



STACK TALK

OCTOBER 2016

The Official News Letter of the Adobe Mountain Railroad
Phoenix Arizona, Operated by the Maricopa Live Steamers
Railroad Heritage Preservation Society,

UP-COMING MEETS

2017 OPS MEET JANUARY 19,20,21,22

2016 FALL MEET OCT. 27,28,29,30

Another month has flown by, and it seems like they just go faster and faster. We are already three weekends into our public run season. Not even the rainy weather on [October 2nd](#) kept our dedicated crews and riders away. My sincerest thanks go out to everyone who gives their time each weekend for public rides, as well as all volunteers who give so much of their time and talents to keep our railroad going. Junior engineer school is a big hit again this year. Thanks Hank for all the work you have put into that very successful program over the years.



The fall meet is right around the corner; we have less than 4 weeks to go. If you haven't already, please send in your registration form and money to Bob Douglas. With the cooler weather we have had, I expect the weather to be very good for the meet. I'm looking forward to seeing lots of running trains. Please also take a moment to look at the sign up sheet in the clubhouse. There are many jobs (lots behind the scenes) that help make for a successful meet. Please see Pete Pennarts if you have any questions about what a particular job is.

The holiday train rides are rapidly approaching, and I also want to thank all who worked on the new banner for the holiday lights train rides. I am sure that will bring in many riders. If you haven't had a chance to participate in or experience the night rides, I suggest you do. It is a great way to see our railroad, and a great way to interact with our community. Dennis Beatty has been working on the layout for the hand out cards, and they should be available soon, if not already. These cards can be left at lots of locations: schools, churches, businesses, doctors offices. They are a great way to let people know about us.

The time of year has come again to think about member dues. You should have already received a notification from Bob Douglas about next year's dues. Our club dues contribute a significant part of our annual income, which is used to pay the rent and utility bills, as well as the upkeep of the railroad. In case you didn't know, our annual budget rivals the budgets of many small businesses, and Bob constantly stays on top of the books. Thank you Bob for your tireless efforts all year round to keep us in a good place financially.

Finally, officer and board of director elections are coming up soon. Please be sure to submit your ballot as instructed on the ballot, and make your voice heard. The officers, board members, and superintendents work hard all year round to make sure our railroad runs in a safe and efficient manner, with the best interest of the railroad in mind. Being on the board is a great way to be involved. It is not too late to be a write in candidate for any of the board positions.

That's all for now, I hope to see all of you at the fall meet, and in the meantime, please be safe on the rails.

John Bergt



HOLIDAY TRAIN RIDES COMING SOON

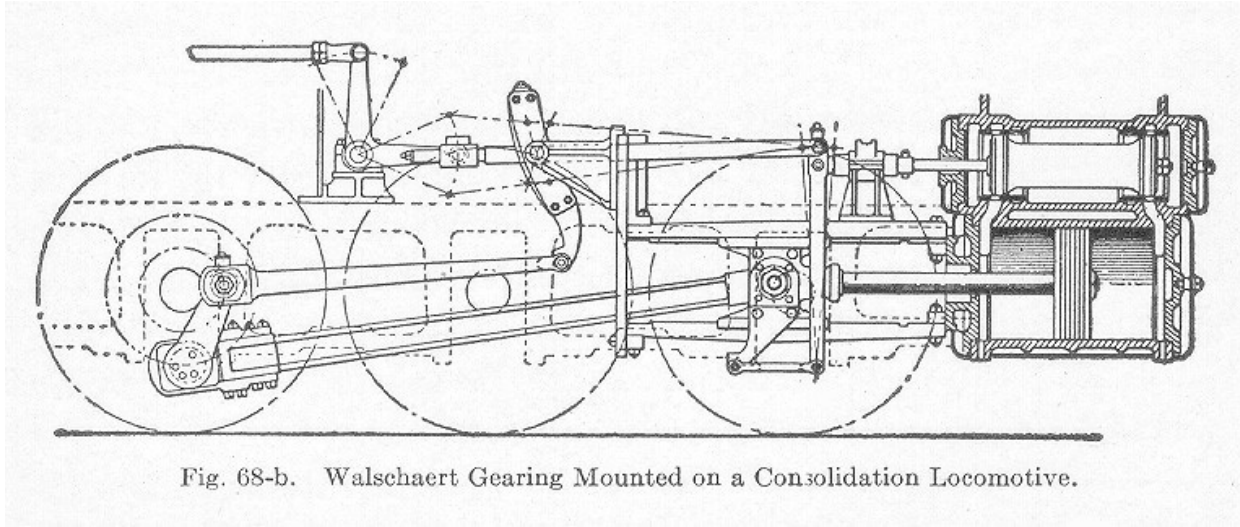
WE NEED MORE HELP GETTING READY FOR AND RUNNING THE RIDES



STEAM LOCOMOTIVES

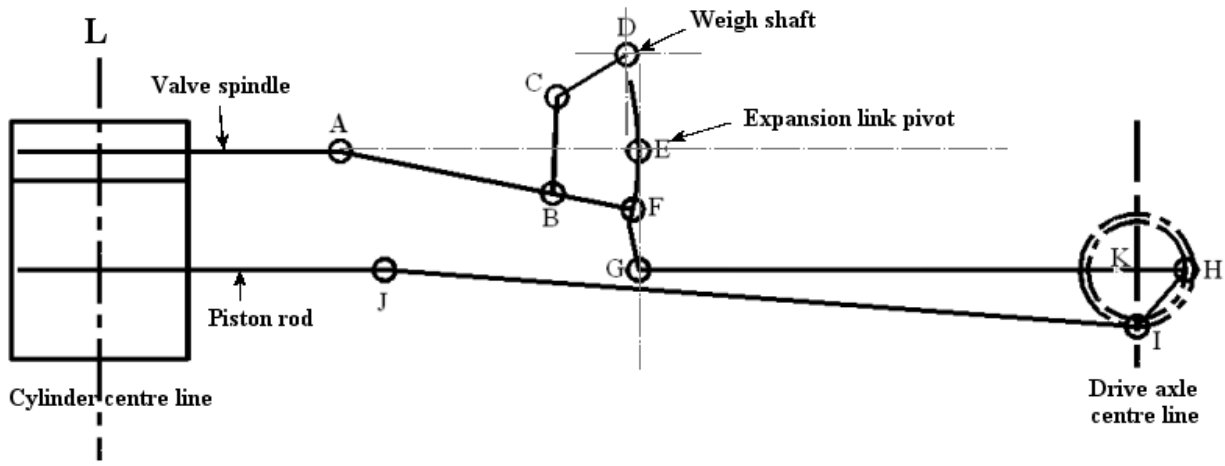
VALVE GEAR

Hello again. This month we're going to investigate some of the design aspects of the Walschaert valve gear using the drawing below for reference as to its general layout. (yes, we used this drawing last time, but it's easy to see what goes where!)

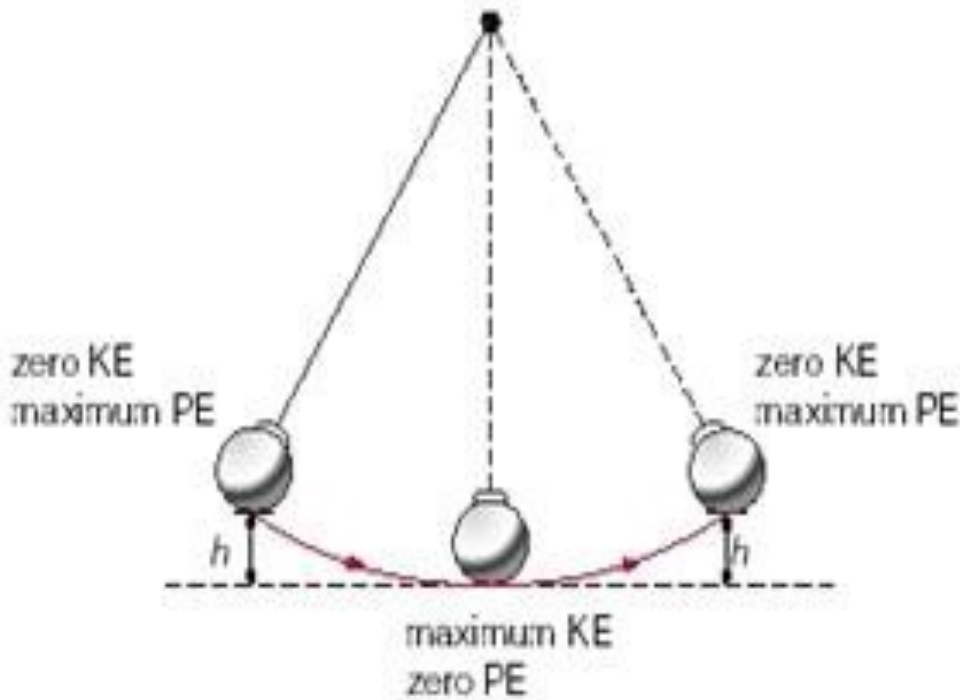


As with most things associated with machinery, locomotives in particular, everything is constructed with reference to center lines (CL). A moment of reflection shows that the fundamental (base) center lines for the construction of the engine will have both vertical and horizontal components. Every aspect of the locomotive then becomes completely relative to those center lines. Then, each component (i.e. cylinder block) will have its own complete set of center lines that correspond to the base center lines. Understanding the significance of the CL's is necessary because the valve gear only functions properly when correctly oriented to the base CL's, along with those of the cylinder block. (whew!)

Here is an example of how the gear is related to the vertical CL's of the cylinders and the main driving axle



Now we have to come to grips with a fundamental concept that is a function of virtually all components of any valve gear, and in particular Walschaert.

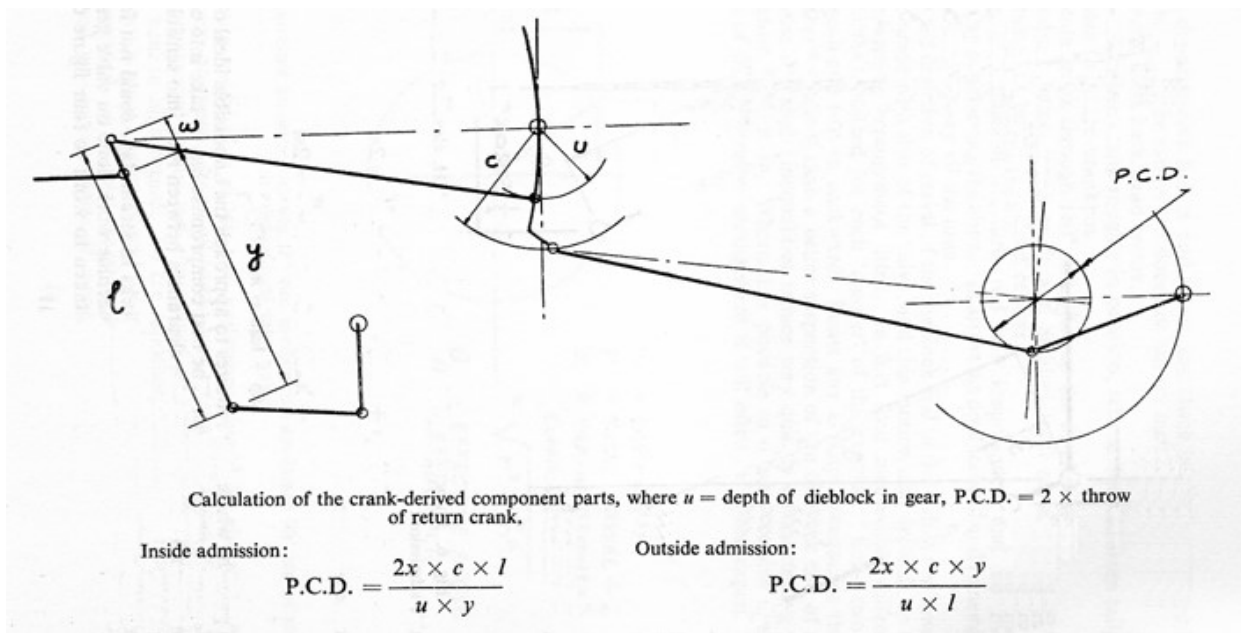


The drawing shown above denotes the swing of a pendulum. This duplicates the action of all of the components in this gear. The most significant concept is to understand how, as the rod swings from its intersection with the tangent, there is a displacement of the ball end relative to the tangent line, shown here as the distance “h”.

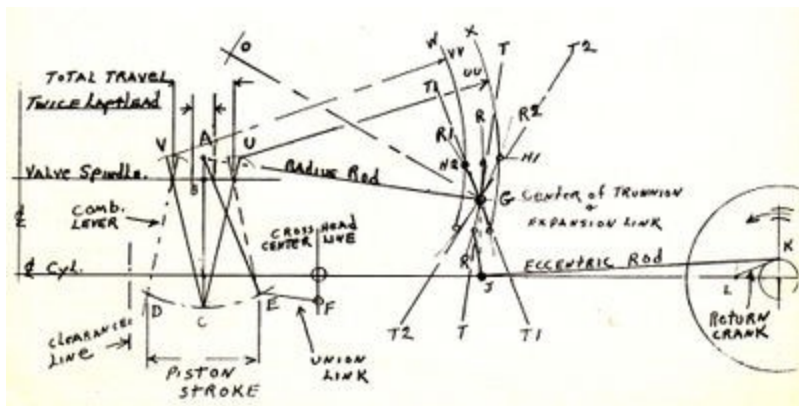
As you can see in the following drawing, this concept becomes quite apparent as to how it creates the desired movements of each part of the

valve gear. Is it any wonder then, that it was often referred to as “monkey motion” !

One of the more complicated tasks in designing this gear is determining the swing of the link (in this drawing points “c” and “u”). typically, the pivot at the foot of the link needs to be backset from the vertical center-line in order to achieve equal swing of the link. The error is produced because the eccentric rod is on an angle from the eccentric crank, just as we can see from our original understanding of the swing of the pendulum.



Here is another example, as shown in developing the movements of the combination lever and expansion link.



I know this may not be as clear as necessary, so send along your questions and we'll see if they can be addressed.

Thank you for your patience on these more complicated items.

Take care,

Dave Griner



Engineer cards expired on May 31st, so now it is time to take your test

It can be taken online at Maricopalivesteamers.com

FOR SALE

For Sale – A 7-1/2 gauge train consisting of a Rail Systems SW-7 switcher in Great Northern colors with a Honda 5.5 hp engine, 2 riding cars (2 seats each), and a gondola. Each of the four seats is hinged on a box for storage of tools, gas, etc. Also included are a frame and materials for a steel gondola, extra trucks and couplers, refrigerator car details (castings), and miscellaneous items. \$9,000. Everything you need to enjoy operating at MLS.

Also for sale, a 12-ft. enclosed trailer with “tracks” and hold-down fittings. \$3,500.

Contact Hugo Meisser, 623/583-6111 or hj.meisser@cox.net. I expect to be at the Fall Meet the end of October. Or we can meet at the track sometime to view/try the equipment.

Hugo



MLS Election Ballot for 2016 /2017 Officers and Board Members-at-Large

Voting Date: November 11/13/16

Officers:

- **President:** JOHN BERGT_○ Write In: _____○
PERRY McCULLY_○
- **Vice-President:** PETE PENNARTS_○ Write In: _____○
- **Secretary:** MIKE LEWANDOWSKI_○ Write In: _____○
- **Treasurer:** BOB DOUGLAS_○ Write In: _____○

Board Members-at-Large

- Mick Janzen_○ Joe Fego_○ Write In: _____○
- Mike Grant_○ Write In: _____○

Voting will take place at the November General Membership Meeting. Fill in each circle for the candidate you are voting for. Please present your ballot at the meeting or mail to:

Mike Lewandowski, 3048 N 152nd Drive, Goodyear AZ 85395

Ballots must be received prior to the November General membership meeting to be counted. **All ballots require a signature for membership verification.**

Member Name:

Member Signature:

