

# August 2016 NEWSLETTER

September Meeting - 6:45 PM - Tuesday, September 6, 2016

Chippewa Valley Museum, Eau Claire, WI  
Carson Park, Eau Claire, WI

**No 19 Debut.** Our oldest locomotive returned to service August 7, 2016, as the solo steam locomotive after tow years of rebuilding the valve gear motion. 19 was built around 1920 where it operated in an amusement park between Racine and Kenosha, WI, by Frank Van Duser. To our knowledge, the valve motion has never been completely renewed. We have re-bushed the motion and made new links and blocks. The eccentrics have never been re-machined to spec. What spec was the problem.

Dave Peterson and Marc Brown worked together to determine what the original design was intended. Lots of measuring, drawing, and some guess work.



Break-in runs began last year. Performance was not what was expected. Excessive blow-by with the slide valve appeared to be an issue. The D-valve and the steam port surfaces were ground. Timing was checked and studied week after week. The locomotive improved, but still not performing as it should. Finally this month, Dave and Marc compared 19 to 16. It was discovered that the blast pipes were of different sizes. We did not take into account that the renewed valve motion allowed more steam to enter the cylinders, hence more exhaust. So the blast nozzle was enlarged. Problem solved. 19 performed all Sunday just fine. More power. Less coal. Less water. Maintaining pressure easier. Thanks for everyone's patience.

**Track Work** Track work began in earnest.. The ballast car, designed by Marc Brown and assisted by Chuck Lindvig, Byron Bobb, and Mick Henning was put to the task Tuesday, August 9, 2016.

Marc is shown loading the ballast car . It holds about 1-1/2 cubic yards of material.

We spread about 10 yards in about 3 hours.

Ballast was placed outside the rails to build up the amount of ballast along the sides of the track.

Ballast was placed from the loading area to the beginning of the return loop plus one load in the back woods.



**Track Work** Marc and Chuck operate the dump doors to spread ballast outside of the rails. The dump doors were inspired by the "Tainter" gate design for controlling water at dams. Tainter gates were first used on the Red Cedar River, in Dunn County WI. The gates are still lives on in the dam that holds back the waters of the Red Cedar River, into the old "mill pond," Lake Menomin. The same principle works with material flow such as gravel.

**Dumping.** The gates control the flow as seen in this picture, Flow is even and can be modified as required instantly.

The design employs three dumps. One on each side to place material on the outside of the rail as seen here, The center dump places material between the rails. Dumps are independently operated.





**Controls.** Three levers operate the dumps from the rear of the ballast car. The dump shoots are visible so operators can monitor the flow easily.

See below as Marc and Chuck operate the levers.



**At Lakeside.** Ballast as placed at Lakeside. (Near the grade crossing). Two passes with the ballast car spread this material at the sides of the rails. As one can note, much more material than the previous ballast car per trip. Now we can begin leveling and aligning.

**Corrections Crew.** Track work will progress Monday and Tuesday, August 22 and 23, 2016. Please find time to help supervise this activity. We will focus on tie replacement and ballasting. Start time is 9 am. End time 3 pm.

# CHIPPEWA VALLEY RAILROAD

**Agenda - September 6, 2016, 6:45 PM** at Chippewa Valley Museum, Eau Claire, WI

## **Agenda Approval**

**Minutes of the August 2, 2016 meeting . Review and Approval. Attached to this email.**

## **Treasure's Report for Review and Approval**

### **Updates...**

- No. 19. Driving blocks and brake components have been machined. Timing resolved.
- Recognition Day - Recognize various members and their efforts. Not finalized.
- Track extension. Inspect right of way inspected. Potential grades need to be set...
- Infrared heating system. Will complete in September.
- Fund Raising discussed for No 16 boiler, track relocation, and tower completion. Committee completing work.
- No. 16 Boiler replacement update. Boiler builder contacted. Next set date for a visit. Early September.
- Base coarse delivered.
- Semaphore mast? Need a lead person
- Project Priority List -
  - 1) Straighten and level track and ballast. Ballasting underway
  - 2) Depot repair - will require about 6 sheets of plywood and some 1 x 6 facing
  - 3) Complete the painting of the trolley stop. Almost complete.
  - 4) Gutters for the roundhouse and the back of the depot. Mick working on this.
  - 5) Paint touchup

### **New Business..**

- August work projects.
  - Corrections Crew Dates
    - August 22 and 23.
  - Equipment check.
  - Car numbers - for all.
  - Order transmission gasket kit - about \$50.
- Nominating of Officers for next year.

### **• Other Business**

Next Meeting; Chippewa Valley Museum, **Tuesday, September 6th, 2016**

Adjourn

Minutes of August meeting sent via another email.