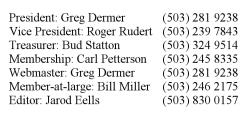


August 2007

http://www.portlandmodelengineers.org



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We met at Grant Carson's shop and got to see one of his new machines and some progress on the locomotive he and Hans Stangier are building. A couple other folks brought some of their engines. Pictures are on the following pages.

Next month we will meet back at Grant Carson's shop on Saturday, August 11th, 1:00pm at:

A & G Products 7360 SW Bonita Road, Unit C Tigard, OR 97224

Remember to bring your metal-related projects -complete or not. Refreshments are provided and
you'll get to talk to some really interesting people.
Last month was pretty sparse, so if you've been
able to make it into the shop and have something
to show, we'd like to see it.

GEARS 2007

On a slightly different note, GEARS is fast approaching. The event will be held at the Kliever Armory September 22 and 23. Members who are thinking about exhibiting should contact Larry Derry for more information. This is the only show of its type on the west coast and a lot of fun. For additional info: http://www.oregongears.org

For The Beginner #42 by Wes Ramsey

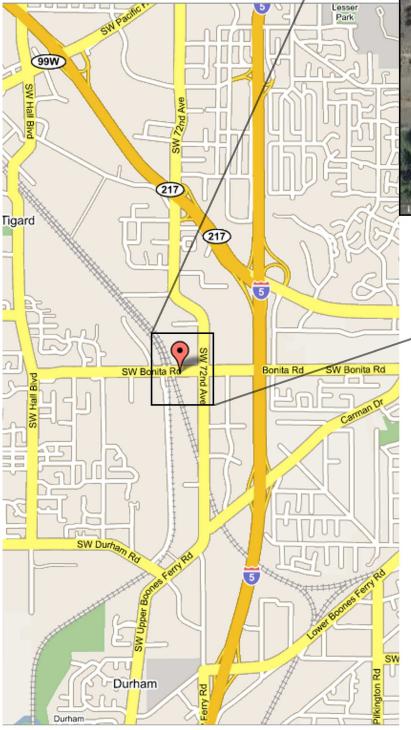
This may be the last issue of, "For the Beginner." I am finding I haven't the time to put into this that I feel it needs. I have tried to keep this simple and geared for the beginning machinist. Most of my material is right out of the school text book. Almost all of the feedback I have gotten is how we do it at the production level.

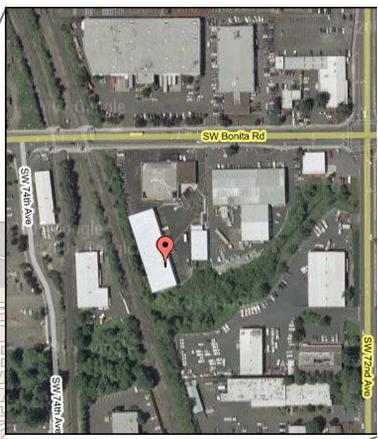
There were several questions at the last meeting as to how to convert a mill to CNC. I started this about three or four months ago, it seems like a year or more. I didn't know how a CNC mill was constructed and had to learn almost everything by trial and mostly error. I have made a lot of parts I thought would work only to find out they would not. I am just now to a point where I am able to tell the mill to do something and it doesn't lock up or tell me where to go. Now that I have the thing moving --- I didn't say it was working --- I can now start building parts that will do as they should and not as they want to. I have sunk a lot of money in proto parts that didn't work. A lot of them came from the scrap bin just to see if the plan would work. Most have found their way back to the scrap bin for the next project. I think the thing that gets me is when I am told this will work if you push this button and it doesn't. There you are, it didn't do what it should and there is no easy way to find out what to do next. For me, the next time I think about a conversion, I am going to go to the manufacturer and buy one from him with the backup that goes with it. If you have enough money and time and know how, it can be done. I have other things I have to get done.

A & G PRODUCTS

Saturday, August 11th, 2007 Meeting, 1:00pm

A & G Products 7360 SW Bonita Road, Unit C Tigard, OR 97224





Directions to Grant's

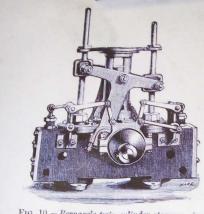
From I-5:

Use exit 292 to Hwy 217, go north about 1/4 mile toward Beaverton to SW 72nd exit. Turn left onto SW 72nd Ave, go about 3/4 mile to Bonita Road, turn right. A & G will be on your left.

From Hwy 99 (Pacific Ave):

Turn south onto SW 72nd Ave, proceed about 1-1/2 miles to Bonita Road, turn right. A & G will be on your left.





The complete original article from which the engine was built.

Bernays's Twin-Cylinder Engine

reprinted from Reports of the United States Commissioners to the Paris Universal Exposition, 1878

In the English department Mr.
Joseph Bernays, of London,
exhibited a twin-cylinder engine
(Fig. 10), in which the crank is
rotated by the intervention of a
triangular connecting-rod an
arrangement not new and long
since apparently abandoned, but
which this exhibitor makes
practicable by an ingenious
arrangement of eccentric and valve
gear.

FIG. 10.—Bernays's twin-cylinder steam-en-fine, The two upright double-acting cylinders are placed with sufficient space between them to receive the crank-shaft. The pistons are connected to one crank by means of a triangular connecting rod, which causes them to move as if connected to two cranks at right angles to each where

Al Pohlpeter gave us a look at his Bernay's engine.

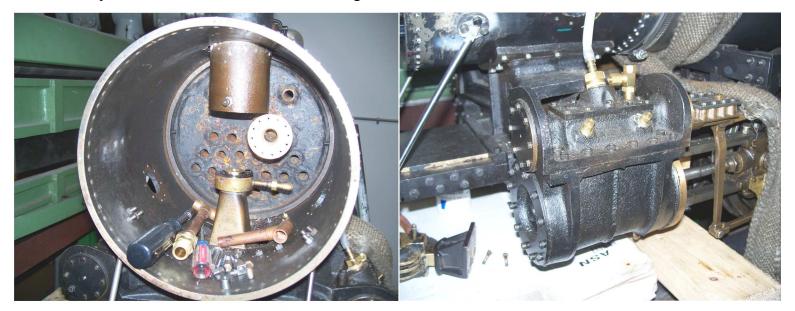
In the lower left, Gary Hart brought in a nice hot air engine that is powering a fan.

And John Benjamin explained the development of sight base he constructed out of 12L14 steel.





This page has some shots of the S.Atlantic 4-4-2 that Hans Stangier and Grant Carson have been building. The left picture is one of the trucks and on the right side the boiler.



The left side here is an end view into the smokebox. The right shot is a view of the piston where live steam is converted into mechanical motion.



Another view of the main drive wheels and, opposite, the bell and the dome. Very nice work went into the creation of this machine.