

# KOMOKA RAILWAY MUSEUM

## NEWSLETTER

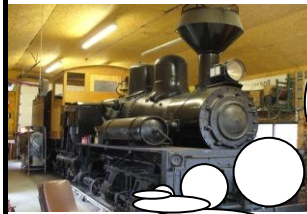


**Komoka Railway Museum**  
**Box 22**  
**133 Queen Street**  
**Komoka, Ontario**  
**519-657-1912**  
[www.komokarailmuseum.ca](http://www.komokarailmuseum.ca)

Monthly meetings are held at the museum on the third Thursday of each month at 7:30 p.m.

*The next meeting will be on*  
**Thursday, March 21st, 2013**

### RECENT DONATIONS



I am turning 100 years in June 2013. Come to the March 2013 meeting with your ideas for my birthday party!

Come join in a special celebration on July 1, 2013. Details to follow!

### A TRUE STEAM LOVERS MOTTO

**MY OTHER VEHICLE IS A STEAM LOCOMOTIVE**

[www.komokarailmuseum.ca](http://www.komokarailmuseum.ca)

### EVENTS

#### ***Kitchener Model Train Show and Sale***

Sunday, March 17, 2013  
 at Bingemans (Marshall Hall), 423 Bingemans Centre Drive, Kitchener ON  
 from 10:00 a.m. to 3:00 p.m.  
 Cost of admission is \$5.00 per person

#### ***Komoka Nostalgia Show and Sale***

Includes railroad items  
 Sunday, April 14, 2013  
 at Komoka Community Centre, 133 Queen Street, Komoka ON  
 from 9:30 a.m. to 2:00 p.m.  
 Cost of admission is \$4.00 per person.

## TENTATIVE STEAMING SCHEDULE FOR 2013



### June 2013 Schedule

June 1<sup>st</sup>, June 8<sup>th</sup>, June 15<sup>th</sup>, June 22<sup>nd</sup>, June 29<sup>th</sup>

### July and August 2013 Schedule

By appointment for special events e.g. car clubs, family reunions, birthdays etc.

### September 2013 Schedule

September 14<sup>th</sup>, September 21<sup>st</sup>, September 28<sup>th</sup>

### October 2013 Schedule

October 12<sup>th</sup>, October 19<sup>th</sup>, October 26<sup>th</sup>

Approximate times are from 11:00 a.m. to 3:00 p.m.

The schedule is subject to weather conditions and locomotive availability.

### **A NOTE FROM THE SHOP**

As noted last month, a problem with the suspension on the "K.D. Fortner" came to light. Despite a solution from the "Engineering Office", it was not wholly resolved. Therefore, the locomotive was positioned under the crane and the front axle dropped. The cause was immediately obvious!

It would seem that in the mists of time, packing spacers had unofficially been inserted in an attempt to stiffen the front end suspension. On removal and reassembly of the front axle, the "K.D. Fortner" now sits horizontally on its wheels.

The first steaming will be looked to with anticipation to see if the engine holds the road, particularly round that north curve

Ed Spencer

### ***Submissions due by March 27, 2013 for next newsletter***

Dan Oatman 5 Velma Street, Strathroy ON, N7G 3L2, 519-245-4947

[danoatman@gmail.com](mailto:danoatman@gmail.com)

***We can now send the newsletter via email instead of via Canada Post. Let me know if you want to be added to the email list.***

Ephraim Shay



Ephraim Shay's home in Harbor Springs, Michigan

## History of the Shay Engines

### Ephraim Shay

The history of the Shay engine has to start with Ephraim Shay, the man the engines were named after. His life began July 17, 1839 in Huron County, Ohio and finished on April 19, 1916 in Harbor Springs, Michigan.

His working career started as a teacher in New Jersey and Ohio. In 1861, he enlisted in the Union Army, serving in a Missouri regiment until 1864 when he was discharged. In June 1864, he married Jane Henderson and they had only one son, Lette, born in 1870. He served as a town clerk 1867-1868 and from 1869 to 1873 operated a steam sawmill. In 1873, his family moved to the Manistee River and set up a sawmill and general store near a logging camp called Haring.

### Problem

Logging was much different than logging operations today. Trees along rivers were cut and floated down to a mill, where logging operations were carried out in winter as the snow and ice provided easy transport via horse or oxen drawn sleds. This method depended on nature. If the winter snows were light and were not at least two feet deep, logs could not be moved. This method meant that only about 17% of costs was lumber while 73% was for transportation of the trees.

### Solutions

In 1875, Shay built a tramway, consisting of wood rails and nailed over cross ties with little regard to grade level. This was a temporary setup. The logs were placed on logging trucks and were pulled by horses, which could prove dangerous to the animals on a downgrade, where the logs could overtake and injure or kill the horses. Shay could now log all year round but realized there needed to be a better way.

In 1876, Shay constructed a very crude, conventional steam engine and began experimenting with it. The conventional style engine proved to be too strong and damaged the curves of the track. He noted that the log cars did not have the same effect on the curves and decided to design an engine that could use the smaller logging trucks.

Over the winter of 1876-1877, Shay experimented with different drives—a chain, a belt. The result was an engine that delivered equal drive power to the wheels on both sides of the engine simultaneously. Shay's engine worked very well and enabled him to reduce his selling price by over half and to fill orders faster and at better prices than anyone else.

Shay began to make many modifications to continually improve the engine and turned to Lima Machine Works to modify the prototype engine. John Carnes, part owner of the Lima Machine Works, developed the means that the Shay engine in Komoka Railway Museum is powered. By using beveled gears on shafts one side of the engine on the outside of the trucks which were turned by the engine, this became the standard drive power of the future Shay's. Shay was granted a patent for this locomotive engine in 1881 and licensed both the Lima Machine Works and the Michigan Machine Works to produce the Shays. Shay acquired shares in Lima Machine Works and a royalty for the first 400 Shays built by Lima. Lima built a total of 2767 Shay engines between 1878 and 1945. In 1883, the Michigan Machine Works went bankrupt, having produced only 6 Shays.

In 1888, Shay moved his lumbering and rail operations to Harbor Springs, Michigan and operated a railroad known as the Hemlock Central, which hauled logs in the winter and vacationers were carried in the summer.

In 1901, Shay sold all his stock in Lima Machine Works, ending all ties with the company. His own company experimented with other modes of transportation as well—cars and boats including a steam yacht. He designed and lived in a steel clad house, where the walls were designed to look like brick and window frames appeared to be stone.

The Shay engines figured prominently in Canadian logging operations as did the Shay (Lima production number 2679) housed at the Komoka Railway Museum. The list below is the history of owners of this Shay prior to its arriving in Komoka as part of Canada's logging rail heritage.

Dennis Canadian Lumber Co. #1, Whitney, ON  
 Hope Lumber Co. Ltd. #1, Ruel, ON 1923-  
 Pakesley Lumber Co. Ltd., Key Valley Railway #1, Pakesley, ON 1930-  
 Standard Chemical Co. Ltd. #1, Fassett, PQ 1935-  
 Beaver Charcoal Co., South River, ON 1952-  
 Ray Industries, South River, ON  
 Ontario Science Centre, Longstaff, ON 1966-  
**Komoka Railway Museum, Komoka, ON 1986-**