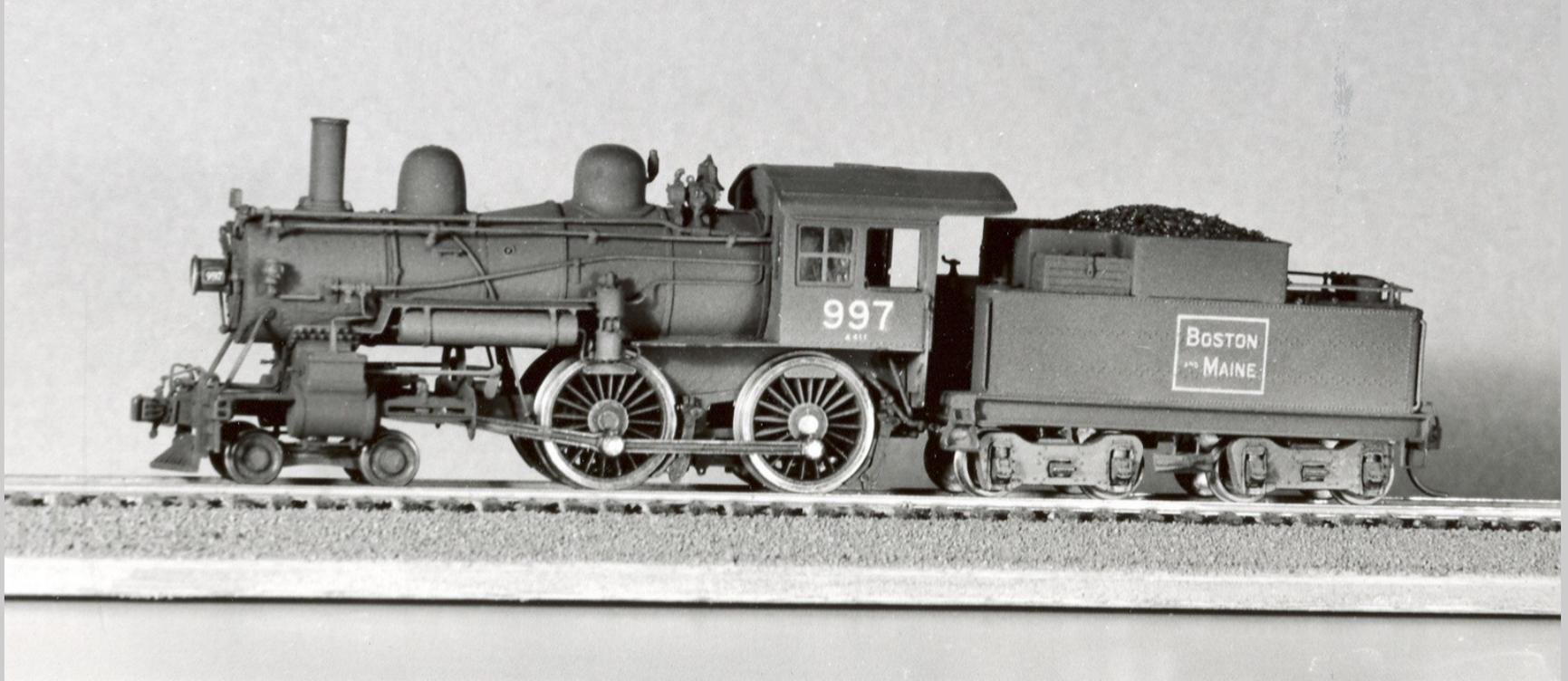


Spring 1994 Baldwin Trophy Winner Glenn Owens's B&M 4-4-0



This HO scale model of a B&M RR 4-4-0 steam locomotive required about 10 years to construct. It was not steady work because I was right in the middle of building my basement-size B&M RR HO scale layout, a project that lasted from 1974 to 2001.

The model is a quite accurate replica of the prototype. Except for the usual purchased parts such as domes, wheels, pilot, stack and headlight, the model was 100% scratch built of brass. I had a good set of prototype photos taken all around the engine, but the best data of all came from the Kalmbach Model Railroader Steam Locomotives Cyclopedia, edition of 1960. There are additional photos of the engine on page 104 plus a superb set of drawings (side views, end views and cross sections). That is what made the exacting work so possible.

The side frames were cut from 3/64" brass. The two frames were cut to exact required outline and then lightly soldered together in a precise match. The outlines of all the frame openings were then scribed onto the brass. Using a drill press, holes were drilled through the frames in the curved comers of all openings. A jeweler's saw blade was inserted through one of the holes and then re-attached to its saw frame. The opening was then carefully cut out, following the scribed outline. This process was repeated for all the other frame openings - slow tedious work, but very rewarding. Cross braces were made per the drawings. The frames were separated and then assembled by soldering in all the cross braces, again per the drawings. The boiler shell front and rear sections were made from brass tubing. The center section was rolled up from sheet brass around a wood form I made. The firebox was built up from sheet brass and structural shapes. The cab and tender shell were also formed entirely of sheet brass, with curved comers formed around proper sized steel rods. The tender frame bed was built entirely of structural shapes and sheet brass.

All riveting was done very carefully with a standard riveting wheel and handle. The beading around the top of the tender tank and coal bin was formed from brass wire and soldered into place. I didn't think this was going to work too well, but by slow and careful "draw" soldering it worked to perfection. There is a detailed boiler backhead and associated fittings in the cab. Finally, all piping and external fittings were added per the photos and drawings. The drive is a can motor and NWSL gear box, all totally hidden in the boiler. I spray-painted the model and added the decals. The model earned 107 points out of a possible 125 and won frst place, locomotives, as well as best in show.

The Boston & Maine RR had hundreds of these engines over many years. They were used extensively for commuter service to the suburbs - I rode behind them (and other engines) from Arlington, MA into Boston from 1939 until I enlisted in the Navy early in 1942. The last of them were scrapped in 1947.