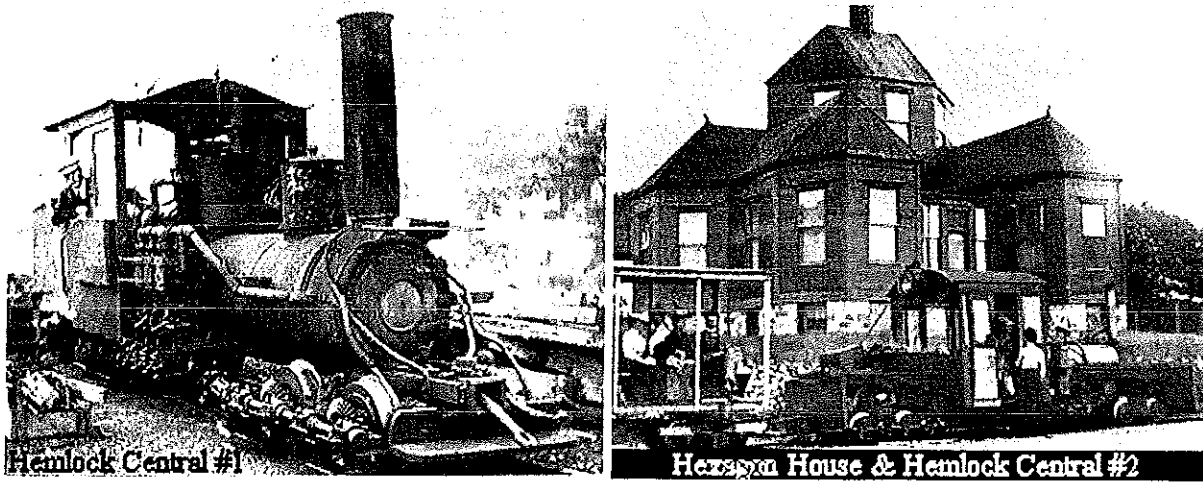


Shay did not give up inventing. He was granted several more patents. In 1882 [269,473 dated 12/19/1882] for a Universal Joint and [269,723 dated 12/26/1882] for Propeller Shafts, in 1883 [273,043 dated 1/19/1883] for Logging Wheels, in 1884 [301,528 dated 7/8/1884] for a Valve Gear, in 1894 [521,868 dated 6/26/1894] a Fire-Fighting Hose Cart, and in 1902 [706,604 dated 8/12/1902] for a Shay type Loco Truck.



Some have called shay eccentric. He designed and lived in a steel clad house called "The Hexagon". The walls were embossed to look like brick and the window frames were made to appear as stone. The heavy doors were sheathed with imitation carved wood. His machine shop building was across the street and close by was his Harbor Springs Waterworks. He supplied the city with water for many years and his business card had a locomotive on one side and a rendering of the waterworks on the other. He was a well-known inventor and his firm experimented with boats and automobiles. Mr. Shay even used galvanized sheet metal to build a steam yacht. Known as the AHA it operated on Little Traverse Bay. The rusting hulk of the AHA was, for a number of years, on display at the Maritime Museum in Mackinaw City, Michigan.

Mr. Ephraim Shay, credited inventor of the Shay Patent Locomotive, did indeed enjoy a life of variety and interesting vocations. We learn now that Ephraim Shay's 'concept' of powering the smaller complete axles rather than having pistons power each side of an engine independently, was the foundation of all geared locomotives. The question of rather Ephraim Shay or John Carnes should be credited as the real inventor of the Shay with it's right side gearing is answered simply by Lima Machine Works. Ephraim Shay must have had more direct input than is reported by Lima's records for it is Lima that paid Ephraim royalty payments on the first 400 shays, something they would never have agreed to were John Carnes more deserving the credit. To say that it was solely due to Shay getting the patent first would be unfounded because a patent could be challenged if filed falsely

Rick Henderson

www.ShayLocomotives.com 2001