

# Incising Porcelain

by RAY BUB, and SUSAN NYKIEL

THE TECHNIQUE of putting a translucent glaze over incised decoration is one of the most ancient methods of embellishing ware. Our work draws from that rich tradition and reinterprets it for a contemporary audience.

In this technique, patterns are incised in pre-leather-hard to green porcelain of the following recipe:

<b>Oak Bluffs Cottage Pottery Porcelain Body (Cone 11)</b>	
Feldspar (261F)* .....	20%
Edgar Plastic Kaolin .....	15
Kaolin (6 Tile Clay) .....	12
Tennessee Ball Clay (5) .....	25
Flint (200 mesh) .....	28
	100%

To promote plasticity, 0.5% Macaloid is included in the dry mix before adding water. Aging four weeks or more also will improve plasticity.

After bisque firing, the pots are finished with translucent clear or celadon glazes. Often the pattern emerges solely as a result of the varying depths of the translucent glaze, which pools in lines and incised areas, projecting variations of tone and shading. On other pots the incised pattern is enhanced by painting a darker glaze (such as the following Dark Blue or Dark Brown Shaner variations) onto the drawing, then sponging off the excess to leave the dark glaze in the recessed, incised areas only. The pots are then completed by dipping in or pouring on a clear or celadon glaze.

Shaner Clear Glaze is crackle-free on our porcelain body:

## Shaner Clear Glaze (Cone 11, reduction)

Dolomite .....	5.3%
Whiting .....	16.8
Feldspar (261F) .....	31.9
Edgar Plastic Kaolin .....	14.1
Flint (325 mesh) .....	31.9
	100.0%

Add: Bentonite .....

Several color variations may be achieved with the following additions:

1% Iron Oxide .....	Light Green Celadon
1% Iron Oxide and 0.05% Cobalt Carbonate .....	Light Blue Celadon
2% Iron Oxide and 1% Cobalt Carbonate .	Dark Blue
7% Iron Oxide .....	Dark Brown

Susan incises cylinder shapes when the clay is beyond leather-hard but not yet bone-dry. This minimizes the problem of breathing the clay dust carved from the pot, as the clay comes off in chunks rather than dust. For fragile bowls and platters, she waits until the forms are bone-dry to eliminate the danger of warping, which may

occur if these shapes are handled while still pliable. (Warping of leather-hard porcelain can lead to cracks which often show up only after glaze firing.) On the other hand, porcelain is very fragile in the bone-dry state because of its larger particle size. Both methods have advantages, but for her, working with clay slightly beyond the leather-hard state is the more convenient method.

After the pattern is completely incised, the entire drawing is lightly smoothed with a barely damp sponge. (Too much water will cause the porcelain to swell, then shrink and crack as it dries.) After sponging, the drawing is finished by reemphasizing details with a dentist's pick. Smoothing with a damp sponge is not advised for *bone-dry* porcelain since even a little water applied risks the chance of cracks appearing when the clay dries again. Incised drawings on bone-dry porcelain can be smoothed with the fingertips, a soft brush and delicate scraping with the dentist's pick.

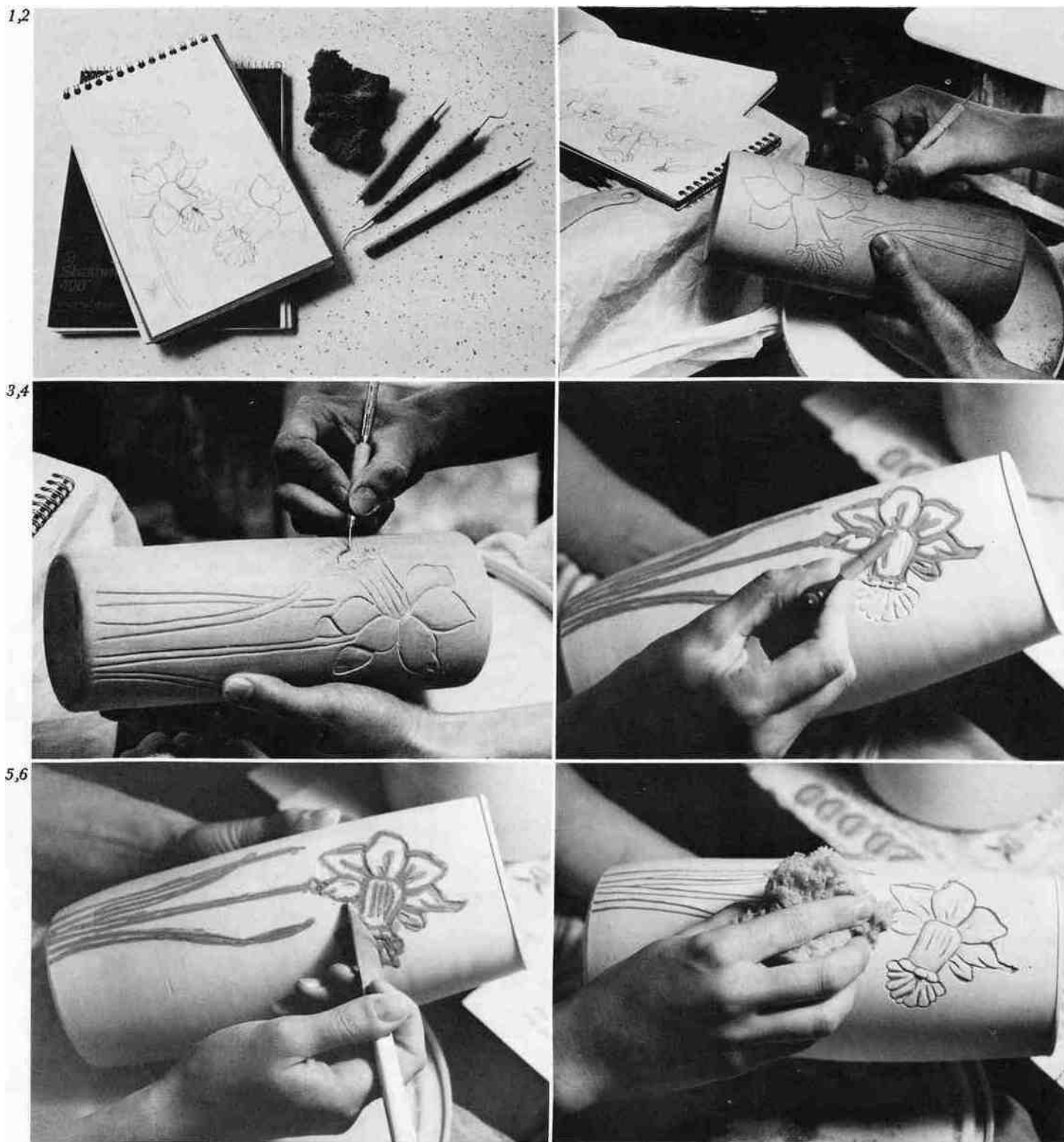
Ray incises freehand patterns on plates, platters and wall plaques when the clay is firm, but before it has dried leather-hard. The pot is left on the throwing bat for support; a bent-end carving tool made from a stainless steel butter knife is used to incise patterns, which are then smoothed with a damp sponge to eliminate sharp edges that may protrude through the glazed surface. After the pot is leather-hard, it is inverted onto a bat and trimmed. Rims of squared plates are cut with a knife, then sponged smooth.

When working with closed forms, Ray allows the clay to become leather-hard before trimming and incising, thus minimizing the danger of warping which might occur if the pot was handled while too soft. Incising on a convex surface may be more difficult than working on a flat surface—the clay is much more crumbly. Mistakes can be repaired by moistening the area, smearing on some lightly wetted incised scraps and smoothing with the knife. Let this spot dry to leather-hard while working on another section, then recarve the patched area before smoothing the complete pattern with the knife.

About the authors *Ray Bub and Susan Nykiel have been working together since 1975, and in 1978 established the Oak Bluffs Cottage Pottery in Pownal, Vermont, where they produce thrown stoneware, flameware and porcelain.*



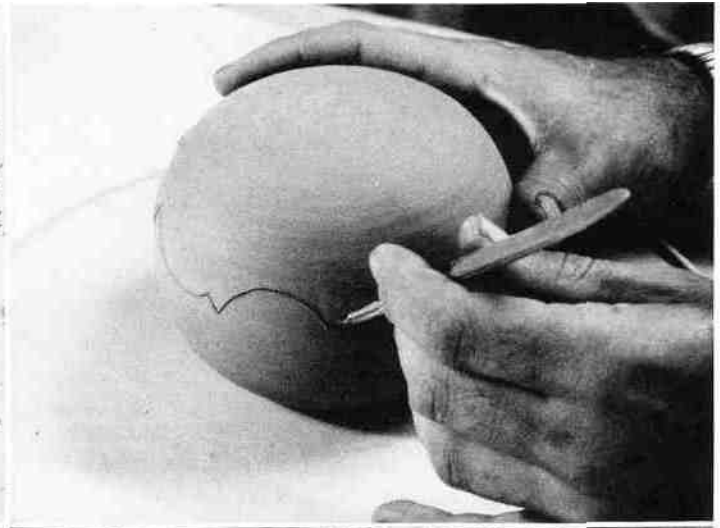
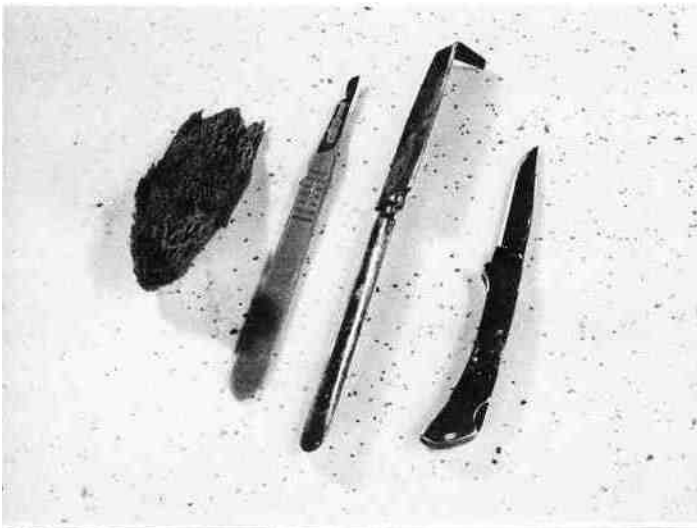
\*A potash feldspar, available from Hammill and Gillespie, Inc., Box 104, Livingston, New Jersey 07039. A possible direct substitute is Kingrnan feldspar.



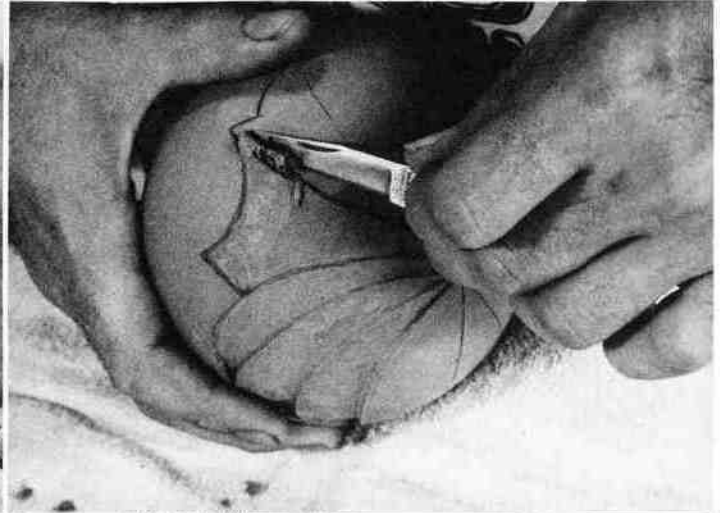
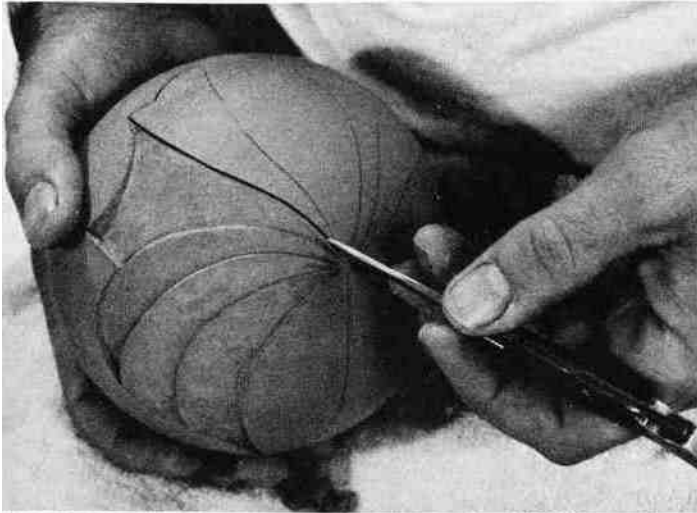
1-6. Susan's tools: sketches, sponge, a darning needle wrapped in masking tape, a dentist's pick and potter's pin tool. First, a line drawing is composed with the needle, then modeled with the dental tool. When complete, the surface is wiped with a barely damp sponge. After bisquing, a dark glaze is applied to emphasize line; excess is scraped away and the surface wiped with a damp sponge. The ware is allowed to dry, then glazed in the usual manner.

Right Incised porcelain by Susan Nykiel: a platter, 11 inches in diameter; and vase, 7 inches in height.

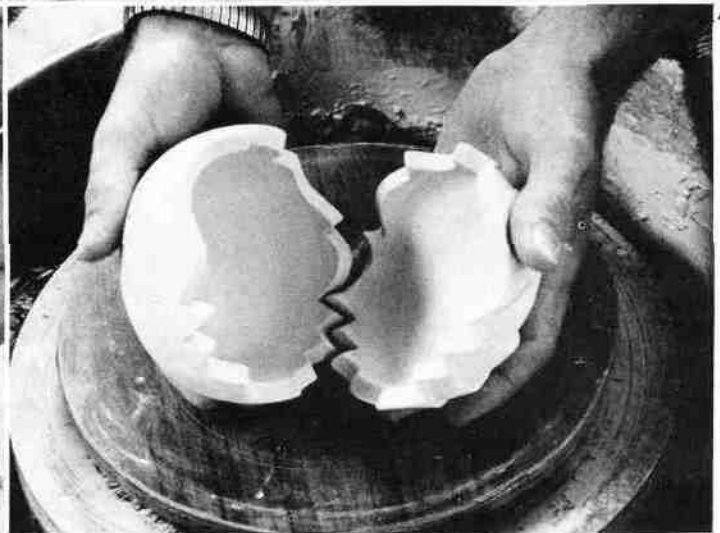
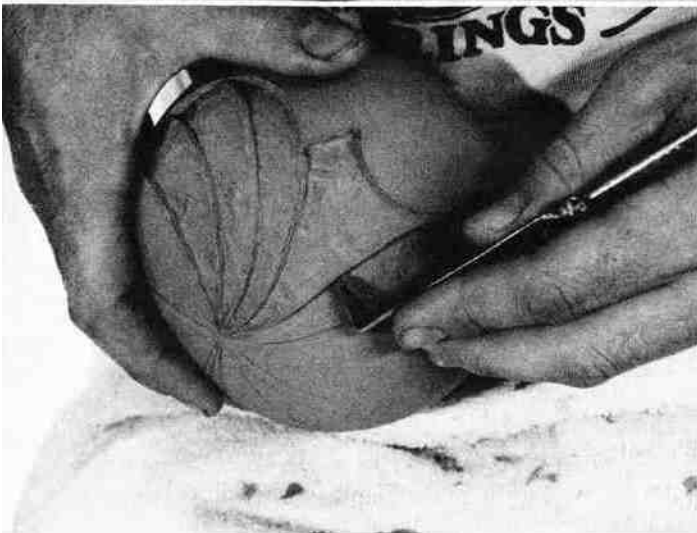




7,8



9,10



11,12

7-72. Ray's incising tools: a sponge, surgeon's scalpel, altered dinner knife and a penknife. The basic pattern is scribed with the scalpel; each area is further outlined and carved with the penknife, then the sharpened dinner knife is employed to refine the surface. Finally, the lid is separated with the scalpel, and the cut edges sponged smooth. Bisque and glaze firings follow.

**Right** Porcelain by Ray Bub: covered jar, 4 inches in diameter; and plate, 7 inches square.

