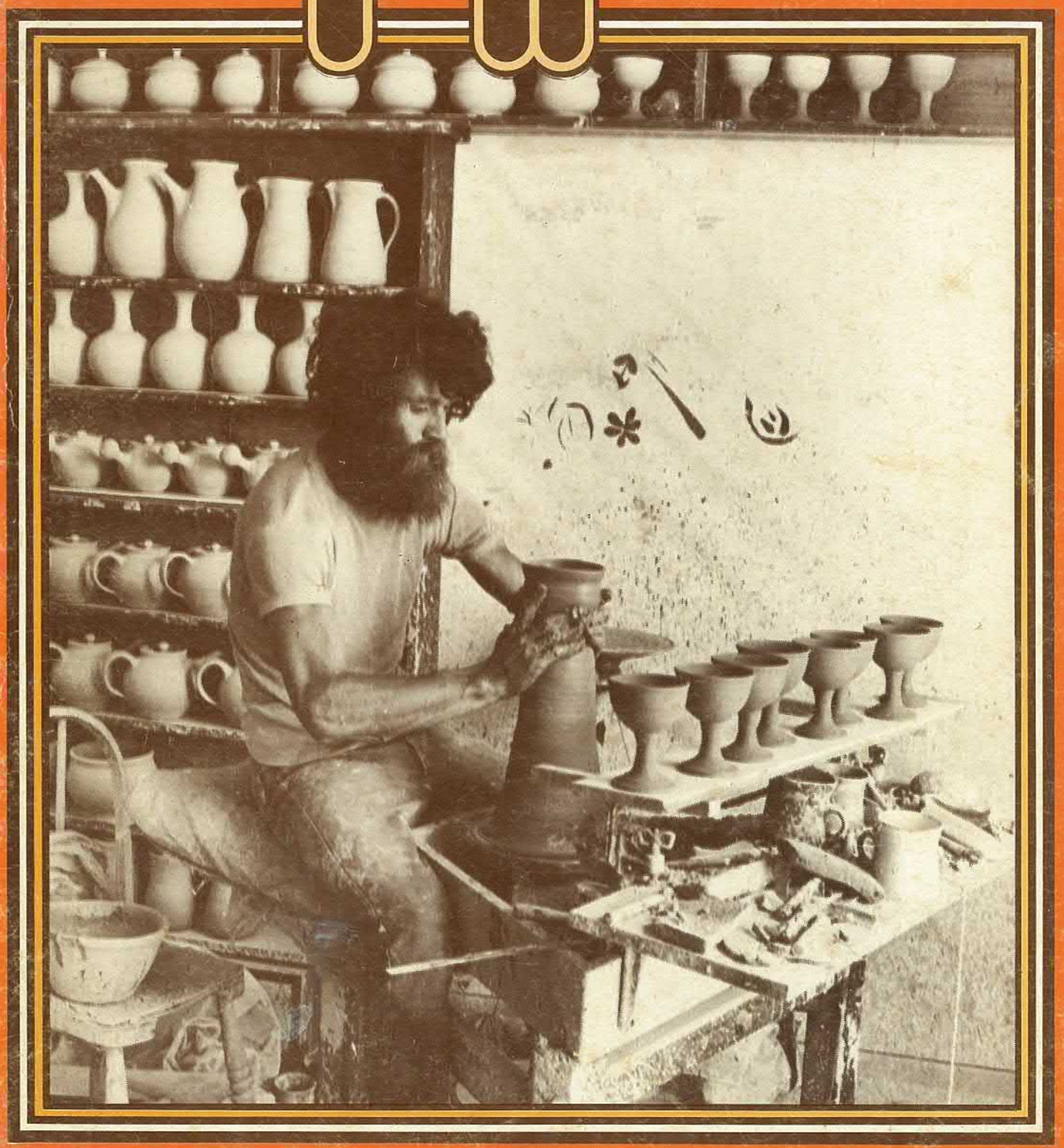
new zealand potter vol 19/1 autumn 1977

Potter



cover

Nicholas Brandon at work.

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19th National

A Selector's viewpoint

LUIT H. BIERINGA
gallery director

After the flurry of activity in Christchurch in October, one felt the need to commit red hot thoughts to paper before specific impressions and sensations faded. In a sense I am glad we have allowed time to filter our thoughts and consolidate some of the ideas underlying the specific comments we prepared and which have been made so often in the past. As Chester Nealie prefaces his notes:

"Most comments of mine would have been said many times before by other selectors and I wonder why potters have not acted on these suggestions".

Perhaps each potter thinks those suggestions pertain to others and not him.

Being new to the National game, I have no illusions that 'major' group shows provide a watershed for radical or even minor progressions. In the defined and cohesive selection of a potter's one-man show 'good' and 'bad' are highly relevant or relative to the total selection premise and idea behind the public confrontation. In the context of a selected group show the 'failures' which slip through the subjective selection net, stand in greater isolation and while a number of similar failures may indicate a lack of attention to previous admonitions, it could equally well indicate a shift of emphasis and direction in general.

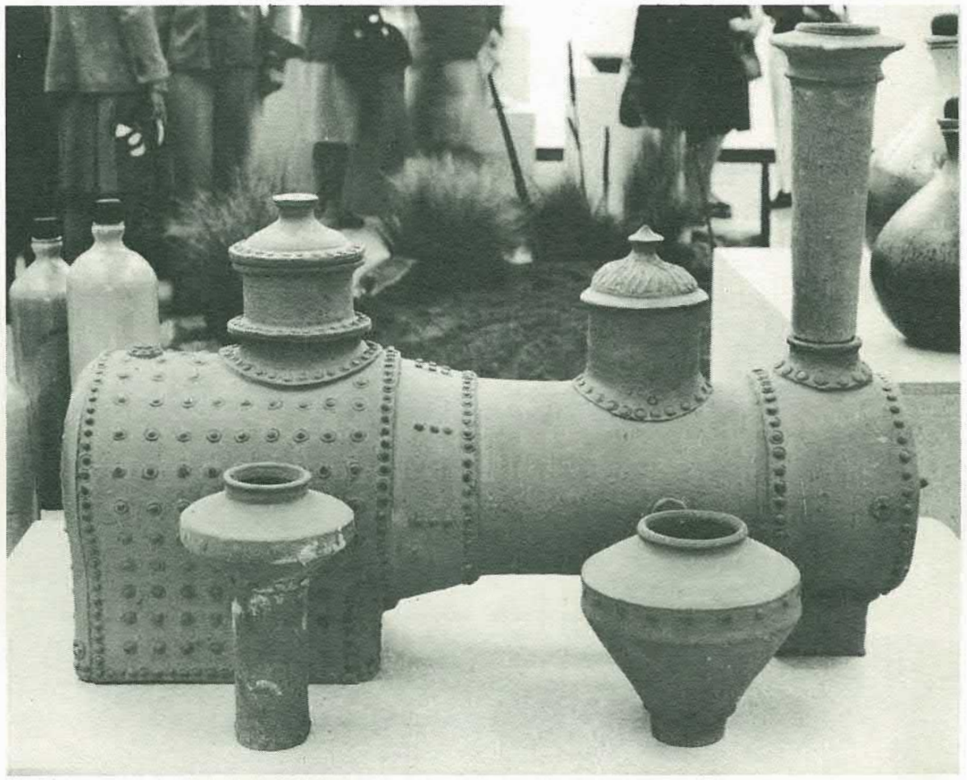
Comments by Estelle Martin and Chester Nealie reflect this shift of emphasis from domestic ware to sculptural forms. Whether that reflects the real interests of potters or is an eye-catching technique for exhibition selection will resolve itself in future shows.

"The domestic section was disappointing, much of it obviously not chosen by the potter to a high enough standard for a National Exhibition" (Estelle Martin and Chester Nealie), "The same old problem of 'exhibition pots' appeared again. Some potters appeared to forsake their strengths and produced a 'new, trendy, instant sculptural form'. As has been the trend over the last few exhibitions good domestic pots were hard to find. There was one individual jug and only a few sets of bowls or mugs".

"We missed the well-made, joyous jugs, small bowls and mugs". (Martin) I concur with these observations and the adjectives 'individual' and 'joyous' describing the simple jug, point out most forcefully the ill-conceived belief that only the bizarre and expressionistic can exclaim individuality or seduce selectors and are supposed to be synonymous with sculpture.

Since art gallery directors have for a

Loco boiler (with alternative stacks for warming the hands) terracotta. Barry Brickell



number of years been promoting sculptural ceramics from a non-existing base i.e. wishing to call to life fine art ceramics where little or none existed, I was designated to make comments on the so-called sculptural ware. It is always with some trepidation that I face a group of ceramics labelled sculpture for it is precisely the label and its connotations which tend to supply a different context for the works in a pottery exhibition. To me all good ceramic works are sculptural by the very essence of their space-containing and — intruding nature, from the simplest jug to the most savagely torn slab or largest boulder.

I presume we call pots sculptural if we can't spoon soup or pour wine from them i.e. if they are non-functional in a direct domestic sense. Barry Brickell's lovely 'loco-boiler' is a plaything (toys are most functional) which has the potential of being warming to the heart as well as the hands. Domestic, functional, decorative, erotic, sculptural — take your pick. Jane Capon's 'Pissholes in the Snow' capturing the impression of its title in a light-weight sculptural way, could also be used as a container for olives or even dried figs.

Together with the most consistent group of works in the exhibition (Leo King's forms) these works and several others possessed sculptural qualities without pretending to be or being designated as sculpture.

Selectors comments from previous National Exhibitions by Len Castle and Roy Cowan on the 11th, (NZ Potter Vol. 10/1) can be applied to the 19th. "There appear to be unresolved difficulties in the definition of ceramic sculpture. It is thought that some objects entered as sculpture would not be acceptable as such by a sculptor, while the use of the ceramic medium as one for sculpture is as yet not well defined, and some of the objects showing sculptural qualities most effectively were entered as pots".

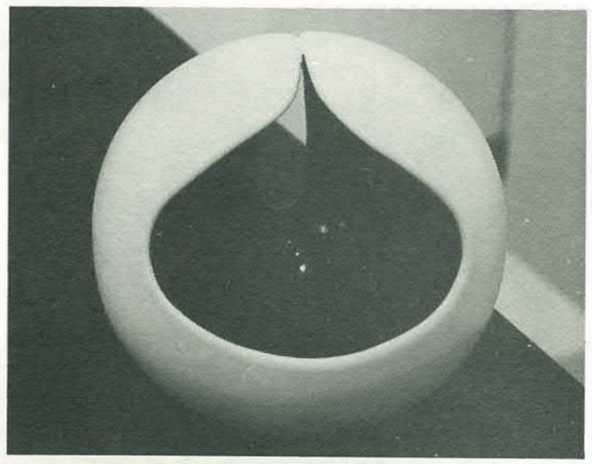
We may well ask why some 'sculptural work' would not be acceptable to sculptors who after all have a professional and specialist training on which to base their judgements. While the ceramic medium has over the last decade become a major means of sculptural expression on the international scene it is a well-known fact that the prime movers in this field have been ceramic artists issuing from art schools with highly specialised ceramics departments.

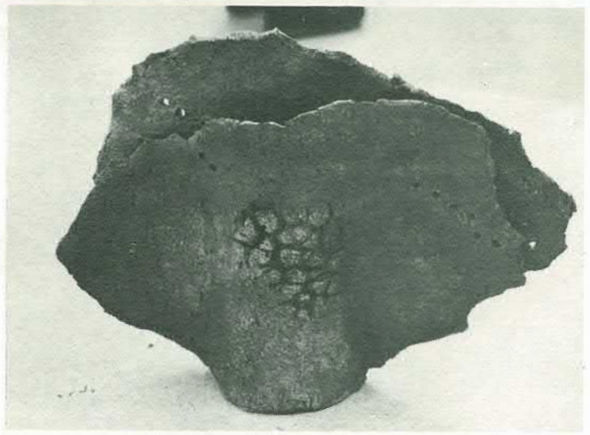
In the absence of such a tradition in New Zealand (excluding some splendid individual directions) we must be wary of trying to jump on a label which eludes many of us for in rejecting some of the basic strengths in our home-grown tradition we end up pursuing "that unfortunate affair between sculpture and pottery".

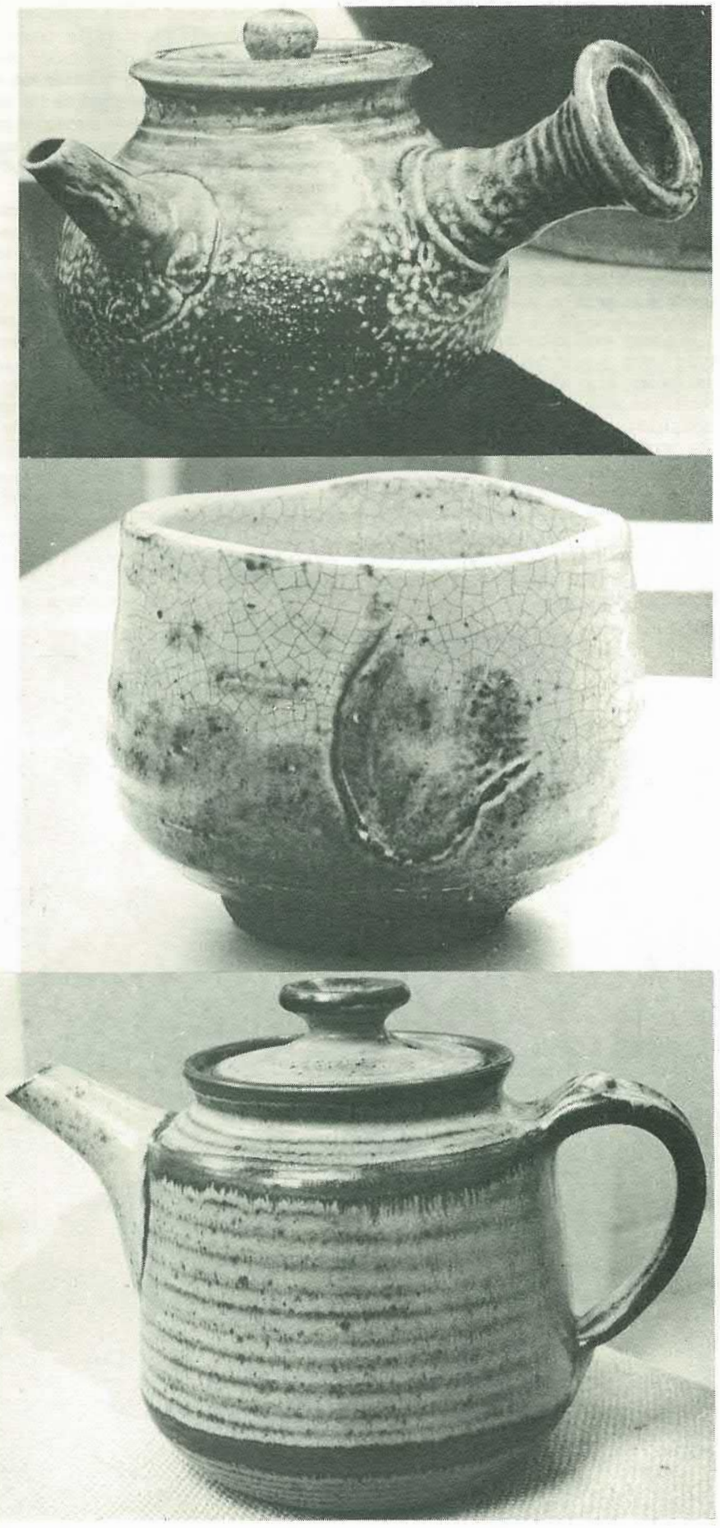
Instead of striving so hard to produce 'sculpture' — or perhaps ornaments — it would be wise for many to allow more *pride of place* to the basis of their craft — the clay. The nature of clay is plastic and this plasticity must survive the processes of the kiln. Too often this marvellous material is forced to death. No matter how carefully wrought a form may be, or expert the glaze or decoration the basic element that moves the imagination is the plastic nature of the material.

In the hands of our best potters, pots can achieve the strength, vigour and brilliant understanding of pottery forms that allow the viewer to realise why pottery in the hands of sensitive men or women can also become an art.

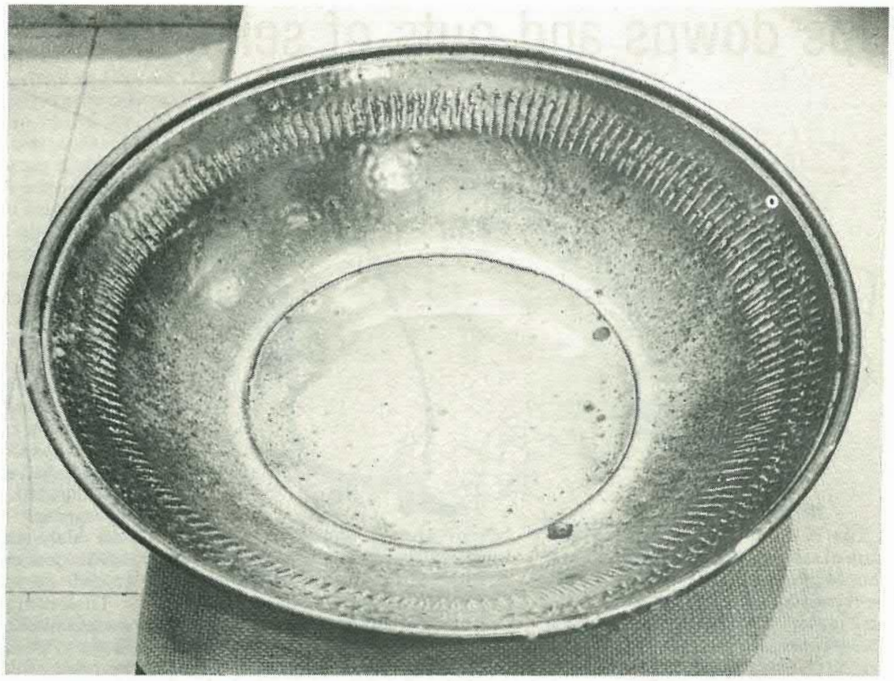
Left: Don Chamber's bottle
Above right: Leo King's slip cast form.
Below right: Doreen Blumhardt's banner stone
Photographs: Stan Jenkins

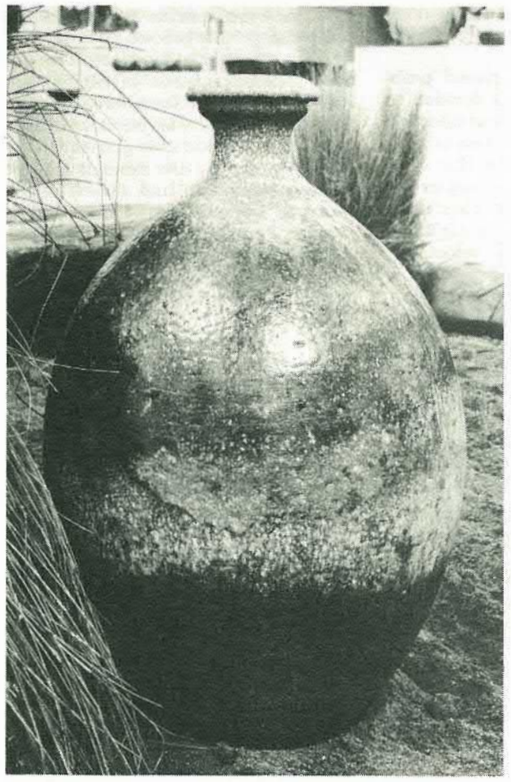


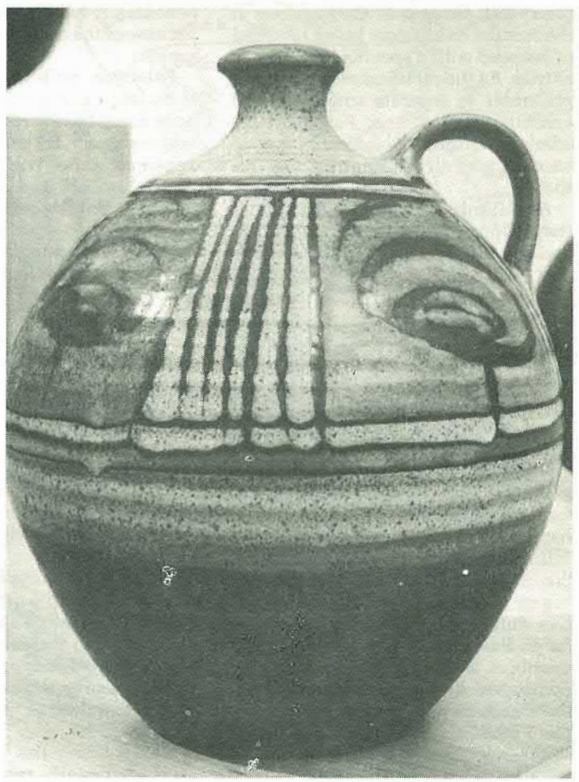




Left: Salt glazed teapot by Chester Nealie
Stoneware teabowl by Rex Valentine,
Stoneware teapot by Stan Jenkins
Right: Stoneware bowl, Shino glaze by Len Castle
Opposite left: raku bottle by Denys Hadfield
Opposite right: Stoneware branch pot by Estelle Martin
photographs: Stan Jenkins







Ups downs and outs of selection *Roy Cowan*

All are pots but some are more

The N.Z. Society of Potters was formed amidst a debate as to whether it should be open to all or be restricted to working potters. After one year on the first option the second was adopted, and some were obliged to resign, leaving only those making, or trying to make pottery (mostly trying to reach temperature).

Thereafter applicants submitted their work along with the members at the Annual Exhibition, being required to succeed with a specified number of entries. As the numbers rose it became preferable to seperate admission and exhibition selections. For the 1976 admissions the 29 applicants had to succeed with all of six entries, and five did so.

Admittedly some failed because they assumed the rules meant that they had to provide six kinds of pots, and they tried to add, say, a tea pot to their normal repertoire, and failed there. Two experienced jurors, with assistants, took a day and evening to examine the work, so new members undergo a close inspection. Whether this system is proof against jurors preferences, and what would happen to non-conformers or radicals, remains a question.

By the time the N.Z. Society was formed, some regional potters groups had already appeared largely upon the initiative of the Editorial Committee of the 'New Zealand Potter' which had begun to attract national administrative duties. A constitution providing for an Executive partly elected by the members at the A.G.M., and partly nominated by regional groupings of the members, was written. For a time the 'Potter' also had a place upon the Executive, relinquished when it was felt that the journal should be seen to be independent. The independent regional pottery associations which have an important role in the functioning of the Society, are not represented.

While it is for the N.Z. Society to see that an Annual Exhibition is held, the Society cannot muster the forces needed without the support of a local association. In some places where the Annual Exhibition could be beneficially held nothing can be done because of the absence of a strong local group.

Selection policy has raised problems too: once Auckland decided to have none — and proved that selection was necessary, for such a mass of work appeared, and it was found that some potters go 'off' and some potters are devils for putting out second best upon opportunity — so we continue to struggle and wrangle over selection.

The rules are silent — perhaps prudently, on the details of selection. However there is a practice, in which three selectors are chosen who, it is hoped will combine knowledge of the craft with an open attitude towards the widening range of conventions in which ceramics are made. Usually someone is added who may widen the views of the group, usually a holder of art or architecture or design qualifications. Some potters of eminence but decided views have been treated with reserve.

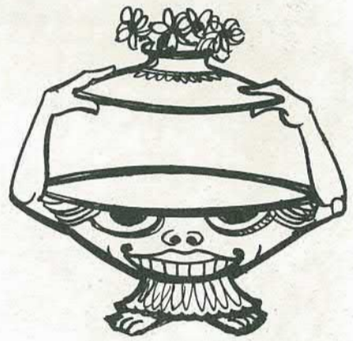
These panels have returned an average of about 50% rejections, so that membership is not enough to guarantee a place in the exhibition. There is also a rule whereby those who fail to gain a place in three successive years may be required to re-apply for admittance.

Three times the balance has not worked normally, twice because one of the three selectors drew the panel towards a personal point of view, restricting the selection.

The third cutting back occurred in Christchurch in 1976, through joint action of the panel, and produced criticism of their actions. They replied with statements made at the time or published in the Society's newsletter. One selector claimed that the standard of work sent in 1976 was far below that sent in 1975, but another had announced the intention to refuse most of the work, before seeing it. The third had a special position over works classified as sculpture, referred to the previous annual exhibition as an 'extravaganza', and suggested that the task of showing what was being done in New Zealand pottery should be left to craft shops and galleries.

Their common ground was taken on matters such as lack of feeling for clay, faults in treatment of spouts, rims and foot rings. Granted that a selector cannot convey clearly in words what is being experienced when the throwing of a pot is called 'lifeless', but one can see that even specific parameters are only deceptively precise, or universal, in an intensely subjective situation, and statements made in explanation tell us more about the utteree than the object. The celebrated remarks of Bernard Leach upon the glories of the Sung, quoted by one selector are just such a statement. In a review of the work of Yvonne Rust, T.L.R. Wilson wrote: 'Yvonne Rust's work would be terrible by anyone else'; in effect pointing towards the interaction of personal style, and charisma, and the conventions of 'good' potting.

From the many comments made upon this exhibition, the overall response was that there had been a loss.



Hats off for the Soong!

The best work present was as good as before, but the feelings of diversity and energy, and the excitement that comes when there is also tolerance of the wayward Funk Artists, those who set out to challenge or make fun of the conventions, including the pieties of traditionalism, all elements that had been present at Hastings, were absent.

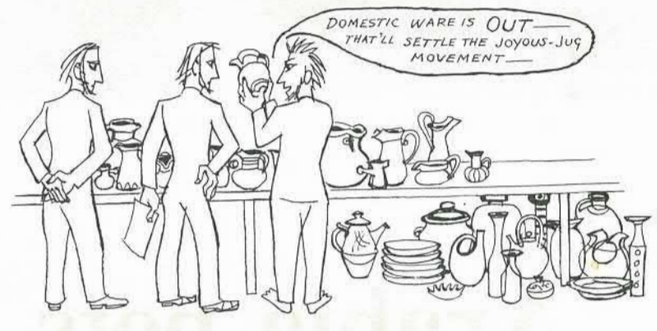
N.Z. potting is still in the stage of early but rapid growth upon a relatively slight basis of tradition. Progress is reactive rather than analytical, and there is a remarkable mixture of waves of fashion, such as the current crush on Shino, and the ritualising of certain forms, but these qualities — the 'irrationale' of the movement, are part of the exciting formative stages of a culture, which won't be cleaned and tidied up by manipulation of exhibitions. Those who tried at Christchurch, failed. In trying, they inflicted punishment not only on the members, but also on the organising body, who could well have raised the anti bombers' cry, 'no annihilation without representation!'

Finally, any continuation of highly eliminative selection at the Annual Exhibition will have implications for the membership, of whom many could be required to walk the plank, while others may be just driven out by discouragement. No doubt there are some duffers, but there are also ways in which the Society could help those needing assistance, if it were more active. Any continuation of policies such as were sprung upon the members at Christchurch should be brought into consideration by the members, perhaps also by the regional bodies which help, or put up with, the N.Z. Society.

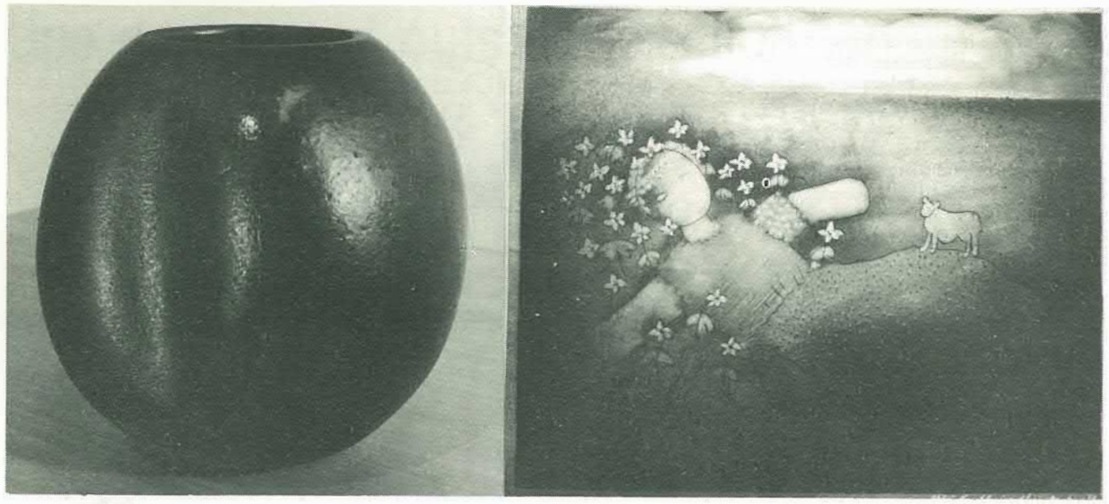
The writer is against the idea that the Society should be reduced to the dimensions of a small elite (particularly a self-designated elite). The idea was tried with the Potters Guild, and failed. Granted that when one sees the further effects of the enthusiasm for pottery in the mind-blowing accumulations in some craft shops, a loss of nerve or patience can be understood, but exclusivism in the arts is, as elsewhere, a dead duck, and one of the Society's achievements is that it has continued to provide an authoritative review of the work of potters of ability, while retaining contact with those who want to participate.

'POTTER' SCOOP

Unique series showing jury at work selecting the umpteenth National Exhibition.



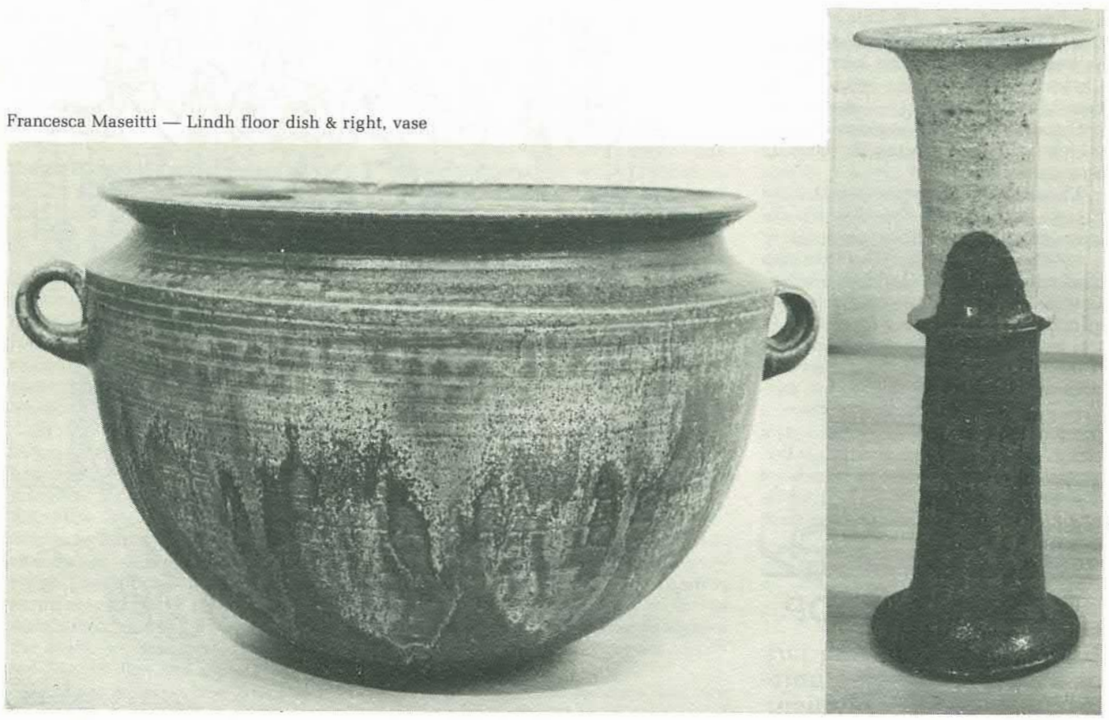
captured by Juliet Peter



Paul Envalds, sculpture. Right: Helja Llukko – Sundström wall plaque. *photographs: Stan Jenkins*

Arabia pots

Francesca Maseitti — Lindh floor dish & right, vase



N.Z. Society of Potters — 20 years on

Audrey Brodie

Twenty years after the first New Zealand Potters exhibition held in 1957 with only fifteen exhibitors, none of them full-time potters, the present membership of the N.Z. Society of Potters is 167, many of them working full time professionally. The society grew out of these early exhibitions.

The society is basically national in character but takes care to meet regional concerns. Not only is the Annual Exhibition held in a different major or provincial centre in turn, but successive memberships of the council reflect national groupings.

Members must have work accepted for the Annual National Exhibition at least once in three years to retain membership. Selection, review and criticism at the annual exhibitions have played an important role in shaping the development of New Zealand potting. Not without risk — indeed as one selector observed after the eighth exhibition held in Wellington, "It would be difficult to find a person whether from New Zealand or outside who has the divine qualities required for selection. In any case he should like Ned Kelly, appear in public after selection only if attired in the kitchen stove."

The 18th Exhibition in Hastings in 1975 provoked the following comment from a reviewer, "The most successful work came from those whose creative ideas appeared to have grown from a spontaneous fusion of materials and process and the potter's own personal observations of his surroundings."

The 20th New Zealand Potters Exhibition is to be held in Wellington at the N.Z. Academy of Fine Arts gallery from 21st October to 6th November this year, the receiving date being 12 October. Potters wishing to be considered for membership in the N.Z. Society submit work first to their regional group which may make helpful recommendations as to whether the work should be sent on for national selection.

Bruce Martin a full-time potter from Hastings is currently president of the society, and the secretarial address is Box 477 Hastings. Potters interested in joining a regional group will find them in Canterbury, Otago, Southland, Manawatu, Wellington and Auckland.

Rosemarie Brittain has a potters' plea

Several potters who took part in recent invited exhibitions have been concerned about certain aspects of the display. On behalf of the potters I wish to present our viewpoint to the hard-working people who arrange the pots at these events.

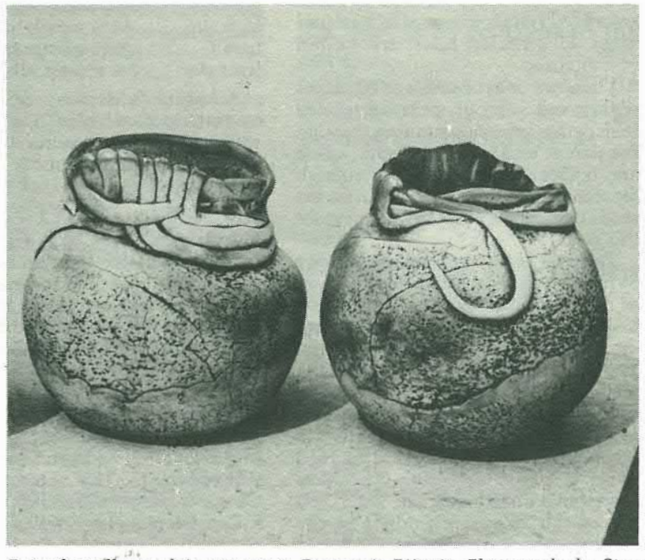
Twice recently, presumably to achieve an overall appearance of balance to the exhibition, guest exhibitors had their group of work divided up and spread around the display area. We would like to state that when as guest exhibitors we are asked for work we try to provide a unit which should be displayed as such, even though to some eyes the group could appear visually unharmonious, this is not necessarily so, because it represents a true statement of what the potter is doing at the time — it may be a range of work — and therefore should be seen in totality. If the group is broken up and mixed in with other pots it is not easy to get an overall picture of the potter's work. Besides the potter has chosen the pieces to make up a complementary group.

So please all you diligent folk anxious to make a good display consider these factors:

- If guest exhibitors are asked for X number of pots keep the group together and label clearly.
- Label accurately — check the spelling of the name and get someone who can print well, or type the cards.
- Do not put numbers in visible places on the pot (e.g. Page 22, N.Z. Potter Vol. 18/2). Put the numbers on the display stand beside the pot.
- Try to provide good tonal contrast for pots, remembering that white is still hard to beat as a backdrop.
- Overall balance can be achieved without dividing the pots up too much. Viewers often want to see the work of a particular potter. This is simpler if its altogether under one label.
- Finally, keep the display simple. The pots should speak for themselves. They do not need gimmicky displays.

The 19th National in Christchurch achieved these aims fairly well as did the 1975 show in Hastings. The Waikato Art Museum in Hamilton is to be congratulated on the fine display of pots on loan through the Japan Foundation which made up the Contemporary Japanese Ceramics Exhibition.

We potters are grateful to all the people who display our work for without you the show would not happen, but some of us feel that there is not enough understanding between us. The views expressed here we hope will tell you what our intentions are, and how we feel our pots should be seen.



Pair of small porcelain posy pots. Rosemarie Brittain. Photographs by Stan Jenkins

A New Zealand Potter's Geology pt. 3

Barry Brickell

The igneous group of rocks provide more potters raw materials than any other. Such rocks have arisen from hot fluid magma deep within the earth's crust either bursting forth as lava to form volcanic rocks, or else upwelling into weaker strata without volcanic eruption, to form plutonic rocks. These latter such as granite, diorite, syenite, gabbro etc have cooled slowly and tend to have a beautiful coarse crystal structure. The volcanic rocks, e.g. rhyolite, andesite, basalt etc are more rapidly chilled and can be glassy — obsidian — or may be so fine grained that they are difficult to identify. Indeed some of the fine grained andesites of this area (Coromandel) resemble fresh greywacke, and even give similar glaze melts in the test kiln.

Crystal texture in igneous rocks makes for a fascinating study and all the tricks of nature are again present to daunt the academic classifier. Beachcombing holiday potters who examine rocks in the Whitianga district will puzzle over the small rounded crystalline spheres about 3—4 mm diameter which make up the local cliffs of spherulitic rhyolite. Picnickers at Kaiteretere Beach west of Nelson could boggle at the size and pearly beauty of the enlarged feldspar crystals popping out of the eroding granite cliffs. These enlarged crystals when set in a ground mass of smaller ones are called phenocrysts.

Then we may come across veins (dykes and sills) of more segregated feldspathic minerals running through the parent rock, e.g. pegmatite, aplite and spilite. Seldom plentiful enough for commerce, they can be a win for the studio potter who has his own crushing gear.

Table III is my painstaking attempt to present an acceptable classification of igneous rocks for potters who want to delve into the books. It is difficult to correlate all the authorities in a plum pudding dish that will not offend the tastes of the connoisseurs. Bear in mind the practical potter does not have to read a thing on geology in order to be able to use his local rocks to good effect in glazes or bodies. The local road metal quarry will do. There you are bound to find on edges of the crusher shed fine rock dust which you can take home and try out in the kiln. Depending on the kind of rock it may, or may not, be a good idea to add 10—12% woodash for more fluxing. Some rocks, e.g. basalt or phonolite, may require china clay additions to stop them running, especially above cone 8 or 9. Use the geological map as a rough guide to the kind of igneous rocks in your area, bearing in mind that it will not indicate the extent to which that rock may have weathered. Igneous rocks are well scattered throughout the country, although the more interesting ones such as nepheline syenite do not seem to occur in useable form and purity.

The Feldspars

There are many different types of feldspar, not to be confused with the feldspathoids (see later), the white micas (muscovites) or the zeolites which contain much the same chemical elements but are different in arrangement.

Feldspar is an abundant material; it makes up by far the major proportion of all our igneous rocks. This is why they flux in the stoneware kiln. For example to give a rough idea of the amount of combined feldspars in the common igneous rocks we have:

rhyolite	56% mostly alkaline type
granite	63% mostly alkaline type
andesite	61% mostly calcic type
basalt	59% mostly calcic type
trachyte	77% mostly alkaline type

Alkaline feldspars are the most common potters' type. They contain soda and potash, formula

$$\left\{ \begin{array}{l} Na_2O.Al_2O_3.6SiO_2 \\ K_2 \end{array} \right.$$

Calcic feldspars are known as the plagioclases. They form a series containing a variable mixture of calcium and sodium and tend to predominate in the more basic volcanic rocks.

I have not yet been able to determine the effects of these various feldspars on glaze colour, but I do note that as one proceeds from the acid to the basic rocks, the iron glaze melts tend to change slowly and subtly from red iron browns to muddy crystalline iron yellow-browns. This subject provides a basis for some interesting research.

Commercial New Zealand feldspar as supplied, ground to fine powder, is mainly from Nelson, and is sodic rather than potassic in nature. The eastern of the three major granite mountain formations west of Nelson are characteristically high in soda content. As a rough rule potash content increases as one proceeds west towards Karamea, and south towards Fiordland.

Feldspar itself is a beautiful looking mineral in the crystal form. It has a pearly greyish or pink appearance with a texture made up of myriads of platey layers and minute "steps". For those interested in details of crystal structure obtain "Practical course in Minerology and Petrography" E.J. Searle (University of Auckland).

The Feldspathoids

These are interesting feldspar-like minerals with an extra low silica content. The major one for potters is nepheline, formula $Na_2O.Al_2O_3—4SiO_2$. The potash version is leucite. They thus have a greater alkaline content than feldspar. One would expect them to have a greater fluxing power than feldspar but my own experience shows this is not always so. Rather, glazes based on nepheline syenite (a syenite rock containing much nepheline) seem more temperature-tolerant, maturing over a wider range. With wood firing, nepheline-based glazes show a great warmth and softness, especially in the higher temperature ranges (cone 9-10) often with a pearly suntan lustre.

Some so-called "Shino" glazes are also based on nepheline syenite, where it can form strong pinks when thin, over bodies with a mild iron content. This lobstery pink is, I believe, a soda-alumina-iron combination also obtainable using common salt dissolved in ordinary glaze mixes.

Although the mineral nepheline has not yet been found in New Zealand in pure state, there are several rocks in which it is significant. These are the soda-rich syenites, tinguaites, phonolites and some other basic rocks found in the Otago Peninsula. For potters with an analytical bent, I refer them again to N.Z. Geological Survey Bulletin N.S.84 "Chemical Analyses of NZ Rocks and Minerals with C.I.P.W. Norms and Petrographic Descriptions"* available at the Government Printer. Part 1 covers the igneous pyroclastic rocks. The latter are formed by deposition of hot volcanic ash showers and are mainly glassy vesicular pumices, ignimbrites and various tuffs of the more acid variety.

Before diverging from the feldspathoid theme too far, I cannot stress enough how much fun it would be at this stage of the country's potting evolution to go searching for these high alkaline mineral bearing rocks, as both an antidote to our siliceous clay problem and as a source of rich warm natural glazes. A pack containing a copy of Benson's Otago Peninsula Geological map, a bottle of good dry red wine, six inches of salami, two or three apples, several plastic sample bags, a notebook, a drinking beaker and a raincoat should suffice as essential equipment for a day in the field.

SOME NOTES ON ROCK GLAZES

Fluxing tests of fresh rock in powder form, cone 8—10 Nelson granite.

Viscous, whiteish (if applied thickly) at cone 10. Speckled if not fired strongly. Add 10% woodash for maturing at cone 8—10.

Rhyolite (pumice, ignimbrite e.g. Hinuera stone)

Similar to above. Watery if thin, at cone 9—10. Add 10% woodash to increase fluxing, but glassy if overfired.

Andesite

Fine-crushed gives red or yellow-brown, maturing at cone 9; some ash added gives tenmoku or iron spot. Less finely crushed gives iron-spotty Kaki or tenmoku if high fired.

Basalt

The fresh rock is dark grey. Its pumice "equivalent" is reddish to dark scoria, common around Auckland and Northland. Iron-browns to cone 8—9. Rather runny if high fired. Som crystalline iron surface effects when runny. Requires addition of say 10% china clay for cone 9. Kaki maturing.

Phonulite

Rich iron soda-browns at cone 8. Needs clay additions as above.

Sepentines and Ultra-basics. Generally give iron yellowish-browns, much surface crystallisation and muddiness. Additions of woodash and china clay improve the surface quality. Cone 8—10.

Good winter prospecting!

* *Locations, brief description, chemical analyses, index and mineral composition equivalents are given in order.*

Table III

Classification of main Igneous Rocks of NZ.

Based on acid/base ratio, crystalline Texture and characteristic minerals.

Total silica content by analysis	Free Quartz content	Type (Iron d.)	mineral feldspar characteristics (see note below)	Origin — crystalline texture finer ↔ coarser: Volcanic	Plutonic	Colour of fresh rock
>66%	>10%	Acid (A)	alkali feldspars >50% Total. f. " " <50% " "	Rhyolite Dacite	Granite Granodiorite Tonalite	Lighter greys
52-65%	<10%	Intermediate (B)	alkali feldspars < 1/3 Total f. " " 1/2 - 2/3 " ". " " > 2/3 " ". ditto with >10% feldspathoids	Andesite Trachyandesite Trachyte Phonolite	Diorite Syenite Tinguaite	medium To darker greys
45-51%	Seldom present	Basic (C)	Mostly plagioclases (Ca/Na) less potassic. some free quartz, finer dike material, glassy >10% feldspathoids →	Basalt → tholeiic, → spilitic, → limburgite Basanite	Gabbro Diabase Dolerite	Darker greys
<45%	none	Ultra-basic (D)	Complex alumino-silicates of Ca, Mg, Fe with some Na & K.	Lamprophyres Peridotites (Rodingite)	Serpentines Dunite (Nelson)	Light. Greenish silvery greys.

note: feldspars: alkali = soda and potash type. (Na, K).
plagioclases = soda-lime series (Na/Ca). eg albite → anorthite.
feldspathoids: see text notes. Unusually low silica, high alkali composition.
Iron content - as affects glaze colouration: (A) < 2%, (B) 3-7%, (C) 6-12%, (D) 3-10%.

To 'see' is to go right to the core;
to know the facts about an object of beauty is to go around the periphery.

One other thing seems necessary – the seeing eye. Without it selectivity lacks standard.

Soetsu Yanagi in the unknown Craftsman

AMERICAN EXCHANGE

A prime objective of my travel abroad towards which I had an Arts Council Grant in 1975, was to make contact with the producers of other craft and pottery magazines. The editors of Studio Potter in New Hampshire, USA were among them.

From the first issue of Studio Potter in 1973 we detected in the American potters depicted, a common outlook and preferred relaxed lifestyle to that of our own. When we visited we found this to be true and immediately felt at home among friends. Gerry Williams met us in Boston and whipped us along state highways through New Hampshire forests and mountains to Goffstown. Ruth Tobey looked after us in an 18th Century clapboard farmhouse. Pete Sabin took us around the state to meet some of the potters and craftsmen who we found living in circumstances we were familiar with, and producing pots that were not unlike ours either. Everyone was very interested to hear how things were done here, showing a curiosity we had not met in England.

The climate creates problems which we do not encounter, with all work having to be done under cover and anti freeze precautions being necessary. Neither is it easy for North American production potters to sell their work. Selling at craft fairs to both retail and wholesale buyers is common, but the 100 per cent markups do not go into the potters' pockets.

Rural colonial buildings are perfectly preserved in New England. No borer could survive the freezing winter temperatures — and unused barns and outbuildings make ideal work areas for craftsmen. The state of New Hampshire has been actively engaged in assisting craftsmen since the thirties when the League of New Hampshire Craftsmen, the first in the United States, was established. The league provides direct assistance by running two craft fairs annually, maintaining 14 summer shops manned by voluntary staff (6 in winter) having a group insurance scheme and arranging workshops and exhibitions.

We decided that New Zealand Potter and Studio Potter would both benefit if we introduced each other's magazines to our own subscribers. We would circulate an information sheet for them, and they would do the same for us. Consequently the winter issue of Studio Potter had our enclosure and we welcome several hundred new North American subscribers. Thank you Gerry and Pete.

Studio Potter is a magazine geared to the professional production potter. It has a practical approach which appeals to New Zealand and Australian potters and is good on equipment and technology. At $US8 it may seem expensive but there are 90 pages with some colour printing. We commend this magazine.

Margaret Harris

PUBLICATIONS

Craft Australia. The only magazine solely devoted to craft in Australia. Full colour coverage of local and overseas craft, both traditional and contemporary, plus comments and reviews on national exhibitions and craft activities.

Published quarterly by the Crafts Council of Australia, 27 King Street, Sydney, 2000.

Subscription for four issues, AUS $10, including (surface) postage.

World Craft Council Directories to Crafts

Four volumes of directories have been published covering the Americas, Europe, Asia and Africa. They include everything, summer schools, seminars, museums, regular exhibitions, native markets ----- The facts are supplied in looseleaf format and can be bought by cheque or money order to World Craft Council, 29 West 53rd Street New York 10019. Price $6.50 (US) including postage and handling.

A Potters Book by Bernard Leach is now available in paperback, published by Faber and Faber.

The Potter's Challenge by Bernard Leach edited by David Outerbridge is a new publication by Souvenir Press. B.L. examines what the fundamental qualities of good pottery are.

Pottery in Australia published by the Potters Society of Australia provides good articles based on technical research on clays, glazes and equipment which fully compensates for a dull format. $A5, Pottery in Australia, 48 Burton St Darlinghurst NSW 2010.

Ceramic Review magazine of the Craftsmen potters Association of Great Britain has good how to do it articles and photos of what is currently showing in exhibitions. £4.50 a year (4 issues) from Ceramic Review 7 Marshall St London WIV IFD.

Judith McMillan has taken over subscriptions for us. She is a member of the Wellington Potters Association and edits their newsletter.

Gold Coast Potters Association

A new Queensland group announces its meetings on the first Tuesday each month at the Royal Queensland Art Society rooms, the Esplanade, Broadbeach.

New Zealand potters — their work and words

Doreen Blumhardt and Brian Brake. Published by A.H. & A.W. Reed. Price NZ$15.95

Doreen Blumhardt carefully points out that the selection of the twelve potters whose pots and philosophies are set out was a personal one, her choice being made "because they represent a cross section of what is being done — not because they are better than any other group that could be chosen." She goes on to say that a much larger volume on the best New Zealand potters is still needed — the title might well mislead some buyers into believing that this was it.

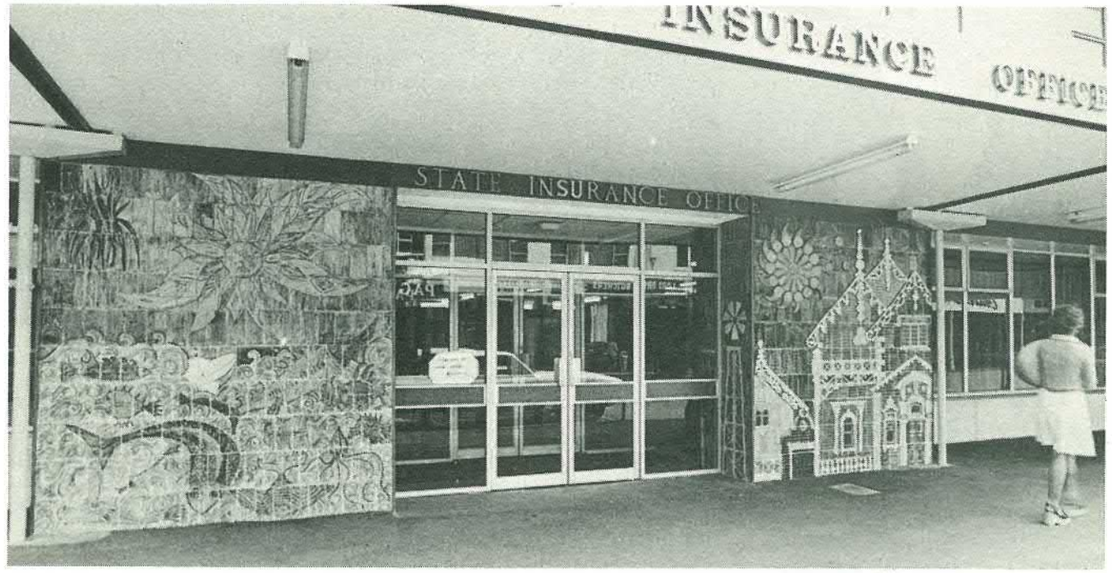
Some of the potters were self conscious in their taped comments. Perhaps the discipline of the written word would have provided the Twelve with a more considered opportunity.

The success of an art book rests with the quality of the photographs and in this case Brian Brake's reproductions of New Zealand pottery in brilliantly accurate colour are superlative. Recording the complete assignment through one pair of eyes gave the opportunity of accentuating variety in the pots and the differing personalities of their makers. Complementary outdoor backgrounds for some of the pots establish the scale of the work so successfully that it is hard to understand lapses such as the inappropriate tree stumps used as repositories for Peter Stichbury's domestic ware.

The history of ceramics in New Zealand, the introductory text by Doreen Blumhardt — is of interest and is particularly valuable to those who have not been readers of *New Zealand Potter* Vols. 1-18. Valuable too are the potters' marks.

All interested in New Zealand pottery will want a copy of this book on their shelves.

Margaret Harris



photograph: Mike Hemmings

Making a mural

Christoper Vine

I was asked to design and make a mural around a local theme for the main street frontage of the State Insurance Office building in Nelson.

The final scheme evolved from the before and after idea thus giving point to the division of the design into two halves. Nelson, which has been our home for twelve years, had a great richness of pre first World War wooden buildings which was one of the reasons why we settled here. Many of these I have drawn for various reasons, largely because I just like them, and so one half of the scheme became a fixation in ceramic of these departed or still extant structures.

The other side then became a memorial to the pre-European-impact landscape based upon the forms of an untrammelled nature, the curvilinear shapes of wave, fish and fern contrasting with imposed geometry of men's disciplined pattern, gable and tower, trees in their seried orchard ranks, a harnessed sun regular and tamed — (Rutherford was born in Nelson after all), — order and anarchy.

Further design limitations arose through the position of the doorways and external angles, so six of the eight panels became long and narrow, lending themselves to such subjects as tree ferns, church steeples and the old wooden windmill at Foxhill.

The panels are of tiles approximately 11 x 5½'' made from Macpherson's slab clay in a cinva ram block making machine and cut or incised when leather hard. Originally I was going to use a good deal of melted glass as I had used this a year before in some 6,000 tiles, (S'welp me Gawd never again), but decided against this as the architectural shapes did not seem to lend themselves to this type of treatment.

The backing is a concrete wall (by the builder), the external angles of bronze. The tiles are in horizontal courses with staggered vertical joints; the major diagonals and some of the geometrical shapes are superimposed over the first layer of tiles, to give high relief and avoid difficult jointing problems. They were stuck with epoxy resin glue with initial difficulties owing to frosty weather and the long curing time needed, overcome by the liberal, temporary application of sticky tape.

A great asset on this job was the tiler, Bill Harrison who was most cooperative and enthusiastic, and now alas returned to Newcastle-under-Lyme near Stoke-on-Trent. The colouring was chiefly applied by washes of pigment to the raw clay. The white parts were tin glazed and the rest fired with clear glaze to about 1160°C.

My chief retrospective reservation about the design is that the right hand panel being composed of more formal shapes, dominates the composition, but perhaps this after all is only a comment on how man does assume a preponderant role, however transitory, on our spaceship.

The pioneer who came too late

As one who worked as architect to the National Trust it follows that Christopher Vine would appreciate New Zealand's colonial architecture. He has taken a strong conservationist stand towards preserving what is left of a once rich assortment of early buildings in the Nelson area.

The beginnings of Christopher and Philippa Vine's plans for establishing themselves as a self sufficient craft unit on land at Hira, Nelson were written about in *Potter* Vol. 12/2. On a few acres of marginal farmland with some ancient buildings, Teal Valley Pottery and Weaving Loft had made a start. Seven years on, the trees are spreading, the stream is bridged, the house is built and now the workshops are complete and the sun shines. Christopher's passion has led him reconstruct in the colonial idiom "making Womble Temples using the things that everyday folks leave behind".

"The fabric of most of the buildings has been on the farm for years, in use as woolshed and so forth. My contribution to the Disneyland contrivance has been by way of applying bargeboards and other decorative woodwork from old Nelson buildings intercepted en route to the tip. Relics from several fine old timers have been incorporated, in particular from the late lamented Nelson Provincial Council Building demolished eight years ago, of which I fancy I have the largest surviving portions in the massive Jacobean porch and double front doors. (East elevation of barn). Some 8,000 slates from the roof were used to sheath the external walls of our house, and some magnificent Kauri panelling incorporated.

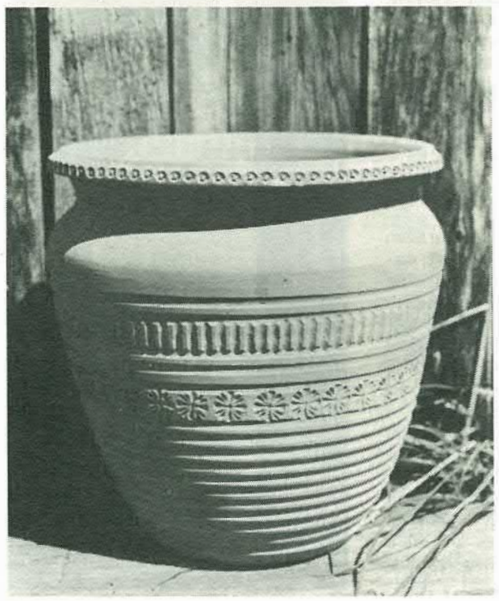
Virtually all these examples of the carpenter's skill were in almost perfect condition, and though brittle and sometimes requiring repair from breakage, and after all what is epoxy for, very little rot or borer was present.

We lacked a suitable finial on the gable end of the barn — this sad deficiency was remedied by the use of "reinforced pottery", using an armature of steel reinforcing rod screwed and bolted to the ridge and similarly secured to the "weather pot" on top of all.

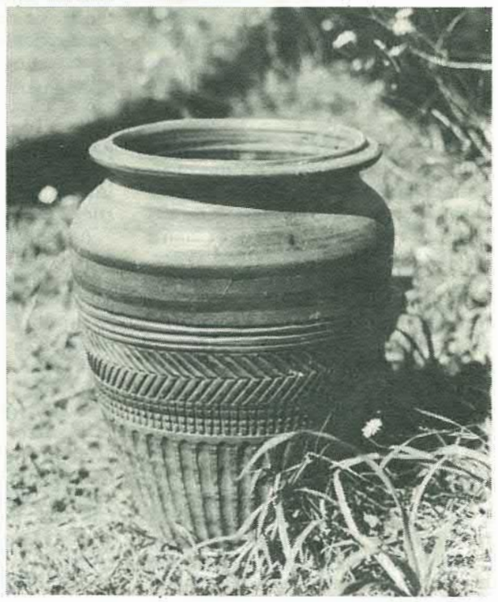
And so the mania goes."

C.B.V.

Terracotta planter 17" high

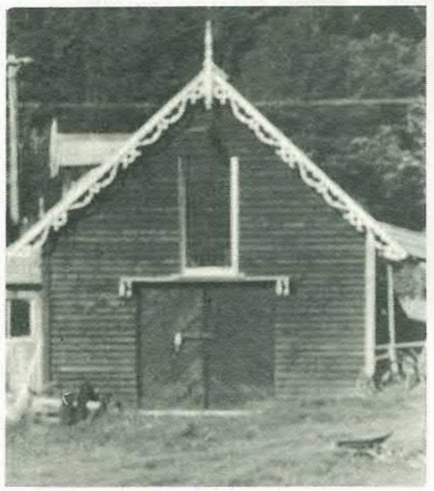


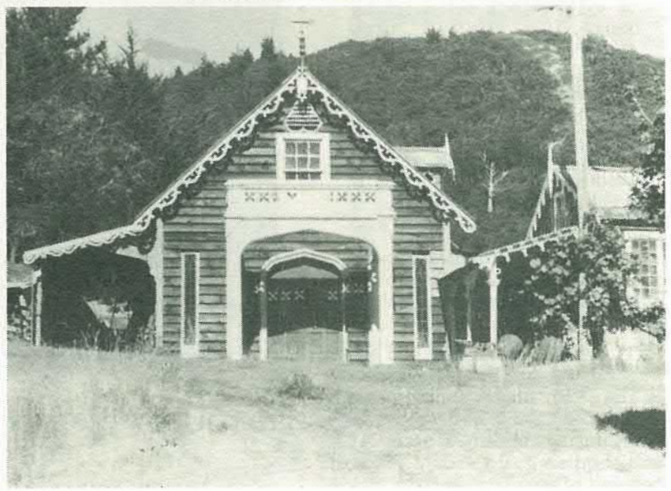
glazed earthenware planter 25" high



In and around the Vine establishment and the Foxhill windmill

Earthenware lantern 32" high





Frank Sharpley's pug-mill

In the '74—'75 Winter Edition of the American magazine "Studio Potter" there was a fine series of articles on clay-mixers and pug-mills. Most of the machines shown were commercially made for potters, and cost between $800 and $1200. Only one of the pug-mills claimed to de-air, and I very much doubt if it does.

Nowadays there is a commercial de-airing pugmill in New Zealand. But there were no such things when we bought a home-built one based on the magnificent Cowan article in N.Z. Potter Vol. 9 no. 2. Later we made an even simpler one for ourselves, and several have been made to the same pattern. I cannot weld nor even saw straight, yet it was not too hard to make.

This machine has certain advantages over a de-airer. It costs a fraction of the price, it is not damaged by the odd nuts and plastic sponges that tend to become mixed with clay, and it has a foot-powered, quick-release plunger which saves effort for less robust potters.

The parts needed for the machine are:

6 inches helix, 3 inch diameter	1.00
24 inches Shaft	2.00
4 inch "T"	5.00
4 inch Steam Pipe. 8 inches. (outlet pipe)	4.00
4 inch Pipe-ending (6 inches long)	4.00
4 inch End Plug	2.00
4 inch Reducer	3.00
Plumber block to fit shaft	50
2 Pillowblock self-aligning bearings	12.00
¾ HP or 1 HP Electric Motor (second-hand)	50.00
3 inch pulley to fit motor	2.00
21 inch pulley to fit shaft	44.00
Belt, A or V, to fit pulleys	6.00
Cutters, boring, and general welding	12.00
Odd bits of wood, hingers, bolts and screws, iron rod	5.00

A few principles:

(1) A 1 HP motor attached to any pug-mill will pug fingers just as easily as clay. Your fingers should never be put into the inlet or outlet pipes, especially during building. If necessary an anti-children guard should cover the belt-end of the machine.

(2) A friendly engineer or plumber and "bits" bought second-hand will make a quite inexpensive machine. (A new 1 Hp motor costs over $100, a 21" pulley is very expensive, yet easy to pick up at the junk-yard.) A piece of old 3 inch helix can be bought at most engineering workshops. (Long lengths of helix are used for carrying grain in agricultural machines) Either with or without a central tube it can be welded easily to the shaft.

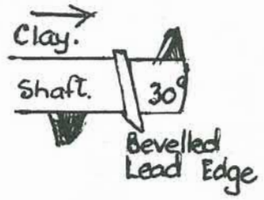
(3) There MUST be from ¼ inch to ⅜ inch clearance between the outside of the helix and cutters and the inside of the 4 inch outlet tube. This allows the clay to adhere to the inside of the pipe, and prevents it simply sliding through.

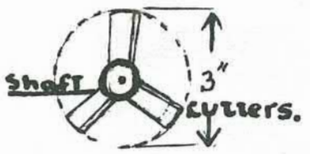
(4) The shaft-size depends on the inside diameter of the helix, and until this is known several other measurements cannot be decided. So buying the helix is where to start.

BUILDING

Have the engineer weld 24 inches of whatever shafting fits the hole in its centre to your 6 inches of 3 inch helix, so that there is 3 inches between the end of the helix and one end of the shaft. (fig. 1) In this three inches he welds three cutters made of 1 inch wide three-sixteenth inch steel welded to the shaft so that they are about one inch apart and the same diameter as the helix. The edge is bevelled as in fig. 2.

Fig 2.

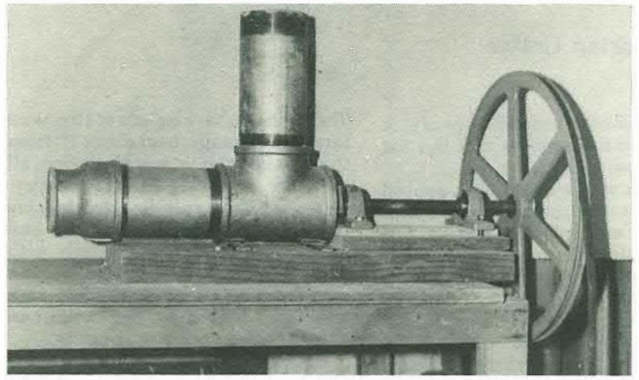




Now buy your 4 inch piping and pillowblocks to fit your shaft. Have your engineer weld two lugs to the bottom of the "T" with ⅜ inch holes bored in them, so that the T can be screwed to the base. Your engineer will also bore a hole in the centre of the lug, fractionally larger than the shaft size. Note that this hole is not used as a bearing for the shaft.

Screw the T to an 8 x 2 x 24 inch piece of wood, the base, so that the plug is at least 10 inches from one end. Fit a plumber block (a wide washer with a grub-screw) tight behind the helix on the long end of the shaft and push the shaft through the hold in the plug so that the plumber-block rubs against the inside of the plug.

Thread the two pillow-blocks loosely on to the shaft and fit a 4 inch wide piece of timber 12 inches long and of whatever thickness is necessary to have the shaft parallel with the base and as high as the plug-hole when the pillowblocks are screwed to it. See fig. 3.



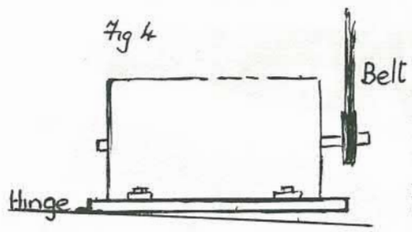
Bolt the pillowblocks down, as far apart as possible, making sure that the end of the shaft is at least 4 inches clear of the end of the base.

Grease well and screw in the inlet and outlet pipes to the T. These are not screwed tight, you may want to clean the machine in a year's time. Stand your machine on a table or wide shelf close to a wall, so that your inlet pipe is opposite a wall-stud. Screw the base to this table.

Buy the larger pulley to fit the shaft, 21 inch is fine but expensive, 18 inch is an absolute minimum, working to a 2½ inch pulley on the motor. With this ratio the smaller pulley will tend to slip under stress, where a 21 inch to 3 inch ratio is less likely to.

Screw the motor to a wooden base and hinge this to the floor with the hinges at the end of the motor further from the pulley. In this way the weight of the motor keeps the belt tight. Buy the belt to fit, so that the motor is about an inch off the floor at the pulley end. This will take a little manoeuvring, but it works very well. *(Fig. 4).*

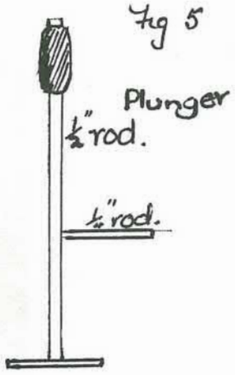
Fig 4

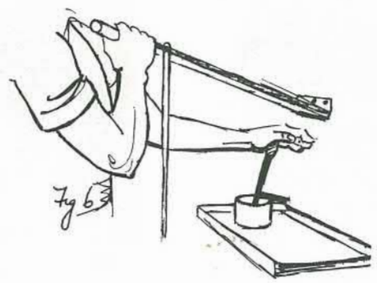


Fit an "On-Off" switch just behind the machine so that the motor can be controlled easily. Test the machine without clay in it, it should run smoothly and silently. (If your motor drives the helix the wrong way, change the direction of rotation of your motor.)

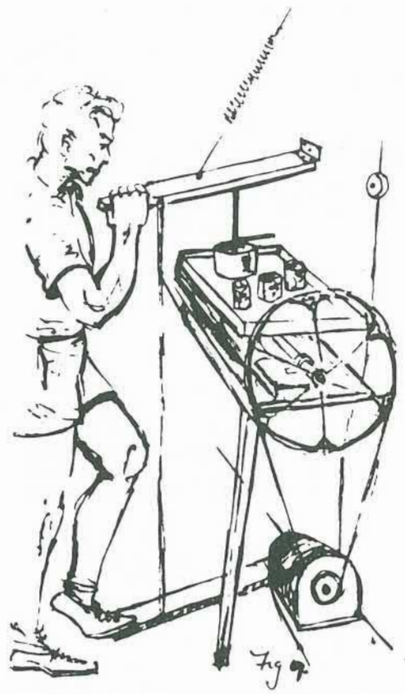
Now the plunger. A circle of ¼ inch steel just under 4 inches in diameter (so that it slides freely in the inlet pipe) has a 12 inch length of ½ inch steel rod welded to its centre. (Fig. 5). A 5 inch length of ½ inch rod is welded out from its side at such a height that the ¼ inch rod hits the top of the inlet pipe when the steel circle is ½ inch above the helix. This plunger is quite free of the rest of the machine. When clay is put into the inlet pipe and the circle of the plunger is forced down on top of it, the ¼ inch rod faces away from the operator. When the clay is carried off by the helix the ¼ inch rod prevents the circle hitting the helix. Then a push on the plunger-handle hinges the ¼ inch rod on the top of the intake-pipe and the plunger is freed from the clay below. *(Fig. 6).*

Fig 5





Forcing down the clay is too strenuous to be done for long by hand. Two pieces of 3 by 1 inch timber, two feet long are hinged to the stud on the wall behind the intake pipe. One is 2 inches from the ground, the other about 12 inches above the top of the inlet pipe. These two 3 by 1's are joined by a length of ⅜ inch iron strip screwed to one side, *(Fig. 7)*. This lever-system is



held floating" by a spring or ribbon of inner-tube fastened to the ceiling. When in use, the plunger is placed on the clay and under the top 3 by 1, and foot-pressure forces the plunger down.

A reducer on the end of the outlet pipe compresses the clay but is not really necessary unless the clay comes out with a hole in its centre. A cutting-wire fastened here is pulled through the column of clay which is bagged in foot lengths in plastic clay-bags. The first few feet of clay in a new mill will come out raggedly until clay has adhered to the inside of the outlet pipe; then it will settle down.

When not in use the mill may be left full of clay sliced flush with the tops of the inlet and outlet pipes and covered tightly with glad-wrap, or a few inches of water are poured into the inlet-pipe, and a cork fitted to the top. If the clay does go hard in the machine, unplug the motor-flex from the wall, unscrew the outlet-pipe and pull out the hard clay.

Continued on page 36

A clay blender

Adrian Cotter

For anyone who still mixes their own clay, this mixer would be a great labour saving device. Bacially it is a ribbon blender which is widely used in industry for blending different materials but does not appear to be used in the ceramic or clay business very much. It is extremely efficient (my mixer will blend perfectly about 300 lbs of wet clay in 10 mins), has a relatively low power requirement, and is fairly compact (much more so than a dough mixer which is widely used overseas for blending clays). A major benefit is being able to blend slops back into a batch of new clay without having to dry out the slops.

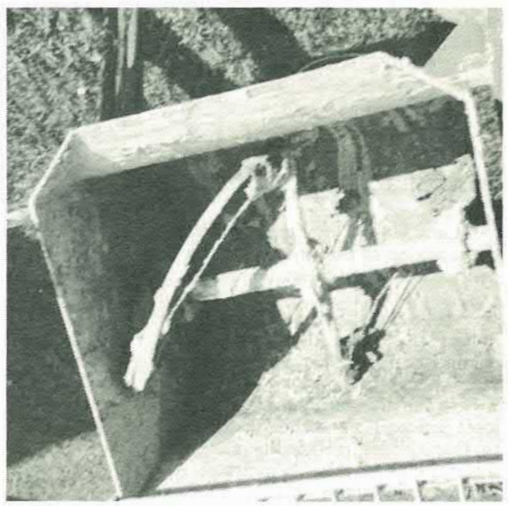
I know that some purists will say that the best way to blend clays is to mix them into a slurry and dry them out to a plastic state, but this method of mixing the clay in a plastic state saves a lot of time and labour: I find that if the clay is aged for a few months the plasticity improves considerably. Mechanically this machine is quite simple, but I doubt that building one is really a job for a potter. For those who would like to try I will describe the contruction.

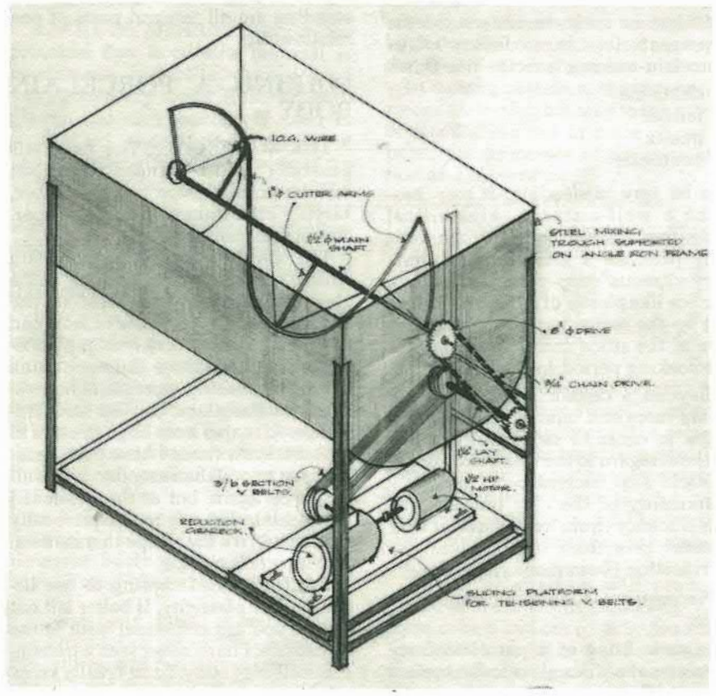
The clay container is like a 44 gal barrel that is cut lengthwise from top to bottom but with the sides extending beyond the mid-line of the barrel. This trough is placed lengthwise on legs with a shaft running from one end to the other. On this shaft are four or five arms that are either welded onto the shaft or made as a sleeve fit and pinned to the shaft. Joining the ends of these arms are bolted or welded strips of 1" x 8" steel band placed so that the flat scrapes around the barrel.

The arms can be arranged as a spiral around the shaft or they may spiral from each end into the middle, but they should not be arranged in a straight line on the shaft. If the arms are a continuous spiral they tend to push the clay up to one end in the intitial mixing but some clay can be thrown to the opposite end and it soon settles down without pushing the clay anywhere except around the barrel.

The arms also have a piece of 10 g. wire threaded through them about 1" from the ends and this wire actually does all the work by slicing through the clay. The steel band merely cuts the clay free from the sides of the mixer and allows the clay to move slightly with every turn of the shaft, so that the wire cuts the clay in a different place each time. The action is very similar to wedging clay with a wire cutter.

By keeping the mechanical friction low, the torque loading on the machine is not too high. However I think it is best that the final drive be a chain drive as belts are prone to slipping and stretching if the torque loading is too high. The mixer does not need to run any faster than about 30-20 r.p.m., so a relatively small motor can be used geared down with a reduction gear box or by double lay shaft drive. When using lay shafts, double or treble B section V belts are necessary.





There is a very similar machine on the market known as the "Fecco" Concrete Paddle Mixer made by Forrest Engineering & Construction Ltd P.O. Box 3043 Tauranga in two sizes, 2 cu. ft and 5 cu. ft. They only need slight modification to the paddles to be quite satisfactory as clay mixers.

Sump oil as fuel

For those potters who would like to try and save a few dollars in this day of ever rising oil prices it might be of interest to know that old engine oil burns very well in an oil firing kiln. However there are a few problems associated with its use.

Because of its high viscosity it needs to be diluted with diesel to get it to run in small diameter pipes and also for it to atomise and burn without too much smoke. I have found that 50% dilution with diesel works well and cuts my fuel bill in half. Here is my system:

I pump the old sump oil from the garage underground tank into a 44 gal. drum with a 1" gear pump. Because of the viscosity you need a fairly hefty pump. When I get it home the old oil is pumped into a 44 gal. drum with a filter made from a truck air cleaner filled with sponge rubber bolted on underneath. This satisfactorily removes any large pieces of rubbish. The drum is only half filled with sump oil and then the other half is filled with diesel. I give this a vigorous stir with a paddle and allow it to drain into another tank which serves as a header tank. To maintain a constant head pressure to the burners this tank in turn feeds into a 12 gal. tank fitted with a ball cock, which means that the pressure of oil at the burners remains constant whether I have 100 gals of oil or only 20 gals in my main tank.

I have found that the mixture of 50—50 diesel and sump oil is a bit slow to burn when starting a firing and it may be preferable to start with straight diesel and then switch to the mixture, but once there is some heat in the firebox it burns without any trouble. It is a bit smokier than diesel but not enough to worry about.

Adrian Cotter

PORCELAIN

John Reeve

The Chinese materials for porcelain-making, petunse and kaoling, correspond to Cornish stone and china clay. That is what we generally say, and it is certainly a generalisation, for there is no combination of our Cornish stone (or felspar or nepheline syenite) which will combine with our china clay to produce a porcelain body at cone 8 — 10. The permutations are invariably too low in silica, and we must always augment the silica content with quartz or flint.

The difference between the silica in clay and the silica in quartz or flint is not a difference in chemistry (SiO_2 is SiO_2) but a physical difference in size. Clay contains immensely finely-divided silica which dissolves readily: quartz or flint are only as fine as they are milled and only dissolve with difficulty.

During the firing of a porcelain body, *the felspar melts first and combines with the clay in a more-or-less liquid form. This solution then gradually dissolves the silica.* It is crucial to understand this as a sequence, for it implies the time-relative-to-particle size factor which determines the quality of any porcelain body. A well-matured porcelain body will contain the maximum silica glass (for vitrification and translucency) and just enough free silica to control the thermal expansion. To whatever extent quartz crystals remain undissolved in the body, that body is less translucent.

It is generally accepted and understood that sand (coarse quartz crystals) added to a stoneware body should not be "counted" as part of the silica-content of that body, because the sand does not melt into the body-glass. What is less generally understood is that the ground silica (quartz or flint) is also, in relative terms, a coarse material which resists dissolving, and is more like fine sand in size than it is like the extremely fine, easily dissolved silica in the clay itself. Thus, quartz or flint added to a porcelain body should be thought of more as fine sand than as silica, and will augment the silica glass content of the body very little.

Unless the firing is long enough to accomplish the slow solution of quartz. (Slow-firing below 1100°C helps very little in this respect. It is only as the body nears maturity that slow-firing or "soaking" is a desirable and necessary ingredient).

The size of the quartz particles is of great importance because all materials dissolve only from their surfaces, and unless the quartz has greater surface (i.e. smaller size) or greater time, or greater both, it will only partially dissolve, resulting in diminished vitrification and translucency and increased possibility of the ills to be derived from too much free silica.

Unless or until we understand the time/particle-size factor in porcelain-making, a recipe like this:

56 china clay
28 felspar
14 quartz
2 bentonite

can be very misleading. It may produce a well-matured, high-silica, craze-free, translucent porcelain, or it may produce a glaze-crazing, not-very-vitreous semi-porcelain with a surface like plaster of Paris, depending not on the recipe but on the particle-size of the silica and/or the length of the soaking period in the firing.

Beyond a certain level, simply to pump more and more silica into a receipe in order to satisfy an analysis without regard to the firing-time or the particle size decreases not only the workability of the clay but also the translucency (from free quartz) at a far greater rate than it increases the vitrification (from more silica glass).

Necessary, if complicating, footnote:

The slow firing of a porcelain body increases the silica glass and therefore the vitrification and translucency. It diminishes the quantity of free silica, which decreases the thermal expansion and contraction, leading towards crazing. At the same time, the slow firing also converts more of what free silica there is into christobalite, leaves less as free quartz. This increases the thermal expansion and contraction, leading away from crazing again. Thus there is a compensating-effect in the thermal-expansion caused by slow firing.

Although the experts seem to shy away from the desirability of christobalite formation in stoneware bodies, the porcelain maker can hardly avoid it, but the relatively small quantity of free silica in a porcelain body makes it a less important factor than in stonewares. More christobalite does mean that there is a greater thermal contraction later in the colling, between 300° — 200°, with the greater risk of pots cracking if the kiln is opened too soon.

How much is enough?

This question, applied to the silica content of a porcelain clay, cannot be answered simply in a quantitative way, but only through an understanding of how the materials, the recipe, the firing, and the potter's understanding are all integral parts of one relationship.

MAKING A PORCELAIN BODY

THE MATERIALS: The materials generally used by studio potters for making porcelain are few in number, varying little from china clay, felspar, quartz and Bentonite.

THE CLAY: For making porcelain which is really white, English china clays are probably the best in the world. They are very low in iron and titanium and also very low in plasticity. I have used three different china clays for making porcelain bodies: standard Porcelain, Grolleg and Treviscoe. All come from English clays in St Austell. At times I have been more partisan to one than another, and well might be again, but at the moment I don't think that any is unequivocally superior — it's the recipe that matters, and how it is used.

BALL CLAY: Tempting to use because of its plasticity, is better left out unless you are contented with white stoneware. I have never seen a translucent ball-clay body. I don't really know why, but suspect the iron and titanium content.

FIRECLAY: I have been told can be used to make porcelain, but only in those parts of the world where a low-iron, low-titanium fireclay is available. I do not know of one in England, but in America there are clays called flint fireclay which might satisfy these conditions and combine with them a higher degree of plasticity than that of china clay.

THE FELSPAR: The body-fluxes used in porcelain are generally added in the form of felspar (and/or the related alumino-silicates Cornish stone, nepheline syenite, petaline). The reason is simple. The fluxes they contain are predominantly soda, potassium and lithium (see note below) and these fluxes, the alkaine metals, have a long slow, steady action in their melting. The other forms of these fluxes, such as soda ash and pearl ash are soluble materials and difficult or impossible to use in a clay-body. The other common fluxes, calcium and magnesium, are sudden-melters and are likely to cause instant distortion in the ware unless the firing is very precisely controlled. Thus, like the plague, they are better avoided, even though it might seem tempting to bring in some fine-grained silica through their silicate forms, Wollastonite and talc, or even wood ash. Bone ash, used in bone china, is best avoided for the same reason. It is calcium phosphate, and a sudden melter.

A NOTE ON LITHIUM: Lithium, the principal flux in petalite (as well as spodumene, lepidolite etc) is a good supplementary body flux for both glazes and clay bodies. If used in significant quantities, however, it might create difficulties because of the unique physical properties of fired lithium silicates. These qualities which include the charming contradiction in terms called negative expansion, are not within the scope of this article.

THE QUARTZ: Additional silica is usually added to the porcelain in the form of flint or quartz. There may be some difference in which of them is used because flint converts more easily to christobalite than quartz does, but the main consideration is that it be extremely finely ground. (Singer refers to 325-mesh silica as "a fairly coarse form"). The finer the silica, the better for the glass-forming of porcelain. However finely ground it is, it will have no more plasticity than wet sand.

Coarse body quartz is better left to the formulation of earthen-ware and tile-bodies, which it is used largely as a "filler", not as a source of silica.

Of course the ideal source of silica is clay, and if the china clays were high enough in silica, there would be no need for either quartz or flint.

THE BENTONITE: The magic plasticizer. Bentonite is a clay with an extremely high plasticity and gives very marked improvement to the workability of a porcelain body, even at the low but usual addition of 3—5 p.c. The additional workability justifies the slight loss in translucency and the slight increase in colour.

MAKING A PORCELAIN BODY: BY THEORETICAL MEANS

There is no way to make one beautiful glaze or clay body by purely theoretical means. Whichever method we use, it can only (at best) tell us where to look. The exact quality of beauty evades analysis and calculation, and is too subjective to show on a slide rule. In the end, all methods are empirical (experiment and observation) and the choice is up to you and me.

At the same time, to reject any useful tool (such as glaze-calculation) because it is too limiting for an artist, is to cut the nose and remain faceless. Tools may be extensions of human consciousness, or they may be amputations — and the choice is ours, not theirs. A knife, as a tool, is indifferent to whether it is used to cut Madeira cake or the throat of an enemy. The knife does not care, nor can it take over the soul of it's operator.

In making porcelain, the theoretical means are useful, but only to the extent of establishing one or more places to begin the processes of experimentation and observation.

Consider these five analyses:

	Silica	*Alumina*	*Fluxes & Iron*
(a)	78.19	16.24	5.57
(b)	77.0	18.3	4.7
(c)	70.3	23.36	6.34
(d)	67.19	26.54	6.27
(e)	65.62	28.36	6.02

The first is super-porcelain, the analysis of a Chinese Y'ing Ch'ing porcelain, highly translucent. The second (b) is a Japanese commercial porcelain: very hard and highly translucent, but less likely to distort than (a). (c), (d), (e) are three porcelains which I have used in England made from English materials.

All of the analyses will produce vitrified, translucent porcelain between cone 8 and cone 10. In descending order from (a) to (e) they will be more plastic and workable but less vitreous and translucent and more inclination toward crazing unless they are fired very slowly. Thus the working properties and the fired qualities are in some opposition to one another, and it is quite true to say that the more plastic the porcelain body the longer it must be fired.

It is a fairly simple matter with a slide rule to calculate recipes to fit these analyses. A little variation in the silica content will make little difference. It is unlikely that you will achieve a body that can be thrown with ease unless you include 2—5 p.c. Bentonite in every recipe. To diversify the fluxes by using a number of different felspars and alumino silicates will likely improve the felspars and alumino silicates will likely improve the fluxing of the body but as most as higher in alumina than felspar (relative to the fluxes) they will also diminish the quantity of clay in the recipe. Above all things, use the finest grained silica which you can obtain and soak the firing as long as you can endure. If you use simple, clear, transparent porclain glazes they will bring out the best qualities. If the body has a high degree of translucency it is surprising just how? glazes can be which are at the same time highly coloured. It is not colour which makes glazes opaque.

MAKING A PORCELAIN BODY: EMPIRICAL MEANS

If the chemistry makes you nervous, a porcelain clay body can be made by empirical means. As a beginning, take this recipe: 50 china clay, 25 felspar, 15 quartz, 5 Bentonite. Fire it. It is quite low in silica and the glazes will likely craze. If they do increase the quartz in the body until the glazes fit. The recipe will be unlikely to take more than 25 parts quartz. If the firing cycle is short, so much quartz may be needed that the fired body will begin to look "dry" and plaster-like, although the body may be translucent. This is an indication that the recipe has run out of fluxes, and you must slowly, carefully raise the felspar content. A rough method, it is a perfectly workable one, and has the advantage of matching the available materials and the existing firing-cycle to the recipe.

Assuming that the porcelain recipe is nearly right, with approximately the right balance of silica, alumina, and fluxes, and that the glaze or glazes are themselves well-balanced: a long firing with fine silica will result in the maximum silica glass and the highest degree of vitrification and translucency.

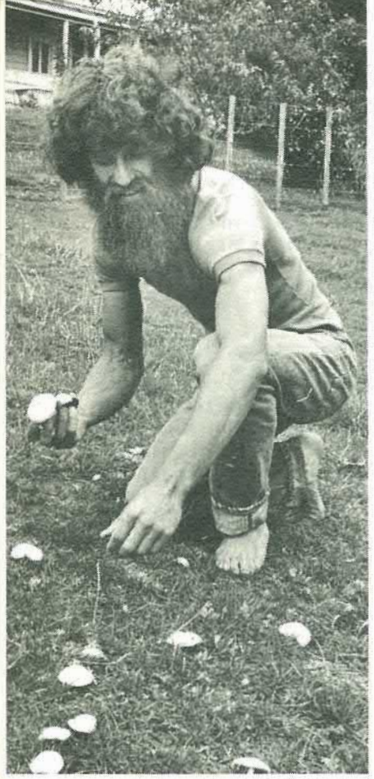
If it crazes (causes crazing), it needs: more silica for better fit but likely loss of V & T. Or — small silica or longer firing for better fit maintaining or gaining in V & T.

If it shivers (or spiral cracks, or shatters) it needs: less silica for better fit with gain of V & T or larger silica or shorter firing for better fit with loss of V & T.

NOTE: The addition of felspar, often advised as a cure for shivering, etc. will work only if the body is already underfluxed. Thus it often works well in stoneware bodies, but in porcelain is more likely to cause a sharp increase in distortion.

To put the same kind of information the porcelain recipe is nearly right, etc. etc. the following are the likely symptoms resulting from:

continued on Page 29



Nicholas Brandon

The only constant thing in this world is change.
The task of finding yourself is luckily never ending.

You can't express yourself
until you know yourself

You can't know yourself
until you lose yourself

Lose yourself in your work
and you will discover yourself

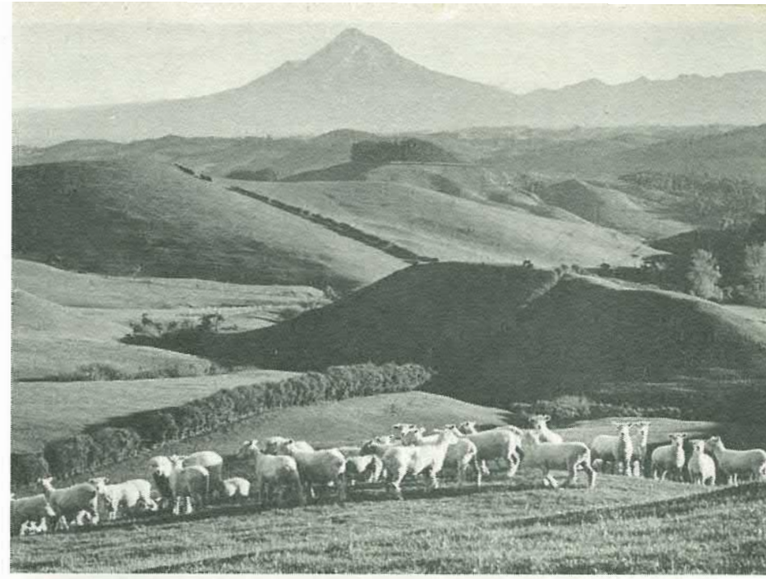
Pottery is to me like a child – as such, in the beginning it needs the security of constant love, attention and discipline. At first I worked 14 to 18 hours a day, seven days a week with a 40 hour stint when packing and firing the kiln. You die fulfilling its needs. Yet live again through your pots.

A natural aptitude for working with my hands led me to experimenting with wood, paint, fibreglass and wool. Reluctant to commit myself to any one of these for fear of losing the enjoyment of creating to the commercial aspect of the work, I began working with clay in 1971. Two months with Mirek Smisek showed me what total commitment was and I began potting at home with a kick wheel and a 2 cu. ft electric kiln and progressed to a 25 cu ft. oil fired kiln also at home. In 1974 I ran out of working space, so I moved to a lovely old farmhouse 17 miles from New Plymouth. The country environment offers much peace and quiet, room for 4 kilns and hundreds of pots, fresh meat and milk. Having my own garden and baking my own bread makes me quite self-sufficient. Wandering over the hills looking for mushrooms, blackberries and chestnuts and helping Ross with haymaking and calving offers a welcome break from potting. Most rewarding though is the awareness of the seasons.

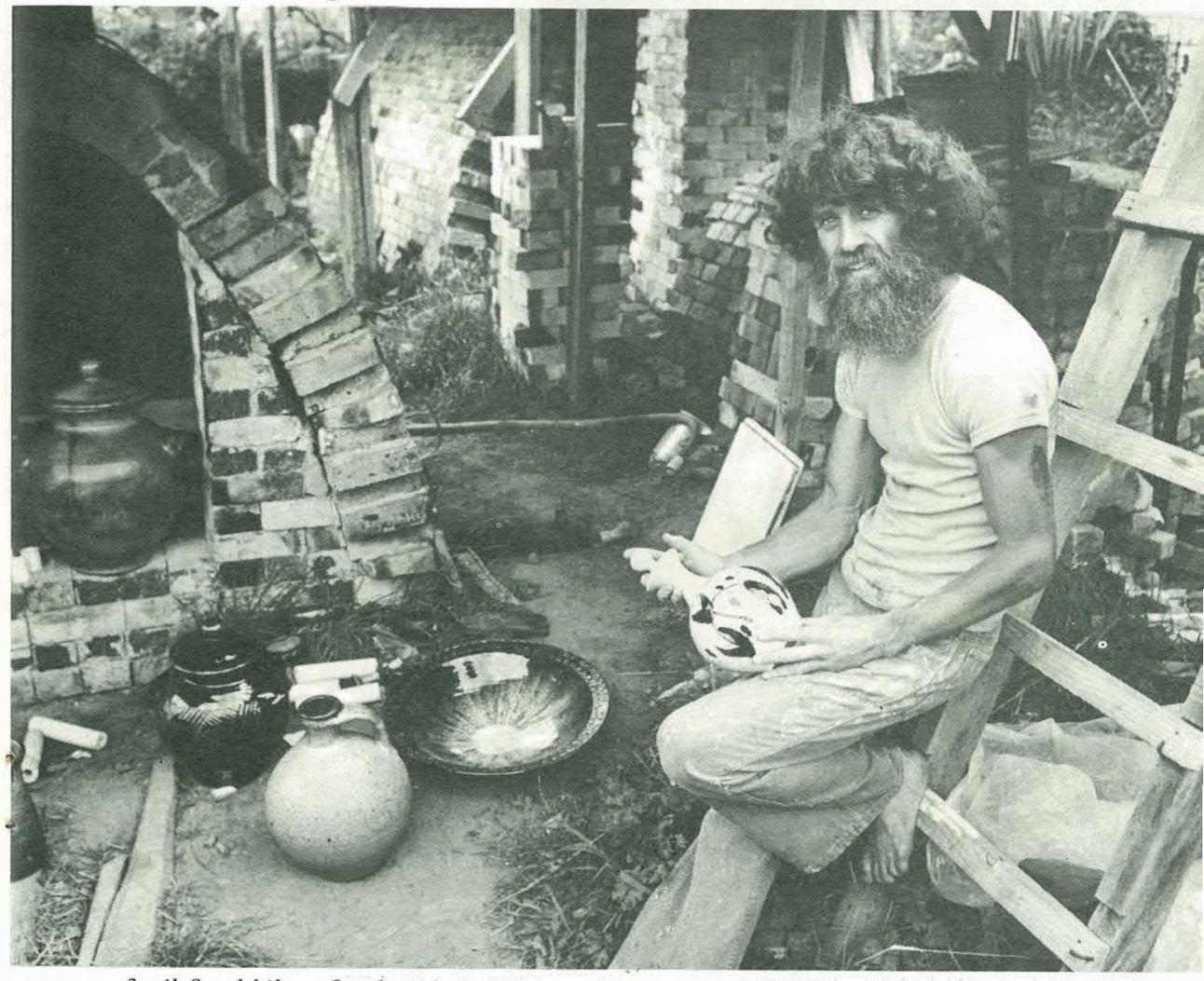
I think life today is difficult, fewer restrictions have made it too easy to find new directions and ideas from sources that are not always relevant to one's experience. Beginners tend to experiment with too many clays, shapes and glazes, but I find just as much enjoyment and more understanding in the subtle variations of using just one clay, shape or glaze. 'Restrictions being our freedom' it saddens me to find we have no tradition within which to grow. Until such time as we are forced to use only indigenous thoughts and materials a tradition will not be able to grow.

Tradition is like a kiln – a solid form to get to know and within which to work. Solid yet flexible. Use cement in its construction and it will crack, fire it with too much direction and the pots will warp.

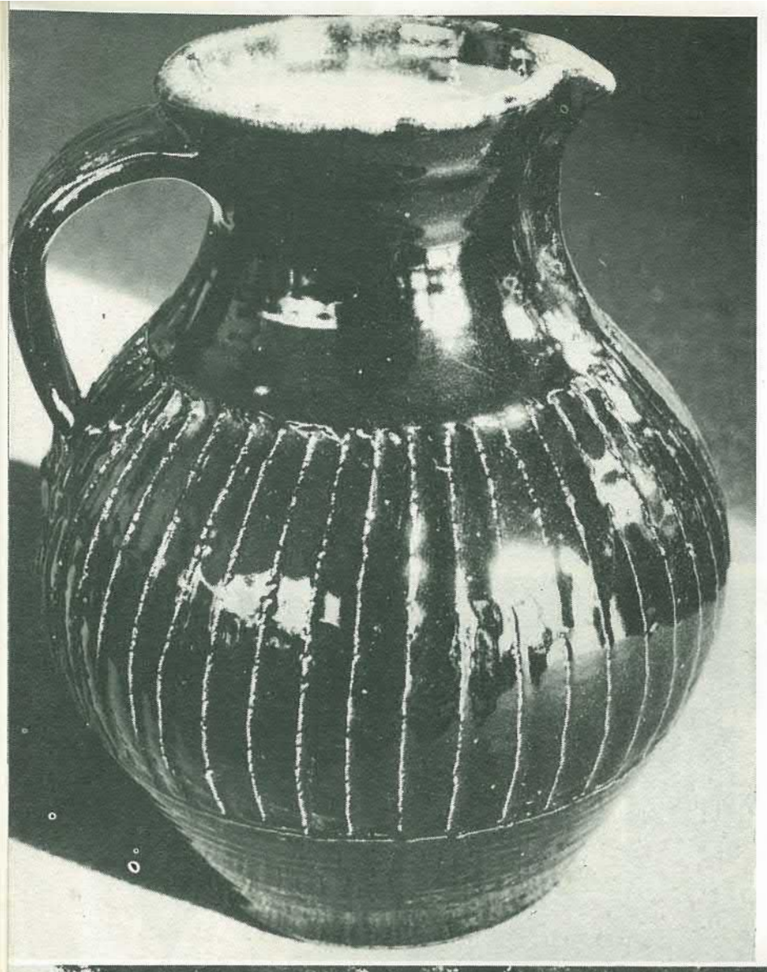
My creative child – now six years old – no longer demands the same intensity of attention and discipline – becoming more and more independent – needing only to be loved.



I enjoy climbing the hills to view Mt Egmont.



3 oil fired kilns, fired with 4, 6, 2, pot burners to 1300°C in 12, 16, 10, hrs. I also have a small top loader which fires to 1300°C in 5 to 6 hrs with 1 pot burner. I enjoy firing and like the fact that using fire, such a destructive force, you can make something positive.



Left: Stoneware Jug tenmoku glaze Ht. 34cm.

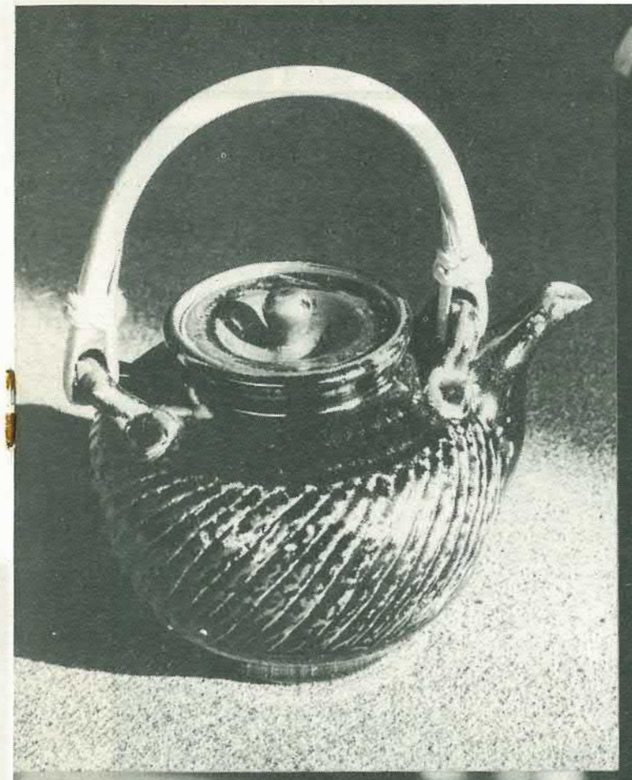
Right: Stoneware Tea Pot tenmoku glaze Ht 17cm.

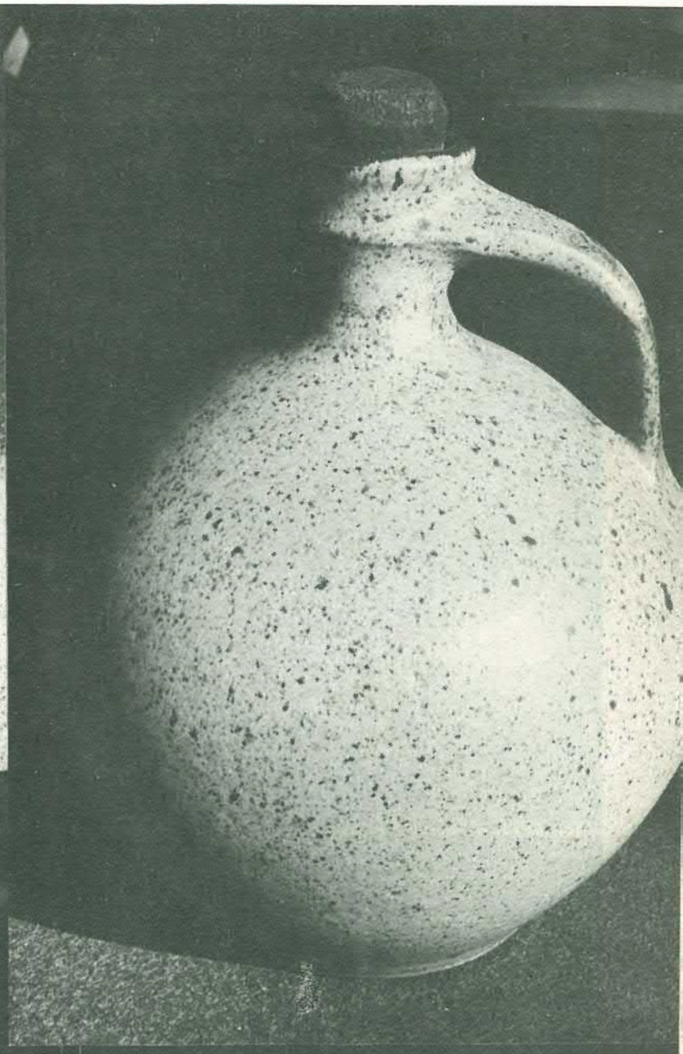
Far Right: Stoneware Bottle speckle ash glaze Ht 32cm.

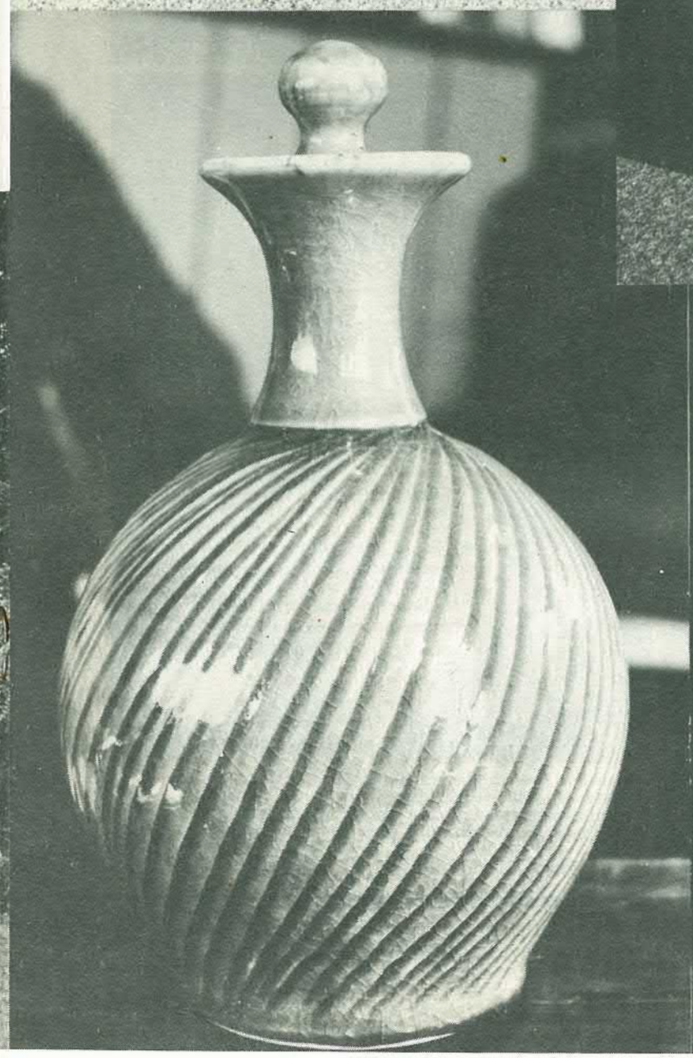
Right: Porcelain Bottle celadon glaze Ht 24cm.

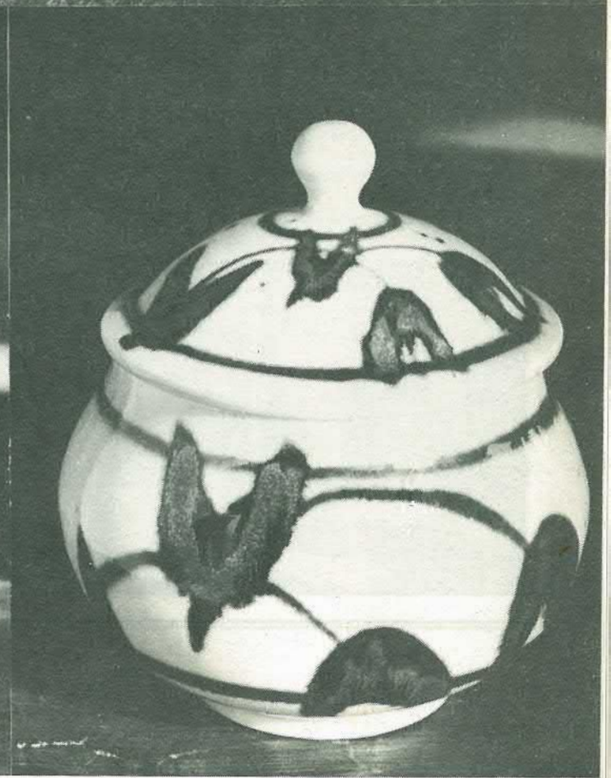
Far Right: Porcelain Lidded Bowl Iron Dec Ht 12cm.

Photos of Pots: Stan Jenkins from an exhibition at the Craftsman Palmerston North.
other photos: Alfred Brandon









Single glaze firing

Dennis Parks

Within the next decade the quaint custom of sequential firing (bisque-glaze, bisque-glaze, bisque-glaze) should be passé — like large families, fins on Cadillacs and electric scissors. Unnecessary. Preshrinking clay before applying glaze is, in most circumstances, simply tiresome. Bisqueing is that extra step that wastes energy, yours and ours.

Then why don't more contemporary potters single-fire? I am uncertain. Probably the lack of reference material is the most compelling reason. Being a generation of school educated potters we respect the Word. If we didn't learn it from the mouth of our teacher or can't find it in a book, we don't do it. Also until a few years ago there was no pressing need to conserve fuel. And don't discount that dark side, the fear of failure in a big kiln, that inhibits us all.

The sole reason I routinely bisqued for the first six years I worked with clay was basic. It was the way I was taught: I was following through on a process I thought had to be. I dropped the habit in 1965 when I started experimenting with salt glazing. Vaguely I remembered reading a sentence in a history-of-ceramics book where potters always single-fired in salt kilns. So I tried. Pragmatically I discovered that single-firing worked, and it worked well. I haven't bisqued since, raw glazing for salt fire, high fire and raku.

The definite history of handmade pottery has not been written from the technical point of view of the potter. From the fragmentary information available it does appear that the twice-firers were a late coming minority. 12th Century Chinese celadons were probably not bisqued, though 14th Century Korean celadons appear to have been double-fired (from sherd evidence uncovered at the kiln sites). At the Sevres National Factory in the 18th Century records show that bisqueing was practiced as an exception, and only for copper red glazes. In every culture where tin glazed pottery developed or was introduced bisque-firing replaced single-firing. The industrial revolution killed the English raw glazing tradition. Just bits and pieces of information. Today for a potter on-the-learn, going through the library more questions than answers emerge.

Still the advantages of single-firing are real. Would you like to cut down on the number of times you handle each piece; load and unload your kiln less frequently; have more time to make pieces; need no shelves for bisque storage; and save fuel (money) too?

If you want to try single-firing without risking a kiln full, just glaze one or two raw pieces. Put them in a corner of your kiln with a standard (bisqued) glaze load. Use your regular glazes on them. Often the old favourites work with no adjustment. Apply to bone dry greenware. Fire as cautiously as you normally would for a bisque kiln until it reaches red heat, then fire to temperature according to your glaze firing schedule. Of course there will be no fuel savings with this type of test firing. Charge it to experience.

Last fall, out of curiosity, I mixed twenty, cone 10, bisque-glazes (some commercial dry mixes, some randomly chosen from books), added 3—5% Bentonite, and applied them to dry greenware test cups. To my surprise all adhered and matured. Luck.

Some tips on applying glaze to raw clay:

(1) Handle with care. Remember dry greenware is fragile, even more so when re-moistened with glaze.

(2) When you pour a wet glaze on the inside of a dry pot the moisture forces the clay to expand, exerting pressure against the outside of the wall. If you do not soon apply glaze to the outside you must wet a portion of this area with water to reduce the chance of cracking the piece. This procedure is critical with plates where the unglazed bottom is such a large proportion of the piece.

(3) Thin glazes cause fewer problems than thick glazes. There is less chance of the pieces cracking or dissolving, or the glaze peeling or crawling. Shake excess glaze off lips for the same reasons.

(4) Glaze recipes with a high percentage of clay usually adhere best. Substituting ball clay for kaolin helps a glaze not to crawl. 3 to 5% Bentonite added to bisque glazes(mix dry ingredients before adding water) very often is all that's needed.

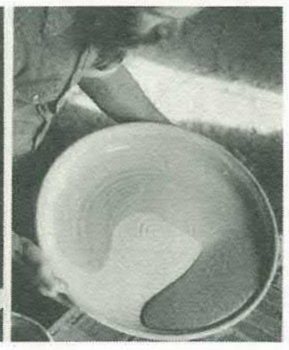
One further application technique which works well on raw clay is dusting. A 50 or 70 mesh sieve is the tool. The "dust" can be a dry glaze mix, ash, cement, dirt or almost any fluxing material. On pots with gently sloping shoulders, or flatware, this dry sediment may be the sole glaze. On more vertical forms I sift on different materials while the glaze is still shiny wet. The base glazes all have several rich variations depending on what is in the sieve and how thick the coat of particles.

CONE 10 Base Glazes

B.P.W. gloss: Best Possible (Parks) White	
Kaolin, E.P.K.	1 lb
Kentucky ball clay #4	1
Nepheline Syenite	5
Silica	1
Gerstley Borate	1
Talc	1
Zinc	0.15
B.P.W. matt	
Kaolin, E.P.K.	1 lb
Kentucky ball clay #4	1
Nepheline Syenite	5
Silica	1
Gertsley Borate	1
Whiting	2

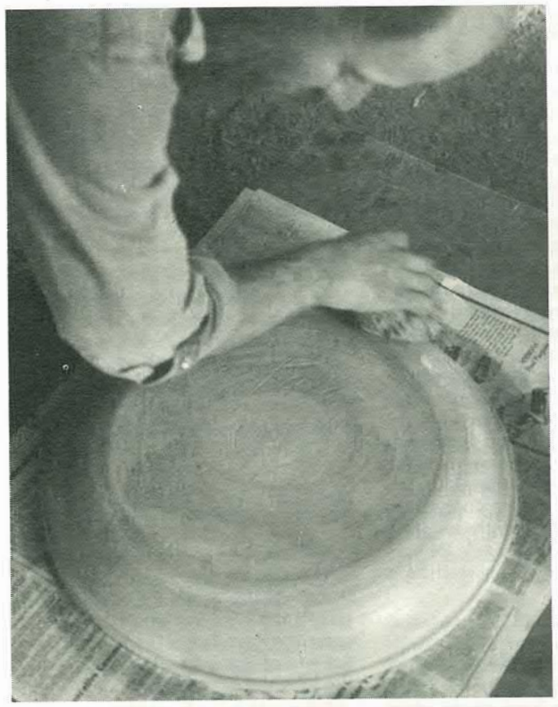
It is possible to substitute Gertsley Borate with Standard Borax frit. Editor

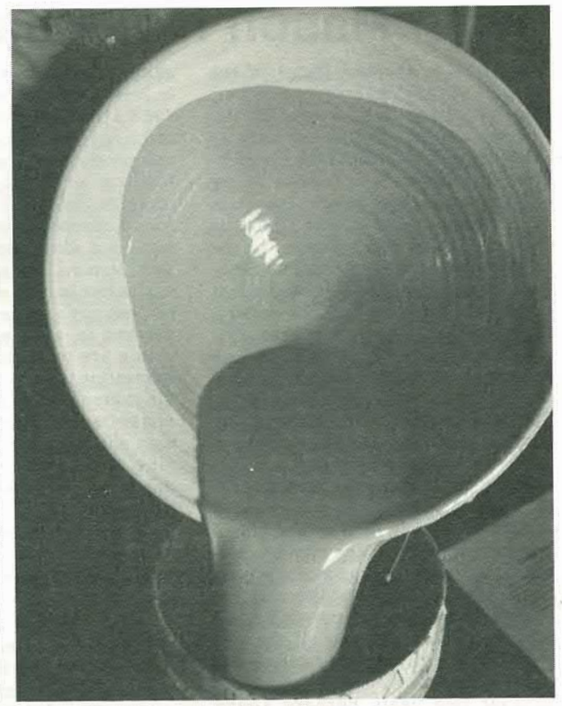
Dennis Parks runs a pottery school among old mine buildings at Tuscarora in the wilds of Nevada, U.S.A.

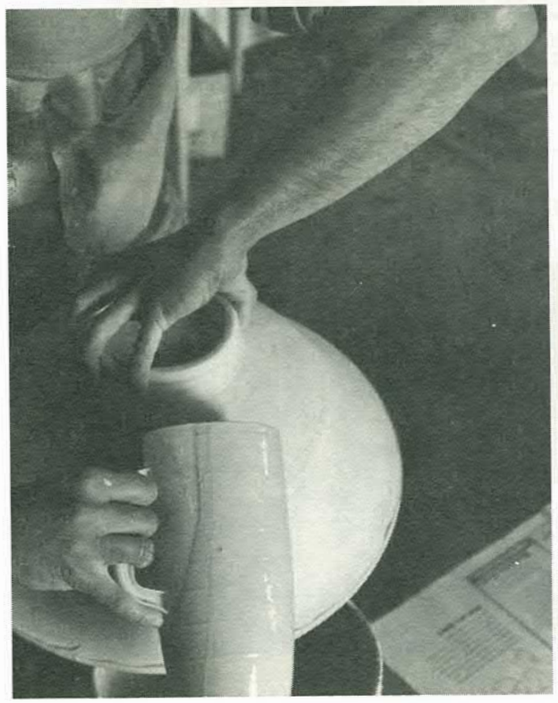


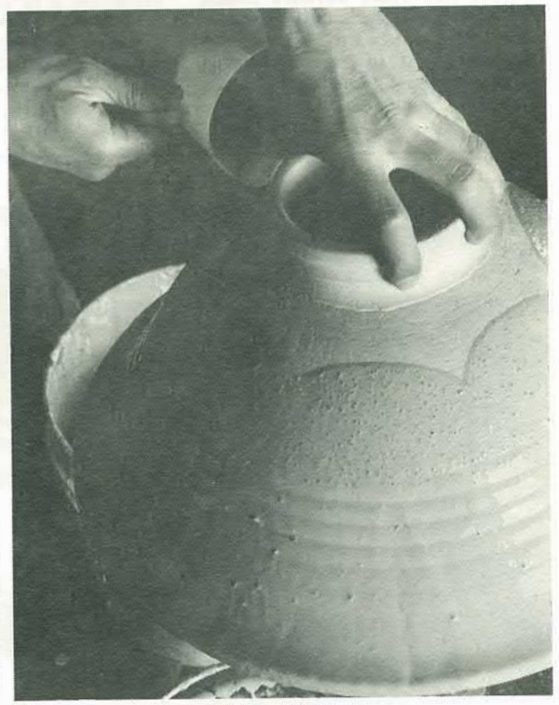
From left: Pouring glaze in platter, flooding glaze over platter. Opposite above: Sponging bottom of platter to equalize expansion, glazing inside of bowl, starting to glaze bowl outside finishing glaze on bowl outside

photographs: Valerie Parks









Helen Mason looks back

Mention in the last Potter of the news that the Victoria and Albert Museum, on the occasion of an exhibition to honour the 90th birthday of Bernard Leach, is publishing a booklet based on our own *New Zealand Potter* publication *Bernard Leach, Essays in Appreciation* collected and edited by Dr Terry Barrow and published by the original Editorial Committee in 1960, has set my mind to thinking about those exciting early days of pottery. How well I remember that lost weekend in the mid 1950's when, as a student in one of the first pottery classes in Wellington I discovered in the Public Library Bernard Leach's *A Potter's Book*. It seemed to give the answer to what we were seeking. Nor did I think at that time, as I gazed out of the kitchen window into suburbia and imagined myself in that delightful Korean potter's hut depicted by Bernard Leach, that within 5 years I would be visiting Japan, Mashiko and the Mingei Museum, and meeting Shoji Hamada, Dr Yanagi and all the rest (who incidentally all requested copies of these same Essays), and that within another two years Bernard Leach would be visiting me in my own home. Such is the power that is generated when a group of kindred spirits with a common interest gets plugged into a worldwide happening. I have told the story in my booklet *10 years of Pottery in New Zealand* published by me in 1968. I think now that perhaps it was a reaction to the safe days that were developing after the abnormal but exciting times of World War II. We wanted more out of life than the suburban round offered, some went the affluent way, and some began to develop the self. Bernard Leach, Ba'hai that he is, with a foot in both eastern and western philosophy, started something that meshes in with what the thinking young are on to today. It should be interesting to see whether this belief in the value of handicrafts is a forerunner of a better world to come when every man and woman will tend their own vine and live in peace with their neighbour, or whether the skills we have acquired in spite of everything the consumer society can throw at us will prove vital in the struggle for survival of the species. There will be a reason for it all!

Helen Mason

There are a few copies left of 10 Years of Pottery in New Zealand *published 1968 $1 each from Helen Mason Box 101 Tokomaru Bay, East Coast.*

Helen has been awarded a QE II Arts Council Fellowship that recognises the vital role she has played for more than 20 years in establishing an international reputation for New Zealand pots and potters. This award is given in appreciation of a substantial period of distinguished service to the arts in New Zealand and is not the result of an application for assistance. For all the different arts to date there have been only 16 recipients.

As the first editor of the *New Zealand Potter*, as foundation member of New Zealand Society of Potters and more recently in encouraging craft activities in the East Coast region, Helen Mason has earned this honour.

Potters will welcome the news of this recognition for Helen.

M.M.H.

Nola Barron is the new director of the Canterbury Society of Arts Gallery in Gloucester Street Christchurch. A potter and sculptor she has been an executive member of the New Zealand Society of Potters and is a member of the World Crafts Council

John Parker has returned after four years in England where he gained an M.A. in ceramics at the Royal College of Art. This year he is managing the Auckland Potters Centre.

Commuters waiting for the "Brickell special" from Driving Creek to New Vision, Auckland

The Japanese way

Auckland potters recently had the opportunity of working with Professor Kenji Kato at a day school arranged by the Auckland Studio Potters. Professor Kato pots with his wife and brother in the family pottery at Shigaraki, near Kyoto and lectures at Gifu University.

Professor Kato majored in ceramics at Kyoto City College of Fine Arts at the time when Kenkichi Tomimoto, the contemporary of Bernard Leach was lecturing there to emphasise the inflated values of work by Japanese Master Potters. Kato showed a slide of a blue and white plate inscribed to him on his student days by Tomimoto. Although not for sale, the plate has a market value of $U.S.100,000. He spoke of the difficulties young Japanese potters face in gaining recognition. Handmade pottery is for the collector rather than for the everyday domestic user. Japanese businessmen investing in the work of recognised masters have created unreal values — $U.S.30,000 is the accepted price for a teabowl from a master potter. (The reason why gallery custodians were jumpy at the amount of handling the pots were getting during the exhibition here last year of contemporary Japanese ceramics!)

Professor Kato spoke of the dwindling natural resources and the disappearance of nature's green from Japan. All fuel is imported. Suitable clays now come from China and Korea. Air pollution is a real problem. Most potters use electric kilns. Gas kilns are popular but the imported fuel is expensive. A reduced atmosphere is achieved in electric kilns between 950°C and 1150°C by introducing tiny pine twigs into the holes at the base of the chamber. Community kilns are popular. Potters working communually sign their ware with a personal mark as well as the community seal. Taxes are assessed through these seals.

The area where he pots is the centre of Shino ware. He showed a tiny Shino glazed pot fired in a gas kiln which took three days to reach 900°C and twenty to thirty hours to reach 1280°C where it was soaked for ten hours. From 1280°C down to 700°C the atmosphere is reduced — the temperature dropping only 20°C an hour. His Shino formula: soda feldspar 100 parts, kaolin 8 parts.

Indicative of Japanese fastidious attention to detail are these drawn out firing times. Fifty hours in a small oil-fired kiln were used to achieve his Tenmoku oil spot glaze. The iron oxide is found in impure form in the rusty irony pockets of a mountain stream.

After generous sharing of glaze formulas and recipes he gave demonstrations of his technique. He showed the Japanese press method of wedging — ideal for mixing hard and soft clays, or for the addition of grog. He showed spiral kneading — fifty times each way — left then right. As kneading slackened the clay assumed a bullet shape. Dipping the blunt end in water and attaching it firmly to the bat on the wheel-head he set the wheel in "clockwise" motion and working from base to top, rapidly centred a hump. Professor Kato found the Nelson clay provided was too plastic. He suggested the addition of about 7% to 8% silica sand.

Although right handed, Professor Kato used only his left hand with no help from his right to form five basic shapes from the hump. Throwing each flat then drawing the walls up to cylinder shape he produced in rapid succession a cup, a teabowl, a plate, a lidded pot and a tall narrow-necked vase. These five forms he says are basic for wheel skill.

The remainder of the day was spent wedging, kneading, pulling up an amazing selection of forms including huge bowls from clay which began as a pummelled lump on the wheelhead, and a large cylinder pulled up with one hand working only from the outside.

Professor Kato advises not to work up a load of clay and throw it hours later because wedging, kneading and throwing in quick sequence retains plasticity.

Sonia Andrews

Potters' doo 1977

Once again the rains came but this time only for the first two or three days. It was good to see folk from so far afield as Dunedin, Christchurch and Westport.

I hasten to correct the popular image of the Doo as a school or something equally horrific. The annual Doo is an informal get-together; most of the time I too attempt to do as I please which may be anything but potting.

This time we had rides behind the local 12 ton steam traction engine imported from Invercargill in '75, which also gave a fine kiln wood cutting by belt power demonstration. (I would be grateful for a photo or two of this event from which to make a black and white enlargement). On the final day we had a childrens bush lolly scramble which was such fun it will have to be an annual event.

It was decided that people attending future Doos be asked to bring samples or pictures of their latest work. This should provide a somewhat badly needed reason for a venue, meeting point, get-to-know each other. The feeling was that this pot-chorum be held on the first or second evening with some food and wine and little direction to keep it on the rails. Suggestions welcome.

Ideas have also come forward for ways of organising the Doo although it was never my intention to introduce anything even remotely resembling formality. The folk should be on holiday. Naturally they wish to see over the potteries, and the idea of set hours for visitors would overcome the awkward problem of work interruption for those battling with glazing, stacking and firing.

An advance notice about Doo 78 will be in the Spring *Potter*.

Happy animated potting

Barry Brickell

Continued from pg. 21

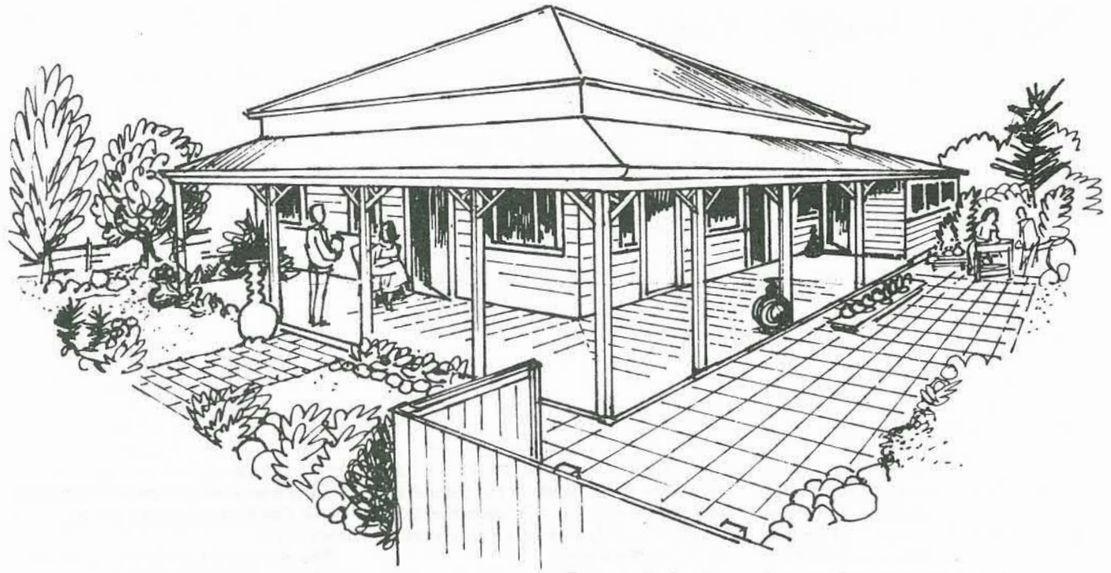
TWO PORCELAIN GLAZES

Here are two recipes for "conventional" well-fitting porcelain glazes which will fire between cone 8 and 10 in most kiln-cycles, producing smooth, bright glazes. The first is Salvetat's Modern Chinese Porcelain Glaze, which has an ultimate analysis of : silica 68, alumina 12, lime 14, soda/potassium 6.

39.6 Felspar	27 Felspar
21.6 Whiting	14 Ball clay
9.7 China Clay	7 China clay
29.1 Silica	20.5 Whiting
	31.5 Silica

If these glazes craze on any claybody in this temperature range, it is extremely unlikely that it is caused by the glaze.

The preceding is the second installment of a paper prepared by John Reeve, Canadian potter, on the subject of Porcelain.



The Auckland Studio Potters Centre

The Centre at Captain Springs Road, Onehunga is well established and expanding its scope in its second year. Generous help from commercial business firms, a grant from Q.E.II and so much hard work from the Committee and members have made an asset for those who work there and for the local community.

The Centre has a paid manager and an office assistant. The manager coordinates with the tutors, the day to day running of the classes and workshops and the firing of the kilns. He ensures the safety and maintenance of the building the grounds and equipment.

The office is open from 9—12 on Tuesday to Thursday and an answer phone operates at other times to free tutors from the phone nuisance. Eight three hour courses are offered weekly open to 18 pupils a class. These are not restricted to A.S.P. members. The classes are as follows:

Monday	
7—10 p.m.	John Parker
Tuesday	
9—12 noon	Pat Perrin
1—4 p.m.	Pat Perrin
7—10 p.m.	Pat Perrin
Wednesday	
9—12 noon	Nancy Wilson
Thursday	
9—12 noon	Margaret Milne
1—4 p.m.	Margaret Milne
7—10 p.m.	Roger Brittain

Most of the classes are structured with a published syllabus, and as firing is included, the tutors are largely responsible for the firing of their pupils work. A non-structured hobby class also operates.

Weekend and holiday schools have been well attended.

The centre has a reference library of books, magazines and other information. Access to this is during office hours or by special arrangement.

The origins of the Centre go back 7 years, when Margaret Milne pressed for a home for the A.S.P. and persuaded Ruth Court to join the Committee. After many possibilities were examined and rejected, a suitable old house in Panmure became available and the search resumed for a piece of land. Eventually, Onehunga Borough Council offered the use of the present site on favourable terms. In 1975 the house was moved to Onehunga in three parts and restoration was begun. Auckland firms, lobbied by Committee members, responded generously with direct financial aid and with gifts of materials. John Toland put in many hours of work.

The Centre began classes at the beginning of 1976 with Leo King as manager and Grant Hennings took over from him in July, until the end of the year. The manager for 1977 is John Parker.

Equipment to date is as follows:
WHEELS: 10 electric and 6 kick — most of which have been donated and others have been supplied on generous terms.

The electric wheels are Talisman, Cowley, Bredveldt, Arum and a Leach style from Seaboard Joinery. The kick wheels are from Seaboard joinery and Smith and Smith.

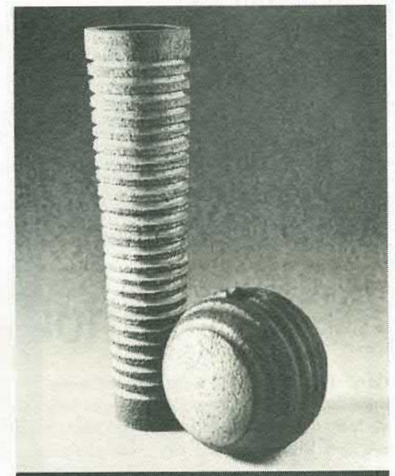
KILNS: We currently have a 3½ cubic foot Eagle kiln running on single phase power. This is a prototype on indefinite loan from Smith and Smith. We also have an oil fired kiln built by Ian Firth. This kiln adheres closely to Roy Cowan's kiln plan published in 'The Potter' Vol. 13/1. It has two chambers of approximately 21 cubic feet each, is very adaptable and can be used for staged firings by simply shifting a burner so that we can meet the demand for two chambers of bisque, two of glost or one of each. The kiln uses two pot burners to achieve red heat and then the switch is made to jets. Recent firings to maturity on the pot burners alone have been successful. The burners were supplied by Codes Projects, Engineers of Auckland.

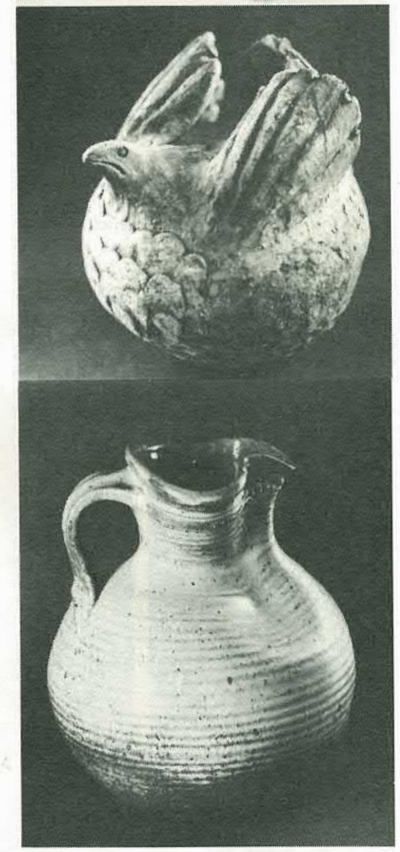
Future plans are for a single chamber catenary arch gas kiln with a 27 cubic foot packing space from a Les Blakeborough design.

The present kiln is housed in a separate 400 sq. foot building designed by Roger Paul, who is responsible for all the building plans.

Visitors are welcome at the centre during class working hours.

Grant Hennings
John Parker

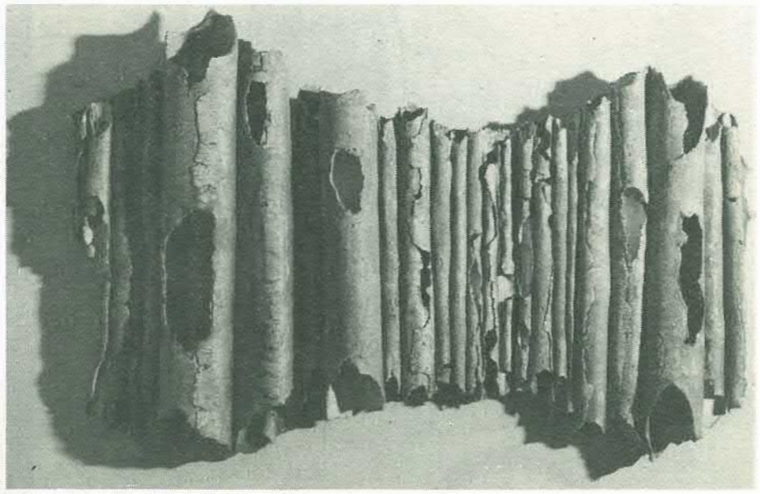




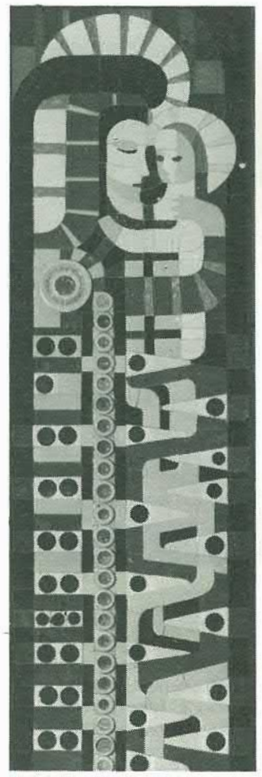
At Auckland Studio Potters 13th Exhibition. Top left: Ted Kindleysides, Renton Murray and Joyce Oliver and Warwick Lidgard. Above: Leo King, Rosemarie Brittain and Ian Firth

photographs: Howard Williams

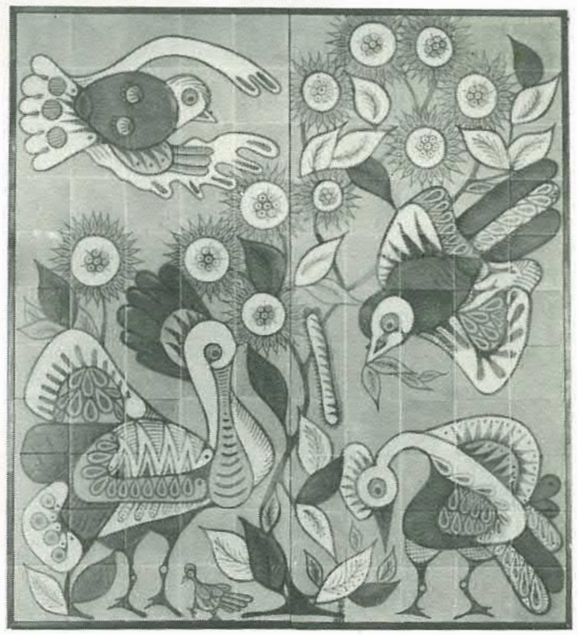
Ceramic murals



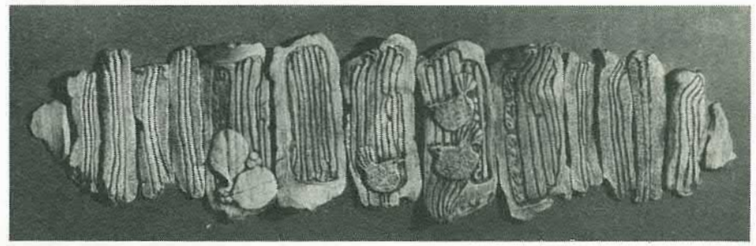
Eleven potters contributed murals to an exhibition held at New Vision, Auckland. Right: mural in porcelain by Doris Dutch



Left: Computer madonna by Roy Cowan. A similar work was bought for St Paul's Cathedral Wellington.
Middle: Stoneware King & Queen by Ted Dutch
Below: decorated tile plaque by Anneke Borren



Porcelain relief by Rosemarie Brittain



Keirunga potters — Havelock North

In order that the somewhat unique features of the Keirunga Potters set-up be understood, it is necessary to briefly relate the history of 'Keirunga' (the house on the hill) in Havelock North.

Keirunga, a fine old homestead, set in 15½ acres of parkland and 2½ acres of garden came into the hands of the Havelock North Borough Council through the generosity of the late Mr George Nelson in 1964. In 1966 Mr Frank Bacon, then headmaster of a local primary school, called on the Council together with a group of interested people, with a suggestion that Keirunga be developed as a cultural centre and after negotiations the Council agreed to this step being taken. This small band then moved in, with paint pots and ladders, carpentry and garden tools and a great deal of enthusiasm, and after a mammoth task of restoration, together with a successful fund-raising effort, Keirunga came into being as a fine cultural centre. It stands today, ten years later as a monument to those farsighted people, with a membership of over 650, an adjoining workshop building recently completed, excellent working facilities and surroundings that are a sheer pleasure in which to work and play.

At that time (ten years ago the potters operated as the Havelock North Pottery Group, founded in 1964 by Mrs Beryl Blackmore in a disused cowshed and barn on land then owned by Mr Blackmore Senior. The late Heulin Fulford who was a third-generation potter and who owned one of the first commercial potteries in New Zealand helped and encouraged us in those early days. When the opportunity came to throw in our lot with Keirunga, we were the first group to move up the hill and become a part of the Keirunga complex, changing our name when we did so.

With heavy and permanent equipment there was no place for us in the homestead but we were happy to take over the derelict garage, with horses' loose-box and woodshed-cum-fowl-house attached. We hung out our shingle, "Potters' Cottage", moved in our one kick-wheel and our little old electric kiln, and we were in business!

Now, three electric wheels, four kick-wheels and two large electric kilns later, we look back with pride on our achievement. We endeavour each year to add to our assets. We have recently had installed a glass-fronted cupboard for displaying our exhibition pots (mainly the work of well-known potters who have run weekend schools for us, and of distinguished overseas potters). We have also the nucleus of a fine library.

We consider that our club is well administered and, as far as is possible where 60 women and a few men are concerned, with a minimum of troubles. We keep our membership to 60-65 which seems to be an acceptable number for members' own comfort and convenience. These are divided into four day groups and two evening groups, and each group has a representative on the committee. As we are a club we cannot accept trainee potters. Consequently and rather unfortunately we are not able to offer many vacancies, but we have a waiting list and from time to time we take in new members who have had experience in other places. As there is little opportunity in the district for receiving tuition, one of our senior potters has been taking small groups for a ten-weeks course and in the main we are able to absorb these "graduates" into the club.

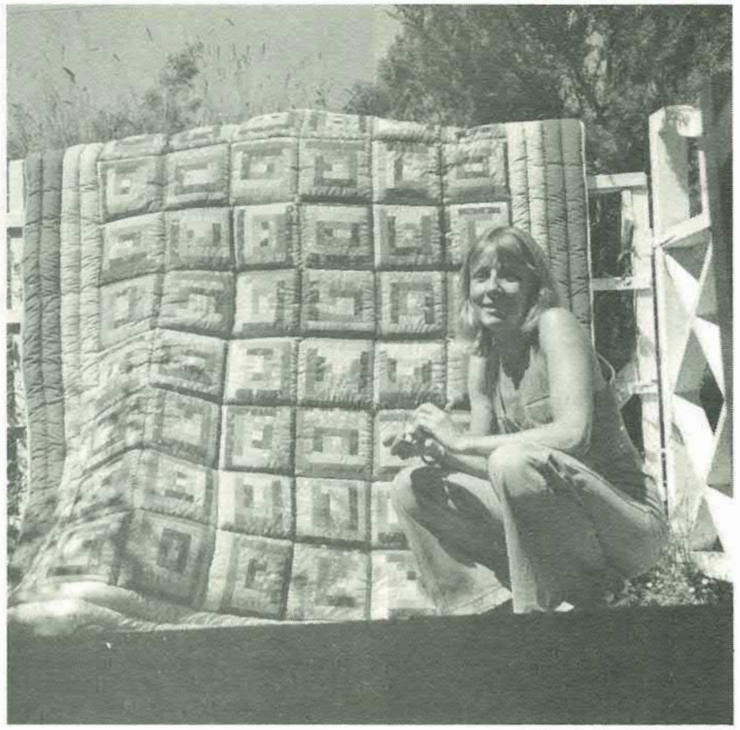
We buy clay (earthenware only) in bulk and resell to members. Glazes are now purchased by members although until recently we have supplied these free. Each group fires separately, i.e. Monday and Wednesday groups fire one week, Tuesday and Thursday groups the alternate week, and the two evening groups take the alternate weekends. Those firing share the kiln expenses. Each member holds a key to the pottery and can work there at will provided they do not intrude on another group's day without their permission. Members dispose of their pottery as they will, but once a year we hold a sale — in the grounds if fine. We share in this with the Artists Group as the two crafts complement each other, and traditionally we serve a cup of coffee before the sale, which all tends to make it a friendly occasion. In April of each year we combine with all other Keirunga groups — spinners & weavers, basketware, film society, rock & mineral, artists, drama groups, floral art and gardening circle — in an Open Weekend when hundreds of people visit Keirunga, stroll through the gardens, listen and watch open-air performances, and buy extensively from the stalls. We also endeavour to have two or three social events through the year to bring members together.

Over the years (we are now 13!) we have had some first class tutors and demonstrations at Potters Cottage. Perhaps our highlight was being host for Hawke's Bay to Harry Davis on his tour last year. He expressed appreciation of the space in which to work, the atmosphere and the peace and quiet of the garden to which he could escape for a few brief respites. We were also glad to help with the staging and preparation of the N.Z. Potters Exhibition in 1975, and to be able to entertain at an evening meal the guest potter, Alan Caiger Smith, delegates and members.

Primarily a hobby club, we consider we are remarkably fortunate to be able to ply our craft in such a pleasant place — indeed we are repeatedly told so by visitors from other parts of New Zealand and from overseas. But as a group, we never overlook the fact that we are an integral part of the whole Keirunga concept — the primary object of which is to serve the people of Havelock North by the development of Keirunga as a community asset, and as a centre for cultural activities.

Hilda Bradley

Quiltmaker



The bedcover has always been a vehicle of artistic expression for craftspeople. Revival of interest in traditional American quilts comes from an appreciation of heritage folk art and a wakening to the whole spectrum of the embroiderer's craft where past techniques are being uplifted and infused with new life and images.

Bette Heising of Bay of Islands brings to the craft of quiltmaking the skills acquired through years of training. Following the Scandinavian procedure of practise before theory, to qualify for the Technical Institute in Sweden to become a dress designer, she spent a year in factories machining followed by an equal period in French Haute Couture handsewing. Bette Heising displays her technique and knowledge with craftmanship of a high order.

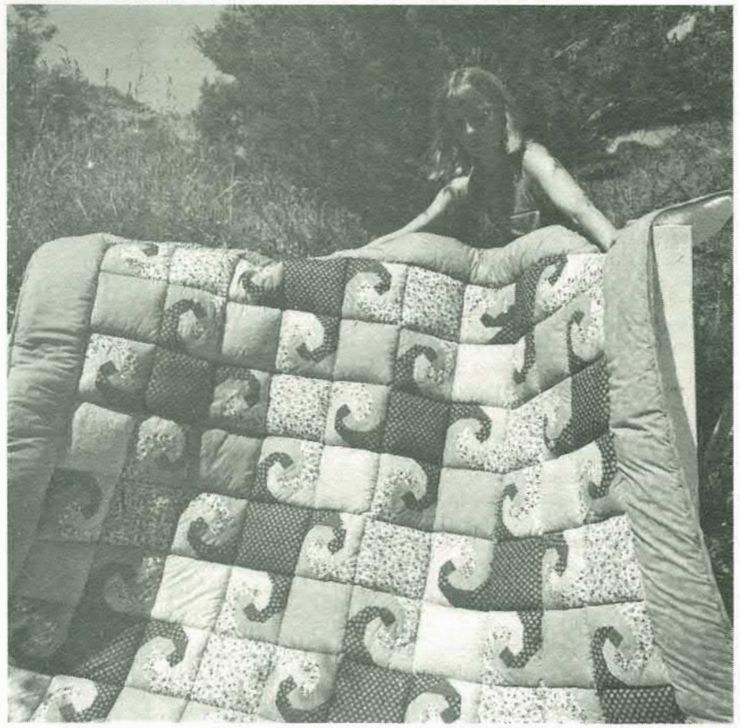
She uses only new fabrics. Lining is washable dacron fibre. She would not be interested in the slow process of sewing scraps into patchwork by hand. For her the machine must do the routine work to allow her scope for creativity. Many quilts will be made before the right colour combination for the design develops, and at that point she considers she may have created a work of art.

Careful background planning is the first step in making a quilt. On graph paper the design and exact size of the shapes are decided. Some are original, but most are traditional American designs. A sample block is tried in materials. It may take half a dozen trials until she is satisfied, then all the pieces are cut and making up is a matter of methodical sewing and ironing.

Bette Heising's quilts and patchwork are sold from her shop in Russell, where partner Eva Brown sells paintings by New Zealand artists.

Margaret Harris

Read Craft Horizons April 1976 "A quilt is built" to see how quiltmakers responded with originality and fresh approaches to an exhibition shown in the Museum of Contemporary Craft, New York.

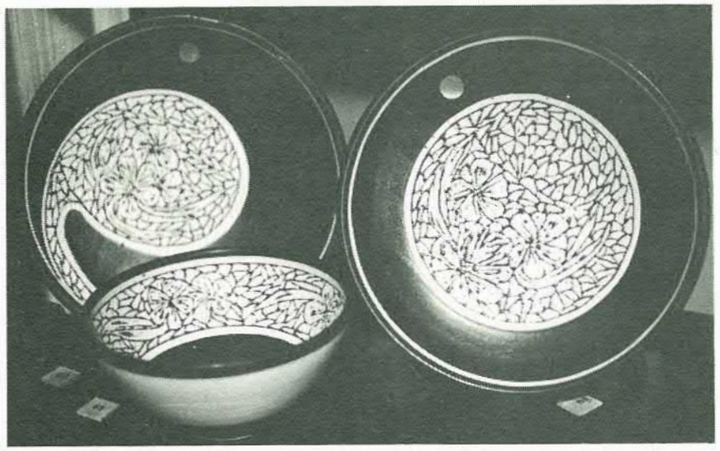


RECENT WORK

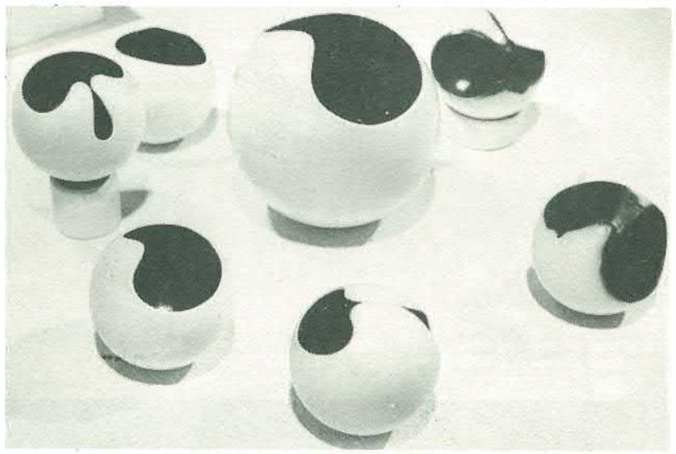
On this page from exhibitions at Alicat Gallery, Auckland

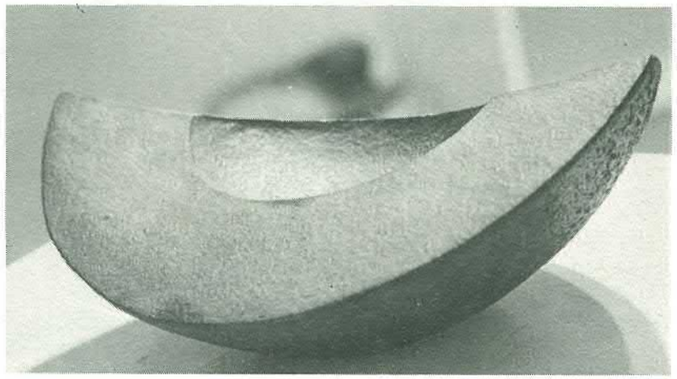
Porcelain bowls, celadon glaze, inlaid coils rubbed with copper oxide to form red under reduction. By Beverley Luxton
Matt black porcelain bowls with wax resist decoration, Fredrika Ernsten

Orange topped bottle by Flora Christeller



Silver lustre pearl boxes, Beverley Luxton

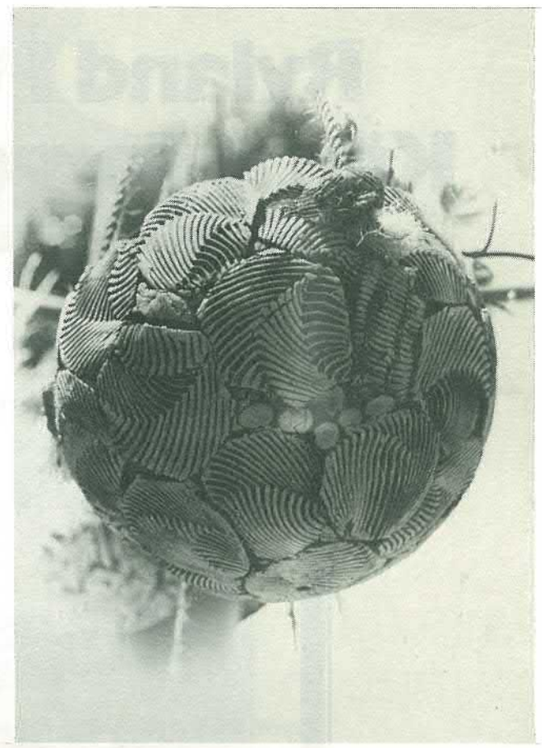




Sculptural work at Alicat Gallery, Auckland.
Above: Warwick Lidgard coiled stoneware dish glazed, 53cm, and "pot a cinq goulots" stoneware, chun glazed 30cm.
Right: Leo King, slip cast, glazed in matt white and matt black
Below: Jim Greig "landform pot" stoneware chun glaze

Continued from page 17

We use this machine to mix firm and soft clay, and to mix different blends and colours of clay, scoria, grog and sand together. Checkerboard-slicing before pugging mixes the clays in proper proportions. After pugging the mix is 'short' and needs to stand in bags for at least a day. Over-hard clay will make the best slip, if it is borderline hard an occasional pull on the big pulley will help.



Outdoor pots at Country Arts Muriwai. Left: Hanging sphere moulded stoneware oxided by Una Sharpley. Right: Salt glazed terrace pots by Arnaud Barraud.
Right: Man in a pinstripe suit oxidised stoneware from Jill Crowley's portraits in ceramic, shown in London in March at Crafts Advisory Committee's rooms in Waterloo Place.

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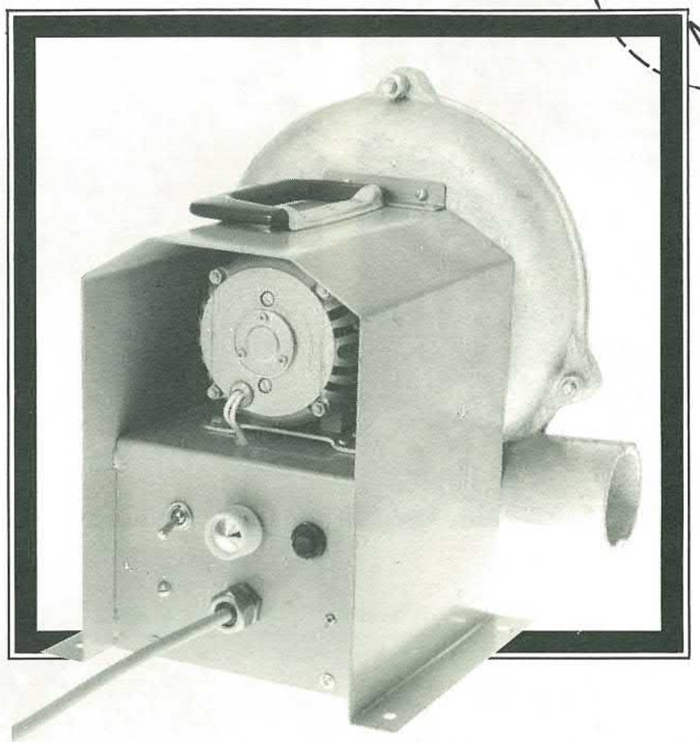

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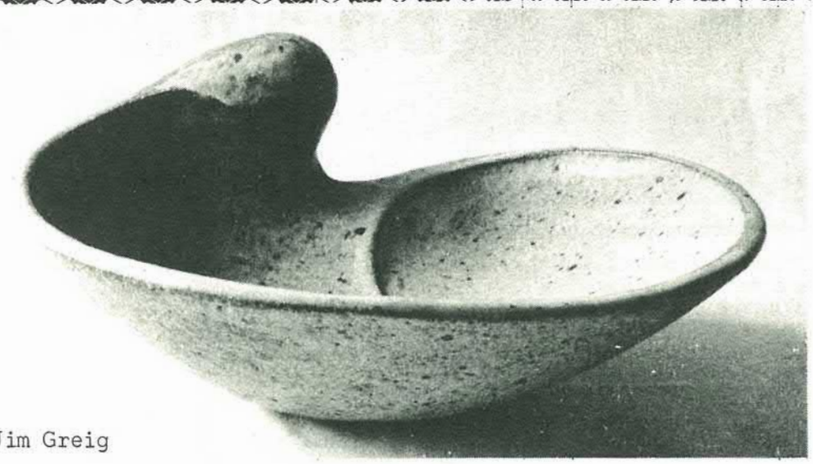

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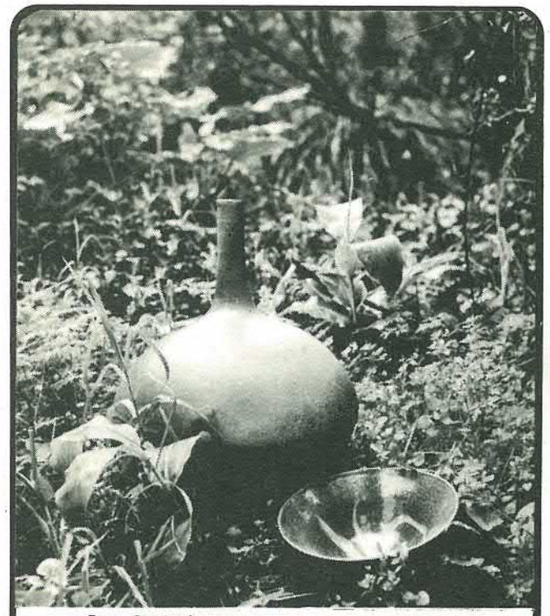
Ans Westra took the photographs from an exhibition from 393 Christchurch potters



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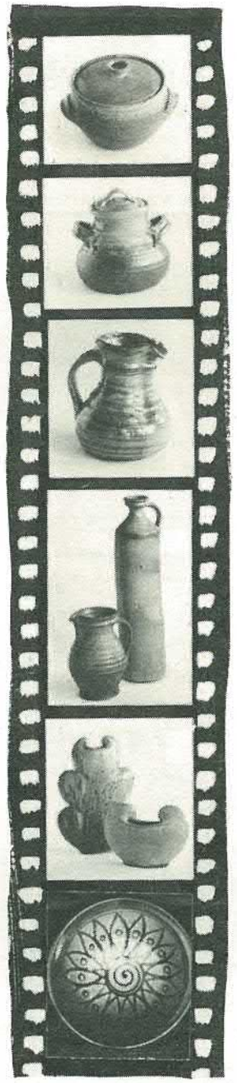

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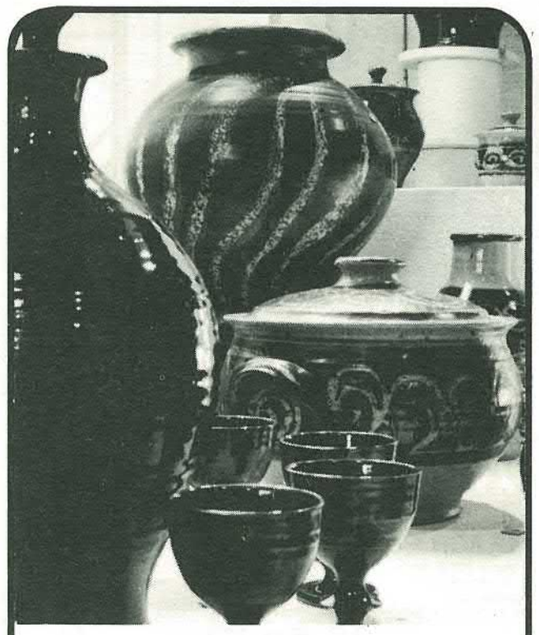
JAN FLEMING
JIM GREIG
DENIS & FAIRLIE ROWE
CAROL WILSON

"I agree with the Japanese potter, Kanjiro Kawei: 'Man can make a bowl of clay. He can make it round and smooth but till it is fired it cannot be used. Man can lay the fire and light the flame. But still it is the fire itself that really completes the bowl, and that fire is something bigger and more wonderful than any man.' I refer here to the infinite variety of qualities that come from how the kiln is fired. Whether it is fired with a clear oxidising atmosphere or a smoky or reduced atmosphere and how one cools the kiln. These things cannot be learned from books or from being told." — COL LEVY.
Australian potter.



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