

# MLS MasterClass - 2002

## Build a 2-6-6T or 0-6-6T Mason Bogie An Adventure in 1:20.3

By David Fletcher

Coming to Soon to myLargescale.com



Ever since I built a South Park Mason Bogie 2-6-6T in 1:24 scale back in 1998, there has been an unending line of questions, e-mails and 'orders' for such a loco. In one case I did relent and build a Mason Bogie as a special commission. On the Bachmann board there is hardly a month that goes by that someone doesn't ask Bachmann for a 20.3 Mason Bogie. There is no question, the Mason Bogie is a 'desirable' loco, and the antique styling of the thing has an attraction that even interests later era enthusiasts.

### What is a Mason Bogie?

The Mason Bogie was among the first of a breed of articulated or 'flexible' locomotives designed to provide greater power to the restrictive narrow gauge lines. The Mason Bogie was the American development of the 'Single Fairlie', originally the brainchild of Scottish Engineer, Robert Fairlie. Developed in the late 1860s, running through to the mid 1900s, the Mason Bogie featured the first pivoting locomotive frame and the first practical application of the Walschaert's valve gear in the US. Designed with all the decoration and industrial art that the 'craftsmanship' period of locomotive design could offer, the endearing Mason Bogie has had a lasting impact on railroad history.

## The Project

After some considerable thought, and discussion with manufacturers who could provide the necessary components to build a fine scale Mason Bogie in 20.3, and with the support of myLargescale.com, we're proud to announce that a second MasterClass will be run during 2002, which will cover the construction of a Mason bogie.

Similar to the MasterClass 2001, the project will be a co-operative effort.

- The Chassis for the project will be produced by [Barry's Big Trains](#), and will be a very fine product in brass, aluminium and stainless steel. The chassis for the Mason Bogie is a 'special' and is currently in development at BBT.
- A wood cab kit and pilot kit will be available commercially from [Vance Bass](#). These kits will be based on the exact CAD drawings produced for the class. The cab is usually the hardest part to make on the Mason and the option of a commercial cab should inspire some of you to join the class.
- I will be providing a background story about the development of the Mason Bogie, from its origins in the late 1860s in the United Kingdom. The story will cover the use of this unusual locomotive in the US, including the most famous of them all, the collection that dominated the roster of the Denver, South Park & Pacific. We'll look at the Bogies of Northern Michigan and where the last Mason Bogies ended their careers.
- The model will be of brass and styrene superstructure. Full component templates will be provided to enable cutting of the styrene to the correct pattern...a type of do it yourself Kit.
- The model will be fully articulated and will feature operating Walschaert's valve gear.
- The prototypes offered will be the South Park 2-6-6T and the North Pacific Coast "Bully Boy" 0-6-6T, both in 1:20.3 scale.
- We're also investigating an option for a 1:29 scale standard gauge 0-6-6T based on Mason Practice. The model would be technically identical to the Narrow Gauge versions, with the addition of correctly scaled cab, domes and tender.

The Masters 2002 Mason Bogie class format will follow similar lines to the current 2001 Class, with 'Background' and 'Construction' sections. The 'Background' however will be reduced to info about Mason Bogie history only, as loco history is already covered in Masters 2001. In addition, with the help of Dwight's new CAD conversion package, we can place the Mason Bogie templates on-line at 1:1 scale, just print them off, and trace them onto styrene etc, and get cutting. This will make writing and building much easier for 2002.

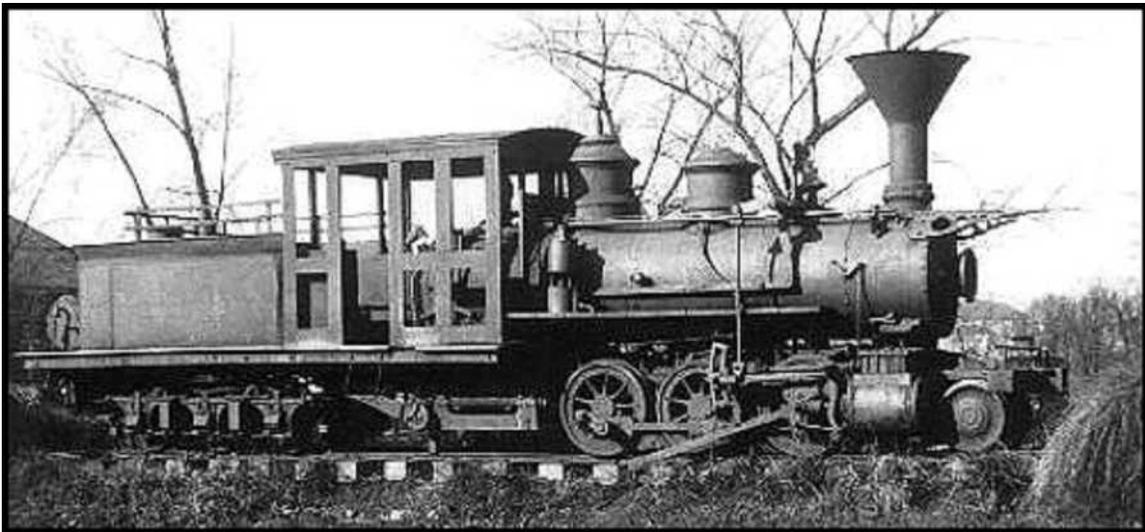
## MasterClass Highlights

1. Learn about the Origins of the Mason Bogie. Discover the unusual designs of Robert Fairlie and the Ffestiniog Railway.



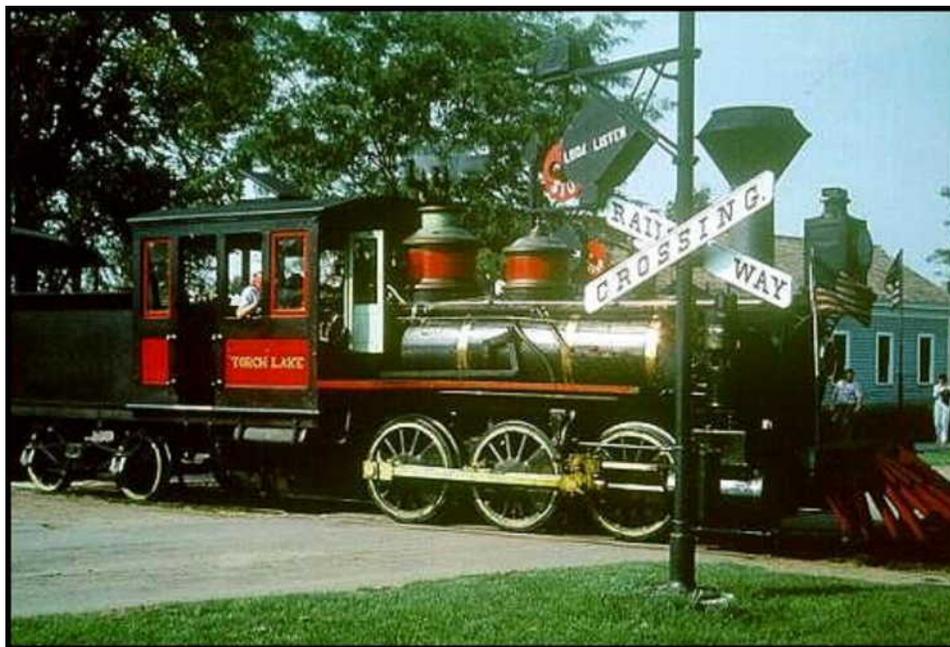
*The origins of the Mason Bogie... the 'Single Fairlie'. Replica running today at the Ffestiniog.*

2. Read the last chapter of the Mason Bogies of the South Park.



*The sad remains of the South Park's last Mason Bogie... seen in the early 1940s.*

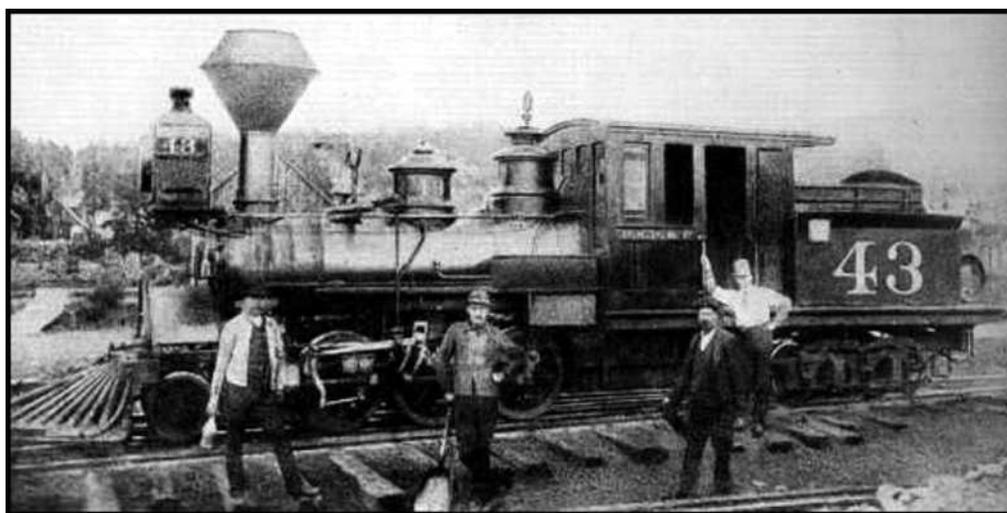
3. See the last surviving Mason Bogie, and model it too (if you wish!).



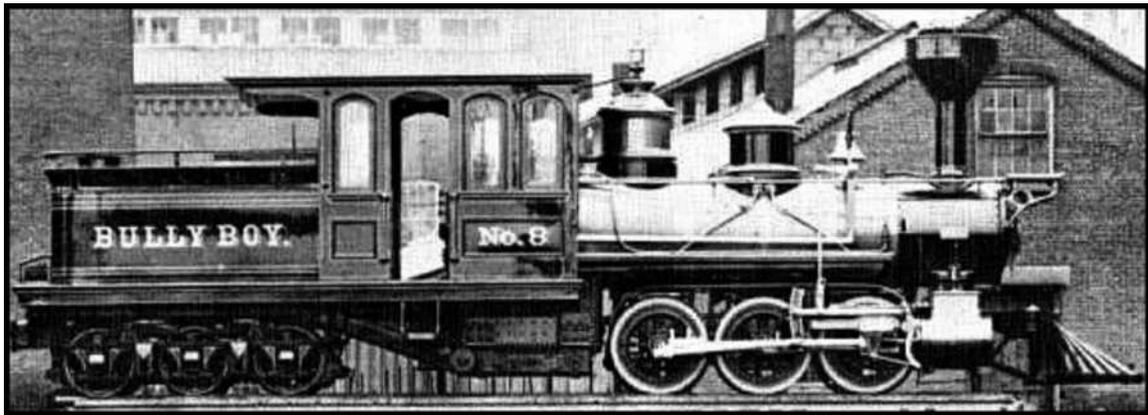
## The Prototype

The design chosen will be a 1:20.3 fine scale version of a South Park 2-6-6T. There were two types of 2-6-6T on the South Park, both had the same basic chassis and overall length, but one was lighter, and had a smaller, narrower boiler. This 'smaller' 2-6-6T is very close in design to the NPC's famous Mason, the 0-6-6T 'Bully Boy'. This smaller 2-6-6T is the one that appeals to me the most. The templates for the Mason Bogie class will be set up for South Park 2-6-6T and 0-6-6T only. Other variants can be done by modifying the drawings.

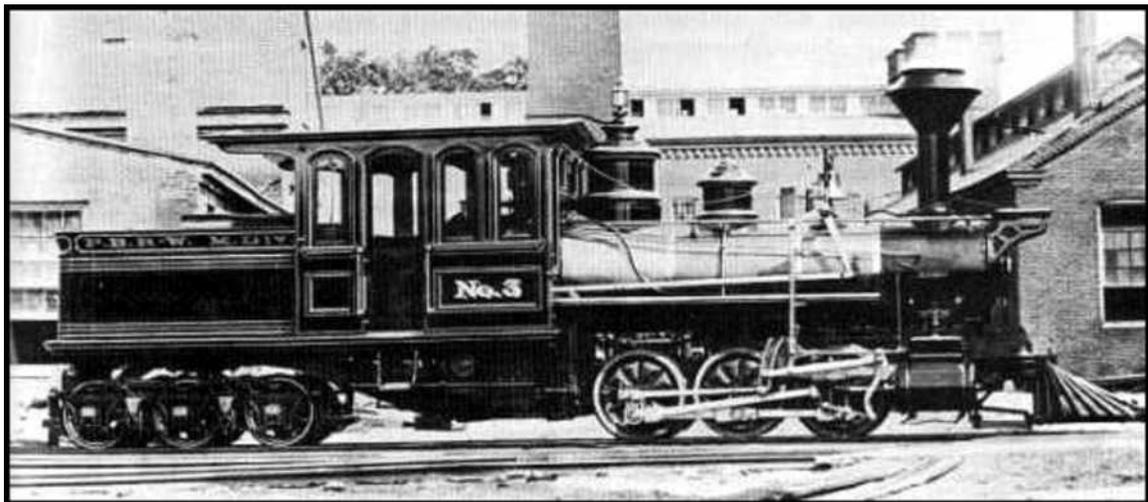
Here is what some of the possible prototypes look like:



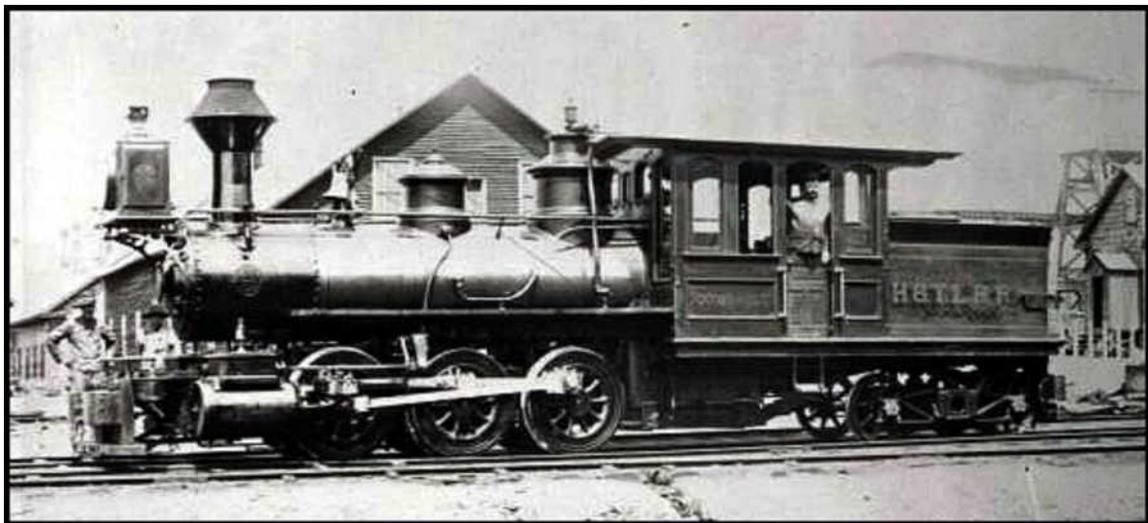
The most famous of them all, the 2-6-6T of the Denver, South Park & Pacific RR. Dominant power though the late 1870s to mid 1880s. Colorado & Southern #1 was the last South Park 2-6-6T



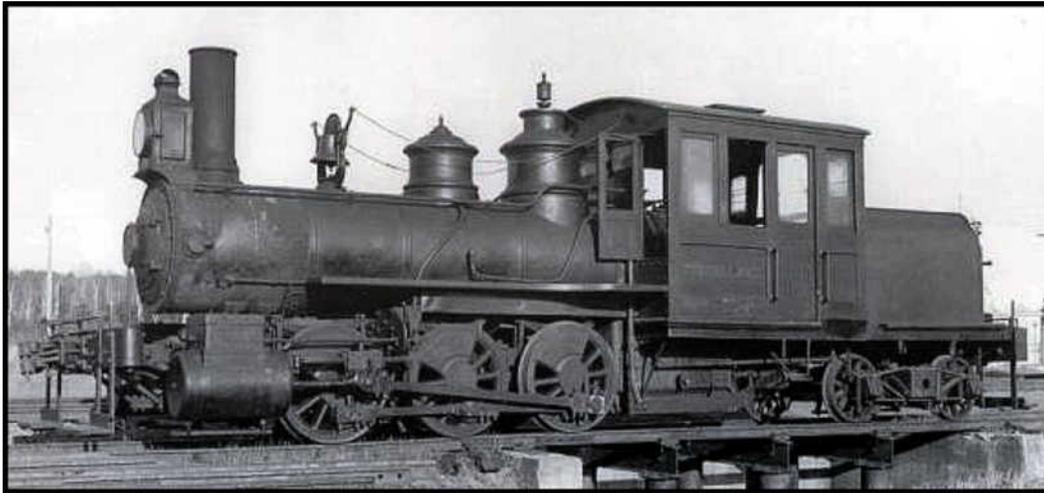
The beautiful 'Bully Boy' of the North Pacific Coast RR, as she looked when delivered.



There were a host of similar 0-6-6Ts built for roads all over the US, as 'Bogie' power seemed to be the answer to enhancing the efficiency of NG lines.

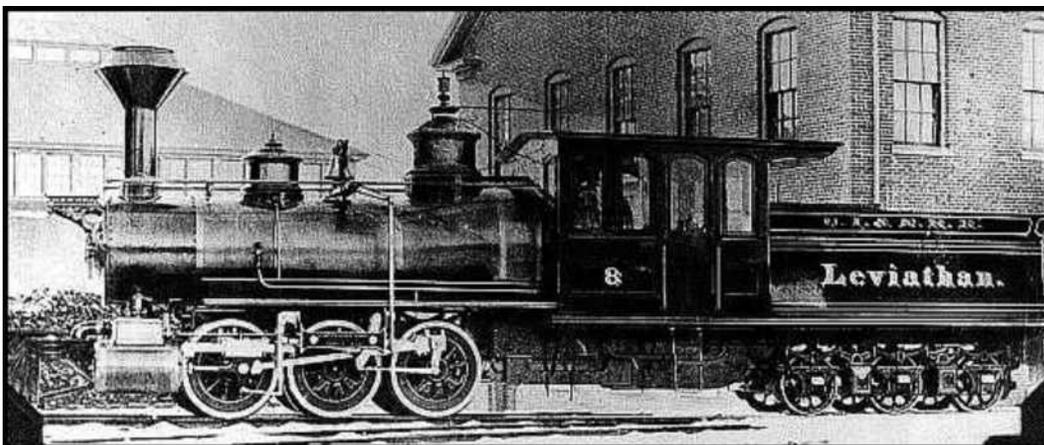


All kinds of gauges were tried, with the most unusual being the 4' 1" gauge used by the Hecla & Torch Lake RR in Northern Michigan. 5 Mason Bogies were to operate the line, representing the earliest and among the last Masons to be built.



One of the H&TL 0-6-4T Mason Bogies would ultimately prove to be the only survivor of the type. The 'Torch Lake' Seen above nearing the end of her career in the 1930s. Today she's undergoing restoration at the Henry Ford Museum's Greenfield Village display and should be steaming again shortly.

An option for Standard Gauge - this 0-6-6T is almost identical to the typical NG 0-6-6Ts, note the different cab, tender and dome proportions.



## The Model

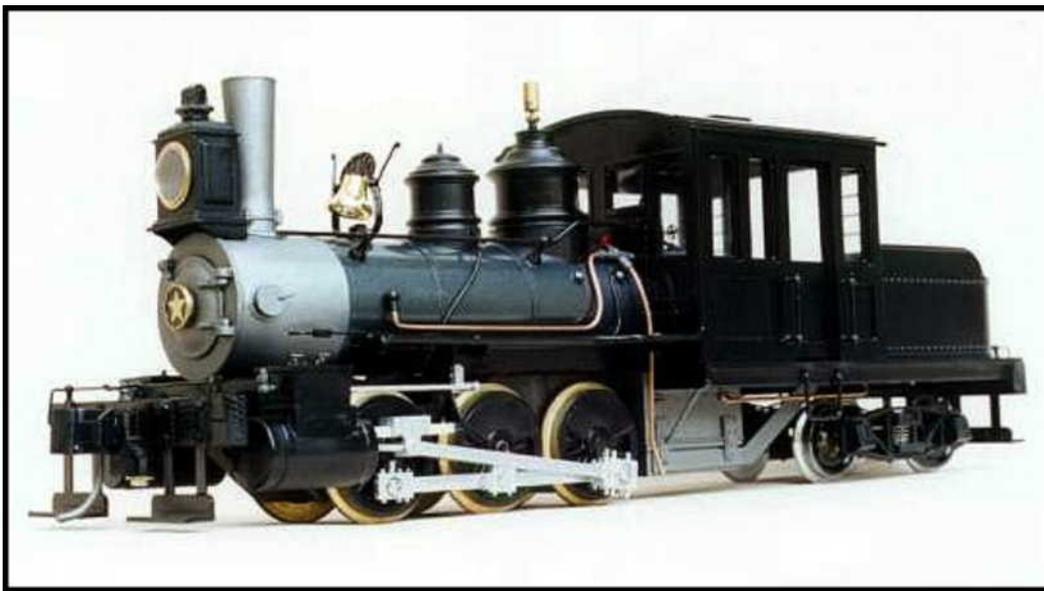
The Mason will be a BIG loco, longer and larger/taller than the Bachmann Shay. The Length will be exactly 578mm, or 22.7" long. Height of cab roof above railhead (to edge of roof, not crest of roof) is 157mm or 6.2" tall.

The loco will be able to negotiate LGB 1500 curves or a 5' diameter (2.5ft radius).

The model will be mostly scratch built, but it is not difficult. If you can cut a bit of styrene to add a detail to an existing model you might have, believe me, there is nothing in this Mason you can't build. Trace the templates and its just one cut bit of plastic after another, focus on the little assemblies and before you know it, a whole scratch built model emerges. There is always a first time.



*The South Park 2-6-6T, modeled to represent the Mason Bogie in the late 1870s, complete with Congdon stack.*



*The 'Torch Lake' of Northern Michigan, modeled to represent the Mason Bogie in the 1920s.*

The Class will start around April 2002. By that time we should have a better idea of how many will be building with us, and as such BBT can work out the finer details of the pricing for the 0-6-0 chassis block. Currently the block will be in the order of \$200.00. Most of the rest of the loco will be built for less than \$150, in styrene, parts and paint. So the biggest investment is your time. Built well, the 20.3 Mason with BBT drive will have a considerable market value and could be sold for a lot more.

Thanks to all those who took part in the Masters 2001 class, we had a blast, and thanks for all the kind comments also. Without your support and the endless efforts of Shad and myLargescale.com no MasterClass would have happened. Thanks to you all and to Shad.

**Get Ready... MasterClass 2002**

**The Mason Bogie is coming soon to myLargescale.com!**

