

Welcome to Railroad Avenue

*Tollie the Shay
welcomes visitors to
historic downtown
Shelton.*



*With restoration still in
progress, Tollie greets
visitors in all seasons
offering a hands on
experience -
and children love it.*

Tollie: Researched and Written by David A. James

DAVID A. JAMES . . . The “wit and wisdom” of David James is present in the books and articles he wrote throughout his lifetime. He came to Shelton in 1935, at the age of 25, to work as a reporter and sports editor for the *Shelton Independent*. After a year with the *Independent*, he worked for the *Tacoma News Tribune*, then *The Seattle Times*, and finally returned to Shelton in 1947 to write and edit the *Simpson Lookout*, a company publication for Simpson Logging Company. In his capacity as Public Relation Officer, Dave James wrote two books, both of which are sold at the Mason County Historical Museum: *Grisdale, Last of the Logging Camps*, about the last of the live-in forest communities, 1946 to 1986; *Big Trees and Steam Lokies*, which contains photos of early camps, railroading and logging. Also available is a video he published, *When Loggers Climbed Trees* featuring highclimber Hap Johnson and other logging videos, including when Arthur Godfrey aired his show from Simpson’s Mason Lake Recreation area in the 1950s. James was promoted to Vice President of Public Affairs in 1966, moved back to Seattle, where he handled government relations in Washington, D. C. as well as Washington, Oregon and California until his retirement in 1975 at the age of 65. In 1993, David James received the Mason County Historical Society’s Lifetime Achievement Award for his historical writing and research. David James passed away in 1995 at the age of 85.



Mason County Historical Museum
on the corner of Railroad Avenue and Fifth Street.

Open Tuesday through Friday, 11 am to 5 pm;
and Saturdays from 11 am to 4 pm.

Check for events, lectures, movies on Facebook

Post Office Box 1366
Shelton, WA 98584

360-426-1020

MASONCOUNTYHISTORICALSOCIETY.ORG

TOLLIE THE SHAY



Mason County Historical Mini-Series:

Stories of Mason County’s places,
camps, buildings and trains

MASON COUNTY
HISTORICAL SOCIETY
MUSEUM

TOLLIE THE SHAY

The Shay we have dedicated as “Tollie” descended from a machine invented in 1879 by a Michigan lumberman named Ephraim Shay. As have so many loggers before and since, Shay contrived machinery to ease his own burdens.

Ephraim Shay’s invention served the lumbermen and miners of the nation for a good 80 years. But trucks came along to replace old methods of railroad logging and the Shay, like the horse and the bull and steam donkey, came to realize that it, too, belonged to the Past.

Lima Locomotive Works of Lima,, Ohio, built 2,761 Shay locomotives between 1880 and 1945. Only five were built by this company after 1930.

Tollie, No. 7, was one of 20 Shays constructed in 1924. Its dimensions are given in a copy of the original specifications card appearing on this page.

Heyday of the Shay was from 1898 through 1917 when 1,865 engines were turned out to finish the timber harvests of Michigan and

Minnesota and open the great cutting of the Pacific Northwest forests.

Ephraim Shay wanted a locomotive that would run on a cheaply constructed railway, and one that could negotiate heavy grades and curves. He began with an ordinary flat car built on two trucks for four wheels each. A small upright boiler with two vertical engines was fastened to the center of the car, and power was extended to the trucks on side through a flexible shaft, bevel gears and pinion wheels.

A barrel of water was placed at one end of the car and a box of firewood at the other, and – wonderful day! – The Shay locomotive was born.

Merely looking at the Shay distresses some people. Everything from the cab forward seems out of balance and out of whack. Three chunky vertical cylinders have sprung up to push the firebox and boiler out of kilter to the left. Not content with giving power to the engine, a series of inter-locking shafts also force the tender to help shove the load.

These unconventional features gave Shay’s dreamchild the surefootedness of a Tibetan yak. Its gyrating underpinning could twist around the most awkward turns until, it is claimed, the headlight would shine over the engineer’s shoulder into the firebox.

The sight and sound of a Shay clawing its way up a mountain grade was unforgettable. The short rods of the triple cylinders thrashed wildly and the frightful crash of the rapid exhaust sent frightened animals scampering into the timber for dear life.

“It sounds like 100 miles an hour and looks like hesitation mixed with uncertainty,” snarled one old Timberbeast.

The official literature of the Lima builders bespoke of these virtues:

Because it had no counterbalance in the driving wheels to hammerblow the rails the Shay could operate on lighter track.

It could outrun rod engines on curves and a wobbly track.

It could be replaced easier than rod engines when it left the tracks. Sometimes the Shay could run itself back onto the tracks with only the help of common wrecking frogs.

It was so simply constructed and easy to operate that a blacksmith could mend its troubles.

Oh, all Shay fans can be proud of these old lokies and their history. Now most of them, like Tollie, are at rest or melted down. The ash hoe, clinker hook, flue scraper and jack-screws can be stacked in the corner. Their day is done.

LIMA LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO												
CLASS: 80 - 3 TRUCK SHAY GEARED • BUILT FOR SIMPSON LOGGING COMPANY • ROAD No. 7												
GAUGE		DRIVING WHEEL		FUEL		CYLINDERS			BOILER		FIREBOX	
of Track		Diameter		Kind		No.	Diameter	Stroke	Diameter	Pressure	Length	Width
4' - 8.5"		36"		oil		3	13.5"	15"	49.875"	200 lbs.	72.25"	54.25"
WHEEL BASE			MAXIMUM TRACTIVE POWER			FACTOR OF ADHESION			TUBES			
Driving	Engine	Engine & Tender							Number	Diameter	Length	
4' - 8.5'	32' - 2"	44' - 8.375"	35100			5.56			49.875"	2"	12'-5.25"	
AVERAGE WT. IN WORKING ORDER POUNDS			GRATE AREA			HEATING SURFACES, SQUARE FEET						
On Drivers	Total Engine		Square Feet			Tubes	Firebox	Total				
195300	195300		27.2			1268	116	1384				
CAPACITY, WATER 3000 GALLONS • NEGATIVE ORDER NO. 410 • FUEL 1200 GALLONS												
Physical Dimensions of Simpson Shay No. 1 From Original Specification card from Baldwin-Lima-Hamilton Corp.												

