Founded by Dave and Beth Carr in 1995

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http://www.portlandmodelengineers.org

President: Greg Dermer	(503) 281 9238	depmco@easystreet.com
Vice President: Roger Rudert	(503) 239 7843	rrudert@omsi.edu
Treasurer: Bud Statton	(503) 324 9514	budstatton@worldnet.att.net
Membership: Carl Petterson	(503) 245 8335	tomten@easystreet.com
Webmaster: Greg Dermer	(503) 281 9238	depmco@easystreet.com
Member-at-large: Bill Miller	(503) 246 2175	bilau@gte.net
Editor: Jarod Eells	(503) 830 0157	jarod@eells.us

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The Portland club is hosting the annual picnic this year scheduled for June 9th at the Brooks Antique Powerland pavilion. The cost is $3 a head over 7yrs old. Lunch is included and as are free rides on the trolley. Purchasing a ticket allows us to better prepare for the number of people attending. Families and friends are very welcome. Greg Dermer has tickets.

Back by popular demand, the picnic will also feature a swap meet in the parking lot. Bring your treasures and swap them for someone else's junk. This was a big success last year.

Wes Ramsey requested ideas for future issues of his "For The Beginner" column. He has used up most of the interesting material from his current source. If you have some topics that you'd like to see covered, please talk to Wes.

Next month we will meet at Tom Miller's shop on Saturday, May 12th, 1:00pm. Due to some unfortunate events that occured during our last visit only PME members will be allowed to attend. He has a large 7 inch outdoor railroad setup including a trestle and other structures. It should be quite fun.

18055 SW Seiffert Road
Sherwood, OR 97140

Remember to bring your metal-related projects -- complete or not. There are refreshments as always and a chance to talk to some fine folks who share similar interests.

For The Beginner #39 by Wes Ramsey

The Steady Rest, Part 3

A frequent misconception among students is that the steady rest may be set up properly by using a dial indicator near the steady rest on a rotating shaft. This procedure would never work since the indicator would not show run out, no mater where the jaws were moved. Steady rest jaws should never be used on rough surfaces. When a forged, cast, or hot rolled bar must be placed in a steady rest, a concentric bearing with a good finish must be turned. Thick walled tubing or other materials that tend to be out of round also should have bearing surfaces machined on them. The usual practice is to remove no more in diameter than necessary to clean up the bearing spot.

When the piece to be set up is very irregular, such as a square, hexagonal part, hot rolled bar or rough casting, a cat head is used. The procedure to set up a cat head is not difficult. The piece is placed in the cat head and the head is mounted in the steady rest while the other end of the work piece is centered in the chuck. The work piece is made to run true near the steady rest by adjusting the screws on the cat head. In most cases, the work piece is given a center to provide more support for turning operations. A centered cat head is sometimes used when a permanent center is not required in the work piece.

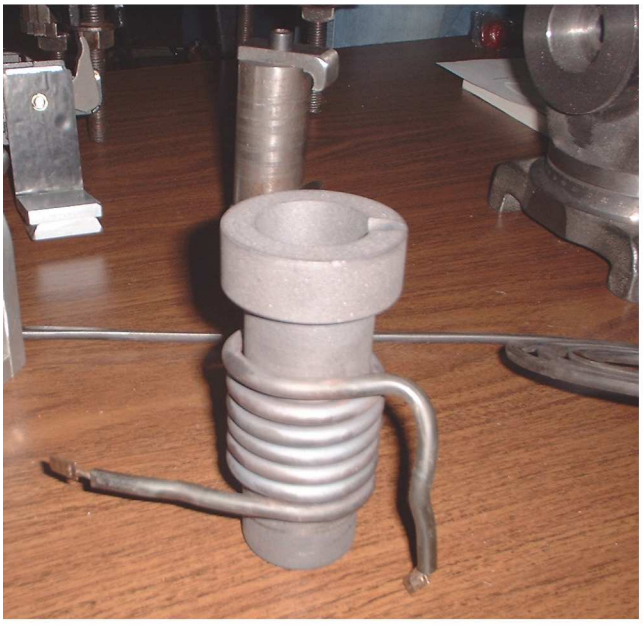
Internal cat heads are used for turning to the inside diameter of tubing that has an irregular wall thickness, so that a steady rest bearing spot can be machined on the outside diameter. These also have adjustments. So what is a cat head you ask? I have used them before and not known what they were called. A cat head is a piece of pipe with 4 to 8 bolts at right angles to each other. It is like two four jaw chucks facing each other. The screws can be adjusted to bring the turned part to center. The outside of the pipe is set in the steady rest to hold the whole thing steady while it is turned.

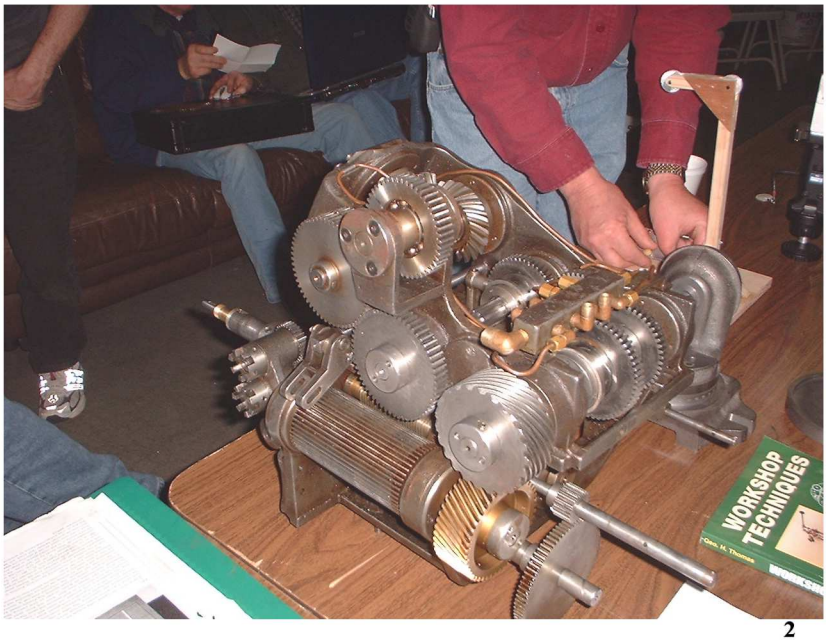
If your membership expired (as shown by 2006 on your address label) renew by sending a check for $12 to:
PME Membership Renewal, c/o Carl Petterson, 1631 SW Pendleton St., Portland, OR 97239

Bud Staton gave an update on two of his projects. On the upper right, the pattern board for chair handles on a trolley car restoration. The two pictures on the left are a follow board for the curved piece that supports the flamethrower nozzle and the grips. The nozzle support is particularly tricky because there are threads that must be cast into the piece.

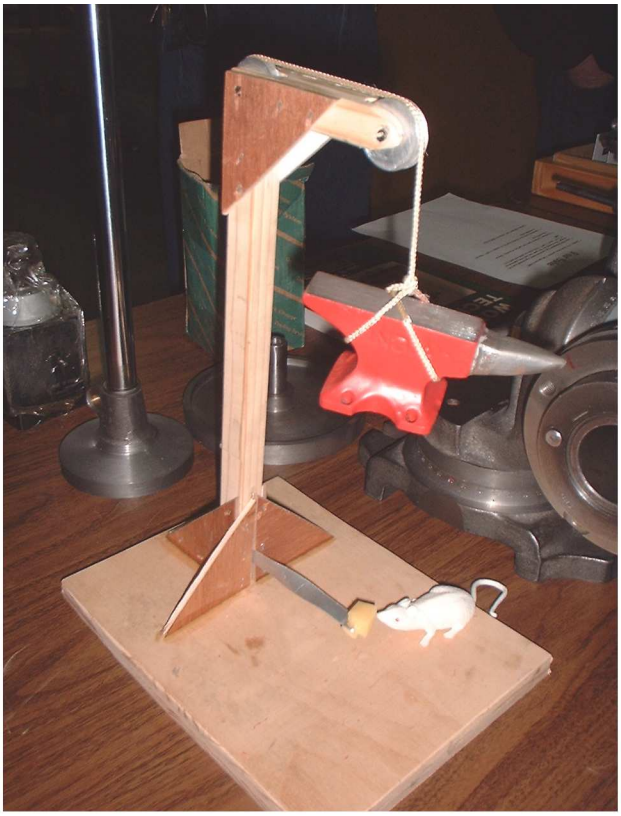
Below left is Gary Hart's experiment with using a stove element wrapped around a graphite crucible to get a mini furnace. He hopes to be able to cast several ounces of material on a table top.

Below is a Rivett 1020 lathe gear box that Brett Fleming brought in to show the exquisite detail and extra features that were employed to create these machines. This model sold for $8000 in 1942. Quite a bit for the time. They were mostly sold to the Navy though this one seems to have come from an optics lab.

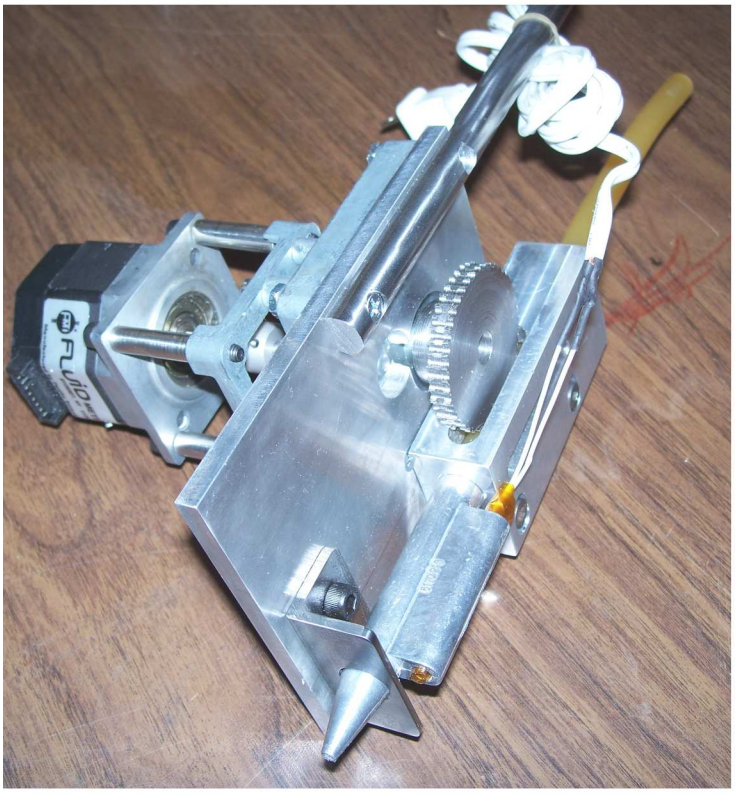




Above Vince Kurpan demonstrated his answer to the problem of handling a heavy camera on the end of a tripod. It has a quick disconnect to transform from horizontal to vertical.

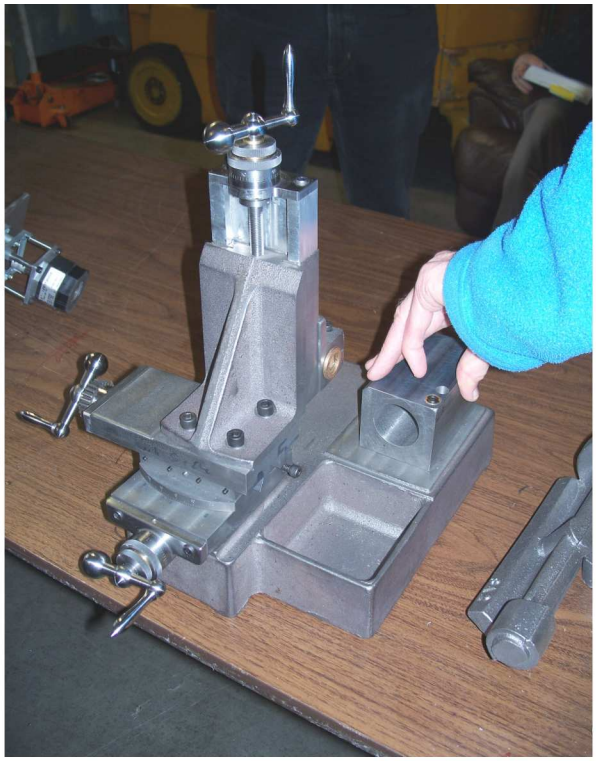


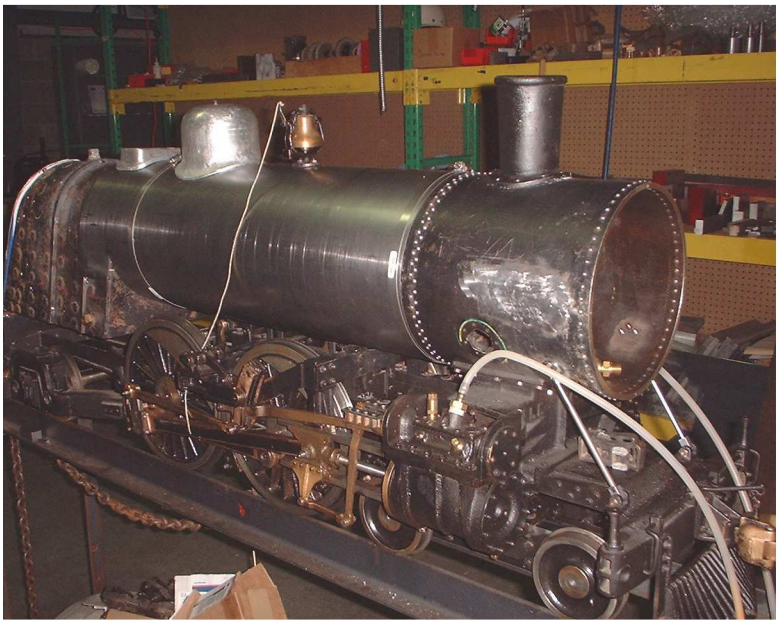
This entry by Tom Senior is the winner to the "Rodent Dispatching Contest." He took the honors with his straightforward approach.



Bill Miller put together this assembly based on a glue-stick dispenser for the Rapid Prototyping SIG. They have been meeting each month the week before the PME meeting at Bob Diffely's.

Carl Peterson brought in what appears to be a micrometer on a stand. It turns out to be an Ames hardness tester.





Counter clockwise from UR, Tom Hammond answered questions on his gear-hobbing machine. It is derived from a Jacobs design from the '70s.

Next, John Benjamin explained how to use his simple jig for adding a riser block to his milling machine.

Hans Stangier and Grant Carson continue to make steady progress on their Atlanta 4-4-2 steam locomotive project.

Mike Robinson brought in his dividing head and accompanying tail stock.