

The NEMES

NEW ENGLAND MODEL ENGINEERING SOCIETY INC.

Gazette

No. 225

January 2015

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Presidents Corner

Victor Kozakevich

Happy New Year everyone!

We've been through a number of changes in the last year, like a new Gazette publisher, and meeting in a new place. Thanks to the membership for hanging in as things evolve.

A couple members stepped up and gave presentations, so thanks to them, and to those who brought us speakers from outside. I hear a few more members are planning to speak, and I'm looking forward to some good stories. I made a couple attempts at using video at meetings, such as the industry along the Charles River story and the machining video with member comments. Reactions were positive, so I hope others will pick up the idea and take in in new directions at future meetings.

I've scheduled Waltham Library lecture room for Thursday January 8 as a poster session, and an opportunity to discuss/plan our model show. And of course to see the nifty tools Santa brought everyone.

And oh yes, send in your dues !

Thursday, Jan 8, 2015

Waltham Library
735 Main Street
Waltham, Massachusetts

Membership Info

New members welcome! Annual dues are \$25 (mail applications and/or dues checks, made payable to "NEMES", to our Treasurer Richard Baker) Annual dues are for the calendar year and are due by December 31st of the prior year (or with application).

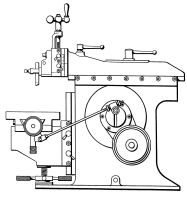
Missing a Gazette? Send a US mail or email to our publisher. Contact addresses are in the left column.

Issue Contributions Due

FEB	JAN 22, 2015
MAR	FEB 19, 2015
APR	MAR 19, 2015

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Metal Shapers

Kay Fisher

R. G. Sparber's Gingery Shaper - Part 57 Shaper Table

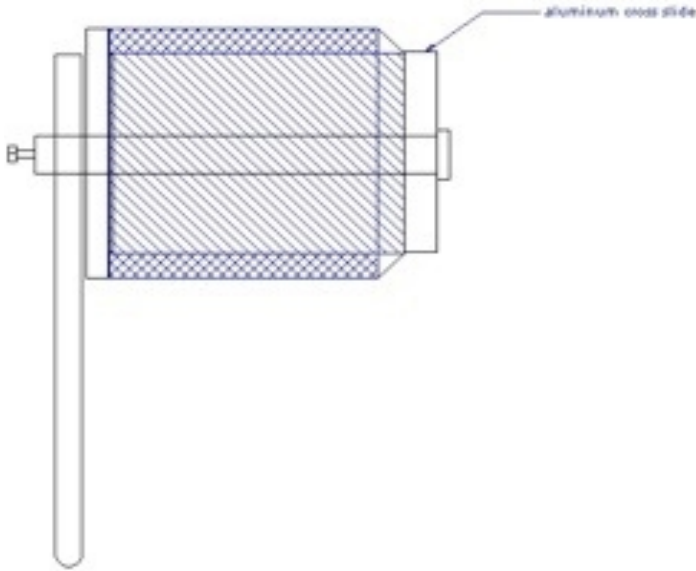
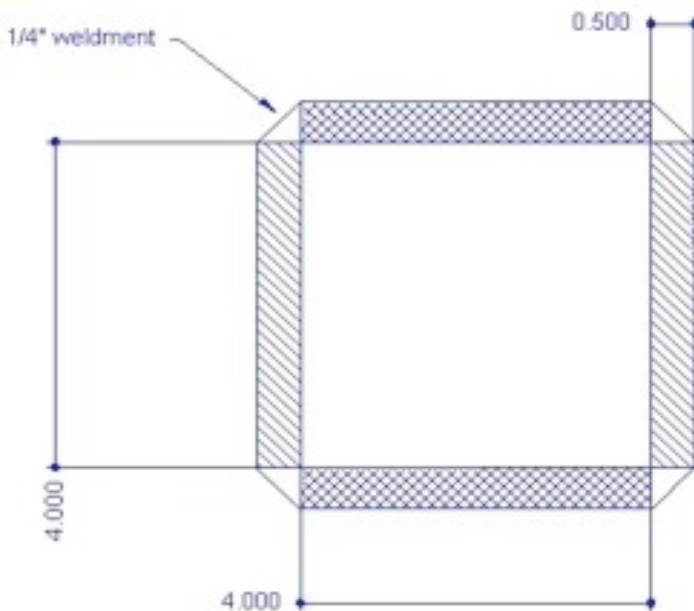


Table & Support Leg Drawing by R. G. Sparber

I made the table out of $\frac{1}{2}$ " thick CRS plate. The corners were welded. Here is the assembled table with support leg. On the right side is the cross slide. On the left side is a $\frac{1}{2}$ " diameter rod that supports the table. Not shown are the 3 screws that pass through the back plate and into the cross slide.

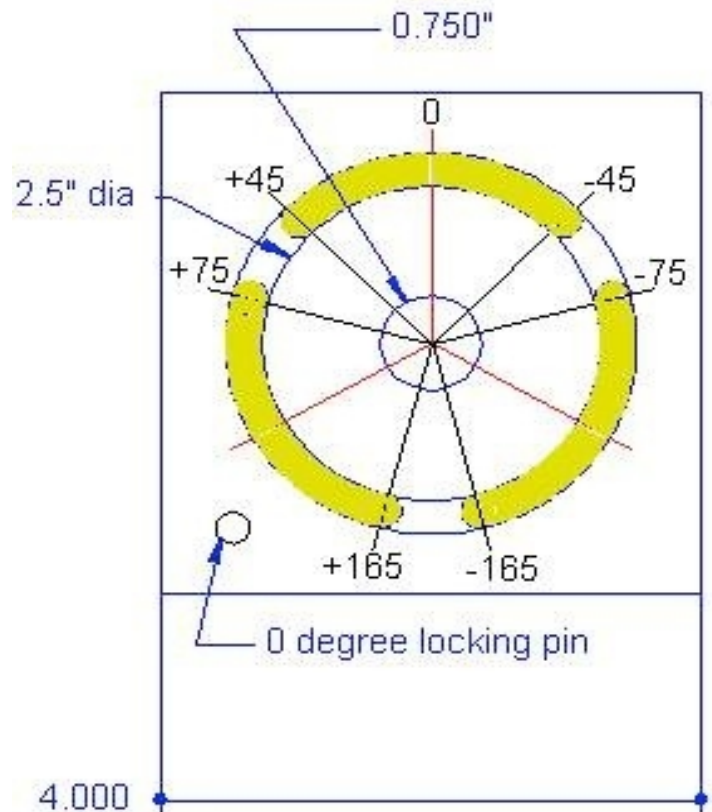


Front View (no back plate) Drawing by R. G. Sparber

Looking in the front you will see the ends of the 4 plates.

A $\frac{1}{4}$ " weld at each junction holds it together.

I cut the plates on my bandsaw and milled them true. A MIG welder tacks the 4 plates together. This gives small tack welds. Once I'm sure it is square, I used my stick welder to secure the plates. I ran 1" on a given corner and then run 1" on the diagonal corner to balance the stress. The cycle repeats until all corners have an alternating pattern of 1" of weldment and 1" with no weldment. This is very strong.



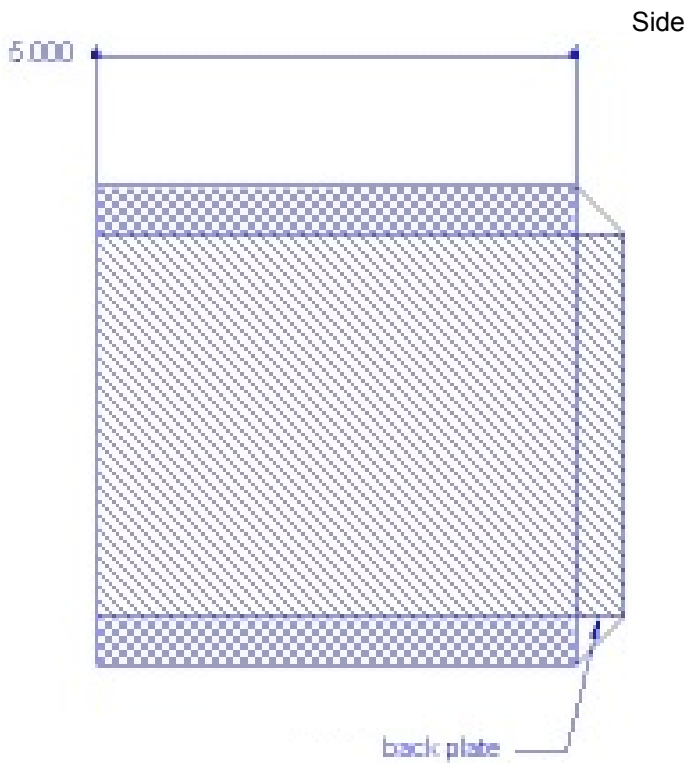
Back Plate Drawing by R. G. Sparber

The back plate will have three arcs milled into it. A $\frac{3}{8}$ " screw will pass through these arcs and thread into the cross slide. Each arc will be $\frac{7}{16}$ " wide.

The arcs will permit the top surface to tilt $\pm 45^\circ$.

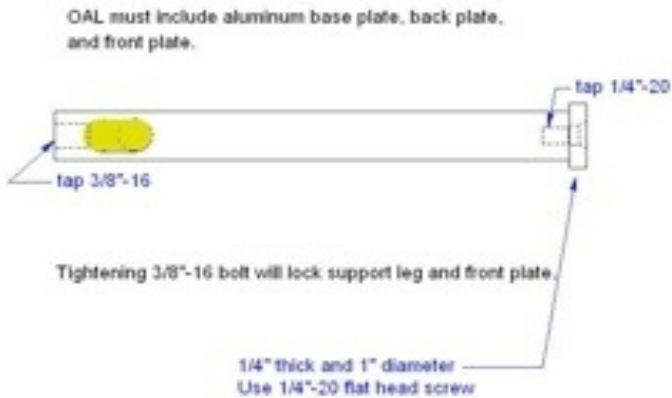
In the center will be a hole bored to 0.750" to accept a pivot pin.

In the lower left corner of the plate will be a 0.250" hole that will accept a locking pin. The pin will go in before the shaper cuts the top face of the table.



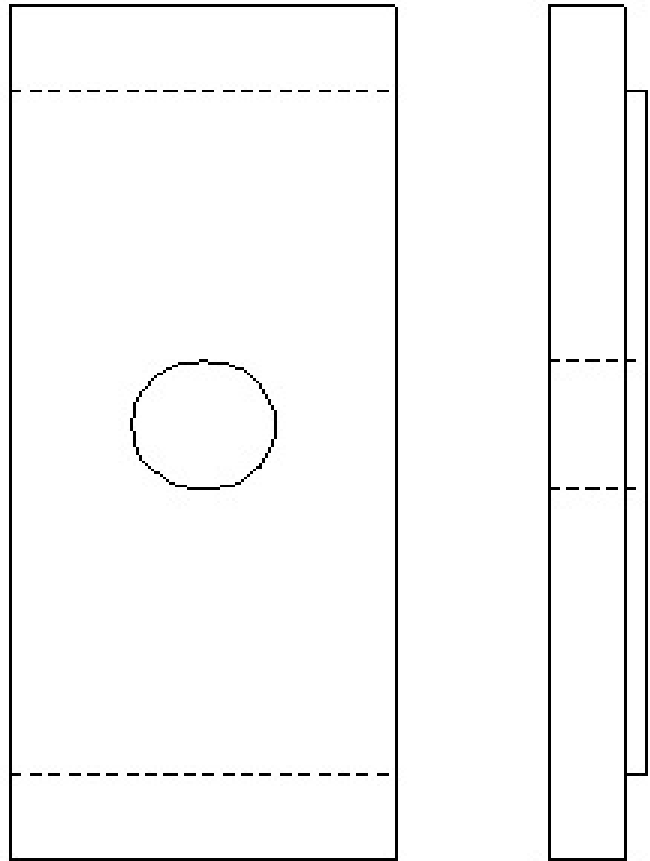
View Drawing by R. G. Sparber

This side view shows how the back plate fits on the table. A 1/4" weldment will secure it. When all five plates have been welded together, I can relieve the stress in the furnace. There will be some warpage. I'll use my mill to square up the cube. The top face will be cut again after being mounted on the shaper.



Pivot Pin Drawing by R. G. Sparber

Side



Removable Front Plate Drawing by R. G. Sparber

The front plate will have a lip that engages with the inside of the box. The hole will be bored to 0.750" to accept the pivot pin. As the screw in the end of the pivot pin is tightened, the 1/2" rod will be forced against this front plate so both the rod and front plate are secured.

When I want access to the bolts passing through the back plate, I back off the bolt in the end of the pivot pin, remove the 1/2" support rod and the front plate. It will then be easy to access the bolts.

The 1/2" support rod will have its lower end rounded to minimize friction. It will ride on a plate fixed to the base of the machine.

The top surface of the table will have 3/8"-16 tapped holes on 1" centers. The right vertical face will also have tapped holes plus a V groove that I will cut on my mill.

Stay Tuned for part 58 from R. G. Sparber next month.

Keep sending me email with questions and interesting shaper stories.

My email address is:
KayPatFisher@gmail.com

Kay



Upcoming Events

Bill Brackett

To add an event, please send a brief description, time, place and a contact person to call for further information to Bill Brackett at:

events@neme-s.org or 207-865-1347

Jan 1st New Years day run
Wauhakum Live Steamers
Holliston MA.

Jan 8st Thursday 7PM
NEMES Monthly club meeting

Jan 24-25th
Amherst Railway Society Big Railroad Hobby Show
Eastern States Exposition, West Springfield, MA.
<http://www.amherstrail.org/>

Feb 5th Thursday 7PM
NEMES Monthly club meeting

***Feb 15th 10:00-4:00

***18th Annual NEMES Model Engineering Show