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Last month's meeting/picnic was held at Bud Statton's house/shop/range and was quite successful as witnessed in the included pictures. Thanks Bud and thanks to the ladies who prepared the picnic. No one left the meeting hungry.

This note from Carl Petterson:

OCTOBER MEETING to be held at the IRON RANCH

On **October 9, 2004, at 1:00 pm**, the Portland Model Engineers will meet at the Iron Ranch in Ridgefield, WA. This wonderful place is owned by Alan and Marcella Schurman, our hosts. They have several buildings full of antique machinery, engines and equipment. All of them will be accessible to PME members. Coffee, cookies and the regular meeting will be held at a central meeting building. There will be prototypes for every interest, except, maybe, clocks.

Directions: Begin on Interstate 5 in Clark County, Washington, a few miles north of Vancouver. Take Exit 9, which is 179th Street and is marked as the Clark County Fairgrounds exit. Go north through the stop light and travel north on NE 10th Ave. two miles to the four way stop sign at Duluth. Then go 1.5 miles north and look on the left side of the road. Turn left at **23100 NE 10th Avenue, Ridgefield, WA.**

This will be the location in 2006 for the National Meeting of the Early Day Gas Engine & Tractor Assoc. A related group, Branch 15, helps produce the annual Steamup at Brooks, OR.

FOR THE BEGINNER # 20

The Compound Slide Method

Both internal and external short steep tapers can be turned on the lathe by hand feeding the compound slide. The swivel base of the compound slide is divided in degrees. When the compound slide is in line with the ways of the lathe, the 0 degree line will align with the index line on the cross slide. (On some lathes the 90 degree mark lines up rather than the 0 mark.) When the compound is swiveled off the index, which is parallel to the centerline of the lathe, a direct reading may be taken for the half angle or angle to centerline of the machine part. When a taper is machined off the lathe centerline, its included angle will be twice the angle that is set on the compound. Not all lathes are indexed in this manner.

When the compound slide is aligned with the axis of the cross slide and swiveled off the index in either direction, an angle is directly read off the cross slide centerline. Since the lathe centerline is 90 degrees from the cross slide centerline, the reading on the lathe centerline is set off the axis of the cross slide

14 1/2 degrees, the lathe centerline index reading is 90 - 14 1/2 = 75 1/2 degrees. Tapers of any angle may be cut by this method.

When turning either an internal or external taper by any method on the lathe, the cutting tool must be on the exact centerline of the lathe. If the tool is too high or too low, the taper will not be correct

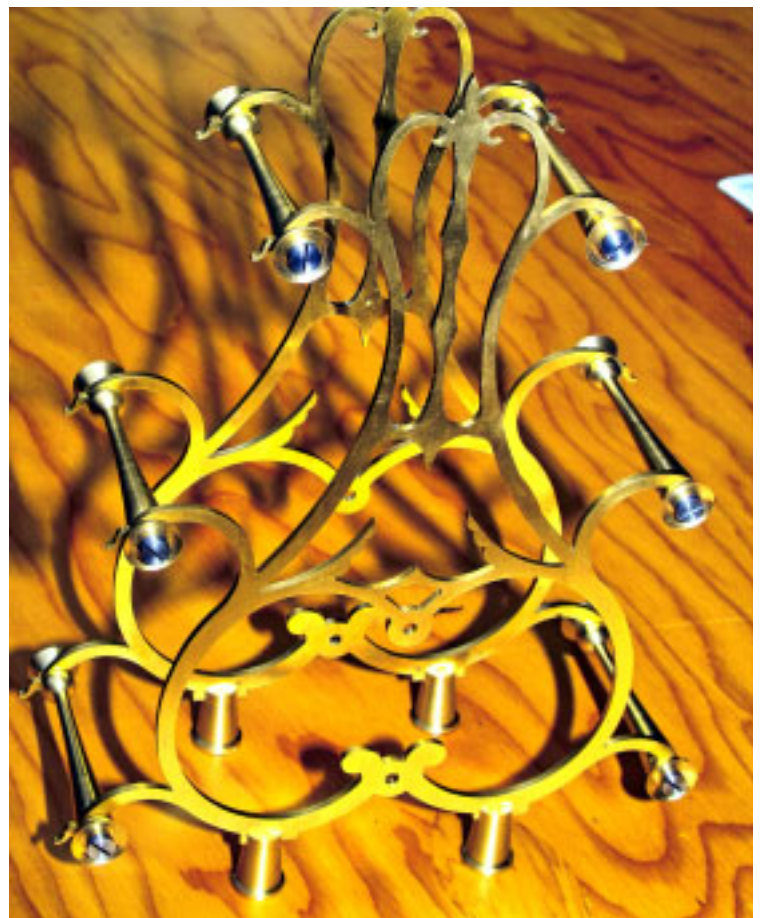
- Wes Ramsey



Bill Mitchell showed the railroad switch (at left) he built from castings poured last year.

Roger Linschied brought most of the display items this month including the one on the right (a Jerry Howell heat engine fan) and the Low Temperature Differential engine below left designed by James R. Senft. More of Roger's offerings are shown later.

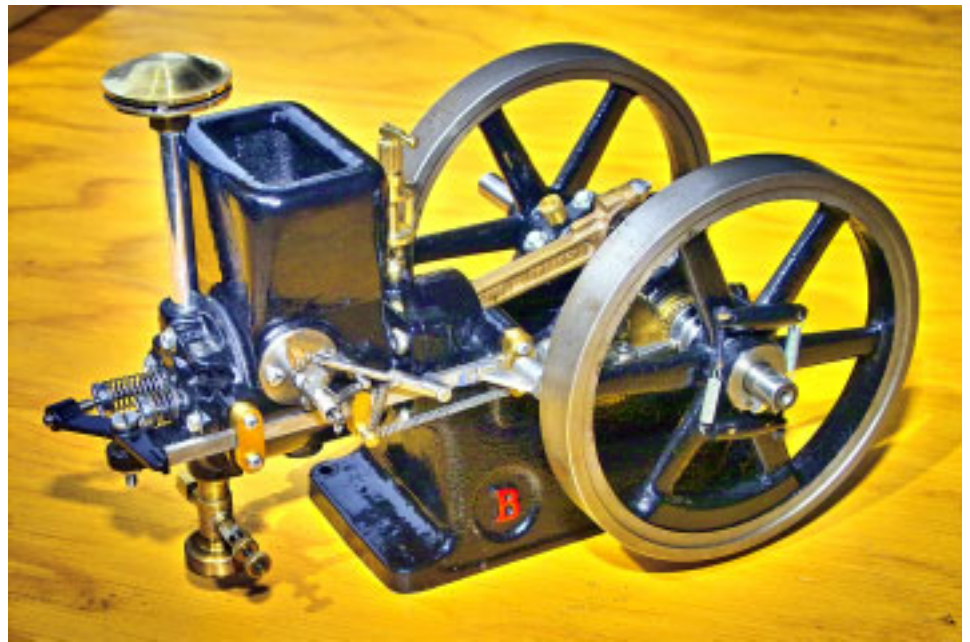
Henry Casson brought the skeleton clock (below right) he is constructing mostly through his CNC machine shop. Henry developed the CNC code using autocad based on an original design from Condreft of liverpool.





Bud Statton's pouring party was even more successful this year. He is shown at left pouring brass ingots while **Jamie McAdams** helps steady the crucible. The two are also shown center right lifting the red hot crucible. (A close up of the crucible still in the furnace appears at right). The two are joined by **Roger Rudert** (below right) shown pouring aluminum for a governor bracket he needs for his 1934 Fairbanks morse gas engine. **Paul Pierce** is shown at lower left holding the still hot aluminum casting of a bracket for a copying machine in Paul's antique computer museum. I heard one person say it still looks like a \$3.00 hunk of aluminum. Hmm.





Bill Mitchell (above) is shown adding metal to the crucible being heated in the furnace. Two more items brought by **Roger Linscheid** are shown at right (a Tiny Power kit engine called Ajax with a 1.25x1.5 bore and stroke), and at upper right (a 1/4 scale hit and miss engine kit scaled down from a 2 hp Brush original).

Below is a close up of **Roger Rudert's** bracket immediately after its removal from the mold.

Below right is a photo showing how the propane tank is warmed in order to compensate for the natural cooling that occurs in its use.



Directions to Alan Shurman's Iron Ranch 1:00 pm on October 9, 2004

1. From the point of merger of I-5 with I-205 north of Vancouver:
2. Take the WA-502 E/ NE 179TH ST exit- exit number 9- toward BATTLE GROUND. 0.32 miles
3. Stay straight to go onto WA-502/ NE 10TH AVE. Continue to follow NE 10TH AVE. 2.67 miles
4. Look for and turn **left** at the steam engine frame holding the mailbox. For reference, there is an old lathe holding a mailbox on the **right** hand side of the road for his machine shop business.
(The ranch is about 3/4 mile past the second traffic light from the freeway.)

