

The NEMES Gazette

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*The Newsletter of the New England Model Engineering Society,
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**Our Next Meeting is at 7:00 PM on June 5th, 1997
at the Museum, 154 Moody Street, Waltham Ma.**

From the Editor's Desk:

When Ron said that we'd be impressed by the NAMES show if we went, he wasn't kidding. It took me three hours just to walk along the exhibitors tables and give each item a quick look. That doesn't count the commercial exhibits or the time I spent going through the exhibits again to take a closer look at things. I've got lot's of notes on the trip and the show but will save them for another time when I need some material and have time to write it up.

I'm going to be out of town for the week preceding next months meeting, but expect to be back the Monday before the meeting so that I won't miss the meeting. As a result the deadline for the July issue of the Gazette will be a week early, on 17 June. So be sure to get those letters, articles, classifieds or whatever to me by then or it'll have to wait till the August issue. I'm planning to get the issue all ready to drop in the mail before I go, then will give the bundle to Ron who will mail them on Thursday as usual so that you should all get your reminder about the July meeting right on schedule.

July 26 and 27 the Hamilton Museum of Steam and Technology is having a show. I got a copy of the flyer when the bus stopped there on the way NAMES and they will have full size and model Traction Engines, antique steam and gas engines, model trains, and over 75 exhibits. It's about an 8 1/2 hour ride from the Riverside T station by bus, and the Museum is a fascinating place to visit with it's two big beam engines. If you've got it on your list of places to go, the show would be a good time to go.

I've printed the latest form for the NEMES profile this issue so those of you who haven't filled it out yet will have a copy to fill out and send to Kay Fisher. There's also the latest on the latest group buy from Ed Kingsley. I doubt that he knew what he was letting himself in for when he got things going. We'll be getting almost a thousand pounds of iron and steel in this buy, so be sure to get your payment to Ed by the June 5 meeting so that the material can actually be purchased.

See you all next Thursday night. -- scl

The Founders Corner

by Ron Ginger

Bus Trip to NAMES

I can't let an issue pass without a note about the bus trip. From the volume of notes Steve was taking, I'm sure he will have lots more to say about NAMES and the Ford Museum. I thought it was a GREAT trip, and want to thank all the fellows, and our two ladies, that went along. I hope you all had as much fun as I did. I

hope we can do it again next year. If anyone that went along has any comments or suggestions for next year, please let me know while the thought is still fresh. And for those that couldn't make it, mark the date now for 1998 - April 25, 26.

Meeting notes.

There has been considerable discussion on the Internet mailing list about the conduct of our meetings. I appreciate all the feedback and the helpful suggestions. We are going to try a couple new things based on these discussions.

At the last meeting I wandered around the back of the room a bit, and I was very disturbed at the lousy acoustics. It is my highest priority to do something about this, as I don't understand how anyone would want to attend a meeting and not be able to hear what's happening. I assure you we will improve this, or we will find a meeting room with decent acoustics.

There is a limited amount we can do with the room itself- there are a few banners hung in an attempt to make the sound better, but I suspect it would take a lot more. The sound system does not seem to be well suited to the room. If anyone among the group has some good experience in acoustics, I would greatly appreciate your suggestions.

Next meeting, I want to try to hold the meeting in the lounge area off to the side of the main room. Although this is small, the low ceiling and carpeted floor should help the sound a lot. Our problem there may be lighting, but we will see what we can do.

Poster Sessions

The Internet list has been kicking around an idea we are calling 'Poster Sessions' and I want to try this at the July meeting. The basic idea is simple. We will pick a specific topic for a meeting- more on that later. Anyone with an interest in, or experience with that topic will be encouraged to bring a small exhibit to the next meeting- Think if it like a Science Fair- Each person can bring in real objects, plans, articles, anything related to the topic. These items will be placed on the round tables. The first half of the meeting will be our usual Show and tell and announcements. Then we will break and everyone is free to wander around among the tables and see what has been brought in.

I think this will be a good way to see several interesting objects, and give everyone a chance to display some of their work. I suspect some of our members may not be too eager to stand up in front of the whole room and talk, but with this format you don't have to make any speeches, just tell your friends what you have done.

We have discussed several possible subjects. Among them have been Beam Engines, Stuart Turner Models, Lathe Gadgets, and various others. I want to have a quick discussion on this in June, and decide on a topic

for July, and maybe for a couple more sessions in the next months.

June Meeting

One of our members, Lesslie Russell has contacted Joe Picone of the Norton Company, and arranged for him to speak at the June meeting. I have been calling this talk "The care and feeding of grinding wheels" I am sure we will all learn a lot about this very valuable subject.

Show and Tell. I have acquired a very good overhead projector- from the MIT Flea Market last Sunday. It even came with 2 good bulbs! We will have this at the meetings, so anyone with a show item of an article or drawing can make up a slide. We will have a few blank slides and a set of marker pens on hand, so diagrams can be drawn to explain the discussion. This should help a lot. I've also heard from Dick Cushing that he may have a copy machine for the club. With this we could make slides right at the meeting, or make copies of handouts as needed.

I have the impression some fellows think the show and tell is only for bringing in major, finished projects. I want to encourage you to bring in 'works in progress' (Hey Ed, how's that V-8 coming along?) I'd like to see it a session of short tips, maybe requests for help. Let's have more SHOW.

Organization

There has also been some discussion of getting organized on the net. Since this article is already too long, I'll just say we are continuing to work on this, and we will get organized, someday!

-- Ron Ginger

May-1997 Treasurers Report

Previous balance ----- \$ 999.15
 Newsletter postage ---- - 65.32
 Charge for new checks - - 11.27
 Service charge ----- - 3.20
 New balance ----- \$ 919.36
 Respectfully Kay R. Fisher

Calendar of Events

Thursday June 5, 1997 -- NEMES MEETING at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

Paul and Howard's Most Excellent Swap Meet. To be held on Sat., June 14. Hours from 10 AM to 3PM. Bring a blanket or tarp of folding table to display your excess plunder. You're sure to find a little something that will follow you home. Easy to find- Rt.2 to Rt. 13 in Leominster. Go North on Rt 13. towards Whalom Park for 1-1/2 miles. Bernice Ave. is on your right. Paul's house is the third on the right, right across the street from the Little League field. Rain date is the following Sat;. 508-534-5700 or 508-987-0654.

Saturday and Sunday, 28 and 29 June 1997. Orange Engine Show and fly in at the Orange Airport, Orange MA.

Thursday July 3, 1997 -- NEMES MEETING at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

26th and 27th July 1997 The 6th annual RC Subregatta at the US Sub Base New London CT.

13 September, 1997, Original Yankee Steamup at the New England Wireless and Steam Museum. 9:00 AM to 4:00 PM Admission \$5, No charge for exhibitors.

Saturday, October 4, 1997 -- STEAM EXPO at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

Saturday Feb 21, 1998 -- Second Annual NEW ENGLAND MODEL ENGINEERING SHOW at the Charles River Museum of Industry, 154 Moody Street, Waltham, Ma 02154, telephone 617-893-5410

The Meeting, May 1, 1997

Ron Started this meeting with announcements, then went straight to the main speaker to try to balance things out a little better. Hopefully this way nobody will have to leave in the middle of the main topic for the month. Next month (the June meeting) we're going to start collecting dues again for the next year. \$20 will cover you until June of 1998. You can make your check payable to NEMES.

Our next show is October 4th, 1997, and we had a bright yellow flyer for people to take and pass around at any shows they go to between now and then so we can get as much publicity as possible.

Tonights main speaker is Frank Morrison. Ed Kingsley saw Frank on the internet, and it developed into tonights talk.

Frank's interests are in Machine Tool Technology in North America, New England, and more specifically Fitchburg, Mass., from about 1790 to the present. Most of the people he knows don't know anything about machine tools, or care. He is researching their history as best he can, but there is not much left. Most of it has been thrown away. He passed out an outline, with some pictures of early machinery that he has been able to accumulate.

The elemental mechanical devices were all pretty much known by the Renaissance in Europe. During the period from 1800 to 1850 there were chain lathes, and rack and pinion lathes. From 1850 to 1880 gear driven lead screws and flatbelt feed rods made an appearance, and in the 1870 to 1890 period the single splined leadscrew - feedrod under the apron became prevalent.

The 1836 Putnam Lathe pictured is in the American Precision Museum in Windsor, Vermont. It was made by John and Sam Putnam in Newark NJ. They were there for a year before they came to Fitchburg.

Samual Smiles wrote a lot about the early English Builders. Henry Maudsley may have had an earlier tradition in England than existed in North America, but there was lots of tool design here as well, it just wasn't as well publicized.

Gibbs on carriages came in in the 1850s. Prior to that the carriage was held down by a hanging weight to stop things from chattering during a cut.

David Wilkinson produced the first known leadscrew lathe in the US. Perhaps it was the first ever. It was patented in 1798.

During the period of 1800 to 1830 the Boston Steam Engine Co. existed, and Otis Tufts was associated with it. Frank has been unable to find any info on it other than it existed. If you have any info or any leads, please let Frank know.

The 1836 Putnam lathe is a lot more modern than it would seem from a casual glance. It has a cast iron bed, raised V ways for the head, carriage, and tailstock, and also has V ways on the cross slide. It doesn't have gibbs on the carriage, so it probably had a saddle weight. The single flat belt pulley in the headstock was probably powered by a water wheel via an overhead lineshaft and belt. We don't know who invented back gearing, but it was before 1836 because this lathe has them, right down to the pin to disengage the pulley from the spindle like on a modern South Bend. There's a lever for left, right, and neutral on the carriage feed. The tool bits were carbon steel, and it didn't cut screw threads, but lathes weren't used for cutting screws back then.

He brought a couple of machine parts with him to show us. One was the Crank arm from a shaper he got by arriving just before the junkie. He's saved it, but has yet to get it completely restored and back together. It was a nice looking piece of what I assume is wrought iron, with that nice silvery sheen that comes with age and polishing from long years of care and cleaning. The shaper was built in 1885-1895 sometime and has power feed to a rotating head for cutting gears, which was commonly done on shapers back then. It also has a traveling ram, rather than the travelling table more commonly seen on shapers today. It came from the Fitchburg Machine Works and had been out of service for 40 or 45 years before he arrived and rescued it just as it was about to go out the door.

The second machine part he brought in was the tailstock from a lathe. When he got it it had 3 coats of green and three coats of black over the original finish, plus a lot of grease. He has carefully cleaned it to expose what is left of the original finish. It's all bright and has red, yellow, and blue pinstripes. Hardly the basic machine grey that we think of today. The lathes headstock bearings are what was called "Composition" back then but we'd call it bronze. It's a split bearing. Babbit bearings were introduced by F.E. Reed of Worcester on their lathes in the 1900-1910 period.

It is tough to make definite statements about what happened when from a single old machine, because as long as it was in active use it would be maintained, which meant adding new parts to the old machine. So old machines that had a long working life could have a great many parts replaced and updated between when the machine was new and now. The older the machine the more likely it is to have had parts replaced, and the more likely it is that you can't find similar examples to compare it to.

Frank had two books that were on display during the break along with the machine parts he had brought in, "American Machinist's Tools" by Kenneth L. Cope and "Studies in the History of Machine Tools" by Robert S. Woodbury.

Last Year we had a swap meet at Paul Gauffin's put on by Paul with help from Howard Evers. It was a great time and everyone who went had a good time. The MIT Radio Club Flea Market has been suggested as a possible place for NEMES to gather, but Ron hasn't been able to get in touch with the organizers yet. It's also been suggested that we should have a combined swap meet and barbecue. A great ideas, but we need a location.

Last month when Errol Groff got into his trustee Plymouth Horizon for the 110 mile ride home to Connecticut the oil light flickered at him. I was a cause for some concern because it never had done it before, and he was a long way from home. Half a mile from home it was clanking pretty bad and finally died after 261000 miles in 11 years. Not bad for a 1.6 liter Peugeot engine. He doesn't need to buy a replacement right away, because his wife left their son and daughter in law off in Georgia and Errol gets to use their vehicle till they walk to Mt. Katahdin and he has to pick them up and give it back. He joined his wife in Georgia to spend the School vacation week driving back to Conn., which brings us to the subject of his talk. "Watch it Made in the USA" is a book that lists plant tours across the country. Gulfstream Aircraft has a listing in the book, so he went to visit them in Savannah. The book was out of date, and they didn't know anything about a tour. In the meantime he managed to promote the fact that he teaches manufacturing technology in a High School and is in the Experimental Aircraft Association into a spot in a Pilot Safety tour that they were running. He got in and saw the plant, with aluminum sheet coming in one end and airplanes rolling out the other end. When he got back to his hotel he had a message waiting from Gulfstream, they have discontinued plant tours and were sorry but they couldn't let him come see the plant. In Beaufort he went to visit Two Stroke International (they used to be Cuyuna) and saw the engine test cell and the machine shop where they make parts for their Ultralight Airplanes.

Driving home they heard an ad on the radio for Pam's Restaurant and stopped for the night. On the way to Pam's they saw a building that said "Custom Hot Rod" on the side. They stopped the next morning and got invited in. The place made fiber glass bodies for old Ford reproductions. Then he stopped at the Darlington Speedway, where the guard refused to let his wife take a lap around the track. Right up until Friday he was planning to go to Detroit for NAMES, but he decided he'd had enough driving and didn't go. The moral of his story is, if you see someplace interesting call and try to get in. The worst that'll happen is they'll say no, and maybe they'll say come on over.

John Wasser showed us a neat little casting set that he had picked up at NAMES. It comes with oil bonded sand, a cast flask from India, a book, parting powder, borax flux, crucible, crucible tongs, a heat resistant block to put the crucible on while your heating it with a torch, and some bronze chips to melt for your first casting. Ron liked it so much when he looked at John's that he bought one too. If you know of a source for 1/4" gas cocks for less than \$5 let John know. He wants to get

them to use on the compressed air manifold for the air supply at the NEMES show in October.

Kay Fisher passed out the first set of NEMES Profiles to the people who had contributed their info to it. If you haven't filled out yours yet you didn't get a copy and now is a good time to fill it out. He passed out 29 of them. The reason he asked how many files do you have is that he hoped it'd get you into your shop to count them and that way you'd be there and be better able to answer the other questions. If you want your own copy, be sure to fill out your form and get it to him. He has a "Torch Mate" video from a guy in Ontario who sells them. It's an interesting video and shows how to hook up a cutting torch to make a lot of the same piece.

Jay Stryker had a couple of items to contribute to the NEMES library. The first item is a page out of a recent issue of ME from England. It shows a travelling steady that uses bushings to support the work while it's being turned down in diameter. He was especially impressed that it was designed and done by a 16 year old in England. The second item is a handout from the 125th Anniversary of the Greenfield Tap and Die Industry. It shows the places in Greenfield that do tool work.

Ron suggested that we need to have a standard format for 1 or 2 page tech tips to put onto paper for our use. Maybe eventually they could all be collected into a book. Handouts are nice, but the tough issue there is how many to make? It'd be great if NEMES owned a copier so that people could copy things in the library right away, since the necessity to take an item, get it copied, and bring it back at the next meeting will put a real crimp on efficiency when the library builds up to the point where its getting used very much. So, keep an eye out for really cheap copiers.

The Boys Scouts eliminated the Machinery Merit badge in 1996. Write them and let them know you think they should reinstate it since it's the only merit badge out of about 120 that has provided scouts with some exposure to the basic tools and skills of the Machine Shop trades. Write the Boy Scouts and let them know that you think the Machinery Merit Badge is important. Send your letter to Mr. John Dalrymple, Chairman, Advancement Committee, Boy Scouts of America, P.O. Box 152079, Irving, TX, 75015-2079. .

Dick Cushing brought in a 5" angle lock vice. They are on special at ENCO for May at \$83. He's real happy with his. He got the 5" because it's 72 pounds and the 6 inch one is over 100. Errol Groff say he used a lift truck to change a 6" vice today. Dick also got a nice set of 10 pair of 1/8" thick parallels and a "Spillmaster" for cutting oil that has a hole in the top for a brush but won't leak if it falls off the machine and lands upside down. He had some Reid Tool Supply Catalogs. He recommends them for rubber isolation mounts, springs, etc.

He started a new job about a year ago and hadn't been feeling to well. It turns out that he's allergic to the cobalt that ends up in the air from a wire EDM machine. So, if you work around a wire EDM and don't feel so hot, see if you've got the cobalt flu.

Don Strang took the info from last months talk on "Roland's Fathers Method to Level a Lathe" and calculated some numbers using trigonometry. For a lathe

where the center line and the support points on the bed form a 45 degree right triangle, if the left leg moves down 2 mils, then the apex of the triangle will move over a mil and down a mill. And your lathe is now going to put a mils worth of taper onto the radius of the shaft you're trying to turn straight. Some things to consider here are that a piece of paper is about 3 mils thick, a Starret level that will measure 5 mils in 12" will cost you \$60 or \$70, and a Starret level to measure half a mil in 12" costs \$320. All of which makes RFMLL look pretty good.

Max ben-Aaron brought in a copy of one of Joshua Rose's books on Machinery. He picked up two of the volumes for \$42 a couple years back. The covers are falling off, but he says they are great books.

Tips And Techniques

by Ed Kingsley

First, the "Group Metal Buy." I was unsuccessful in finding a supplier with better prices, on-hand stock and/or selection, so it looks like Peterson's is it. When I first discussed this purchase with the sales people at Peterson's, I was given 'ballpark' prices on each item, which I was led to believe would cover even small purchases. This proved not to be the case. I was also never told about cutting charges, although I had explained NEMES, and the Group Buy, to the salesman in some detail. The below quoted prices, per item, reflect the amounts of each size of stock being ordered, e.g., the more -- the cheaper, the less -- the dearer. The cost of cutting each bar increases with the diameter, and ranges from \$6 to \$8.50, per cut. There is at least one cut on every item. Total cutting charges were quoted at \$131.50.

Some items went down, a little, but most went up some, unfortunately, quite a bit. The spread-sheet reflects the final costs (including cutting), per item and per buyer. The total cost comes to \$972.55, for 970 pounds of metal. To that, I have added-in a factor of 1.0808% which includes the sales tax, \$10 to cover gas expenses for two people to drive to Worcester to pick it up and take it to Chelmsford, and \$20 for a bandsaw blade to replace the one Rick Tomer will destroy, cutting up the stock. A LARGE HAND, here, for Rick, please! These prices, albeit higher than estimated, are still *considerably* cheaper than buying from MSC, or "Metal Marts".

If you are still "in the game", please bring a check for the amount of your share, to the June 5th meeting, or mail it to me, to arrive before the meeting. If you wish to cancel your order, please contact me ASAP, because any change in the quantity of an item will affect the unit cost to the other members wanting that (those) same size(s). (617) 233-3671 or EdK4@aol.com.

REPLACEMENT NOZZLES FOR SPRAY CANS Radio Shack, Item 64-4301, is a blister card containing (10) 3/32" x 4", red plastic tubes which will replace all of yours that have moved on to wherever it is that socks go. Cost - \$.99.

LITTLE PLASTIC CAPS ADAP, Replace-It Vacuum Tube Caps, are +/- (15) little plastic 'caps', sold to plug the ends of vacuum lines, and are handy to have

NEMES GROUP BUY - 1 2 L 1 4 STEEL

MEMBER	ROUNDS							SQUARES	TOTAL lbs - 970	TOTAL \$ - \$972.55	LBS											
	1.5"	2"	2.5"	3"	3.5"	4"	5"															
Ben-Aaron		12	\$8.22				12	\$1.53	12	\$3.14	1.5"	\$4.67	Ben-Aaron	2								
Evers													Evers	11								
Martha				6	\$10.70								Martha	12								
Piper													Piper	17								
Eshbaugh	12	\$6.11	12	\$8.22									Eshbaugh	17								
McIlvaine				12	\$14.95								McIlvaine	13								
Lovely													Lovely	20								
Boucher M	24	\$12.22	24	\$16.44									Boucher M	19								
Wells	24	\$12.22											Wells	33								
Kingsley	12	\$6.11	12	\$8.22	6	\$7.48							Kingsley	35								
White	36	\$18.33	18	\$12.33	18	\$22.43							White	37								
Jones	12	\$6.11	12	\$8.22	12	\$14.95							Jones	59								
Stickler	12	\$6.11	48	\$32.89									Stickler	75								
Lennox	132	\$67.20	138	\$94.55	48	\$59.80	42	\$74.90	8	\$29.85	12	\$50.25	168	\$21.40	132	\$34.55	42	\$29.40	78	\$64.50	\$526.40	502
Weight/lbs	66	123	67	84	22	43	12	21	18	50			506.04	- Pounds								

GREY CAST IRON

MEMBER	ROUNDS							SQUARES	TOTAL	LBS						
	1"	2"	3"	4"	6"	3"	4"									
Martha		12	\$9.53								\$9.53	Martha	10			
Boucher M	12	\$4.58	12	\$9.53								Boucher M	12			
Cahill	12	\$4.58	12	\$9.53								Cahill	12			
Kingsley	12	\$4.58			3	\$4.49						Kingsley	16			
Craib					12	\$17.94						Craib	22			
Cushman					12	\$17.94						Cushman	22			
Ben-Aaron												Ben-Aaron	13			
Lovely	12	\$4.58	12	\$17.94								Lovely	24			
Piper	12	\$4.58	12	\$9.53	6	\$33.70						Piper	32			
Stickler	24	\$9.15	12	\$9.53	12	\$17.94						Stickler	37			
Lennox	24	\$19.06	24	\$35.89								Lennox	117			
Dalby	12	\$4.58	12	\$9.53	12	\$17.94						Dalby	147			
Weight/lbs	96	\$36.60	96	\$76.25	87	\$130.10	6	\$33.70	12	\$29.40	11	\$43.20	12	\$96.90	\$446.15	464
Weight/lbs	19	79	160	20	28	46	113					464.13	- Pounds			

Member	Material	(X 1.0808)
1 Ben-Aaron	\$16.45 *	\$17.78
2 Boucher M	\$40.33 *	\$43.59
3 Cahill	\$14.11	\$15.25
4 Craib	\$17.94	\$19.39
5 Cushman	\$17.94	\$19.39
6 Dalby	\$128.95	\$139.37
7 Eshbaugh	\$14.33	\$15.49
8 Evers	\$8.22	\$8.89
9 Jones	\$53.08	\$57.37
10 Kingsley	\$58.49 *	\$63.21
11 Lennox	\$259.81 *	\$280.81
12 Lovely	\$51.28 *	\$55.42
13 Martha	\$20.23 *	\$21.87
14 McIlvaine	\$18.32	\$19.80
15 Piper	\$62.76 *	\$67.83
16 Stickler	\$114.97 *	\$124.26
17 Wells	\$28.66	\$30.98
	\$972.55	

NEMES profile V2.001

List only those items you wish made public to all NEMES members.

Please return to Kay Fisher at a NEMES meeting or email to FisherK@exchange.eng.pko.dec.com

If you have already submitted an older profile please do NOT submit a new one. If you have some changes only submit your name and the changed data.

Name: _____ Address: _____
City: _____ State: __ Zip: _____

Home Phone: (____)____-____ Work Phone: (____)____-____
Cell Phone: (____)____-____ FAX Phone: (____)____-____

Email Address: _____

HSM Status ()Amateur or ()Professional (Retired counts) HSM Experience _____ Years

Equipment owned:

Lathe (brand, model,size): _____

Mill (brand, model,size): _____

Other: _____

Current

Projects: _____

Completed

Projects: _____

Interests: _____

Areas of

Expertise: _____

Other

Information: _____

Are you the supplier or vendor of something that you can offer NEMES members at a discount? _____

What have you brought to past Show &

Tells: _____

What can you bring to future Show &

Tells: _____

Have you been a NEMES guest lecturer? If so what was the subject: _____

If you were to be a NEMES guest lecturer what would be the subject: _____

What would you like to see a guest lecturer explain or demo? _____

Look around your shop. What used equipment would you care to sell and at what price? _____

around the shop. I've used them to replace the little 'hats' from oil and cutting fluid cans, that are probably also in sock Valhalla. Many other uses - \$1.99

MSC CONTINUES TO EXPAND "Brooks Precision", is now a member of the greater MSC family (as is ENCO) and are celebrating with an open house, and BBQ, at their 15 Cabot Road facilities, June 3, 4 and 5, 10 AM - 6 PM. They are located near the MSC outlet in Woburn, and are about a mile from Admiral Metals. Make a 'day' of it, Thursday, and drop by NEMES when you're finished. (800) 456-7270

NEWTON'S LAWS OF MOTION (from Rec.Crafts.Metalworking, or:)

Gerold's Laws of Infernal Dynamics 1) An object in motion ... will be heading in the wrong direction. 2) An object at rest will be in the wrong place. (Amen)

NEMES GROUP PROJECT (A "Proposal") An interesting idea occurred to me, recently. I wondered whether it might be possible, or feasible, to organise a joint project in which a (hopefully large) number of NAMES members could participate in the construction of, say, a model or a piece of machinery, which might then:

1) Be donated (or loaned) to the Museum 2) Become the club "Mascot", and taken to shows, everywhere 3) Be a club resource (if it's a machine or attachment, e.g., cutter-grinder, etc.) 3) Be sold for the benefit of the club, for what ever purpose might be deemed appropriate

It could be an interesting experience having twenty or thirty (or more) of us, each building a piece or pieces of a large, complicated project, that might be beyond the scope (or means) of any one of us, a sort of bonding thing, too, maybe. There are some of us, myself included, who are not "modelers", but who would enjoy participating in such a project, and who might just become 'hooked' in the process. I don't want to be the co-ordinator, but I'd be delighted to lend whatever abilities I have to the effort. I'd appreciate any thoughts you might have on this, at the meeting.

-- Ed Kingsley

Classified

Dave Robie has a 1946 SB lathe for sale. It's in Quincy. Give him a call if you're interested.

Don Strang is selling some micrometers for a friend. 1-2", 4-5", 5-6", 6-7", 7-8", and 8-9". All are B&S or Starrett. Good prices. Call Don at 508-456-3611.

HELP!! I'm building a horizontal attachment for my mill/drill, and am having a tough time locating a piece of stock. Would you check your scrap pile of perhaps point me in the right direction? I need a piece of STEEL pipe app. 7" long. The INSIDE DIAM. must be able to be finish bored to 3.750". The O.D. is not vital but should be 4" plus. Thanks. Howard Evers @ 508-987-0654.

Errol Groff has a friend looking for a set of Armstrong Style tool holders - R hand, L hand, and straight for 1/4" HSS tools. If you know of a set please let Errol know.

Here are some items from the NEMES profiles that people have said they have for sale:

Leslie Russell, Palmgren cross slide rotary table \$75

Bill Brackett 8" disk sander \$35 and 1/6 and 1/3 HP electric motors \$10 each.

Doug White knurling tool for an Aloris AXA tool post ~\$150 new, probably worth \$50.

Kenneth J. Launie 12" Reed Prentice gearhead lathe, large, old, no threading or power feed capability. These days the only times I use it is when lacquering telescope tubes, so I may let it go cheap!

Frederick L. Jaggi Filing Machine \$50, Potts T slotted boring base for South Bend \$50.

Dave Robie 4"x4.5" Lever Action Milling Vice, \$50.00; McGraw Edison Table Top Band Saw \$80.00; IBM PC with Hard Drive & Printer \$150; Portable DOS computer \$100.

Raymond F. HasBrouck Brand New Mig Welder, "Schmmacher" 145 Amp Turbo, Northern price \$499.99 Does not fill my need. Sell for \$350.00

Resources

Along with the info on Carbide Drills included later in this issue, John Lelievre recommended Precision Scale Model Engineering and passed along a copy of their catalog. They have lots of little bits and pieces and are full line dealers for Freedom and Zona. Phone (508) 478-3148, Fax 508-478-3590. They have a permanent booth at the Grafton Fleamarket on Rt 140 in Grafton Mass, which is open every Sunday till 3 or 4 PM.

Carbide Drills, Recommendations for use.

The following is from a handout at the 1996 National Association of Watch and Clock Collectors Eastern States Regional Held in Syracuse, NY by Jim Dubois for Carbide users doing watch and clock work. Provided to us at NEMES by John Lelievre

Over the last 4 years we have used carbide drills extensively for operations that were previously either difficult or nearly impossible. We have also sold thousands of carbide drills. We do not represent ourselves as experts in the field. However, we are able to speak from experience concerning the proper use of the enclosed drills. To say carbide is brittle is a vast understatement. The following will assist you in using the drills, prolonging their life, and increasing your satisfaction with the product. We highly recommend using eye protection when using carbide products of any sort.

1.) Carbide will not stand any side pressure what so ever. It will break, unequivocally.

A) Always, always use in stable machine, i.e. drill press or lathe.

B) Do not attempt to hold the drill by hand. It must be held in a tailstock or similar device to prevent side pressure. Work in a drill press should be clamped to the table.

C) Do not, repeat do not, ever use in a "dremel" tool, or other hand held high speed appliances.

2.) Lubricating the drill. Tap Magic works well as do other drilling, tapping, and cutting fluids.

3.) Run your machine at a slow speed. Slow in this case means a few hundred RPM maximum. Backing out frequently to clear chips is required. Lubricate each time you clear chips.

4.) Carbide should be used on hard materials only. We do not recommend carbide for brass, aluminum, copper, etc. These materials are "soft and sticky". Carbide is not required to drill these materials, and given their "sticky" properties, they will break drills frequently.

5.) If drill starts to dull it is necessary to stop immediately and resharpen the drill using either a proper CBN or diamond wheel. Any effort to "force" a dull drill will result in a broken drill in your work piece. Not a pleasant place to find one's self.

6.) If your work requires "drilling through" the piece, you must back up the work with similar material. As a drill breaks through there is a locking action that occurs. High speed steel will usually survive such treatment. Carbide will not!

7.) In the event you do break a carbide drill in your workpiece (you will, no matter how careful you are, sooner or later) the best method for removal we have found is suspension of the piece in an ultrasonic cleaner with the hole downward. The carbide chips will most often vibrate loose and fall out. Another technique involves flattening the end of a small diameter piano wire, inserting it along side the broken bit, twisting the wire until it locks and then pulling the wire and hopefully the broken carbide tip.

8.) The smaller the drill the more critical the above points.....

Humor

I heard the following joke a couple of months ago at work, and just the other day heard it again, this time from Keith Bradley in South Africa via the internet. I suppose it could apply to model engineers as well, so here it is:

A guy was crossing a road one day when a frog called out to him and said, "If you kiss me, I'll turn into a beautiful princess". He bent over, picked up the frog and put it in his pocket.

The frog spoke up again and said, "If you kiss me and turn me back into a beautiful princess, I will stay with you for one week." The guy took the frog out of his pocket, smiled at it and returned it to the pocket.

The frog then cried out, "If you kiss me and turn me back into a princess, I'll stay with you and do ANYTHING you want." Again the guy took the frog out, smiled at it and put it back into his pocket.

Finally, the frog asked, "What is the matter? I've told you I'm a beautiful princess, that I'll stay with you for a week and do anything you want. Why won't you kiss me?"

The guy said, "Look I'm an engineer. I don't have time for a girlfriend, but a talking frog is cool."

The NEMES Gazette

c/o Stephen C. Lovely

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