



## B & O Railroad "Atlantic" Grasshopper

By 1830, steam locomotives were regarded as being the most promising source of motive power for the fledgling American railroads. However, locomotive configuration depended, to a large extent, upon the instincts of the builders. Thus, the creative minds of Phineas Davis, Ross Winans, Peter Cooper and Israel Gartner gave birth to a unique design which was known as the *Grasshopper* type.

The first unit emerged from their Baltimore works in 1832 and was named the *Atlantic*. Weighing about 14,000 pounds, it featured a vertical boiler and two vertical cylinders driving an overhead beam which powered a crank mechanism geared to the front axle. Since the front and rear wheels were now coupled, the *Atlantic* could have been classified as an 0-2-2, however it is usually called a Four Wheeler.

The *Atlantic*, with its bobbing beams and rods, resembled a huge grasshopper walking along the track hence its popular nickname. She disappeared from service around 1836, however in 1893 the Baltimore and Ohio rebuilt the #7 *Grasshopper*, Andrew Jackson, to resemble the *Atlantic* as she appeared in about 1834. This locomotive can now be seen in the B & O Museum in Baltimore, Maryland. Aster chose to model in Gauge 1, the *Atlantic* as she currently appears in the museum.

The Aster Grasshopper found a new employment opportunity as a "backwoods" locomotive. Check out Sonny Wizelman's article on detailing and weathering - ["The Backwoods Grasshopper"](#) - on the reference page.

## Specifications

**Scale/Gauge** 1/30, 45 mm gauge

**Weight** 0.94 kg (2.07 lb)

**Length** 172 mm, (6.71 inches)

**Width** 80 mm (3.12 inches)

**Height** 141 mm, (5.5 inches)

**Wheel Arrangement** Four Wheeler

**Wheel Diameter** 31 mm, (1.21 inches)

**Cylinders** Two, Bore 9 mm, Stroke 15 mm

**Valves** Piston Valves with Reversing Block

**Boiler Type** Vertical Type with four fire tubes

**Pressure** 0.8 to 1.0 kg/sq cm normal working

**Capacity** 45 cc water when 80% full

**Fittings** Safety Valve, Check Valve, Water Plug

**Lubricator** Roscoe Displacement Type

**Fuel Tank Capacity** 30 cc of Ethyl or Methyl Alcohol

**Minimum Curve Radius** 0.55 meters



