

A VERY FAST TRAIN!!!

MERILYN BAILEY AND BARBARA RYMAN GO TO JAPAN

B - It all seems an age ago when I said to Marilyn, "Hey, I won the Chairman's Award in the Japan Exhibition and I'm thinking it would be fun to go there to attend the Presentation Party" and she said "Can I come too?". Well, what an offer! Travelling solo to Japan did seem a bit daunting to such an inexperienced traveller as myself so the possibility of having a travelling companion made me get serious about the idea. Over the years Marilyn and I have shared exhibitions and we've attended a conference together (always hilarious fun) so I knew together we would conquer any travel challenges with a certain amount of hysterical good humour.

M - Now, the way I remember it. Barbara told me that she had won the "Chairman's Award" and I said, "you're going over to collect it aren't you?". To which she replied no..., possibly..., maybe..., so I said "check if you've got enough frequent flyer points. If you have, then I'll go with you". Obviously we both had enough frequent flyer points.

B - After much rapid organizing we were on the plane to Tokyo. Now was our opportunity to decide what vital words and phrases we needed to learn to get by. I think we managed six or seven words between us and they were amazingly handy, allowing us to be both polite and apologetic.

We decided to travel first to Kyoto on one of the Fast 'Shinkansen' Trains. We'd bought a Japan Rail 7 day ticket before we left Australia. It allowed us to travel on most trains and some buses and was fantastic value and was instantly recognised by rail staff who were very helpful considering our seven words of Japanese and their seven words of English. I think we benefited from the residual good will and bonhomie from the Soccer World Cup that had just been held in Japan (a contest I had watched until my eyes hurt). We came through customs after our overnight flight and descended under the airport to catch a train to Tokyo Station and then the 'Shinkansen' to Kyoto. Have you ever been to Tokyo Central? Huge, monumental, frantic, sixtyzillion-trillion people rushing. Don't panic - just follow the yellow JR line on the pavement and the Shinkansen signs.

Dear Enamellers,

MORE CHANGES FOR DEAR OLD AEN !

Time for putting the newsletter together is getting harder and harder to find. In discussion with many enamellers the feedback I'm getting is that a quarterly Newsletter would be, on the whole, perfectly acceptable to everyone. I also feel that our one 'colour issue' looked so flash and professional that I would like to be able to continue on with that. It's so much more interesting to see the beautiful colours of the enamel works shown.

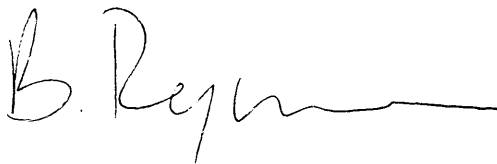
The issues will come out in March, June, September and December. They will have colour on the cover and back page. So this is a great opportunity for anyone wanting to finally feature on the front cover, and its also an opportunity to do something special with the back page. If you have done a front cover, please do another and we all enjoy seeing what new work everyone is doing.

The cost of the colour printing is quite a bit higher; add to this the increases in postage and all other costs associated with the newsletters' production, it does mean its time to increase subscriptions. These haven't been increased since August 1995. I think you'll agree that was an awfully long time ago! You'll see the details in the subs box.

For those of you who participate in overseas International Shows, and need exhibition information as soon as it's available, please send me email numbers so that I can do an instantaneous mail out to you all. This will save me a lot of time and get the information to you much more quickly. (I'm sure that if you have email access, you'll be getting this info off eENAMEL website anyway)

If you don't have an email, use a reliable friends' number and they can print off the forms and give them to you. As a last resort, I can still post them out BUT YOU MUST LET ME KNOW WHAT YOU NEED.

Editor



☞ Subscriptions are to be made out as usual to the Australian Enamel Newsletter, **and are to be sent to Margo Carter at 7/30 Cambridge St. Epping 2121 NSW Australia. Phone: (02) 9868 2909**

☞ Subscription enquiries are to be made to Margo and also to Merilyn Bailey. Phone: 9487 6333 and Email: [merilyn@ozemail.com](mailto:merilyn@ozemail.com.au) (note: Merilyn is back on line but she wants everyone to realise that she checks her emails once a week)

☞ **The deadline for material** for the next issue is March 23rd, 2003. All articles, comments and news are welcome. Send to Barbara Ryman, 71 George St, Thirroul 2515 NSW.

Ph/Fax 02 4267 2939
Email: bryman@ozemail.com.au

THANK YOU

Heidi Wellings, Carolyn Delzoppo, Kate Foster, Jill Parnell, Merilyn Bailey, Margo Carter

NEWS

☞ *Vitrum Signum* will be undertaking annual stock-taking between 29th-31st March 2003 inclusive.

At the same time *Vitrum Signum* is taking the opportunity of relocating to more spacious premises and will be open for business as usual on Tuesday 1st April 2003 at:

Diatherm & Ancillary Equipment
Gresham Works
Mornington Road
North Chingford
London E4 7DR

Contact: David Alexander-Smith
Tel. No: +44(0)20 8524 9546
Fax No: +44(0)20 8524 9546

Please note: Payment by cheque for orders placed on or after 1st April 2003 should be made payable to Diatherm.

Regards

Sarah Wilson

☞ Spotted on eNAMEL links information is Margo Carter's Web page. Very nice!

☞ Mary Chaduk will be visiting Western Australia in mid May 2003. She will be giving a workshop Entitled "New Forms, New Functions for Enamelling" to JMGA members.

☞ Jill Parnell received an Encouragement Award in the 16th Cloisonne Jewellery Contest in Tokyo, Japan.

She also had three Plique a Jour drinking vessels accepted in the AUSGLASS Exhibition held in January at the Moores Building Gallery in Fremantle, WA.

MEDIEVAL TECHNIQUES

If you think modern enamelling is tough, read this for enamelling in the Middle Ages

by Audrey R. Komrad

A. SETTING THE CLOISONNE WIRES: Cut strips of the thinnest possible gold; out of these bend and Shape with tweezers, whether circles, scrollwork, flowers, birds or animals. Arrange the pieces delicately, each in its proper place and secure them with moistened flour of wheat mixed with water and heat over warm coals. When you've completed one plaque, solder it, taking care that the delicate work and the thin gold do not become separated and melt.

Pick up the vessel with solder and shake vigorously to mix the powder and smear the solder carefully with a slender feather all over the wires. Put into the fire and blow with mouth and bellows till you see the solder running around everywhere as if water was being poured on it. Sprinkle a little water over it and wash and again smear solder over it and repeat till all wires are firm.

B. SOLDER FOR GOLD: Take Beechwood ashes and make a lye out of them. Strain through the same ashes until it becomes thick. Put in a small pan and boil it down to a third; then put some soap in and a little fat from an old pig. When cold, strain it through a cloth and put into a copper vessel which should be solid except for a small hole on top and he round so it can be stopped with a finger. Set this vessel aside.

Then take a flat, thin piece of copper, wet with water and rub salt on both sides. Put it in the fire and when it is red-hot quench in water, in which whatever is burnt off the copper should be kept. Again rub salt on the copper and do as before and keen on doing so until there is enough. Pour off the water and dry out the powder in a copper pot and grind it in the same pot with an iron hammer until it is very fine. Put it on the coals and again burn it and grind as before. Add soap and mix carefully; put it on the coals and again burn it and grind again.

Then pour the lye out of the former vessel and into the one which contains the powder, mix and let it boil for a long time...gold and silver are soldered with this composition; but with gold the powder should be stirred, whereas with silver it should not be stirred.

C. ENAMEL: When you have built up and soldered all the plaques, take all the kinds of glass you have prepared, and breaking off a little from each piece, put all the fragments at the same time on a single sheet of copper, each fragment by itself. Put it into the fire and build up coals around and above it. While you are blowing with the bellows observe carefully whether the fragments melt evenly; if so, use them all. Take all the pieces of tested glass and put them one at a time in the fire and when each one becomes red-

hot throw it into a copper pot with water and it will immediately burst into tiny fragments. Quickly crush these fragments with a pestle until they are fine. Wash and put them into a clean shell and cover with a linen cloth. Prepare each color separately this way.

Now take one of the soldered plaques and stick it with wax in 2 places onto a flat, smooth board. Take a finely cut goose quill with a long and unsplit point, and with it draw up some of whatever glass color you want which should be moist. With a long, fine pointed tool, scrape the color off the quill and fill in where you want it with as much as you want. Do the same with each of the colors until one plaque is filled.

Then take away the wax with which it was stuck and put the plaque on a flat, thin iron tray which should have a short handle. Cover this with another pieces of iron which should be concave like a small bowl and should be finely perforated with holes that are smooth and wide on the inside, while on the outside, they are narrower and jagged and serve to keep off any ashes that might fall on it. This cover should also have a small ring on top in order to put it on and lift it off.

After this, heap up big, long pieces of charcoal and burn them strongly. Make a place among them and smooth with a wooden mallot so that the iron tray may be lifted onto it with tongs. Cover it and set it into position; build up charcoal on all sides and above it. Take the bellows with both hands and blow from both sides till the coals blaze evenly. You should also have a whole wing of a goose or some other large bird, which should be fully spread and tied to a large stick. Fan the coals with this and blow vigorously until you see between the coals that the holes in the cover are redhot inside. Cease blowing and wait a half hour and uncover it gradually -till you remove all the coals.

Again wait till the holes in the cover grow black inside; lift the tray out by its handle and, keeping it covered, put it in a corner behind the furnace till it's completely cold. Open and take out the enamel and wash it. Fill it again and melt as before. Continue this way until everything is melted and it is evenly filled throughout.

D-POLISHING THE ENAMEL: Take a piece of wax the length of half a thumb. Fit the enamel in this so that on every side there is enough wax to hold it. Rub the enamel on a flat smooth piece of sandstone with water till the cloisons appear evenly everywhere.

Next rub it for a long time on a hard, smooth hone until it acquires clarity. Moisten the hone with saliva and rub it on a potsherd of the kind that are found broken from ancient pots until the saliva becomes thick and reddish; then smear it on a flat, smooth lead plate and rub the enamel gently on it till the colors become translucent and clear.

Again rub the sherd on the hone with saliva and smear it on a goatskin fastened to a flat, smooth

wooden board. Polish the enamel on this till it is completely brilliant, so much so that if half of it becomes wet while the other half remains dry; no-one can tell which is the dry part and which is the wet.

Excerpted from: Theophilus, ON DIVERS ARTS: The Foremost Medieval Treatise on Painting and Metalwork, Dover Publications. (Reprinted with permission from EGS Newsletter, Volume XXIV, No. 1, October 2002)

BOOK REVIEW

Enameling On Precious Metals by Jeanne Were-Hartley

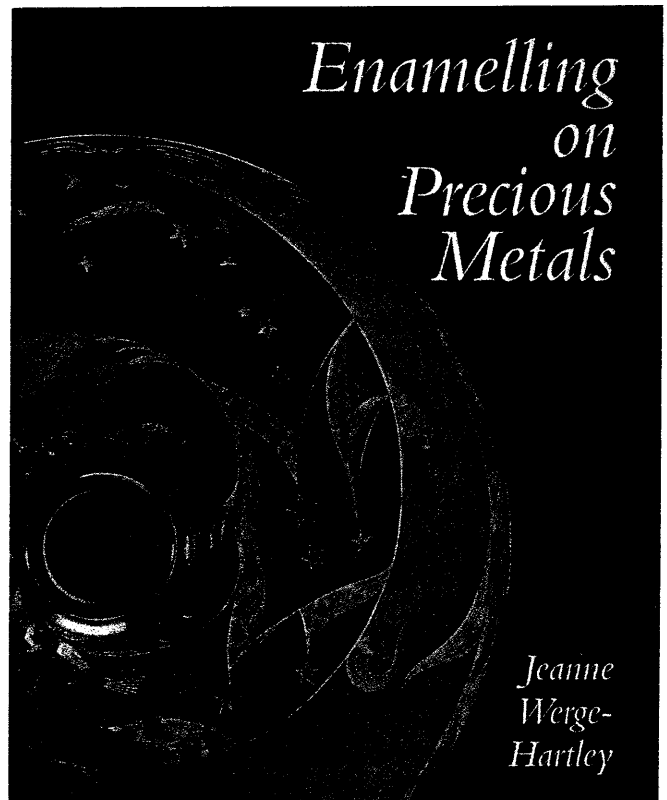
Review by Sarah Wilson

I am usually in a dilemma when asked to recommend one book on enamelling, especially when talking to a student, somebody who has been enamelling for some time, or a jeweller/craftsperson. Mostly the books I have previously come across are aimed at beginners or hobbyists. Whilst these are very good as an introduction, and may contain one or two nuggets of useful information amongst the endless pages of sifted, sgraffito enamel coasters and pendants decorated with millefoire, there is no one book containing advanced information and technical advice.

Books on enamelling often contain Gallery Pages of inspirational work produced by practicing enamellers. These bear no relation to the (basic) projects on other pages, so the reader has no way of spanning the gap between producing a copper plaque following step-by-step instructions, then turning the page to see a jaw-droppingly beautiful cloisonné vase by Fred Rich.

"Enamelling On Precious Metals" refreshingly does not bow to this format and throughout there are numerous photographs of the work of many enamellers currently working within Britain. The book is divided into chapters dedicated to a certain technique - cloisonné, champlevé, plique-à jour, etc. - and interspersed with the technical/how-to-do-it text there are sections about enamellers who specialise in that technique. These describe their career, their particular approach to colour and method of working, and are written in a knowledgeable, informed, and personal style of one professional understanding and admiring the work of another.

The technical text, whilst well researched, is not prescriptive, offering various methods that the reader can experiment with, written in a straightforward manner. It proves that there are not right and wrong ways of enamelling, just many different approaches, and it is for the individual enameller to judge what works best. I particularly liked the little blue boxes



CROWOOD ISBN 1-86126-506-9

scattered amongst the pages like Post-It notes of pertinent information.

As a tutor I am always advising students of the importance of testing enamels and keeping colour notes, so the chapter describing firing enamels on different metals will become prescribed reading for students who are rather loath to take note of their tutor's pedantry. This enlightened chapter aptly reflects the depth of enamelling knowledge the author has and her ability to put this across succinctly. Such knowledge and obvious enthusiasm for her subject shows that this book could only have been written by a practicing professional enameller. It is refreshing to see a book published which will hopefully broaden the acceptance of contemporary enamelling in the UK as a serious, professional art form as opposed to the more hobby/craft pigeonhole into which it tends to be foisted.

There are British enamellers working on a larger architectural scale whose pieces are just as innovative and varied as those shown within these pages and it's a pity that the book's remit doesn't encompass them - but that would be another publication completely.

Enamelling On Precious Metals by Jeanne Werge-Hartley CROWOOD ISBN 1-86126-506-9

ENAMELLED BEADS USING COPPER FOIL

by Heidi Wellings

My use of copper foil for bead making came about because of my frustration with having the enamel crack off the ends of beads made with copper tubing. I have found that this does not happen with foil-based beads.

Relatively simple equipment is all that is needed. I use a squat Primus Cylinder No.2008 filled with propane gas (refillable at garages). Attached is a rigid goose-neck (removable) to which I screw a No.A nozzle pinpoint burner.

Materials needed are:

- pre-rolled foil beads (see below)
- selected enamel colours. either transparent or opaque
- inclusions for the last one or two coats which can be threads, frit or even gold or silver foil which need a transparent coat as the last layer. In place of coloured frit, a lead-free enamel on top of the last lead-bearing enamel will separate and resemble frit.

My enamelling bead rods are stainless steel knitting needles hard soldering rods, or lengths cut from the dry cleaner's thin coat hangers which I cut into about 30 cm lengths.

My enamel powders and frit are in small pyramid mounds on top of inverted small bowls either of glass, ceramic or stainless steel. This gives me freedom of movement when rolling the bead in the enamel after each firing. The bowls sit on a 35 cm square tray just in case I drop a red-hot bead.

Foil beads can be from the smallest round shape to about 2.5 cm long and each one will take about 12 minutes to enamel. My best time was 7 in an hour. A bead will need a minimum of about 5 coats for a small one to about 12 to 15 coats for a large round one. For a medium bead. cut a triangle from the foil about 1.5 cm wide, about 5 cm long, and tapering to about 4 mm at the narrow end. Trim the points off the ends.

Roll the foil around a knitting needle that is slightly larger than the enamelling rod diameter. Commencing at the widest end of the foil, wind tightly making sure to keep the foil centred.

I set up the work area working from right to left, with the gas cylinder in front of me upon a stool facing away from me with the burner approximately 13 cm above the work area. Behind the stool I have my chair and to the right I have another, on the back of which I rest my arm. This method works for me but I realise that others have their own methods.

When I light the torch, I turn down the flame until the blue centre is approximately 3 cm long-the hottest part of the flame is at the end of this blue flame. Whites and reds must be fired well up into the white flame area to avoid discolouration. Practice will find the best working area for a particular colour. To achieve a rounded look, more layers of colour are applied, and the bead must be instantly rotated whilst in the flame. A pear shape is achieved by slightly tilting the bead rod after the last firing while the enamel is still molten, but keep rotating.

Firstly, thread the coiled foil bead on to your enamelling bead rod and centre the bead. Rotate the bead just above the blue flame until the bead becomes red hot. The rod will not become hot if kept rotating. All grease and impurities will burn out with this initial firing. Do not overheat at this stage as you could burn the foil.

Whilst the bead is red hot, roll it in the enamel powder, give the rod a tap with a spatula to dislodge any loose enamel from the rod, and re-fire. After each roll in the enamel powder, I shift the bead a couple of millimetres along the rod either way to prevent enamelling the bead to the bead rod. Repeat the heat and roll process until the desired shape is achieved. Keep rotating the rod or beads will be misshapen. This can be rectified by applying another coat of enamel and rotating quickly.

When the bead is completed, I shift it along the bead rod to make sure it has not adhered and let it cool on this rod which I suspend across a suitable container. I usually work on three or four rods at a time. By the time I have finished the bead on the last rod the first bead and rod will have cooled.

Finish the beads off with a few strokes of a diamond file at each end of the bead and run a rat-tail file inside the bead to clear any possible dags. If the bead is large and heavy, I insert a fine piece of plastic tubing which just protrudes past the end of the bead to prevent the dental floss silk or tigertail thread from being cut. This fine tubing is available from Dick Smith stores. I obtained mine from a BBC store where it had been used as a tie around a bundle of larger gauge tubing.

To assemble the beads I always use tigertail flexible steel wire. The enamelled beads are mostly used in conjunction with silver beads hand-made in Third World countries. The foil beads make up into a lighter weight necklace or earrings.

For me, the biggest advantage of this method of making enamelled beads is that the ends do not come off.



Torch-Firing Enamel Beads with Aileen Gedes

by Irene Davis

One of the high points of the NCEG Conference was Aileen Gedes' enamel bead making demo. For anyone who doesn't know, Aileen is well known for her beautiful and almost organic-looking enamel over-copper beads. Aileen's technique is one that she has developed through experimentation. It definitely breaks some of the rules that I was taught as a beginning enamel bead maker, but it also definitely works. Some of the details that she shared may help to explain her success.

First, the gas. Aileen uses propane for her torch firing. It is also permissible to use MAPP gas or natural gas. Acetylene is too dirty and creates muddy colors.

Aileen's set up for the demo was a Benzomatic Torch clamped in a small vise. Clamping the torch in the vise allows you full use of both of your hands for manipulating the beads and enamels.

Aileen places her enamels on 3" squares of copper. She experimented with aluminum foil, but found that it didn't hold up well over time. If you put your enamels in bowls you won't be able to reach them with the bead on the mandrel. Having your enamels conveniently displayed allows you to make split second decisions about adding colors. Once you start the enameling process you want to be able to keep working until you are finished with the bead. Not all of her enamels are finely ground. Some contained 1/8" chunks of enamel.

Use a pipe cutter to cut the copper pipe into the desired length and solder on round disks for the ends. Make sure to put a hole in the center of each disk before you solder it in place. After all, this is a bead! Aileen uses hard solder and cleans off all visible solder on the outside of the bead. Using disks on the ends of the beads means that when the bead is strung it will be centered on the threading medium, just like a normal round glass bead. Aileen will cap the ends of the enamel beads later in the process. This gives a finished appearance to the bead and covers any discoloration that might result from the use of hard solder.

Lots of bead crafting locations will be more than happy to sell you beading mandrels, but Aileen prefers to make her own from stainless steel welding rod. She cuts the rod into pieces about a foot long and tapers one end with a file. The tapered area is about three inches long and it comes to a sharp point. Do be careful of this point, you can stick yourself with it, especially when taking the beads on and off. Paint the mandrel with wet kiln wash and immediately place the bead on it. The kiln wash will help to anchor the bead to the mandrel and block the bead holes so that

enamel will not flow into them. The kiln wash helps keep the copper bead from becoming permanently attached to the mandrel by the enamel.

Aileen uses a combination of old leaded Thompson enamels and some of the newer unleaded colors in her work. She keeps the bead three to four inches from the torch head. When the copper is bright red start rolling it in the enamel. Continue to roll the mandrel slowly between your fingers, while moving the bead back and forth in the torch flame to keep the bead heated as evenly as possible. Establish a good, even coat of finely ground enamel all over the surface. Subdued lighting will help you to see what is going on with your bead.

Aileen started her demo bead with three layers of white. She directs the flame so that the enamel will melt over the soldered ends of the bead. If the solder lets go, the enamel will hold the pieces in place. Once the bead, and the bead ends had a good even coat of enamel, Aileen began adding thin blue layers of enamel, three in all. She then got the bead very hot and dipped it in crushed chunk enamel. Heat the bead until the chunks melt and use a thin stainless rod to drag the molten enamel around on the surface of the bead. She repeated this melting and dragging technique with white and blue chunks until she got the effect that she wanted.

The finished surface of the bead is glassy, but not smooth. The mixed colors created quite a thick layer of enamel, probably an eighth to a quarter of an inch depending on the area. The bead that she made during the demo was larger in the middle than on the ends, giving it a barrel shape. The enamel definitely wrapped over the ends of the bead, helping to hold the end disks in place. As a finishing touch Aileen covers the ends of the beads with soldered metal caps.

Aileen's demo generated a lot of excitement and good questions among the observers. Her beautiful beads are an inspiration to us all and definitely something to aspire to.

(Reprinted with permission from NCEG Newsletter, February 2003)

Australian Enamel Newsletter

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7/30 Cambridge St, Epping 2121 NSW

Subscriptions - 4 issues per a year

Regular - \$25.00 Student - \$12.50

New Zealand - \$28.00

International Economy Air Mail - \$28.00

TIPS

☞ To preserve the shape of a piece made with thin gauge metal (i.e. tooling foil) and prevent warping, roll and flatten the edges to create a "hem" which will strengthen the rim.

☞ Lead-free transparents, Sea-Foam Green and Pink directly for copper and also Wax Yellow - When applied directly on copper (no flux first) turn beautifully, iridescent after repeated high firings.

Marilyn Tendrich

☞ When working on a small enamel that might require foils in a few cloisons, it's easier to cover the entire piece with foil before attaching your wires. Flux - foil - flux - cloisonne wires. Where you do not want the foil to show, you could use opaques.

Eileen Gately

☞ I have found that SL 28 Pink for silver (Ninomiya), after many firings, i.e. 10 firings, loses its Transparency and becomes translucent or milky.

Diane Almeyda

☞ If you use photo-etched silver metal (can be ordered from David Fell), put flux over it, then enamel color over the flux. It makes the color look richer.

☞ Ninomyia leaded enamel G701C, Transparent pink, stops yellowing on silver.

Alexa Smarsh

(Reprinted with permission of the Enamel Guild South newsletter.)

☞ The following hint is taken from the article:

Repousse on Copper Tooling Foil using Lead Free transparent Enamel, Glass on Metal, Vol. 9 No 3, June 1990, p.58, 59 & 61 by Tom Ellis.

Choice of Enamels: Please choose a lead-free transparent color with the following considerations in mind: Most of the lead-free transparents are very suitable for firing direct on copper, however, there are some colors that chemically react with copper when fired directly on it. These are the cadmium selenium enamels: Woodrow Red 2880, Sunset Orange 2850, Mandarin Orange 2840, and Egg Yellow. Soft Yellow 2215, China Pink 2825 and Geranium 2810 are gold bearing colors which also turn opaque when fired directly on copper. All of the above colors maybe used if a coat of clear flux (glass) is fired first. The following colors are too dark to be used on this project as they would hide the embossing: Oil Gray 2925, Prussian Blue 2680, Manganese 2780, Passion Purple 2745 and Turquoise 2435.

(Reprinted with permission NCEG Newsletter, Jan 2003)

"FRESHLY REMEMBERED" Tips from earlier issues. (Reprinted with permission, Guild of Enamellers, Autumn 2002)

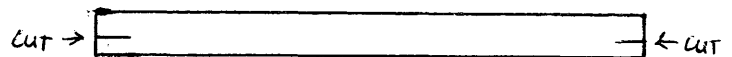
Cloisonné:

*To keep shaped wires in place while you are forming the rest, use a piece of Perspex or glass totally covered with double-sided tape on one side. Put the wires on the sticky side with your initial drawing below the perspex so that you can see exactly where they should go. This not only keeps the wires in place while you are completing the design, but also allows you to travel with it or store it away with another flat piece on top. Removing the wires is simply a matter of lifting them carefully

With tweezers in the middle of the wire - or both ends at the same time. A piece of transparent sticky plastic can be used in the same way if held down on the drawing with adhesive tape.

* Wires look best if they are narrow for opaque enamels, but are better wider for transparents, as this allows for shading and reflection.

* For making straight lines (if you can't extend the wire beyond the edge of the piece and bend it back to form another line), make a tiny cut across each end of the wire and bend the bottom strips at right angles to the main strip. This will stabilise the wire.



*If a wire won't lie flat when being stuck down before firing, hold the raised bit flat with your first finger and place your second finger about half an inch away from it on the wire. Gently pinch the section of wire between your fingers with tweezers and lift slightly. This should flatten the raised bit without distorting it further.

*Brass cloisonné wire can be used for only 2 or 3 times because the zinc in the metal comes out after a few firings and the enamel will no longer adhere to the brass, pulling away and leaving pits.

SUPPLIES AND RESOURCES

New Product from Schlaifer's: Thin Firing Sheet is the answer for those who are enameling small, hard-to-put-on-trivets, items. It is remarkable in that it does not stick to enamel, or significantly mar the surface. It will leave a haze on the enamel surface, noticeable in transparents, not so much on opaques.

Thin Firing sheet eliminates warpage because the heat reaches every part of the enameled object evenly. Enamel the back side of your object and then when you are ready to fire the front side, place this paper on the firing rack or base plate with your piece on top of the paper.

This "paper" looks similar to drawing paper. It is a ceramic impregnated paper able to withstand firing to 1600 degrees F. It is a one time use paper, so cut the paper to fit your object. When it is fired it reduces to a dusty tissue. As with all ceramic fiber material, avoid breathing the residual dust.

If you wish to order sheets are 20.5" x 20.5" and cost \$2.50 ea, 12 sheets for \$25.00. Part Number is TFS. Joan Schlaifer, Schlaifer's Enameling Supplies, 1441 Huntington Dr., PMB 1700, South Pasadena, CA 91030. (800) 525-5959 or (626) 441-1127.
urunv.ertamelirtg.com

Cold Joining Presentation with Susie Gance

By Sandie Bradshaw

This was a matter of fact presentation working with the tiniest joints I have ever seen. Suzie has both patience and excellent eyes, and a flair for decorating joints. They were exquisite! Her presentation was clear and straightforward. She showed tools you would need and the procedures for accomplishing cold joins with a good level of craftsmanship. She also gave out excellent handouts. She demonstrated tube riveting, slots and tabs and threaded connections.

Some of the hints I picked up from her were the following: 1. Rivets cannot be used on narrow pieces of metal. Rule of thumb: the metal should be at least 1/8" wide.

2. One can mount a flush rivet and then enamel. 3. One rivet acts as a hinge. 2 flat pieces must be held with 2 or more rivets.

4. For multiple rivets, drill one, rivet it then drill another rivet it. Pre-drilling all the metal can move, it doesn't work.

5. If you are doing spacers between metal they should be no more than 3/8".

6. When making screwing joins (nuts and bolts) leave space between the screw teeth and head where the solder can run.

7. Use dapping punches to spread rivets and work equally from both sides.

8. Don't use silver for screws. It won't hold up. 9. If drill bit gets stuck then soak in alum and it will come out.

10. Have washers and screws conform to the surfaces they are joining.

For supplier suggestions she brought up that she likes to use prefabricated rivets. R. J. Leahy has nice aluminum ones for joining after enameling. Someone from the audience also said if you are in the Seattle area the Boeing Surplus was great. She also likes the Snapon tool tap and die TD 2500.

(Reprinted with permission from NCEG Newsletter, February 2003)

KEEPING YOUR KILN CLEAN

When it comes to the mess on the floor of a kiln, all the old hands know that prevention is so much better than cure. Admiring a pristine new kiln we think, "I'll be so careful". "My hand will never shake". "I'll close the door so carefully" - and the next thing we know is that trivets are difficult to lift and trail long glass fibres behind them.

A recent contribution to the Orchid web site discussed various methods of prevention.

*Use ceramic fibre board to make a removable shelf. This can be laid on the floor of the kiln or on top of a trivet. It comes in sheets, which can be cut to size with a sharp knife and scraped clean when it becomes contaminated with enamel. Eventually it gets too thin and needs replacing. Work can be laid directly on it and it is not supposed to stick, although it does tend to give a texture where it touches.

* Ceramic fibre paper is thinner, the 1/8" thickness can be used many times and 1/32" several times. It does not stick to the back of your work, but gives a slightly textured surface. It can be used up to 1260°C, so gives no problem to enamellers. There are several types, 110-J Fiberfrax Paper is a bit brittle and must be used flat. As a kiln floor 'carpet' this could be a virtue, but there are softer types on the market.

* There is an even thinner, light-weight ceramic impregnated paper (Bullseye Thinfire Shelf Paper), which gives a glossier finish on the finished product and can be used up to 800°C.

* At Corning Glass, they sift powdered kiln wash onto the shelves and, when firing is finished, scoop it out and use it again. It can be sifted to remove contamination (wear a mask when doing this).

Ceramic fibre board is available from *Vitrum Signum and Fiberfrax Board and Paper from Unifrax Ltd., Mill Lane, Rainford, St. Helens, Merseyside WA11 8LP. Tel: 01744887600.*

*Should the worst have already happened, spilt enamel can be removed with a paint scraper. Have the kiln hot, switch it off, wear heat proof gloves and scrape very gently. Any remaining residue can be covered up with a layer of batt wash mixed to a cream with water and painted on. Leave to dry thoroughly.

Batt wash, from potters suppliers (Potclays Ltd., Brickkiln Lane. Etruria, Stoke-on-Trent ST4 &BP Tel: 01782 219816) or use 'KILNKLENE', from Milton Bridge, Unit 9, Trent Trading Park, Botteslow St., Hanley, Stoke-on-Trent ST1 3NA, England.

(Reprinted from the Guild of enamellers, Spring Journal 2002)

The jewellers among us are accustomed to producing the final shine on our work by rubbing it down with 'Diagrit' or carborundum, filling in the dips with more enamel, rubbing down for a second time and then firing it to produce an even shiny surface. We may have noticed that some American enamellers achieve a particularly even and lustrous shine, but assumed it to be the effect of their enamels or superior skill.

However, at the American Enamelist Conference last October, all became clear - they rub down the final firing with 'wet & dry' and then polish it. Don Viehman gave a fascinating 'break out' session on "The Surface Finishing off Enamels". Finishing a piece properly should take as long as enamelling it in the first place and can be broken down into stages:

1. Finish the enamel ready to stone down.
2. Stone it coarsely to remove pits.
3. Flash fire it to give a shine.
4. Fine stone it and/or rub down with varying grades of 'wet & dry'.
5. Polish it.

Consideration must be given to the degree of polish best suited to the design of the piece. It can vary from matt or slightly shiny to very glossy indeed. Don works with a lapidary machine fitted with expander belts. He stressed that the machine makes it all easy, but must not be done too fast or you may lose the effect by overheating the piece, slower is safer.

On the subject of safety, he stressed the points to watch when working with revolving machinery. As this grinding has to be done with water (dry grinding destroys the enamel surface), care must be taken not to mix it with the electricity. Long hair and loose clothing can be caught in the machine, with painful consequences. Particles of grit and enamel can be thrown off into the eyes and lungs. So, on with the goggles, the good quality dust mask, tie your hair back and wear appropriate clothing.

Coarse stoning is done with 320 grit, followed by 220. At this stage the enamel surface can be reshaped and any pits will show up. Don uses a drum arbour (running at about 1700 rpm) with silicone carbide belts; he prefers this to a diamond belt.

After this smoothing and reshaping he flash fires the enamel surface, emphasising that it is not a full re-fire. Flash firing will curve the edges, making it very strong if it is to be bezel set.

Next, he fine stones it to get rid of any little dips due to enamel flow and, at this point, he works by hand rather than machine. The belt gives a combination of planes, which is not good for polishing. 400 grit

silicone carbide paper (wet&dry) used with water gets rid of hills and vales. Stop when it's smooth as it does put in scratches, which are taken out by the subsequent rubbing down. After the 400 grit, use 600 and work up to 1500. Work in one direction only.

When the enamel is made shiny with 1500, it can be left at this stage or given an extra shine with cerium oxide. To polish with cerium oxide, use a leather covered lapidary lap. Brush on a mixture of the cerium oxide and water, polish gently for about 10 minutes to achieve the optimum gloss.

All the above can be done by hand if you don't have access to the machine, it just takes a lot longer. For ease and speed, use carborundum sticks for the coarse grinding, wrap the wet&dry paper round a piece of wood and do the same with the piece of leather for the cerium oxide. (Tin oxide can be used, but it is not so good.)


(Reprinted with permission from the Guild of Enamellers, Spring Journal 2002)

MORE NEWS

NATIONAL ENAMEL SYMPOSIUM.

The next National Enamel Symposium, organized by Anna Margot Originals of Brisbane, will be held in Sydney in 2004. The Sydney members of The Enamellers Association are assisting by organizing the accompanying Exhibition. It will be held in the Mosman Art Gallery from 4th of September to the 10th of October, 2004. The exhibition will be called "Glass on Metal: Enamel – Fusion of the Elements".

Mary says " there is lots of wonderful wall space so you can think big!" More dates and information will be coming out in the next issue of AEN.

 Jill Parnell, Glenice Lesley Mathews and Barbara Ryman have had work accepted for "on the EDGE", the International Enamelling Exhibition held in conjunction with the U.S. Enamelist Society's conference.

NOTE: If you have won any prizes, been accepted into exhibitions, are having your own exhibition, do let us know as we all enjoy hearing good news about each other.

Using Gold and Silver Leaf

on pre-enamelled metal

by Dorothy Cockrell

Leaf is thinner and cheaper than foil. It is much more difficult to handle, but can give very subtle effects and will reticulate well.

The instructions for loose leaf are:

1. Make the work space as draught free as possible and breathe carefully.
2. Take a sheet of tracing paper, fold it in two and then ease the leaf together with its own tissue paper into it. (The other sheets of leaf in the book can be held down with another scrap of paper.)
3. Lay the folded tracing paper flat with the leaf inside and draw the desired shape on it.
4. Cut or tear through all the layers of paper, then lay the whole thing carefully on the table with the side showing the tissue paper uppermost.
5. Remove the top layers of paper.
6. Wet the enamelled metal slightly with a damp finger, then invert the piece and drop it onto the enclosed leaf.
7. Lift the whole thing together with the remaining paper and turn it over. Remove the rest of the paper, taking care with the edges as scissors may bind the edge of the leaf to the paper.
8. Don't worry if it looks a bit rough, it usually settles in the kiln. If it worries you, pat it down with a scrap of tissue paper-but not bare fingers.
9. Fire at the normal temperature for the base coat of enamel: 1450F/750-800C, less if you have chosen red as the base. Watch it carefully and remove when it has reached the desired degree of separation. If a smooth unbroken coat is wanted, remove as soon as it darkens slightly and check for adhesion.

To use the transfer type gold or silver leaf (which is sold stuck to thin paper):

1. Hold the transfer leaf inside a folded piece of tracing paper.
2. Draw and cut out the desired shape through all layers of paper.
3. Remove the top layer of paper, leaving the metallic side of the transfer leaf showing.
4. Damp the enamelled piece and drop it onto the gold leaf.

5. Turn the whole thing over and remove the rest of the tracing paper.

6. Wet the paper side of the leaf with a brush.

7. Put it into the kiln for a few seconds-just long enough to remove the waxiness of the paper, but do not singe the paper. Don't shut the door.

8. Allow it to cool, then wet it again and let it soak for a minute.

9. Return to the kiln, keep the door open and let the paper singe and bubble slightly with the water. Remove from the kiln and try removing the paper using a pair of tweezers. If it doesn't come away easily, wet it again and repeat this process until it does. Be especially careful of the edges, they may have become pressed together by the scissors. It is possible to simply burn the paper off, but it may drag the leaf as it does.

10. Fire as for the loose leaf.

There is no need to enamel on top of the leaf as it is so thin that it allows enough enamel through to protect it. Up to 2 coats of transparent enamel can be applied over the leaf and it will stand a number of firings, becoming gradually more stable in tone.

Further discoveries made at the Region 1 weekend workshop on the leaf technique.

1. If you put the silver transfer type of leaf on top of gold leaf, the edges of the silver stay sharp and gold disappears. Then, if a light transparent enamel (T212, Lt. Amber) is applied, the gold reappears and the enamel seems 3D following the divisions of the gold.

2. If you put the gold leaf on top of silver leaf, the silver is obliterated and does not reticulate.

3. Gold leaf, cut or torn in strips within paper, makes a nice broken up border. Hold the enamelled piece vertically and use tweezers with one piece of the paper to apply the leaf.

4. Gold leaf can be used effectively on sterling silver, it looks good over pale transparent enamels.

5. Fire scale on top of silver leaf obliterates the silver, but it does reticulate.

6. Leaf below pieces of foil can give an interesting effect.

7. Red or black enamel below the leaf looks very effective.

(Reprinted with permission from The Enamellist 2001, Canada.)

Continued from page one.....

Our train mostly hugged the coastline and we travelled in quiet, smooth, speeding comfort across broad coastal rivers, past small towns, fields of rice and crops, and distant mountains. I wondered if Mt Fuji would be visible; would it look like it does in the woodcut images of Hokusai and Hiroshige? No show this time. We make it to Kyoto. Err, which way to our little Ryokan? Hmm, very hot and humid and bags getting very heavy now! Ah! Marilyn listens to her internal compass and makes the right choice; we take the time to give much self-congratulatory praise at our intrepid travelling prowess. An elderly man and his grandson save us from a second attempt on our part to get lost again and directs us to the Matsubaya Inn and we, in a lather of perspiration, now shod in house shoes, gratefully stand in the air-conditioned office.

M - It is at Kyoto train station that I first realised the main difference between Barbara and myself. Eyesight. Mine is a lot better at long distance vision than hers. She was very wary when I started directing her to the appropriate exit, as she had absolutely no idea how I had come to this conclusion. Eventually I was able to convince her that I had read the sign and she came willingly.

My first impression of Kyoto was the heat and the size of the train station. I was forewarned about the train station and I had my trusty Lonely Planet guide book I had bought on Kyoto. So off we went, with our wheely bags in tow to find our Ryokan. Unfortunately, the guide book was slightly misguided when it detailed the exact whereabouts of our hotel. We did manage to get slightly lost and it was very very hot.

B - We are soon settled in our little Japanese style bedroom that thankfully has an airconditioner on the wall. In fact everywhere we went we found airconditioners clustered on every possible surface. There's not a lot a floor space and we figure out that folding back the beds gives us room to dress – a matter of sequencing actions. No time to rest though. We need to find what transpires to be the only ATM that will dispense Yen on our foreign key-cards. In our travels we wander past little shops and restaurants, through a craft and haberdashery store, and a Japanese equivalent of the David Jones food hall; new sights, smells, samples to try, and lots and lots of fabulous Japanese food all in impeccable packaging and beautifully displayed. A lovely girl chases me up the escalators with my change that I accidentally leave behind, all smiles, giggles and bows.

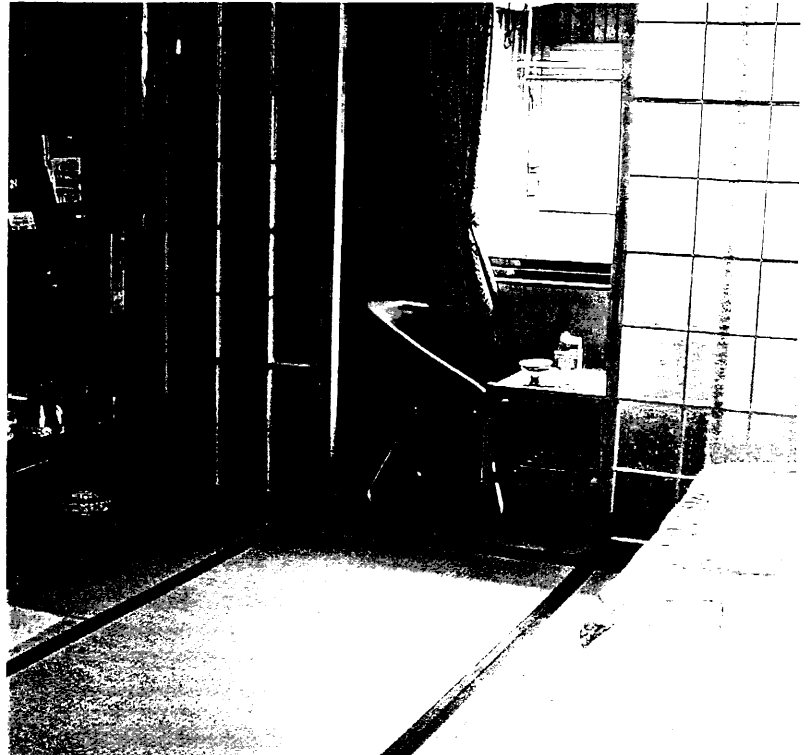
Our Ryokan is in the old part of Kyoto City. The city lies in a relatively small flat valley and we can catch glimpses of forested hills nearby. We are constantly drawn to these and on our map we can see that the hills harbour numerous temples and shrines. We have managed to come to Kyoto in the lead up to one of their major festivals "Gion Matsuri", which according to the lonely planet is perhaps the most renowned of all Japanese festivals, and we were lucky enough to get accomodation.

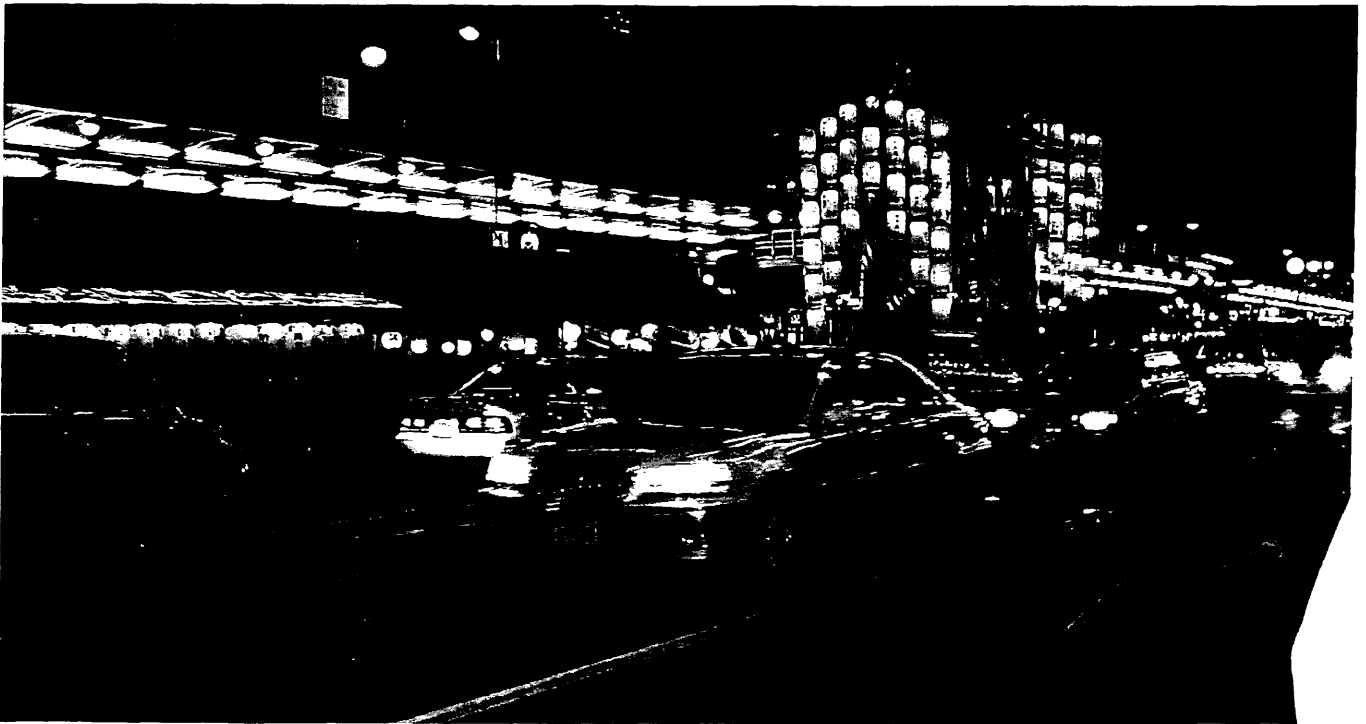
That night we made a sortie into our new playground. Wandering along the street we can hear drumming in the distance and many people are out promenading in traditional Japanese style in their exquisite kimono. We are looking for somewhere to eat and, casting our eyes up a little, we spot a restaurant one floor up. "That looks good" and we lunge up the steps and in

THESE STATUES GUARDED OUR HOTEL



OUR LITTLE ROOM





GION MATSURI FESTIVAL NIGHT LIGHTS.

we go. That was a formula we tried to stick to in our travels; "don't think too much, and if something catches your eye just go for it."

What a great meal we had that night; with lacquered trays and little dishes arrayed with numerous taste sensations. It was no trouble eating anywhere in Japan. Every restaurant and café has either life-like resin models of their menu in the window or photographs. If there is no one to speak English, you can indicate your choice with your finger. It seemed to me that all of the Asian patrons used these images just as much as we did so we didn't feel particularly out of place.

M - This was our first experience of eating out in Japan and we didn't do too badly. Of course we ordered saki and toasted to our impending adventures and the fact that we had actually made it this far. (We might have had a beer as well !).

Kyoto was very exciting on this first night because of the sight of everyone in traditional clothes and because there was this most amazing music being played. We had to find the origin, so after dinner we started to walk towards where we thought it was coming from. We walked down an alley and turned the corner to find a two storied wooden float, filled to the brim with men in identical kimono just drumming and chanting.

They would get into the float by climbing out the 1st floor window of a shop nearby. The floats were lit by very large paper lanterns and they looked beautiful. It turned out that there were at least 30 of these floats located within the city area, each float having different patterned outfits and lanterns.

You would turn a corner and there would be another one, as equally beautiful and they would be chanting something different. It was totally incredible and I don't think I will ever forget their sound.

B - Kyoto is a huge tourist area for Japanese visitors alone. It has a complex history, many historical sites, it's a centre for craft and art, and has numerous temples and gardens. At the time of our visit, it was getting into the height of summer and was very hot and humid. This meant that there weren't many westerners around and we really enjoyed our uniqueness on the streets. In spite of the heat, we walked around for ten and twelve hours a day. I mean, your time is limited and you just have to put discomfort aside and make the most of every moment. We also discovered the Japanese version of icecream Sundays. They were enormous towers of ice, flavoured with green tea and red beans and some others that were unrecognizable, and they had the power to revive!!

M - In fact, Kyoto to me is synonymous with art, fantastic gardens and ice cream sundaes which we managed to sample in many different shapes and sizes. We heard that a typhoon was working its way up the length of Japan and walking constantly for days in the extreme heat, reminded us that it could descend upon us at any time. Interesting!. We were having a great time.

In the next installments – our visit to Biso and their fantastic hospitality, a night in Nara (sister city to Canberra), Tokyo and the Award Ceremony and a surprise sighting on a visit to a Cloisonne Enamel Museum in Kofu.