



John Sipple

# Sipple on Trains

## Athearn's 4-4-0

**At last, modelers have a small and accurate, oldtime locomotive for small and accurate, oldtime layouts.**

### More Than Just a Re-release

The reintroduction of the old Roundhouse line features old favorites, although there are outstanding improvements to everything from detail and motors to drives and power supply. The addition of a sound and DCC inside this smallish loco joins other improvements to make this a nearly new machine. Debut road names are NYC, GN, C&NW, D&RGW, B&O, ATSF and an unlettered version, all with Sound DC and DCC from the factory.

### Placing the 4-4-0 American

The first 4-4-0 American appeared in 1837, the product of Henry R. Campbell of Philadelphia. Some 25,000 were erected into the 1930's, and a few were still operating at the end of steam. Most of them were relatively undocumented, and it wasn't until the great steam fleets of the 20th century that locomotive models were categorized and annotated as we know them today.

Comparing this model to B&O's I-6 class No. 883, we find an American type in about the proper weight (113,700 pounds) and tractive effort (17,388 pounds) with 19 by 24 inch cylinders, 170 pounds boiler pressure, and 72-inch drivers. Dome placement is very different, and these are on a boiler that is tapered on the prototype. The prototype's stack is a plain, straight coal stack, and the pilot wheels are six-spoked. The tender bears some similarity, but has no backup lantern and the headlight is a different design.

### An Old Lady American?

This isn't the first time that a model railroad company has called upon components from one locomotive to construct another. The USRA light Mikados and Pacifics used the



At trackside, the modern 4-4-0 American locomotive is graceful and tall, good for speeds in the 60's and 70's with a light coach load.

same boiler and many of the same domes and appliances. The 4-4-0 model dates back to before the sale of Roundhouse to Horizon Hobby and operational control by Athearn, and the boiler, cab, and tender design are virtually the same as the Old Lady Consolidation from the old Model Die Casting. We can reasonably expect this same boiler to be found on a 2-6-0 Mogul, a 2-8-0 Consolidation and a 4-6-0 Ten Wheeler in future releases.

Since we cannot place this locomotive specifically to any particular prototype at some point in time, we'll place it into the composite order of architecture, into which it fits surprisingly well. This lokie is hog heaven. You could run it on any railroad from the 1890's to a present-day historical excursion, but this update makes this into a whole, new model.

First, it arrives completely assembled while most of the pre-merger Roundhouse models were kits. My Old Lady was built by me and is an okay runner at best. It also isn't any kind of candidate for conversion to DCC, never mind sound. The new model comes ready-to-roll with both DC and DCC, and both feature sound.



By 1890, the woodburning, iron-horse 4-4-0 had become a more modern machine, often earning its keep with mixed passenger and freight service.

### The Model

The boiler is a die-cast piece, wonderfully painted and joined to plastic details, though the

handrail details are metal and the bell is brass. The wheels on the pilot truck represent an interesting period when the entire wheel was cast from steel with an eight-spoke design. They were prone to premature cracking and failure, so most locos equipped that way were converted further to standard cast wheels with forged tires.

Roundhouse was previously owned by Model Die Casting, so it's no surprise that the pilot and the frame are also die-cast structures. The cab is injected styrene that features forward glazed windows. The drive rods and side rods are metal, and the slide valves and running gear simulate the popular Stephenson valve gear.

The tender, which features a styrene shell with a nicely-heaped coal load, is the home of the decoder and sound speaker. The hand grabs are metal wire and add a fineness of detail. The lettering on the side, based on the one photo I was able to view of an I-6, shows the style and placement to be correct. The same is true of the numbers found in various places on the locomotives.

## Operation

The connection between loco and tender is fixed; there are six wires providing circuits for track pickup, motor power and headlight. The drawbar is affixed with a screw at either end, and the spacing between the two units is generous. If you wanted it to be closer and weren't turning tight curves, you could probably fashion a shorter version of the drawbar and replace the factory example.

To help out the traction for this little steamer, Roundhouse has installed traction tires on both wheels of the front driving axle which is also the one driven by the motor. I gave it a train of eight Athearn heavyweight passenger cars, and it pulled them just fine, representing far more than lokies of this sort were likely to be asked to pull. Most worked branchline passenger service pulling two to four cars. A milk car, a baggage car and a coach would be about right, so it's nice to know that our loco can handle more than twice that number.

This is both a DC and DCC powered model, complete with a sound system. As such, it represents perhaps the first model of a small, turn-of-the-century steam locomotive made available with both DCC and sound. My readers have been clamoring for such a model, and here it is. The DC to DCC switchover is made automatically as a result of the type of track power the decoder senses.

Under DC power, the throttle and reverse controls on your power pack work as they're designed. Sound comes on at around five volts and operation commences at more like nine. Since DCC puts around 16 volts on the track, this decoder is prepared to handle that much with a very restrained 65 scale miles per hour (SMPH). Included with the locomotive is a small remote control transmitter to operate the sound functions of the locomotive.

Under DCC, the little guy worked very reliably. The decoder, set at 128 speed steps, didn't start our sample until around Step 27. After it got rolling, I could bring it down to more like Step 21 or 20. When the loco started at Step 27, it jumped to about 12 scale miles per hour, but I was able to dial it back to around Step 16 at four SMPH, though I couldn't start it there.

## Sound

The little guy produces a very nice level of sound. These would be small cylinders, so the chuff is higher pitched and breathier; I thought the sound was quite appropriate. The whistle is the instant favorite of the grandkids. The bell is authentic, and we get both steam letoffs and air brake releases. I noticed the top speed to be approximately three to four SMPH greater with the sound off.

No matter what the speed, the nominal wheel and track noise exceeded any gear or motor sound. I had no derailment issues or shorting problems, though it sometimes lost power crossing some dead frog switches. Such instances were rare and usually occurred at slower speeds.

## It All Adds Up

Roundhouse has brought back many of their older cars, including passenger cars in the 34-foot Overton type and 50-foot Overland in sets of four that would be perfect behind this engine. You could also add a 40-foot milk car on the head end of the consist. This can help you take your whole layout back to the 1890's while having 21st century sound and control. This is the loco we've all been waiting for. **HM**



*The modern 4-4-0 was a coal burner without superheating or compound steam use, employing Stephenson valve gear. The model captures this quality perfectly.*