



# Significant Date:

Industry and Invention (1875-1915)

Registry Year: 1979 Erected Date: 2022

### **Marker Location**

Address: 130 W. Cass Street

City: Cadillac

State: MI ZipCode:

County: Wexford

Township: Clam Lake

Lat: 44.24890300 / Long: -85.40003900

Web URL:

### Front - Title/Description

#### Shay Locomotive

In the 1870s logging was a seasonal operation. Horses or oxen could drag logs over snow or ice trails to sawmills or rivers. But once the ground thawed, the logs could not be moved. Ephraim Shay (1839 1916), a logger from Haring, near Cadillac, was one of several people who decided that temporary railroad tracks and the right locomotive would allow lumbermen to haul logs year round. Shay envisioned a small but powerful locomotive that could operate on tracks with steep grades and sharp curves. He used vertical pistons and a flexible drive shaft to transfer power via gears to all the wheels beneath the engine and tender. This produced more power, less wear on the tracks, and the ability to negotiate tight curves.

## **Back - Title/Description**

#### Shay Locomotive

Shay received patents for his geared locomotive in 1881. He had already granted the exclusive right of manufacture to Ohio's Lima Locomotive and Machine Company, which produced 2,770 Shay locomotives from 1880 to 1945. Before he developed his successful locomotive, Shav experimented with tramways that used cars pulled by horses. However, on a downgrade the horses were in danger of being run over by runaway cars. Later, with the help of William Crippen, a Cadillac machinist, Shay built a rigid drive locomotive; however, it tore up the wooden tracks then in use. Finally, he produced the geared locomotive with pivot mounted trucks that bears his name. This Shay Locomotive, built in 1898, was the last used by the Cadillac Soo Lumber Company. It was restored in 1985.