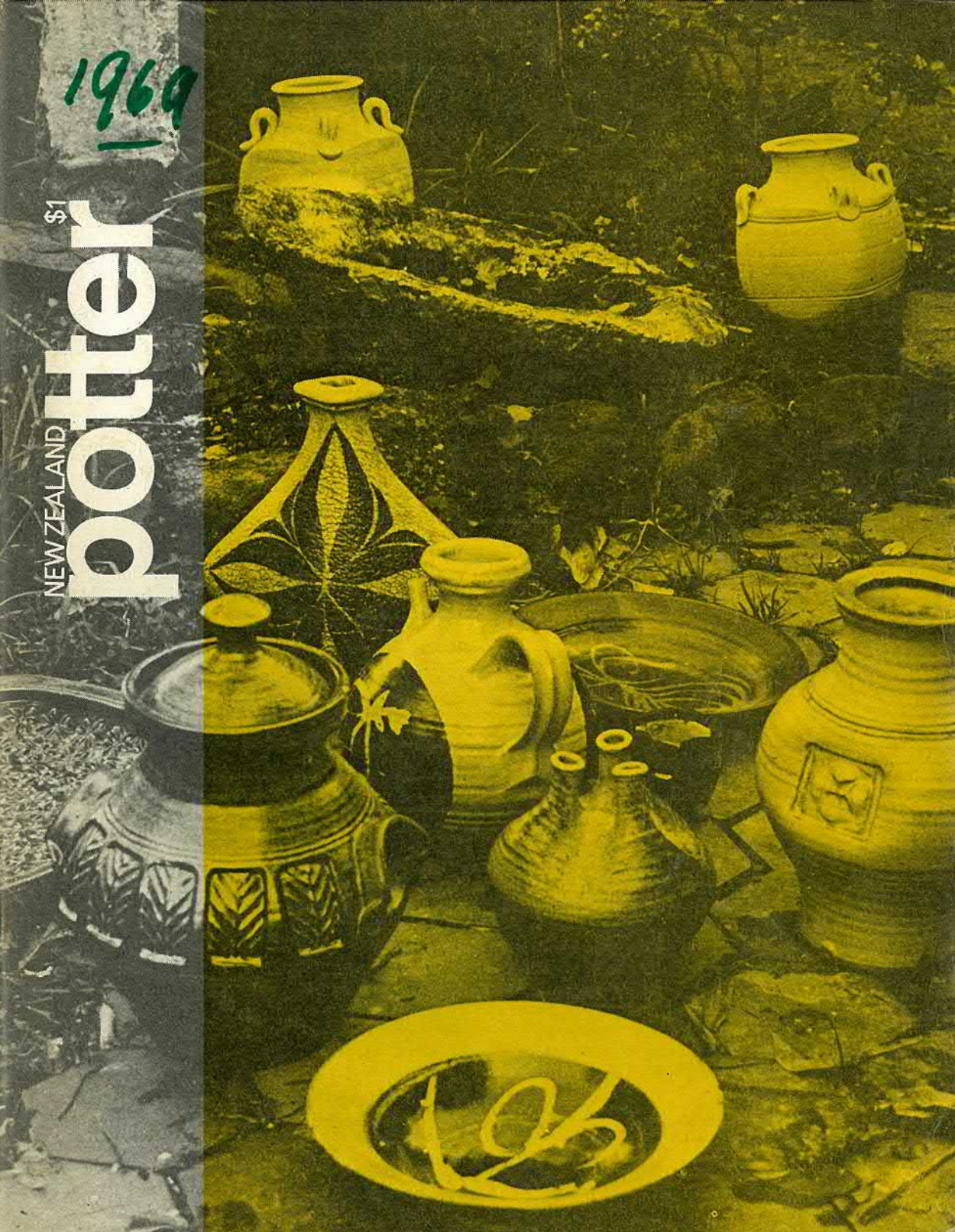


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NEW ZEALAND POTTER is a non-profit-making magazine published twice annually in Autumn and Spring.

Subscription rates:

Within New Zealand: \$2 per annum, post free.

Australia: \$2.20 Canada, U.S.A.: \$US2.40

United Kingdom: 22/-

Other countries: \$US 2.40

Editor	Margaret Harris
Editorial advisers	Juliet Peter Roy Cowan Doreen Blumhardt
Administration	David Carson-Parker Esme Marris
Advertising	John Stackhouse
Layout	Juliet Peter

Editorial/subscription/advertising correspondence should be addressed to **New Zealand Potter**
P.O. Box 12-162 Wellington North New Zealand

NEW ZEALAND potter

editorial . . .

Influences

An article on the potters of the Nelson district is a microcosm of the New Zealand pottery scene, showing the widely varying backgrounds and work of our potters.

Three other potters who are featured in this issue show clearly their influences from different sources: in one case the orient, another present day Europe and in the third from many traditions.

There is mention of the elusive 'New Zealand pot'. Who is making the 'New Zealand pot'? Should there be one? The answer must be yes, but perhaps we are looking for it too soon. In a decade or so it will probably be distilled from the influences beaming upon us now from other cultural backgrounds. These influences are the food by which we will grow to our own maturity. And like all diets they must be balanced: that is we must be open to all influences.

There is a danger that the New Zealand potter may be relying too heavily on the Japanese influence for independent development. The primaeval force of earth and fire evident in much of our stoneware owes little to the European background from which our culture developed.

Cover design: *A potter throwing is an obvious theme, but this study of Jack Laird by Marti Friedlander is so good that it warranted the cover.*

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Nelson Potters

Margaret Harris

The Nelson district now has so many competent resident potters that it has become one of the acknowledged pottery centres of New Zealand. The geology, the climate, the kind of 'South of France' atmosphere of living closely to the land, have attracted most of the potters here from other parts.

CHRISTOPHER VINE

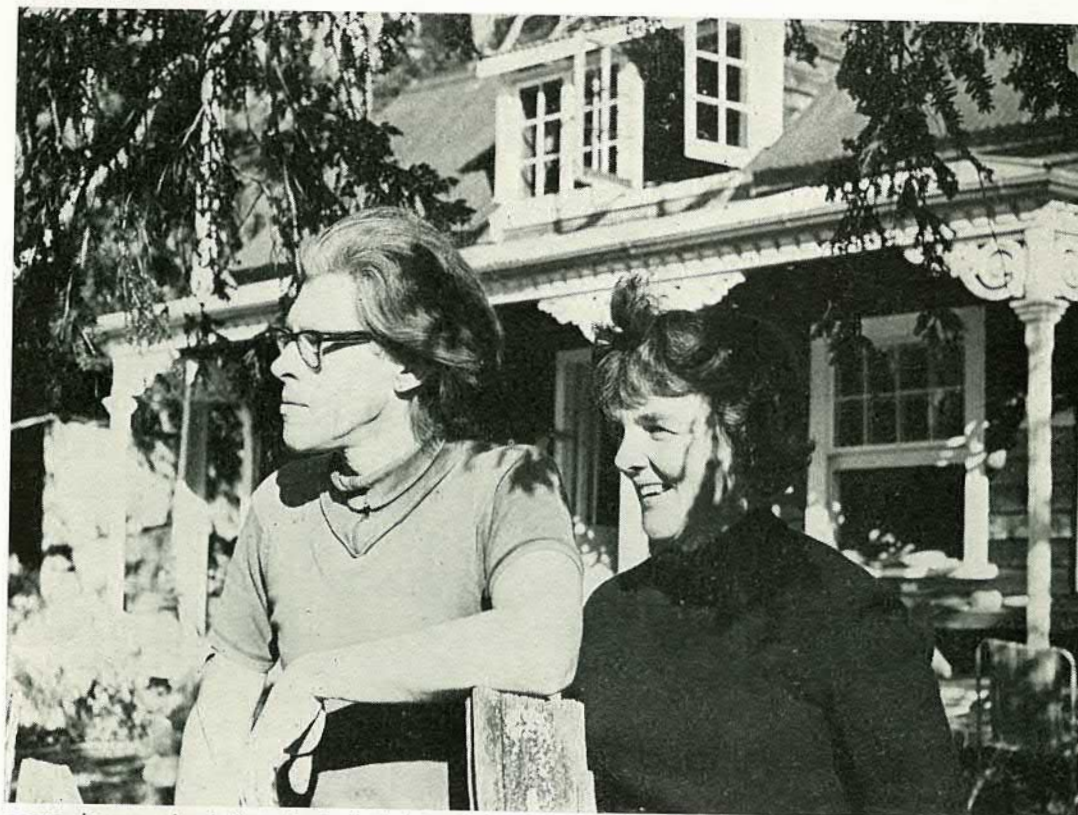
One of the most recently established is Christopher Vine who lives and works in the Teal Valley, ten or so miles from Nelson on the Blenheim Road. Christopher



Vine gave up the London life and his job as an architect in the Historic Places section of the Ministry of Works, four years ago. (His last assignment in Britain was assistant architect for the reconstruction of No. 10 Downing Street and The Treasury).

He was first drawn to Nelson through reading about Mirek Smisek in the Pottery Quarterly. With his wife and four children he toured extensively in search of a place to settle, and returned to Nelson convinced that this area offered all the opportunities for the rural life he wished to lead. He was most fortunate in being able to buy the hundred acre Teal Valley property with two houses on it. One unnotable, where he lives temporarily until his house is built—the other built in 1848, one of the earliest houses in Nelson and used as an implement shed for sixty years. Not only was the house itself an acquisition for an Historic Places man, but the attic floor contained the original furniture. Old clocks, books and a gilded cage for stuffed birds, remain in the house as an interesting background to its new life as a pottery and showroom.

When the Vines bought the property they had ideas, but nothing settled as to how they were going to earn their living. A chance meeting with Jack Laird revealed that Waimea Pottery was expanding and was in need of skilled throwers. Christopher Vine had learned to pot at night classes under Robert Fournier in England, so he took up an offer of working for Waimea while he got his own place established. For two



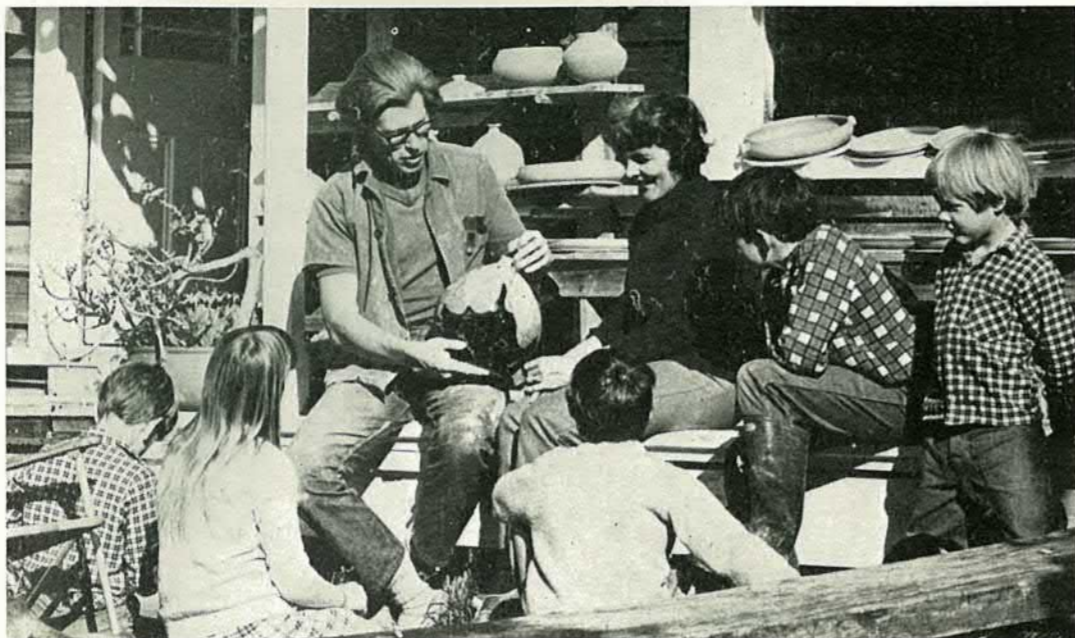
years he worked for Jack Laird and he considers the discipline of throwing consistently to standard shapes was a most valuable experience.

He is now making mainly domestic ware and planters with great individuality of style, but following the tradition of English earthenware potters. Decoration is a distinctive feature of his work. A characteristic Vine pot or platter has a slip trail design using a motif such as an ear of wheat which lends itself to the slip trailing technique. Table lamps he makes effectively by incorporating glass into the unglazed clay.

He also decorates tiles to be used singly or as wall or table tops. Perhaps some of the most successful themes for

decoration of the tiles are drawn from his architectural training. We saw a set of tiles showing the front elevation of the Nelson Provincial Council Chambers (recently demolished). The white design on the blue/grey background, appropriately suggested the colour of a blueprint.





Photos: Warren Haywood

He intends to use architectural themes further in murals.

The Vines consider that they have found the style of living that suit them. Roughly three quarters of the day is spent at the pottery. They run some sheep. They have planted 30,000 forest trees. They have also planted 26 varieties of grape

vines to see if grape growing is feasible. Conservationists, they intend harnessing water and solar energy for power and heat.

So they are realising their ideal of living closely from the land, and at the same time taking advantage of and contributing to, the not inconsiderable cultural life that Nelson offers.

JACK LAIRD

Jack Laird, with his wife Peggy, established the Waimea Pottery at Richmond, just outside Nelson, six years ago. The Lairds came from Palmerston North, where Jack was Senior Tutor in Art in Victoria University's Adult Education Department, responsible for the concept and establishment of an art and design centre. Jack Laird (who had come to New Zealand from Britain with a background of design training from Art School in Chelsea, and a post graduate course

in pottery) found himself becoming more and more involved in pottery at Palmerston North. He became very interested in using clays and mineral resources of this country in comparatively unrefined form. He was particularly interested in the clays and mineral rocks of the Nelson region.

The idea of establishing a craft pottery grew from the concept that unlike industrial development provided for the affluent, people wishing to identify themselves as

individuals needed to surround themselves with things that reflected their own choice and personalities. There was then, a place for the craftsman to make furniture, fabrics, ceramics, jewellery and so on with a limited output.

A property was found, plans were drawn up incorporating machines to handle as much of the laborious and uncreative work as possible, prototypes were made and tested, markets were investigated. Finally Industries and Com-

merce were asked if the scheme made sound economic sense. It did. The Waimea Craft Pottery is very much a going concern now.

The present staff, beside Jack and Peggy Laird, is now seventeen and includes senior potter Carl Vendelbosch and (with the approval of the Department of Labour) two apprentices, Royce McGlashen and Adrian Bevis, assistant potters, glazers, packers and so on.

Some forty shapes are in current pro-



duction, all hand thrown and turned on the potters wheel. Handles are pulled and shaped on the pot. Output from the pottery has grown, but the demand has grown faster—even from export markets. A visiting export designer of Rosenthal in Germany has praised the technical quality and design of the Waimea Pottery he saw. He went as far as saying that it was some of the best handcraft pottery he had seen.

While demand is running far beyond production, handcraft pottery cannot grow faster than intelligent responsible workers can acquire skills by long practice. The human element is one of the most important factors in production. A well balanced team cannot be expanded indefinitely, so craft industries have an optimum size. Jack Laird considers that the stoneware workshop has reached this size. Future development would be another workshop with distinct identity and function. Although in terms of indus-

Photos: Cover. Jack Laird throwing. Page 7 shows Jack and Peggy Laird arranging pots for sale in the showroom.

photo: Geoffrey C. Wood

CARL VENDELBOSCH

Carl Vendelbosch had his first contact with ceramics when as a boy of seventeen he started work in a glass factory in Holland. Glass blowing and pottery making have a good deal in common and both processes need a high temperature kiln.

So when he came to New Zealand in 1950 he soon built a little kiln in his garden and was one of the few potters

trial organisation this would seem inefficient, it is offset by flexibility in being able to suit customer's individual requirements and for doing short runs.

The problems involved in this type of craft industry are complex and challenging but after six years team effort Waimea is established.

Apart from their daily tasks many of the potters do their own work in their spare time. Jack Laird, himself enjoys this aspect of his work. A complete departure from the usual pottery exhibition was his recent display at the Chez Elco Gallery in Nelson. He allowed his creative feeling to run free, to play with the clay—as potters in the past have done. Because of this traditional spirit behind it, he asked that the exhibition be taken seriously — but certainly not solemnly. The works using a wide range of techniques varied from plates, plaques and other wall decorations to gay and colourful figures. They were all sold on opening day, so other people must have found them fun too.

in Christchurch at that time. His real experience came in Temuka at the New Zealand Insulators, where for several years he made two and three gallon pickle jars and bottles.

Since 1965 Carl has worked with Jack Laird at the Waimea Craft Pottery and is now in charge of the stoneware department. He also has a studio and kiln at home where he makes his own individual pieces and domestic stoneware.



Carl Vendelbosch.



Photo: H. A. Foster

ROYCE McGLASHEN

In 1965 at the age of sixteen, Royce McGlashen started his apprenticeship at Waimea Pottery. He has exhibited in a number of exhibitions in galleries throughout the country and with Adrian Beavis had his first private exhibition in Wellington this year.

Designs, decorations and glazes are his own, and in the last two years he has developed a translucent porcelain using all New Zealand materials. He intends to continue making pottery for a living for his own satisfaction and other people's enjoyment.



ADRIAN BEVIS

Adrian Bevis apprentice says, 'I started working at Waimea in June, 1967. For two months I was employed as a thrower's assistant, weighing out and wedging clay. Then I started my apprenticeship. I became New Zealand's second apprentice in domestic handcraft pottery under Jack Laird and Carl Vendelbosch at Waimea Pottery.

After six months I built my own studio and kiln to do my own design and glaze experiments in the evenings and at the weekends. Then Royce McGlashan and myself built a small salt glaze kiln for experimenting with different kinds of clay and glazes.

For my annual holidays at Christmas 69/70 I worked with Barry Brickell at Coromandel and visited other potters in the area.

My first private exhibition, after three years at Waimea, was held with Royce McGlashan in Wellington recently'.



Photo: Jule Beeby

Storage jar, 12½" high.

BOB WALLACE

Another newly established professional potter is Bob Wallace. He has been potting full time since 1967, but not until some eighteen months later did he produce work he was prepared to sell.

Like a number of other potters his introduction to the craft was at Teachers Training College. With his wife, Zoe (both fine arts graduates of the University of Canterbury), he attended Auckland Teachers College where pottery was part of the course. Bob showed an aptitude for the craft from the beginning, and in fact he became so attracted by the idea of

potting that after a year's teaching he decided to do it full-time.

The Wallaces decided that Nelson would be the place to establish their pottery. The fact that Zoe's home had been Nelson was more or less incidental to this decision. She says that in the time she was away she noticed big changes: 'Nelson is getting out of a back-water fast.' The new potters and craftsmen, as much as industry, have contributed to this change in character.

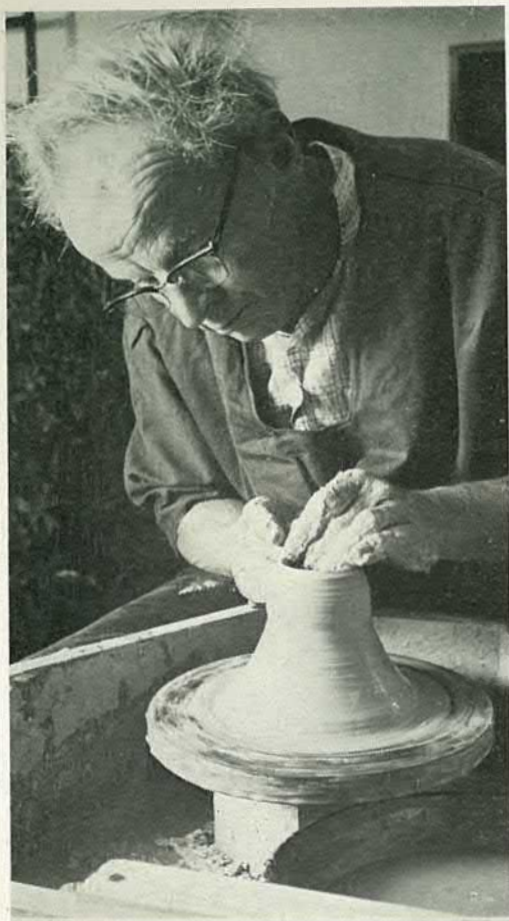
While Zoe worked as an apprentice to Mirek Smisek, Bob set to work to estab-

lish a workshop and experiment in making domestic stoneware. After many strenuous months his work met the exacting standard he set for himself, and he was in business. He sells directly to shops (at present confined mainly to one in each large centre). Production has been increased since Stephen Carter, formerly apprenticed to Crewenna, joined him, and will be further increased when the new workshop, on a ten acre hillside property overlooking Tasman Bay, is completed. The new kiln, built to his own design, is basically the same as the one formerly used which proved an excellent kiln. It is a double fire box, down draught kiln. The pots are stacked on a trolley which runs in between the two fire boxes at each end of the main arch. Exhaust gases flow through the stack of pots into a flue-way which is built into the trolley and which connects to a chimney flue when the trolley is in place. While adjustment of the temperature and atmosphere of the opposing fire boxes is a very delicate matter, this design has the advantage that cold spots are pretty well eliminated and heat zones are horizontal.

Bob has been self-reliant in establishing himself as a potter, and has not sought any promotion. To the extent that he believes that the good pot will be singled out, he is opposed to the personality cult. He does not regard himself as belonging to the school of the studio potter, or of the craftsman potter. To him the studio potter can over-emphasise creativity and personality and insufficiently acknowledge the influence that skills, materials, etc., have on the pot in the making. In its extreme, the craft tradition can lay emphasis in the other direction, and so deny the artist within every craftsman.

Bob likes to think of himself as somewhere in between the two extremes. A finished pot is to him the meeting point of art, craft and science, and he believes a potter's best work will result when he best develops his abilities in all these areas. In his own words: 'In the kiln, fire meets clay, and brings about the metamorphosis of clay to stone. In his kiln, with his mind, his hands and his art, the potter short-cuts time, refining, blending and shaping the components of the earth to new forms with new uses and appeals. This is the joy of being a potter'.





CHRIS DU FRESNE

Chris du Fresne of Mapua, about twenty miles from Nelson towards Motueka, has been dependent on the earnings from his pottery for some eight or nine years. Formerly a builder, he has designed and built his own house, pottery and equipment, plus a 36 foot Seabright skiff, in which he spends happy holidays in Tasman Bay. His house, with similarities to a Scandinavian chalet is on a wooded inlet. Literally he has his boat at the front door and his pottery at the back door.

Chris du Fresne is an uncomplicated man not choked up with theory. He is essentially practical and his ingenuity shows in the range of equipment he makes for himself. His pottery is mainly domestic ware—mugs, bowls and jugs that are in demand by shops in Nelson, Wellington, Palmerston North, Cambridge and Invercargill. Visitors to Mapua can select pots from the showroom at the pottery. Chris du Fresne makes time to teach at evening classes locally, and in this way he makes a worthwhile contribution to the cultural life of the district.

He says, 'I have often speculated on how indigenous styles of pottery originate. How did they come about? Does the environment influence the shape of the pot? As a New Zealander born and bred, and with no background of overseas study and largely self-taught, obviously if there is such a thing as environmental influence I am well and truly under it. I would be interested in an exhibition by potters with similar qualifications (or lack of them). The experts could then paw over it, and see if they can discover any trace of an indigenous style in New Zealand pottery.



NANCY BARNICOAT

Nancy Barnicoat is not a full time potter, but she is a serious potter who sets aside regular periods for spending exclusively in her workshop. A youthful grandmother, she took up pottery eleven years ago, soon after moving to Nelson when her husband, Dr. C. R. Barnicoat, became Director of the Cawthron Institute. Mirek Smisek was the only experienced potter in Nelson then. He was her inspiration and tutor at the Nelson Technical College classes, and later when he went abroad to study in Japan, and then to spend a year at the Leach Pottery in Cornwall, she replaced Mirek as tutor.

Working exclusively in earthenware with an electric kiln, she makes her own glazes and aims for natural blues and greens of the New Zealand landscape. Her inspirations come from the ever-changing colours of the sea and mountains seen from their house on the Tahuna hillside overlooking Tasman Bay.

She makes domestic ware — good shapes, carefully finished. Designs are deliberately simple because she caters for buyers who are not necessarily looking for handmade pottery, but who want a jug or a set of bowls which will go with the things they already have in use, with the hope that more and more people will come to buy and enjoy using handmade pots.

Nancy Barnicoat has had to plough a lonely furrow in Nelson as a potter who was more than a hobbyist. When she started there were no other potters in her position, and only one professional. She is, for example, a member of the Wellington Potters Association (as well

as the New Zealand Potters Association and the World Craft Association) but rarely can attend meetings.

To have attained her level of facility in her chosen field—domestic earthenware—is a notable achievement.

photos: Page 12 N.Z. Herald and Weekly News

Nancy Barnicoat in her studio.

photo: Kingsford and Baigent



HARRY and MAY DAVIS

Harry and May Davis need no introduction to readers of the *New Zealand Potter*. Eight years ago they left their pottery at St. Ives, Cornwall, to re-establish themselves in Nelson, New Zealand, as Crewenna Pottery. They had already decided to come to Nelson before they left England—motivated partly by climate and by opportunities for a growing family (they have four).

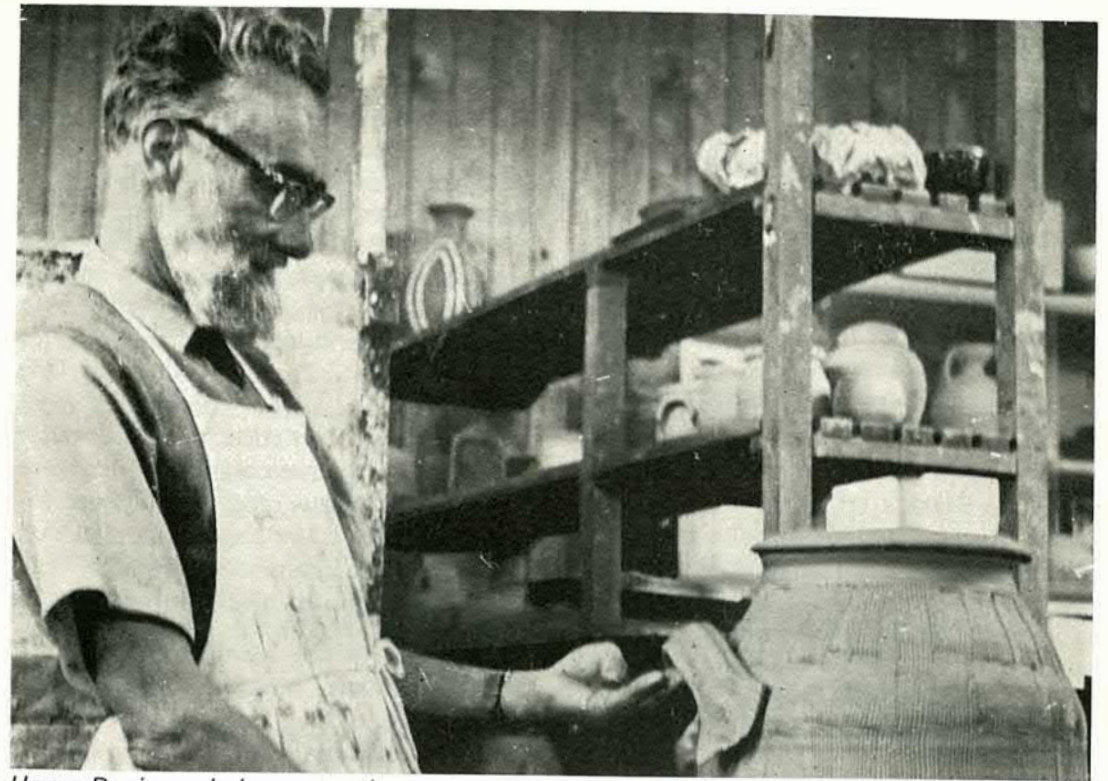
The Davis's also were fortunate in securing a most attractive property at Wakapauwaka with slopes facing Tasman Bay. A charming hundred-year-old house is large enough to provide a showroom sympathetic to the old oak furniture brought with them from England. As well as building a new workshop they have mechanised all possible aspects of the labouring associated with pottery, such as providing stone crushing machinery and a big pug mill.

May Davis writes, 'All our work is sold here in our own showroom, or direct to customers by post, and this has been our

practice for some years now. The showroom is open for the six summer months only, Mondays to Fridays, mornings and afternoons. In winter we catch up on orders, and this is also a time when Mr. Davis undertakes lecture tours abroad: In 1966 we went to Canada, in 1968 Canada again, we also did a series of lectures in London and Denmark on the same trip. A number of weekend schools have also been held in New Zealand and this year he has been to Sydney. In conjunction with these lecture tours we accepted invitations to present exhibitions of our work—in Toronto in 1966, London in 1968 and Sydney in 1970.

The pottery workshop is no longer open to the public as it once was, as there are now several others in the district willing to show people 'how it is done'. Potters and others who have a special interest in our work are naturally welcome in the workshop—but a preliminary letter is advisable.

Harry Davis taking a school.



Harry Davis and demonstration pots.

Photos: By courtesy of Jeanne Edgar, Risinaholme Community Centre, Christchurch.



STEWART ROUT

Next door to the new Wallace property at Atmore Terrace, on the same sunny slope overlooking Tasman Bay, is Stewart Rout.

Stewart Rout makes pottery as a complementary occupation to running his nursery. In fact he makes mainly plant pots which are sold with plants, complete.

He was first a nurseryman (with Christchurch Parks and Reserves and later in commercial nurseries in Britain). Pottery came later—through the Nelson Education Board's art instructor, Lawson Fraser. An obvious facility with the craft has created for Stewart Rout the happy situation of being able to earn his living by growing plants and making pots to sell them in.

His pottery, as expected is specialised. He makes things that don't detract from the plants they contain. Many are terracotta with slip decoration. All are earthenware. As well as the plant containers he makes other lines to offer some variety—mostly small bowls and dishes with brightly coloured decorations. Bird and horse pots add an element of fun. Although these are not to be taken too seriously, they are carefully made, taking their form from natural shapes of clay, and the designs are not forced.

Stewart Rout is a systematic worker. His sense of order is noticeable from the neatly stacked pots in their various stages inside, to the carefully raked gravel outside. He aims for a daily firing.

Travels in Mediterranean countries have made him aware of the appropriateness of terra cotta earthenware for plant containers. He admires large terrace pots. He thinks that Mediterranean-type

gardens, with paving, plant pots and terraces are much more suited to the dry summer conditions in many parts of this country, than the lawns and flowerbeds which require so much effort to keep looking green and neat. It is possible that some day he may go in for large terrace pots if ever he decides to enlarge his workshop capacity. We agree with him that there is scope for this kind of pot in the New Zealand landscape. One thing is certain: he will continue to work in earthenware. In Kenneth Clark, Stewart Rout finds a contemporary potter who is a leading exponent of decorated earthenware. Kenneth Clark has shown him that it is with earthenware that he can achieve the kind of result he looks for.

Since he is not married and likes to travel, Stewart Rout makes journeys away when he can. He has just returned from Afghanistan where he wanted to find out about the pottery and other artistic expressions of the people who live there. At present he is concentrating on developing the nursery side of things so will not be doing much pottery for a time.

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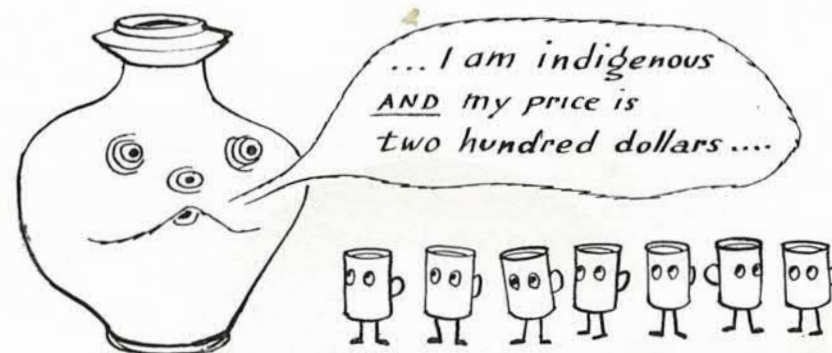
Besides the potters there are other craftsmen having an influence on the quality of life in Nelson and helping to give a distinctive regional character. Anna Correa-Hunt has been weaving for a long time. Her home, Blick House, Blick Lane, has associations with early weavers who made cloth last century for the Nelson constabulary amongst other people. Nan Mason, Miss Sparrow and Philippa Vine (wife of Christopher) are other weavers; Jens Hansen and his wife Gurli, from

Denmark (via Auckland), are young silversmiths. They too live and work in another of Nelson's nineteenth century houses of architectural interest. Harry Reece, of Wakefield, is a wood tuner.

As well as with their work the potters and craftsmen of Nelson make contributions in a number of ways. Jack Laird and May Davis, for instance, play musical instruments in an orchestra associated

with the School of Music. Nelson has settled tradition, older than in many other parts of New Zealand. John Gully was art teacher at Nelson College for many years, and the Suter Art Gallery flourished in the early days. Music and art have appreciative audiences.

The people themselves are receptive to the new influences the craftsmen are making on their city.



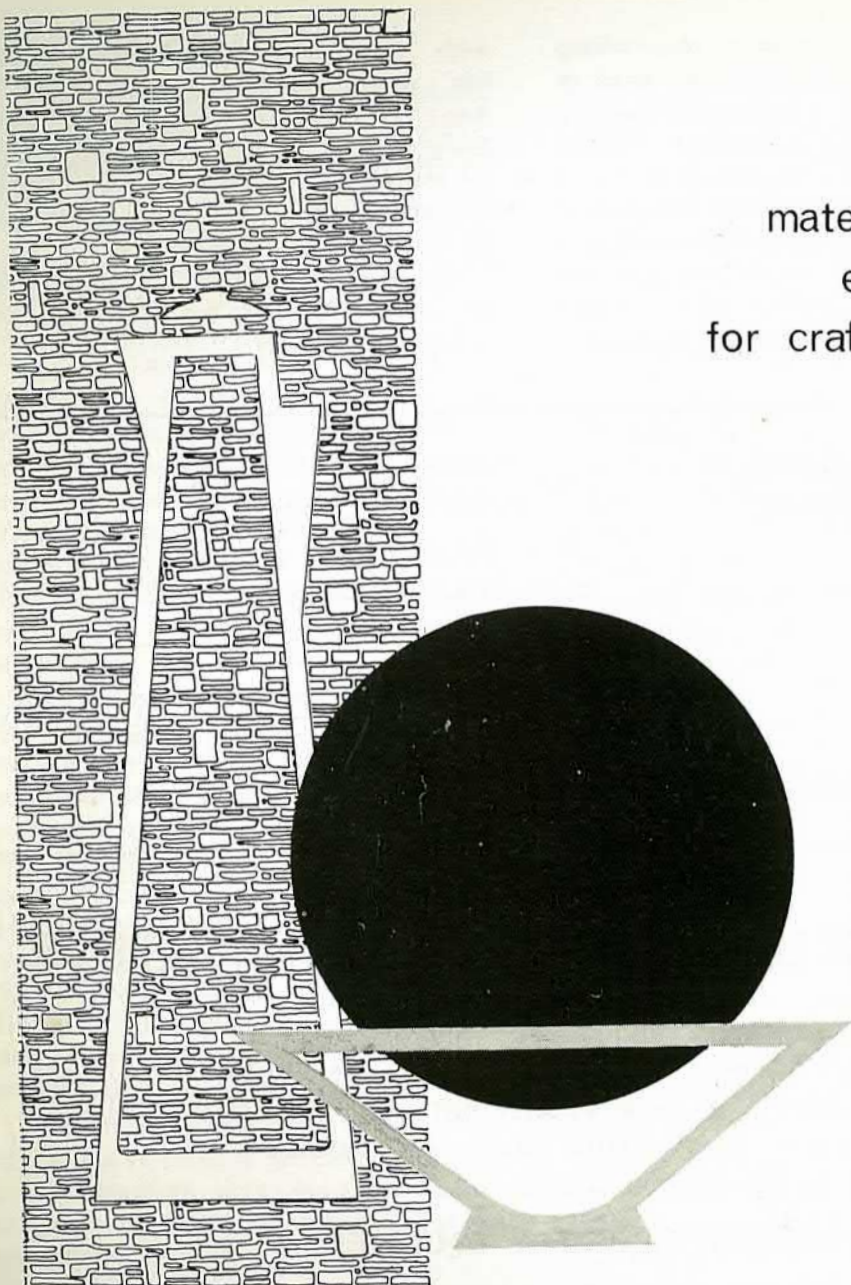
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Thermal shock resistance and thermal failure

By Bob Munro

Pots of good design can and have been produced with little or no technical knowledge on the part of potters, past and present. Conversely no amount of theoretical knowledge will necessarily produce a pot of good design.

However, once a potter states or infers that a pot is suitable for a given purpose then the pot must measure up to that standard in addition to the standards of good taste and design.

Potters and, I hope, not too many customers know of oven-ware whose glaze peels, of casserole lids that lose their handles and of 'heat-proof' pots that go 'pop' in the oven or maybe 'ping' on the shelf sometime after use.

1. CAUSES OF THERMAL FAILURE IN OVENWARE

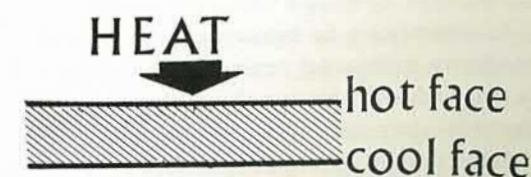
Some ceramic bodies withstand many cycles of heating and cooling then fail suddenly under easier conditions that the body had previously withstood. This is a form of thermal fatigue. Many materials can withstand sudden temperature changes up to a certain extent but with failure occurring when the applied temperature gradient exceeds a given value. This is thermal shock. Failures due to thermal fatigue or thermal shock are complex and are governed not only by the body of the ceramic but also the design. Furthermore there is often no clear dividing line between thermal fatigue and thermal shock.

In glazed pieces the relative expansion

between body and glaze plays an important part in the strength and stability of the pot. If the expansion rates of the two are seriously dissimilar crazing or peeling will occur. An ill-fitting glaze can weaken a body and even when a glaze shows no apparent faults it may have in-built stresses which relieve themselves when the article is subject to thermal shock.

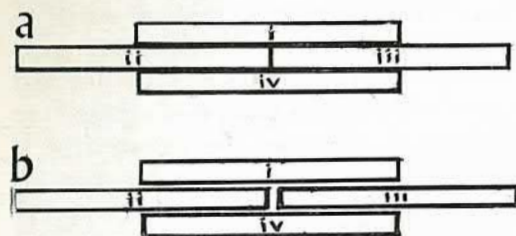
The importance of a well fitting glaze cannot be over emphasised. On vitrified bodies it has been shown that a glaze may increase or decrease the strength of a body by about 60%. This depends on whether a glaze is in a state of compression or tension before a load, thermal or otherwise is applied.

Further, since no heating or cooling can be entirely uniform, throughout the thickness of the body, thermal gradients are set up in the body (Fig. 1).



During heating, a surface area expands more rapidly than the centre of a body and the surface is therefore placed under compression. During cooling the surface contracts first and so is placed under tension. Ceramic bodies are stronger under compression than tension and for this reason failure is almost always found to occur on cooling.

Thermal ratcheting is a further factor to be taken into account when considering heat resistant ware. After a glost fire the relationships between body crystals and between body and glaze are in a random but precise pattern. During further heating and cooling cycles in domestic use the microscopic structure of a pot becomes disorganised in such a way that the particles within a body are prevented from returning to their original positions. (Fig. 2).



- (a) Particles i-iv in stable position after glost fire.
(b) Particles i-iv in unstable positions after thermal expansion.

In attempting to return to their original positions a delayed action strain remains in the body. Within a polycrystalline body thermal stresses in some individual crystal grains and grain networks show characteristics of hysteresis. By this is meant that there is a time lag between the imposition of the stress and the resultant strain that follows. On cooling, i.e. when the stress is removed completely a residual strain remains. This time lag or hysteresis is evident when failure occurs sometime after a pot has been used. There is often no clear dividing line between thermal ratcheting and

hysterical characteristics. In fact the two faults may be closely linked.

Also as has been mentioned in earlier articles (N.Z. Potter Vol. No. 2, Cowan) abrupt volume changes occur within a body, associated with the α - β changes in quartz cristobalite and this has been a limiting factor in the heating and cooling cycles of domestic ceramic ware.

2. IMPROVING THE THERMAL SHOCK RESISTANCE OF STONEWARE

(a) More than the usual amount of care to be taken in design, throwing, drying and firing.

(b) **Increase in porosity.** The cavities within a porous body allow room for uneven expansion and contraction to take place, i.e. strains imposed during heating and cooling have microscopic cavities which act as buffers and so the strains can be relieved internally. There are obvious limits in this method and care must be taken lest a body ceases to have the properties of stoneware.

(c) **Increasing thermal conductivity.** This lessens the damaging effects of thermal gradients by conducting heat rapidly from the exterior to the interior of the body and vice versa. However, bodies of high thermal conductivity are rare in the field of ceramics and include Beryllium oxide bodies (conductivity close to that of aluminium metal!), cerium oxide, tin oxide, aluminium oxide and zircon based bodies. Only the last mentioned is in any way practical for the average potter. The incorporation of grog of high thermal conductivity such as corundum or silicon carbide is useful but at the same time it is necessary to reduce porosity to a minimum in order to eliminate the insula-

ting effects of air spaces. The glassy matrix of the body should be such that it has a high thermal conductivity. It must be remembered that too high a grog content can lower the mechanical strength of a body.

By incorporating zircon in a clay, thermal conductivity can be substantially increased while at the same time a dense vitrified body can be maintained.

(d) **Decreasing thermal expansion.** It is obvious that if a body has little or no thermal expansion then rapid temperature changes will have no effect on the body. It has been observed that bodies containing Lithium in varying percentages can be designed to have positive, zero or negative expansion. By the latter I mean that on heating the body contracts. Lithium can be incorporated in the body in the form of Petalite, Eucryptite, Spodumene, a lithium feldspar, or lithium carbonate. Unfortunately lithium is an extremely powerful flux and even a small percentage can drastically lower the melting point of a clay. I advise anyone experimenting with such bodies to glost fire test rings on a cookie of fireclay. Lithium bodies hard biscuited then glazed at a lower temperature offer the possibilities of ware that can be used on an open fire or element.

The following bodies have been found to have zero expansion up to the temperature given.

	Lithia	Alumina	Silica
350°C (wt. %)	5	15	80
450°C	10	20	70
460°C	14	29	57

In a New Zealand clay (McPhersons P2-1) I incorporated 30% by dry weight

of zircon flour (obtainable in bulk from Winstones). This may sound rather a lot but zircon is a heavy material and I found that it had little effect on plasticity. Test rings were made and biscuited. Some rings were glazed and some left unglazed then all were fired to cone 9-10 to give a dense body. The following tests were made (all rings being of the same dimensions).

- (a) Unglazed ring. Withstood 20 cycles of being heated to 600°C for 2 minutes then plunged into water at 10°C and held for approximately 10 seconds. No deterioration apparent.
(b) Glazed ring. Similar tests to above. No deterioration apparent.
(c) Unglazed ring. Withstood 10 cycles similar to above except that only half the ring was immersed in water. No deterioration apparent.
(d) Unglazed ring. Half the ring was frozen in a block of ice. The exposed half was heated in a spirit flame. (560°C). This test was only done once, however no deterioration apparent.

Magnesia bodies based on talc are low in thermal expansion and are worthwhile considering when dealing with thermal shock resistant stoneware. However, there are a number of serious pitfalls that the potter should consider before undertaking work with a magnesia based body.

It is not sufficient to toss in a handful of talc when wedging up a body mix and hopefully expect that a suitable casserole body will result. In fact the reverse can happen and a body of low thermal shock resistance could be produced. The reasons are as follows.

A magnesia body of low thermal expansion is based on the formation of cord-

ierite within the body. Cordierite has the theoretical formula $2\text{MgO} \cdot 2\text{Al}_2\text{O}_3 \cdot 5\text{SiO}_2$. But it is not sufficient to use ingredients which add up to this formula since underfiring will fail to produce cordierite and overfiring may produce any one of five glassy phases which will only serve to reduce the thermal shock resistant properties. This last is especially so if even a small error is made in mixing the batch. There is a very close proximity in the eutectic points $\text{MgO} - \text{Al}_2\text{O}_3 - \text{SiO}_2$.

In short, bodies of high cordierite con-

tent inevitably have a short firing range. Underfiring fails to produce cordierite and overfiring results in the cordierite deteriorating to mullite or forsterite, both with higher expansion coefficients.

Any potter interested in finding out more about cordierite bodies I would suggest should read:

Gebler & Wisely, J. A. Cer S 32 (5) 163 (1949)

Lamar & Warner, J. A. Cer S 37 (12) 602 (1954)

Theiss, J. A. Cer S 26 (3) 99 (1943).

Make your own Filter Press

by Chris du Fresne

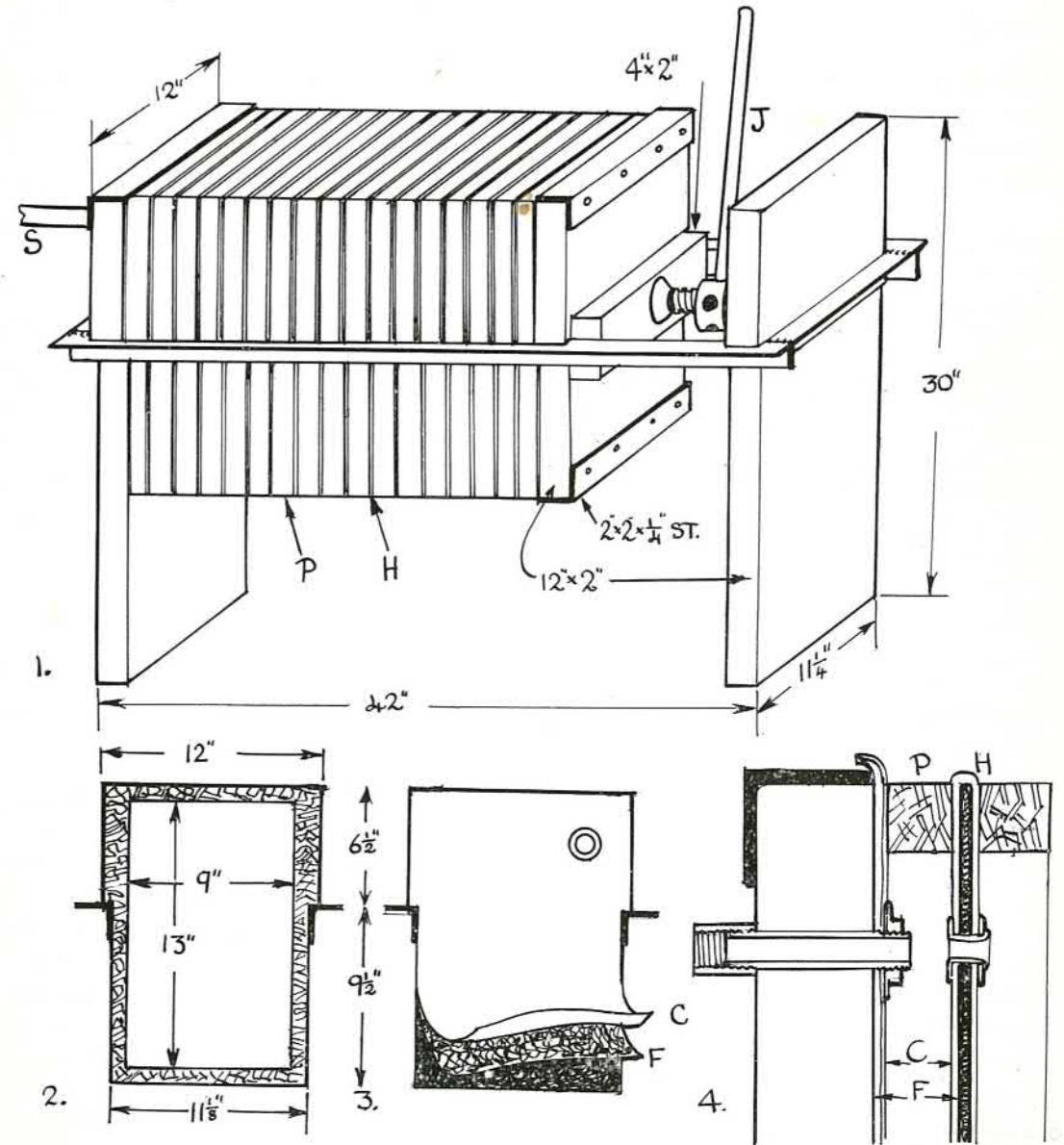
This filter-press can be built for a very few dollars indeed provided you have a reasonably ready pair of hands, and also provided you have a compressor capable of working up to 40 lbs. pressure. I made my own compressor out of an old motor-bike engine, but most potteries have some kind of compressor, and they can usually be picked up fairly cheaply. The drawing is self-explanatory, but there are one or two points that need clarifying. Firstly the slip tank. This should be able to stand a pressure of at least 40 lbs., and preferably hold 30 gallons of prepared slip although it can be done with a smaller container by refilling half way through after slacking off the pressure. A heavy duty galvanised petrol drum is ideal, and for safety's sake should be reinforced. One extra outlet will have to be provided at the bottom of the drum to take the $\frac{3}{4}$ inch pipe that carries the slip to the press, and another at the top to connect a $\frac{1}{2}$ inch water hose which goes to your pressure gauge, pressure switch and safety valve if you don't already have them on your compressor. The air supply is connected to the small $\frac{3}{4}$ inch opening. The angle iron frame around the press should be very strongly welded. Have this done by a good professional, as the

pressure it has to withstand is considerable. The connection for the clay pipe through the end piece is simply done by means of a $\frac{3}{4}$ inch barrel nipple of a suitable length with a socket on the outside and a back-nut on the inside screwed down on top of the feltex and canvas lining. The other end-piece should also have feltex and canvas lining the inside. The canvas is optional, but I would strongly advise it if you don't want your clay to be full of little bits of feltex. By the way, don't be mean when cutting your feltex—it shrinks quite a lot. The particle board is very good for the purpose. It becomes quite porous itself after a while, but I suspect that it might get a little tired with a possible breakage in time, although mine have lasted 12 months so far.

This outfit will press out about 100 lbs. of clay in about 3 or 4 hours with a pressure set to come in at 30 lbs. and go out at 40 lbs. For this you will require about 5 two-gallon buckets of raw clay mixed up into about 30 gallons of medium slip. It's a good idea to have a good stout sash-cramp handy in case the press springs a leak—this can usually be cured by a little extra pressure on the offending spot.

I, the Filter Press. S, $\frac{3}{4}$ " pipe from slip tank; J, Five ton jack; P, Particle Board section, sixteen required; H, Hardboard section— $\frac{1}{4}$ " tempered hardboard, fifteen required; 2" by 2" by $\frac{1}{4}$ " angle steel welded bracing and edging for end boards.

2, Particle board section. 3, Hardboard section. 4, Larger scale detail showing pipe fixing on end board and fastening of grommet through hardboard and both layers of canvas and Feltex. C, Canvas. F, Feltex.



Expo: from inside

By Elizabeth Mace of the Department of Industries and Commerce who went to Osaka as a Trade Officer in the New Zealand Pavilion

Expo is such a multiplicity of things, its impossible to describe it adequately. To talk about work first. Not to glamourise it, I spend hours perched on a stool in the Information Area facing the much admired Roy Cowan ceramic mural which portrays the relationship of New Zealand's and Japan's location, land formation and Asian orientation. The Info Desk features a stuffed Kiwi, with large Kiwi egg enclosed in royal purple—both objects of much comment and wonderment. The Info Area is at exits to: (1) The Cinema. 'This is New Zealand' rates among the top three to five films showing. (2) The Meat Board's Snack Bar (lamb cutlets, curry, lamb-burger, Apple and Pear Board's apple juice, Leopard beer etc.) and (5) The Geyser Room Restaurant (for the Patricians — Lamb International, Toheroa Soup, Corban's dry red, etc.). It is extremely elegant and very highly rated again. (4) Pavilion Shop (records, Pavilion postcard, books, prints, sheepskin articles, stamps). (5) Toilet (last but certainly not in order of priorities least!). Much of my 'learned' time is spent directing pavilion visitors in steady stream to these various alternatives or pointing out in my best Japanese that they have come in the exit, not the entrance, politely declining requests for autographs (which would be full time berserk-making occupation. Imagine writing your name for 6 months!), graciously posing for photographs with or without Kiwi. (The Japanese are great shutter bugs and this is a chance in a lifetime for Japanese rice

farmers to acquire a gallery of 'geijins'). We, the information staff (two Japanese hostesses/interpreters, one trade and one tourist officer per shift), have mentally replaced ourselves with computer programming stock questions/answers, and gone off to the seaside or the quiet contemplation of the tea ceremony ('sado').

However, to justify my *raison d'être*, since you are taxpayers, I do also promote New Zealand (including trade) and apply myself to coping with an incredible range of questions. I'm a veritable mine of miscellaneous data a la New Zealand encyclopaedia, three volumes.

The Pavilion is, I can say with real pride and pleasure, a tremendous success. New Zealand has acquitted itself most impressively — in the Pavilion and the National Day ceremonies on 8th July, conveying tasteful, lively and imaginative and comprehensive pictures of New Zealand life and people. There was an incredible convergence of Kiwi's abroad on Expo for National Day.

As for the rest of Expo, little by little my explorations continue—one hundred and seventeen pavilions and about a hundred visited to date (July) plus a whole host of entertainments, formal and informal, scheduled and spontaneous, cuisine and international personalities. Above all a superabundance of Japanese tour parties stopping for no man, but inexorably following their flag-waving, whistle-blowing leader, the whole party, bowed peasant rice farmers, company employees identifiable by scarves,

banners, kanji inscribed smocks of various hues, petunia shaped plastic hats (which fold flat—someone is making a vast fortune), so as not to lose one another. Nonetheless Lost Children and Lost Adult centres are busy non-stop.

Getting to Expo by train, then to Pavilion by the main gate and Festival Plaza, is like struggling through tightly packed football scrum. By 13th September over half the population of Japan (i.e. some 55 million) not to mention a modest million or so 'geijin' will have converged on Expo, as daily attendance ranges from 200,000 to 500,000.

I shan't attempt to cope with descriptions of individual pavilions, instead I will be bringing some Expo movie films (professional, not my own) and Expo albums home to show. I have taken very few photographs which may seem a pity, but have found myself wanting to record differently.

Activities are extremely various with my mini apartment (cleaned each day in a flash by united onslaught of four trousered and blue smocked Mrs. Mops and buckets) serving as my sole refuge from the hurly burly. Far from our images of cherry blossoms and geisha girls clad in elegant kimonos: industrialised, beset-by-pollution Japan, complete with Expo and extremes of climate — first we were frozen, then drenched and now broiled—can be exhausting and New Zealand seems by contrast a green paradise.

However, activities — a sample. Sorties from Kansai district number two (four in a five day shift arrangement does not allow much travelling far afield). First was to Kyushu, southernmost island and second to Kurashiki and Bizen pottery

village of Imbe. The former was a picturesque adventure. Four of us hired a car from Beppu hot spring resort and braved Japanese drivers in sometimes shattering encounters. Highlights included mixed nude bathing in jungle baths at Ibusuki Kanko Hotel (the Hawaii of Japan) where I had my first experience of a ryokan (Japanese style inn), Atomic Peace Centre at Nagasaki and actively volcanic Mt. Aso, which is almost as well loved as Fuyisan. The later, Kurashiki, in contrast, was a delightful town personifying traditional Japan. It has superb museums, especially the ceramics, with Shoji Hamada and Bernard Leach collections, but also folkcraft, archaeological displays, lovely architecture — narrow lanes between rows of beautiful two-storied houses and mansions, former rice store houses, and picturesque tree lined canal, a minimum of traffic which is rare luxury in Japan. A Japanese man from the Kurashiki Culture Centre whom I'd met, organised a variety of visits and people to guide us when he was working. For example, he took us to one of the most beautiful homes of Kurashiki, where we were invited to partake of Japanese tea. It was one of those occasions when one feels especially privileged. Afterwards we were driven to the house of a potter where we also had tea after admiring the pottery on display. I brought a beautiful green tea bowl with a design on the unglazed portion and a rich dark glazed vase.

Daily activities—many, many visits to Kyoto (my Florence of Japan) also to Kobe (I go tomorrow with Japanese hostess to visit antique shop whose owner had a long talk with us at the Information Desk) Nara and Kinsarbash (covered

mile-long arcade of department stores, little shops/stalls of every description, tea and coffee houses, hostess bars, restaurants displaying plastic facsimiles of their dishes in the window, fruit and parfait parlours, chestnut roasters, pet pedlars, pachinko houses). Visits to Buddhist and Shinto temples and shrines, formal Japanese gardens, Japanese theatre—fascinatingly different from our theatrical conventions, classical Koto and Geisha music performances. On an international scale, a film festival, Beethoven symphony concert by Berlin Philharmonic, French mime, Marcel Marceau, Russian Folk Chorus and

others. Also visited the Church of the Perfect Liberty for Cherry Blossom Festival—the church is one of the new post-war religions of Japan and interesting sociologically. The church's facilities include Peace Tower, Bureau of Computerised Mission, and a fifty-four hole luxury golf course.

Japan is a fascinating and complex country—like a Noh mask, it is described many times as having two faces—the sword and the tea bowl—and a mixture of contradiction in between which tends to make us visiting 'geijin' slightly dazed, awed and intensely curious.

Invitation from Queensland

Formed in February 1968, we, the Queensland Potters Association, are entering our third year of existence with enthusiasm and a membership of approximately fifty.

Most of us are 'spare time' potters who are anxious to learn more and more. It seems to me that 'mad potter' is a most appropriate term and I'm sure all our friends and relatives must agree.

We enjoy reading the N.Z. Potter very much and take this opportunity of extending to any potter visiting Brisbane, a warm invitation to contact us through our:

President—P. Mason, 15 Wylie Ave., Coorparoo. Phone 97-4718.

Treasurer—J. Roberts, 1023 Waterworks Road, The Gap, Phone 39-1275.

Secretary—S. Woods, 22 Carinya Street, Indooroopilly, Phone 78-2633.



Potter's Cottage for a meal

Anyone visiting Australia would probably enjoy calling at Potter's Cottage, Jumping Creek Road, Warrandyte, an old goldmining village eighteen miles from Melbourne at the orchard end of the Yarra Valley.

Apart from the galleries and displays in the old farmhouse you can get a meal served from stoneware and earthenware dishes.

The secretary has sent us some information about it—including descriptions of the food offering and it sounds very good.

Pottery in Australia

Published by the Potters' Society of Australia, twice yearly in spring and autumn. The yearly subscription is \$A2, and the magazine may be obtained from the Editor 'Pottery in Australia', 30 Turramurra Avenue, Turramurra, N.S.W. 2074, Australia.

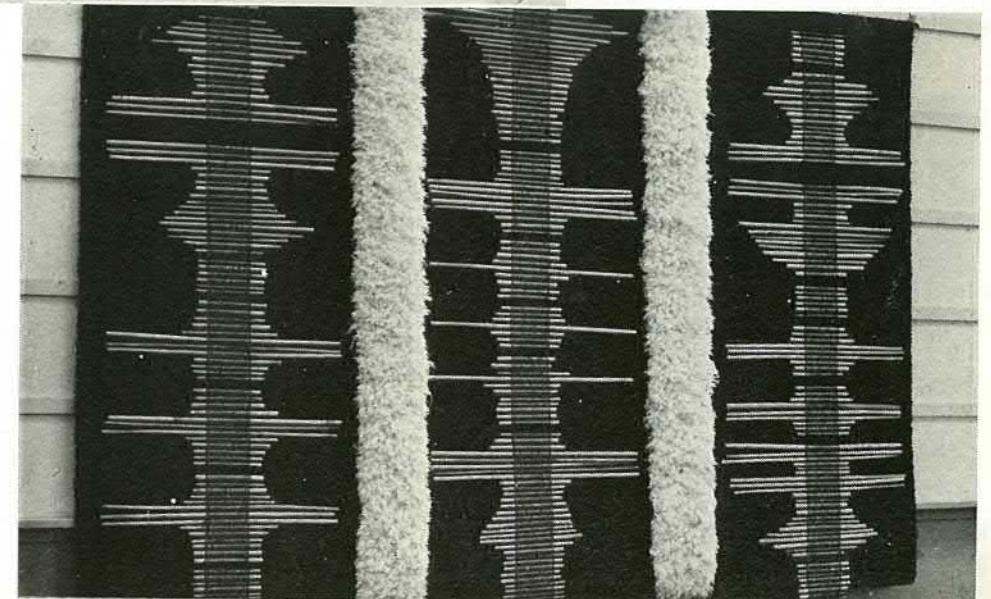


world craft council new zealand asian exhibition 1970

Left: Pots and weaving in the New Zealand section.

Below: Tapestry in bamboo, wool and flax by Ian Arcus.

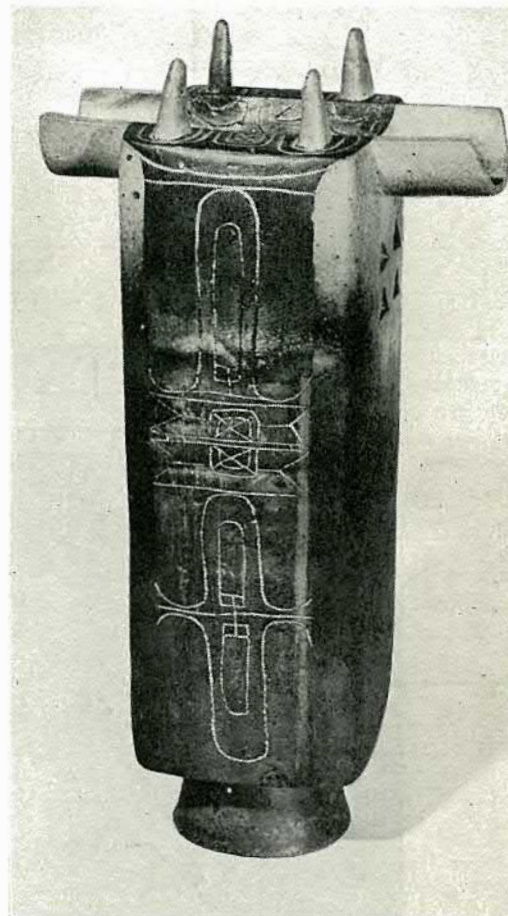
Photos: National Publicity Studios



japanese ceramics

Left: White flower vase. KAWAI Seitoku.

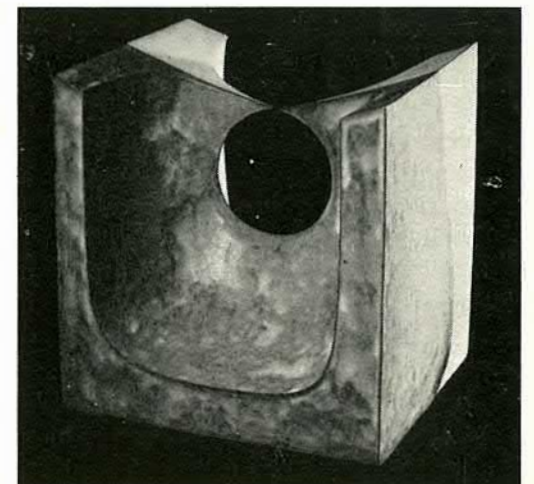
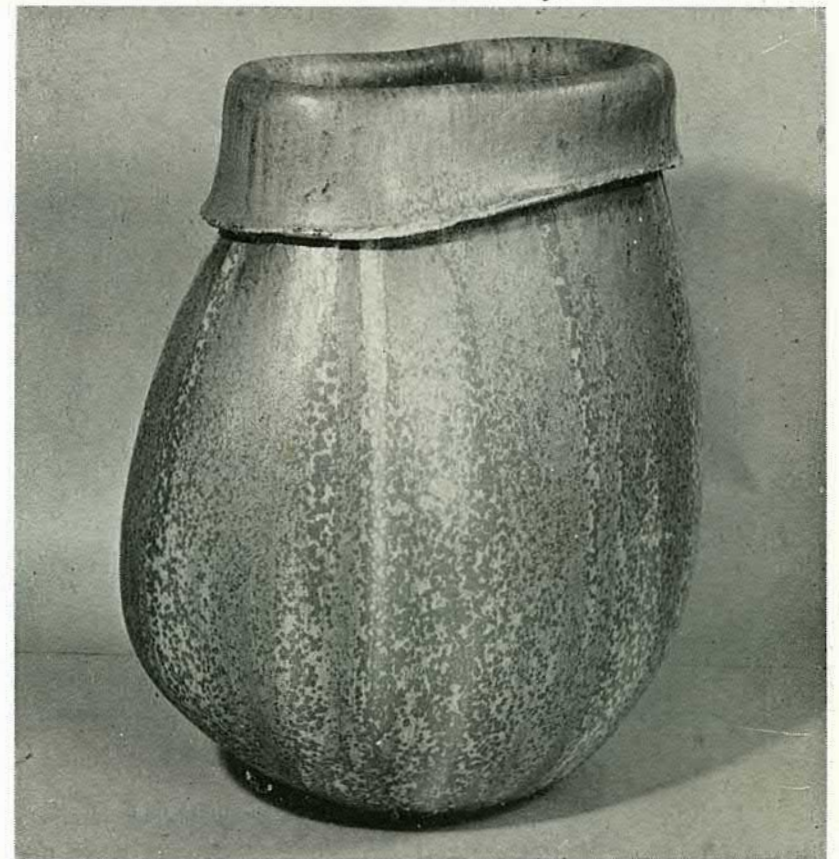
Below: A mask. NAKAZATO Shigetoshi.



Right: Burning jar. MANDAI Shoji.

Below left:
Ceramic flower vase. ISHIDA Yusaku.

Below right:
Ceramic work. YOSHIDA Sohachi



World Craft Council New Zealand Asian exhibition, 1970.



World Craft Council exhibition.



Left: Chair of king. SUZUKI Kenji.
Right: Branch pot, by Mirek Smisek.

Book Review

POTTERY, THE TECHNIQUE OF THROWING

By John Colbeck

Published by Batsford, Watson-Guption.
N.Z. Agents: Whitcombe & Tombs Ltd.
N.Z. Price \$5.55

In 128 pages with 388 photographs John Colbeck demonstrates all aspects of throwing.

The photograph is supported by an extremely clear and instructive text covering clay, its preparation by mixing, wedging and kneading and the pros and cons of different types of wheels.

In addition to all the basic techniques of centering, opening, thinning and shaping, Colbeck discusses how to alter thrown forms, how to make edges, ribs,

lids and how to use calipers, throwing sticks, etc.

John Colbeck, a skilled professional and part-time lecturer in ceramics at the Central School of Art and Design, London, has produced a basic volume for every potter's bookshelf, being suitable for both beginners and experienced potters who may wish to acquire some useful knowledge of more advanced techniques.

N.H.

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Should pollution by pottery be amateur or professional?

by Toby Easterbrook-Smith

The article in the last issue, on the place of professional and amateur potters, has aroused comment which warrants airing. We start with the views of Toby Easterbrook-Smith, Principal Lecturer in English, Hamilton Teachers College and a part-time potter.

Wilf Wright utters clarion calls for a return to some basic standard of awareness of clay. The last National Show is notable for the absence of a number of names, Brickell, Trumic, Perrin, and others generally regarded by the potters of this country as among our betters. Rumours are heard that a Professional Potters Union is to be formed. Almost monthly, news comes of another potter gone full-time (an unfortunate phrase which as a family man I find difficult to separate from obstetric associations) and in the shops and in the galleries pottery continues to sell apace. But a chill wind is also withering some of the plethora of craft shops. Is there some common pattern to be made from all this?

First some questions. Why has pottery so taken possession of the New Zealand imagination? What is a professional? When we speak of 'a standard' what do we mean? Whose standard for a start?

The first question we can answer in conjecture only. An affluent, urban society, more and more alienated from natural sources of spiritual renewal, more and more depersonalised in its social organisation and uniform in its machine-produced artifacts of daily use, produces people who seek tokens which show personal statement, which show interaction between a human being and some

fairly basic natural materials. New Zealanders, from the historical reasons of our settlement by a predominantly puritanical lower-middle and working class, hold strongly utilitarian values, admit themselves to freedom slowly. Most pots can be used, so the utilitarian puritan is assuaged and his seduction by the sensuality of pots becomes permitted. Pots are cheaper than paintings, so bad buys are less sinful, and if you don't like them you can shut them in a cupboard, give them away as wedding presents or even break them. Paintings and sculpture are more expensive, and more embarrassing. Your friends will ask what they represent, what they mean, and other literary questions; for our education system reflects our society and ignores all but verbal and literary perceptions.

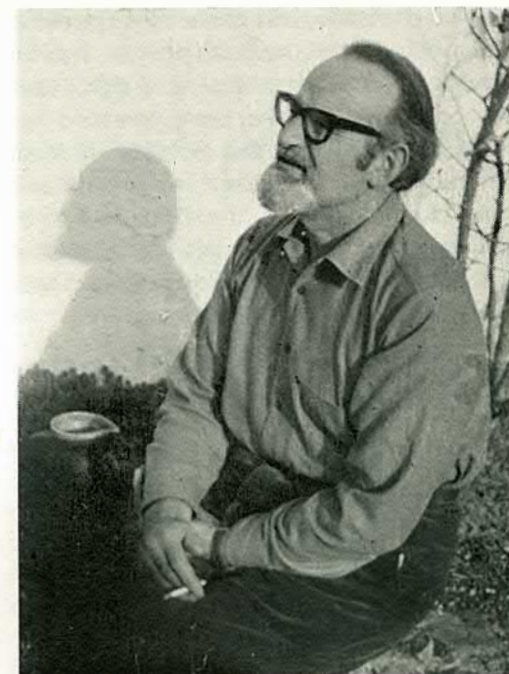
But this utilitarian background to a people seeking spiritual succour also produces do-it-yourself. Some garden; some assemble pre-cut furniture; some paint by numbers; some reduce and re-assemble motor-cars; or work at other ways of reassuring themselves in the suburban desert that they exist, and that they can create. Some pot; in fact an astonishing number of them pot.

In Hamilton this year five colleges conduct between them twelve pottery classes with a total enrolment of 231. As

one would expect in a society which emotionally and aesthetically castrates most of its men, 199 are women and 32 are men. Four of the schools say that they could run more classes with assured enrolment, but that the present policy of the Education Department allows no increase in the number of classes beyond those which were being conducted in 1967. A total enrolment of about 225-250 has been common for some time. The adult population of Hamilton is probably about 50,000. Each year then, about one in every two hundred starts off to learn pottery and, allowing for half of each class being repeat students, over the last five years alone probably about one in every eighty adults has had a go. Most of them have, of course, stopped.

They stop for a variety of reasons. Pottery is demanding and dirty. To progress they must practise daily instead of weekly. Wheels and kilns are beyond the suburban purse unless dedication demands them. My impression is that in Hamilton there are probably about twenty people who have wheels, and perhaps half of these have built or are acquiring kilns. The standard of instruction is variable. Nearly all the night class supervisors speak of the difficulty in finding adequate tutors. My private impression is that the competence of some instructors might not bear close inspection. The size of classes varies from 14 students to 26 students complain of an inadequate number of wheels, that they do not even glaze their own pots, that wastage in firing of students pots is abnormally high. Having seen some of the pots, I do not find this as surprising as the students do.

The \$100 plus, spent on instructors'



Toby Easterbrook-Smith

wages each week could be better used by employing one full-time instructor in a pottery centre where students could come, not only for their weekly lesson, but also, for a small fee, for regular practice. The present pattern of organisation is educationally and economically indefensible. But the really significant point, is the sheer number of people involved.

Whether they try to centre eight ounces of clay once and leave in disgust, or persist with little increase in ability for years of weekly therapy, each of these people will view ceramics in a new light, will gain and know something, even if not as much as they sometimes pretend. Each of these is a little more aware of pots, more likely to buy them, more likely to be critical of what they are buying. If Ham-

ilton is fairly typical, this is happening throughout the country to some **thousands** of adults. Here is a significant section of the public being created for potters. Should not the Society of New Zealand Potters examine this situation and make suggestions to the Department of Education as to how this considerable use of public money, and amenities might be more effective?

How does this growth of a partially-informed public affect the serious potter? In two ways I suggest. First, by the increased demand for pots by a slightly more conscious public, and secondly by the increased supply of pots to local shows and shops as the night scholars attempt to finance their next step in equipping themselves. Craft shops proliferate, but there is an end to the market at any given time. The established potter feels the squeeze.

Does some of the concern of the 'professionals' spring from this? Ten years ago they were few: today more challenge their position? Is their claim to 'professional' status valid? What is a professional? One whose main source of income is from pottery? Is the quality of David Brokenshire's pots in some way less than that of the latest recruit to the 'full time' potters? What rubbish! In art there are no professionals or amateurs there are only good, bad, or mediocre artists. That some of our potters have chosen potting as a basis for financial existence, as a total way of living, is excellent, and the ability to devote their full time to their craft may allow them more rapid and sustained development. That they have chosen to become vulnerable, gives them no right

to reject those who, encumbered by mortgages, children's and spouses' expectations, struggle to maintain a precarious equilibrium between the demands of domesticity and their craft, for these too are vulnerable, and emotional vulnerability is just as wearing as financial vulnerability.

If by a standard, we mean not an amateur or professional, but a standard which represents a consensus of informed opinion about that combination of form, line, texture, colour, material, process and human vitality that makes a good pot, how are we to promulgate this? Essentially we must train potters and we must train the public. In the past the Annual Exhibition has attempted this. Once a year in some part of the country potters and public have been exposed to what a given selector or group of selectors have considered the best offering. But if significant potters do not exhibit, this becomes irrational. Some have valid reasons for not exhibiting. For example, I believe Pat Perrin submitted no pots last time because she felt she had nothing new to offer. This is an excellent, honest, sound, respectable, **artistic** reason, and it is a pity that more of us are not guided by such reasons. The problem of the National Show lies in the division of purpose; there are those who are seeking membership, those who for a variety of reasons are trying to retain membership and those who wish to make a new statement. Mere repetition of what has already been said is not enough. Should we think of two shows; of an acceptance show and of a members' show? And should membership be on the basis of one year's acceptance? Would it not be better to demand

regular acceptance over, say three or four or five such shows before membership was granted? Would this guarantee a level of competence and artistic self-discipline to a stage where we could invite members' own submissions of a group of three or four pots they believed to be significant, and perhaps, at each show invite, two or three different members to submit larger groups?

The original purpose of the society was to set and raise standards. This we have done perhaps more than we know. Not a few of the new craft shop owners have sensibly decided to purchase only from members of the Society, largely because of their own uncertainty of taste. Perhaps more would be advised to do so. Should the Society be rather more aggressive in its own publicity so that the public in general become aware that there is a society of craftsmen who are concerned about the standard of what is offered? This could be done without setting up an establishment which might stultify progress. The individual potter of stature may have no need of such a society. Inevitably most of his work will be exhibited at one-man shows at which, if he has integrity, he will offer new state-

ments and illustrate the process by which he has arrived at them, or show refinement of previous perceptions, and these seem to be the only valid reason for individual shows beyond the initial 'claim for recognition' shows. But does not the individual potter of stature also have some obligation in the creation of a climate by allowing comparison of what he says with the pots of others?

And instead of junkets to Japan and flights to Fiji, might not some of our energies be better devoted to raising the standards of public appreciation by demanding more effective teaching in ceramics. Remember, the once-a-week potter, the few pots-a-year potter, may not have the dedication of the serious potter, but the serious potter is more dependent upon their being informed than perhaps he realises. The sustenance of the best potters is dependant upon there being a broad pyramidal basis of admirers who by having tried and failed, or by accepting their own limitations, appreciate the dedication and skill that distinguishes the best. The larger and better informed the base of the pyramid, the higher the structure of attainment that can be supported.

YOU TOO CAN BE A POTTER — NO EXPERIENCE NEEDED

An ad. in a recent American periodical shows the way to instant potting at last.

'KLAY KRAFT KWIK-DRI plastic Moulding Compound enables you to—

Reproduce the pot of your fancy—by means of a simple moulding technique. Easy. And just as easy to fill mould with PRESTO, KLAY KRAFTS KWIK-

DRI body. Decant and your pot is made. Apply GLOSTO to complete desired effect. In shades of ASH, TENMOKU, BELLARMINE—you name it—Just 15 minutes in our new handy-sized JIFFY KILN set to cone 0 28 A and your pot is ready for use'.

Well folks—it was bound to happen.

Letter to the Editor

West Coast Road,
R.D.1. Henderson,
AUCKLAND, 8
5 July, 1970.

The Editor,
New Zealand Potter,
Wellington.

Dear Editor,

I can tell you what it means to be a professional potter—it means waking up in the morning to the realisation that if you **don't** get out of bed and make those mugs, or ramekins, or casseroles, or whatever it is that the public wants today, next month, you won't eat. Of course the full-time potter is entitled to his own point of view, he's earned it the hard way by going through the fire himself along with his pots.

I speak from experience. Nearly five years ago I was faced with the alternative of either turning what had been an absorbing hobby into a means of earning a living, or joining the 9 to 5 brigade and slaving for other people for the rest of my working days. I chose to be a potter and have been fortunate. Starting from scratch with a new kiln I tried to teach myself to make enough pots to keep ahead of the bills, and at the same time learn to sell them at something approaching a reasonable value. I found it all extremely difficult, and fortunately after a year or so of this I had the opportunity of going into a partnership in an established pottery where I was able to do my own work, but at the same time learn production methods and

improve my skill. In other words I learnt how to think in quantity and produce enough pots to make effective use of my time.

Now, nearly five years from when I first started, I have established a routine of work that suits me. Four days in the workshop, two days in the co-operative crafts market in which I sell my own work, and Sundays for rest and a bit of thinking about what I want to do next. I find only now that I have enough time and energy left in which to work on pots of a more self-expressive kind (but which are rather hard to sell) and I find that I enjoy doing the domestic ware as a rest from the more extending demands of creative work.

But I see and appreciate the struggles of my full-time potter friends, many with more responsibilities than I have, and salute them. One would never get rich at it, but being a potter is a good way of leading a creative and integrated life. And some of the work being done by these fully-committed people has an unselfconscious richness about it that is refreshing. They have earned the right to a point of view.

I feel that the questions raised in the last issue about amateur and professional status are largely academic. After all, we are all interdependent as buyers, users, makers and lovers of pots. The Society is a useful focal point for co-ordinating the activities of potters, but if it is to develop with the times and so survive, the fact must be recognised that we have a new generation for whom pottery is a trade and a means of earning a livelihood. Surely there is enough generosity within the Society to be able to find a means of incorporating this new viewpoint into the existing Society.

Helen Mason

A gallery viewpoint

A good pot is good whether it is made by a professional potter or an amateur—by a person who earns his living wholly from the sale of pottery, or by a person making and selling pots on a part-time basis. Not all good pots are made

by professionals and not all bad by amateurs.

If we are to achieve a high standard of pottery in New Zealand, we must equally support all talented professional and amateur potters. The initial cost of setting up as a potter is the same

for both, and what the amateur gains over the professional in greater freedom of expression the professional gains in quantity. But not all potters are talented. There is undeniably more mediocre pottery available now than in the recent past, a result not so much of a change in the attitude of potters, retailers or the buying public but of more people learning how to pot. The pupil with the urge and the financial means, can set himself up as a potter whether or not he has the true talent to be one. Having spent large sums of money on equipment, the professional and amateur alike need to sell what they produce to make the venture pay.

With his total dependence on his output for a livelihood, the professional tends to produce larger quantities of pottery than his amateur counterpart and can more readily find an outlet for his work because he is in a position to supply regularly. The professional is, therefore, the greater contributor to the numbers of pots in shops and in exhibitions, and, as not all professional potters have the ability to turn out pots of a consistently high standard, some must bear the responsibility for a large proportion of the mediocre pots found there. It is of course, the retailer, or the selector in the case of an exhibition, who decides finally what the public is offered and his negative contribution to the standard of pottery cannot be overlooked.

To meet the demand for pottery, the retailer endeavours to maintain supplies by buying where he can. The majority of his stock will come from professionals, but he will supplement supplies by buying from amateurs as well. It

should be acknowledged, however, that the retailer has little say in what is consigned to him. Having accepted the potter as a supplier, the retailer must then accept what the potter consigns, rejecting only what he considers to be substandard or faulty. The pottery displayed in shops reflects more the judgement of the potter than that of the retailer.

Few retailers are supplied by a representative range of potters, so one cannot expect to assess the overall New Zealand standard from the pottery displayed in retail shops generally. It should be possible, however, to use national exhibitions as a gauge. But much of what we see in these exhibitions is indifferent. Yet, the aim of the selectors must be to choose work only of a high standard and quality. They are usually experienced potters able to separate the good from the bad. One has to assume, therefore, that the standard of work submitted for selection is extremely variable for them to allow pots to pass which should be rejected.

Segregation of the two groups, professional and amateur, will have no direct effect on the standard of pottery. It may help improve the standing of the professional, which is not necessarily a good thing when the ranks are made up of good, bad, and indifferent potters.

What could bring about a noticeable improvement in the standard is the discouragement of the untalented at pupil level by the professionals who teach them.

Maureen Hitchings

Looking backwards to Arts Conference 70

That it was a lively and well organised conference there can be no doubt—in spite of protestations to the contrary in certain quarters.

By inviting representatives of the performing and visual arts to submit their views in the form of remits, then attend in person to argue in support of them, the various arts were brought face to face with each others problems.

The common problem seemed to be the

eternal one of too little money to provide for the functioning and expansion of the arts in general. It was clearly apparent that the Arts Council cake cannot go round or indeed be enough to provide even a taste for the many.

For its part the Arts Council may have hoped that this concerted pressure would draw attention to the need to have a cake of increased size. However, there was no evidence

that any of this registered with Government or the Press.

In the words of one speaker, 'The Conference may succeed for the wrong reasons — it has drawn attention to the magnitude of the problem'.

It is thought-provoking to quote the last two paragraphs of the address given by Lord Goodman, Chairman of the Arts Council of Great Britain.

Lord Goodman said:

'I should like to conclude just by saying this. I said at the outset I don't think we are winning this battle. I believe that mechanical devices of all kinds (some of them we were discussing yesterday in this very hall) are making inroads into our civilised life that are positively dangerous. I think the exercise of free

choice and free judgment is now becoming so strained and so limited that it's almost restricted to the decision about which of one or two knobs we shall press.

I think on all sides we are losing the battle. It is nonsense for us to divide our own ranks, so urgent is it that we should win this battle that the important thing is that we should be unanimous in what course to pursue. Division between us will see a total loss to people who really either do not like or positively hate the things with which we are concerned. We are concerned to preserve the human spirit—we are concerned to preserve a society in which civilised and rational people can live. Let us be united.'

GRANTS IN THE AIR ?

The 'Potter' wishes to correct a false impression relating to grants, which occurs on page 9 of the Annual Report of the Q.E.II Arts Council.

The paragraph in question reads as follows:

Grants to publications and purchases for circulation overseas, 'Ascent' (a journal of the Arts) and the New Zealand 'Potter'—\$4,400.

In fact the 'Potter' has NEVER received a grant from the Q.E.II, nor has it ever applied for one.

The only assistance the magazine has received is by purchase of 200 copies out of the last two issues, 400 in all. This resulted in a very welcome \$400, which enabled the 'Potter' to improve in quality and coverage, and still keep out of the red. We would like to take this opportunity to thank the Q.E.II for its interest

in the 'Potter's' development, and to say that if they REALLY have it in mind to offer us a grant the 'Potter' could carry out ideas which will certainly remain dreams on the present uncertain budget.

GETTING IT RIGHT

In the transcript of the drawings for the Harry Davis pug mill some errors occurred which rendered the result ambiguous. We apologise to anyone who built the machine and had difficulty in getting results and provide here some further drawings designed to show the critical points more closely. These should be studied in conjunction with the original plan in Vol. II/2.

Harry Davis pug mill

The Drawings

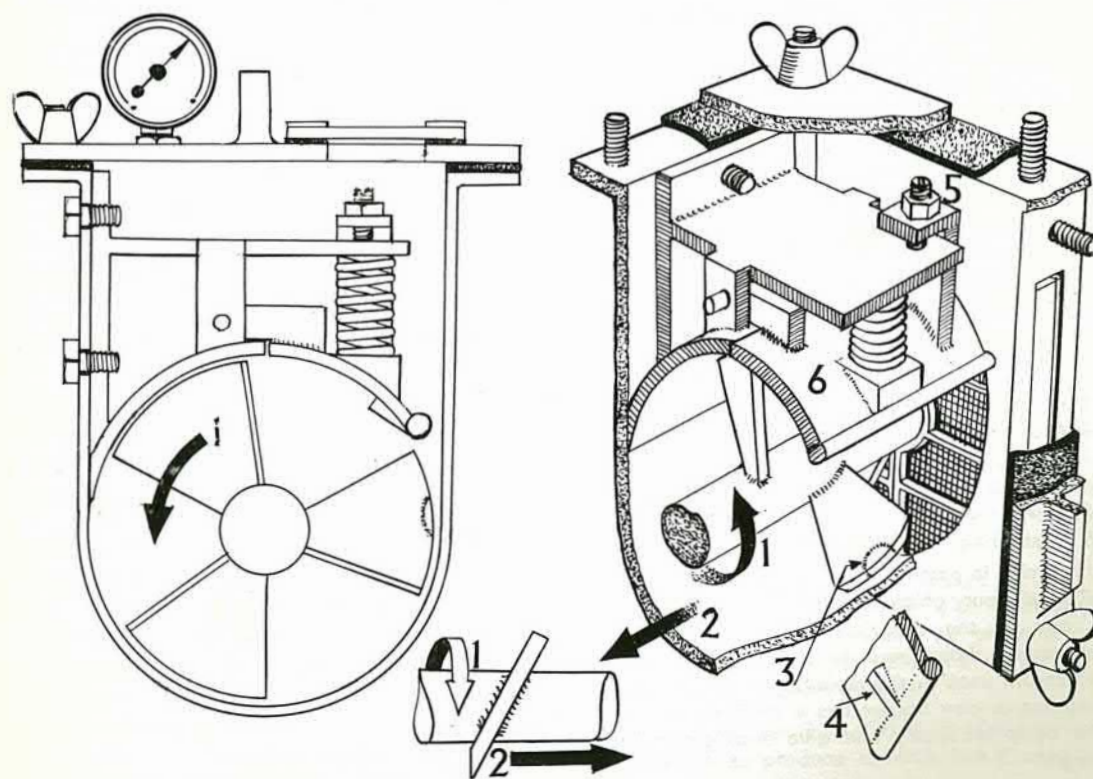
On the left is a section through the vacuum chamber as viewed from the delivery end. The cover plate, secured with wing nuts, carries the vacuum gauge, a glass inspection panel, and the pipe connection to the vacuum pump. Inside the chamber is the breather valve unit, secured by two bolts. The hinged flap of this unit is held down by a spring but is restrained by a bracket and adjusting set screw. Note that the free edge of the flap is edged with a $\frac{3}{8}$ " round bar. Under the centre of the free edge of the flap is a wedge of hard steel $\frac{1}{4}$ " wide which rides up on the aligning auger blade at each revolution. The contacting point on the auger blade is provided with a wear-resisting insert of hard facing weld metal, ground to the general profile of the blade. The set screw above is adjusted so that the auger blades just clear the edge of

the flap, and the resultant thin film of clay between the blades and the flap is broken at each turn when the flap is momentarily lifted by the cam.

Below, a detail shows how the auger blades are chamfered on the non-thrust side of their leading edge.

On the right a cut-away perspective of the section also shows the shredding mesh in its carrying frame. The wire mesh was originally shown as bolted in place, but as it is now known that the life of the mesh is quite long, the mesh, recommended to be of heavy stainless steel wire, eight holes to the inch, may be welded to the frames.

1, direction of rotation; 2, clay flow; 3, hard insert on auger blade; 4, wedge on flap; 5, set screw; 6, breather flap.



Potters materials dissected and examined

This is the first of a series of articles contributed by J. R. Rooney, Pottery Division, Smith and Smith.

ALUMINA Al_2O_3

Molecular weight 101.94, an R_2O equivalent of 102. Specific gravity 3.5-3.9. Insoluble in water and very slightly soluble in concentrated acids and alkalis. It is very refractory with a fusion point of about 2000°C .

Native alumina is found as the mineral corundum, but the most common occurrence is in combination with the silicates, notably the feldspars and clays. In glazes it is the means by which to regulate the oxygen ratio to control the mattness or brilliance. The best alumina to silica ratio in glazes has been found to be between 1:6 and 1:10. The alumina content of the raw lead glazes containing 0.1-0.25 alkali equivalents introduced as feldspars varies from 0.1-0.35 equivalents, depending on the source of alumina and character of the glaze desired. Alumina introduced in the form of feldspar remains combined as a silicate.

In glazes containing at least 0.1 equivalent of alumina, the further addition of alumina raises the maturing point. A very important function of alumina is its prevention of glaze vitrification, it also increases viscosity of the glaze. The chief source for glazes is through the introduction of Cornish stone, feldspar or clay. The increase of alumina also increases refractoriness and causes an increase in opacity.

In general it is recognised that the addition of alumina to a glaze increases the impact resistance to chemical attack, and resistance to weathering.

Alumina in pottery bodies is usually brought in with feldspar, china clay or ball clay. Alumina is one of the constituents which should be accurately determined in clays and feldspars, which are used in the manufacture of clay ware. Alumina in clay bodies has a tendency to make the body refractory and give it a longer firing range.

The addition of 15% fused alumina to fired clays was found to generally improve the spalling resistance, increase the refractoriness and to have no observed effect on the thermal expansion.

ANTIMONY OXIDE Sb_2O_3

Molecular weight 291.52; specific gravity 5.2-5.7; slightly soluble in water.

The oxide is derived from stibnite and antimonial lead. Sulphur is sometimes present as an impurity, in amounts equivalent to 0.5 to 1.2% SO_3 . Used in low temperatures glazes to produce weak white (10-20%). In the presence of iron and lead has a tendency to give yellow. The formation of lead antimonate $\text{Pb}_3(\text{SbO}_4)_2$ a compound of lead oxide and antimony oxide, known as Naples yellow is used as a yellow stain, producing stable yellow up to 1050°C (5-10%). Performs best in lead bearing glazes.

BALL CLAYS

Ball clays are aluminium silicates of variable chemical composition and physical and chemical behaviour. They are sedimentary, plastic, refractory clays more or less white to cream burning.

Their name is derived from the original method of clay working in England, where the clay was won by open workings and taken from the pit in the form of balls weighing about 33 pounds each.

The chief use of ball clay is as a bond. It is useful in whiteware, stoneware, terra cotta, refractories and porcelain enamels. In whiteware the use is limited, due to the fact that it has a burning colour inferior to that of kaolin and usually causes distortion in drying. Its chief function in whiteware or bodies is that of a binder and to impart the necessary plasticity to the mass for easy working.

Commonly used in the following amounts:

Vitreous sanitary ware	10-40%
Hotel china	6-15%

Floor and wall tiles	12-28%
Semi-vitreous whiteware	20-45%
Sagger bodies	10-25%

Some ball clays are used in engobes made for decorative purposes as the clay enables the engobe to fit itself more permanently to the surface of the ware. Excessive drying shrinkage is sometimes objectionable in ball clays since it is likely to be accompanied by a greater tendency toward warping and cracking. As high shrinkage and high strength go hand in hand in clays it is natural that the ball clays exhibit high strength.

BARIUM CARBONATE BaCO_3

Molecular weight 197.4. Specific gravity 4.4. Insoluble in water but soluble in acids. Melts at 1360°C . **Poisonous.**

The precipitated barium carbonate used in ceramics is obtained from barytes (barite, BaSO_4) which is reduced to soluble barium sulphide ("black ash") and converted to the carbonate by precipitation with soda ash.

Barium carbonate is used in both high and low temperatures glazes as a secondary flux (up to 10%) or to produce a satin-matt surface. Barium forms silicates slowly, but when completely combined it becomes almost as active a fluxing agent as lead oxide. With boron, a free flowing glaze results producing a smooth and glossy finish.

Small quantities (2%) are also used in bodies to prevent scumming, but any appreciable amount above this is liable to cause excessive shrinkage.

It gives the characteristic alkali colour response, e.g. turquoise when used with copper, purple with manganese, etc.

BARIUM CHROMATE BaCrO_4

Molecular weight 253.37. Specific gravity 4.5.

Slightly soluble in water but more so in mineral acids. Prepared by the interaction of barium chloride and sodium chromate. It is one of three chromates, the other two being lead and strontium, used to produce chrome yellow; these chromates decompose at or somewhat above 1000°C . Barium chromate being the most

stable, is used only in low temperature muffles; great care is needed to prevent spoiling during firing.

Lemon yellow is the colour usually produced and its application is generally in over-glazes. A pale green colour may be made with barium chromate, whiting and boric acid.

BENTONITE

A natural clay-like substance, a hydrous silicate of alumina, derived from volcanic ash with the clay mineral montmorillonite as the chief constituent. The name of bentonite originally applied only to a specific type that occurs in the Fort Benton formation in the Black Hills of Wyoming and South Dakota. Later all clays comprising chiefly montmorillonite or beidellite and having been derived from volcanic ash were classed as bentonites. Bentonite is somewhat variable in the outward appearance and superficial properties. The most common colours are pale buff, cream and dull green. It fires to buff or light red colour and may discolour whiteware if more than 2 to $2\frac{1}{2}\%$ is used. In glazes bentonite is used as a suspending agent in amounts of 2-3%. When added to a clay body it improves plasticity, although it increases drying and firing shrinkage somewhat.

BONE ASH $\text{Ca}_3(\text{PO}_4)_2$

(Bone: Calcium Phosphate)

Bone ash is a product of calcined bones and contains from 67 to 85% calcium phosphate, 3 to 10% calcium carbonate, 2 to 3% magnesium phosphate, and a little caustic lime and calcium fluoride.

The names bone ash and calcium phosphate are used interchangeably, although the former is a crude product and the latter a pure compound.

$\text{Ca}_3(\text{PO}_4)_2$ has a molecular weight of 310, a specific gravity of 2.3, and R.O. equivalent weight of 103. It is prepared by precipitation from the interaction of solutions of sodium phosphate and calcium chloride.

Bone ash is used occasionally in glazes at low temperature to produce opacity, but if used in

too large an amount or at too high a temperature, blistering will take place.

Bone ash is used extensively in England in the manufacture of the famous bone china characterised by its superior translucency and whiteness. The manufacture of bone china is difficult as the bone ash being non-plastic, destroys much of the workability of the body. In addition, bone china usually contains china

clay and Cornish stone, giving a very high firing shrinkage, and the ware is sensitive to over-firing. Another hazard is the pronounced tendency to go off colour, both in bisque, glaze and decorating processes.

Small amounts of bone ash in a chinaware body increases the fluxing action of the feldspar, due to the 15% of calcium carbonate in the bone ash.

Earthenware glazes

by Gwyn Ace

The aim in developing these glazes was to formulate simple glazes which give reliable craze-free results on a red earthenware body firing at 1080° C. The body is a mixture of low firing red clay and a high firing clay, giving a fired result with low porosity. The use of a white earthenware body 'SNI' in some glazes gave a simpler formula as it provided a consistent blend of alumina and silica and so on. Other commercial white earthenware bodies have been used in these formulae with no change in the results. The use of a plastic clay of this type in the formulae gives a glaze which suspends well and dries to a tough coating on the ware. All lead bisilicate glazes were deflocculated by the addition of a small amount of Epsom salts (about a pinch to a quart of glaze), and gum was added. A quarter of an ounce of powdered gum tragacanth was mixed with an ounce or so methylated spirits and water was added to make a

pint. About a half to one ounce of this mucilage is added to each quart of glaze before sieving.

Clear Glaze 1080° C

Lead bisilicate	100
White earthenware clay	20

This clear glaze is simple and reliable and gives crystal clear glaze which is ideal over red clays or slip decoration. It is free from the cloudiness typical of commercial glazes with a borate content.

With the addition of tin oxide, zinc oxide and titanium, a vellum type glaze was developed.

White Opaque Vellum Glaze 1080° C

Lead bisilicate	90
White earthenware clay	20
Zinc oxide	3
Titanium dioxide	6
Tin oxide	12

A heavier bodied white glaze was developed for majolica type decoration. It is very opaque and has no flow in normal use with a slightly stony surface.

White Opaque 1080° C

Lead bisilicate	100
Kaolin	30

Feldspar	50
Whiting	20
Tin oxide	15
Titanium dioxide	5

All tests using colemanite as the major flux were unsuccessful as the glaze flakes off the pots during the early part of firing, but sodium borocalcite, a colemanite substitute, was reliable as a replacement.

Frosty Matt Glaze 1080° C

Feldspar	40
Flint	10
Sodium borocalcite	10
Whiting	10
Barium carbonate	10
Zinc oxide	3

This glaze becomes clearer if overfired. It is a decorative glaze and can craze on some bodies, but the crazing is usually invisible. However, a non-crazing glaze should be used on the inside of pots designed to contain liquid. Stained with oxides it provides a range of useful glazes. Copper gives a turquoise colour when used in or on this glaze. With the addition of 10 per cent tin oxide it gives a useful lead-free glaze for majolica decoration as it does not flow when used normally.

Rutile glazes give the earthenware potter a range of varied and unpredictable glazes which can be extremely useful. Control of the clay will alter the amount of crystallisation which will occur. High clay content will produce bold, open crystallisation while low clay content will give fine, dense crystallisation.

Rutile Base Glaze 1080° C

Lead bisilicate	60
White earthenware clay	9 to 18
Titanium dioxide	4
Zinc oxide	2 to 2½

In development tests this glaze was made using from 9 to 18 parts of clay, and the ten glazes showed a complete range of crystallisation from dense, opaque, crystalline matt to glossy with open, larger, sparse crystallisation. It is desirable for potters who wish to use this type of glaze to prepare a range of this type to illustrate the results which may be expected. These tests should be undertaken with each colouring oxide to be used, since some variation will occur.

Pure titanium dioxide was used in all rutile glazes as it is a pure substance not subject to the variation which will be found in some rutile samples. Cobalt oxide and iron oxide have been used in these glazes, but iron should not be used in excess of its solubility, or the crystallisation will be altered.

Rutile glazes tend to flow to some degree and are sensitive to variations in thickness. A brushed coat of glaze would be expected to give a patchwork quilt effect. Even dipping will give consistent results. The exact firing temperature and the speed of cooling will also alter the effects produced.

Work with borax frits has been limited because of the large number of different frits available. Potters who wish to use these most useful frits should obtain a precisely identified frit from a regular supplier to obtain consistent results.

With a wide range of colouring this range of base glazes will give an extensive range of simple and reliable glazes which have been used by many potters in the Hawkes Bay area, but accurate weighing is essential, and test glazes will be of little value unless sensitive and accurate scales are used.

3 Potters in Profile

Photo: New Zealand Information Service

Q.E.II award for Doreen Blumhardt

Editorial Committee New Zealand Potter:
President New Zealand Society of Potters
Exhibitor : Selector : Head of Art Department
Wellington Teachers College.



There is a bigness about Doreen Blumhardt. Not so much in the physical sense, but in her personality and outlook. Generous, outgoing, positive, enthusiastic; these are the adjectives to describe her. She is a liver of life. A taker from life to satisfy her own creativity as a potter. A giver to life as a teacher and as a worker for cultural concerns that enrich the lives of many people. She is the kind of person who gets things done. We are pleased that Doreen has been awarded an Arts Council Fellowship to study oriental ceramics in Asia and in some of the great collections of Europe and America.

Doreen believes oriental pottery to be the finest in the world. 'Nothing could be more stimulating and instructive to me as a potter and lecturer, than to make further study of it.' This visit will be in a sense a return. In 1962 she

spent five months in Japan on a Japanese government grant and in 1968 she visited Thailand and Cambodia. In Japan she had the rare opportunity of working with three well-known potters, Arau in Kyoto, Fukuma at Matsue and Fujiwara at Bizen. She also met four of the five potters recognised as 'Living National Treasures', and she regards the visits to these old men in their home surroundings as precious experiences. The period living in Japan made a firm impression on Doreen, and the oriental influence is seen in her work.

Doreen was in at the beginning of the pottery movement in New Zealand. In 1957, after seven years of experiment, first in earthenware and then in stoneware when the college acquired its oil burning kiln, she was one of the thirteen potters invited by Oswald Stephens to exhibit at the Otago Museum. This exhibition led to the

formation of the New Zealand Society of Potters. Today she is a regular contributor to National Exhibitions, and has showings of her own. Her work is lively and exuberant. There is always something new. At a recent solo exhibition the main impression was surprise at the variety of the pots—from two foot terrace pots to Holy Communion cups. It is safe to say that Doreen's creativity is the kind that will go on developing.

Generosity, energy, vigour; these are the qualities we seen in Doreen the potter. The same qualities make Doreen the teacher. She considers that it is as a teacher she makes her greatest contribution. She has the ability to fire the imaginations of her student-teacher and adult weekend pupils, and imbue them with her own enthusiasm.

On the subject of education she is vitally concerned with the part that artistic creation plays in human development. She considers faculties other than memory, such as perceptiveness, awareness, sensitivity, initiative and adaptability are developed through creative activities, so the creative approach to education must extend a pupil's capabilities.

Experience in educating over thirty years gives credence to her opinion. After her own training at Canterbury College School of Art and Christchurch Teachers College, she went first as art specialist to Nelson Central School and then to Wellington to assist in an experimental programme for teaching art in schools. In the atmosphere of improvisation and experiment with the first powder paints to the first electric kiln, to make art education cover as wide a field as possible, her ideas formed and were later tested in the six years spent travelling around the country as a visiting art specialist. Her article for a UNESCO symposium in 1953 sums up her discoveries. 'Children should be given every opportunity to improvise and make whatever they feel the materials will do, and teachers should remember that the result does not need to serve a useful purpose. The child derives a feeling for the structure and nature of the material, and so the creative concept for him will grow out of the material itself. The most important thing is for the child to feel, handle, and become acquainted with the func-



Photo: Pat Ccnneally

*Three legged serving pot 12 inches high,
incised decoration.*

*Terrace pot 20 x 20 inches, unglazed shell
scratched exterior. In the collection of the
Auckland Museum.*

Photo: Photographic Laboratories Ltd.



tions and qualities of these different materials, and no preconceived standards, of sound technique, good workmanship, neatness or utility should be insisted upon.' The achievements of dozens of pupils who have come under Doreen's influence bear out that these principles are sound.

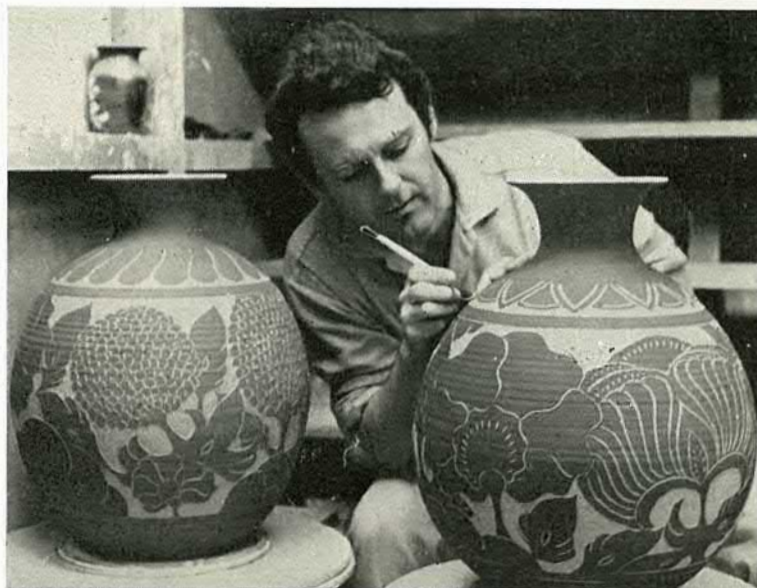
In awarding a study grant to Doreen Blumhardt, the Arts Council has backed a winning horse, for she has both the inclination and the opportunity to share what she gains from her experience abroad.

Margaret Harris

— out of many traditions —

Graeme Storm

Incising slip with floral motif decoration. Vases 19 inches high.



Tall cylindrical forms, bright colours, detailed small pieces, incised all-over flower decoration — these features set apart Graeme Storm's work from that of other New Zealand potters. His influences are European rather than Oriental.

The handling of this type of work requires fine craftsmanship to achieve the desired crispness of line. It also requires a strong design sense for the applied decoration; an aspect of pottery that few New Zealand potters have done much about yet. A recent exhibition at the New Vision Gallery in Auckland, shows Graeme Storm to possess these qualities. He is a potter

who has developed an extraordinary degree of control over his materials. Writing in the 'Auckland Star' Hamish Keith says: 'Graeme Storm is without any doubt one of New Zealand's major potters. He is still developing his craft, but he has already achieved a great deal'. Some people would say that his work does not relate much to the New Zealand environment. Since most pottery is at least unconsciously derivative, do we yet have pots with distinct local characteristics and not markedly influenced by Japan? Or do the critics find Storm's work too sophisticated? Whatever the view, in decoration, colour, as well as shape, Graeme Storm's pots offer us a

welcome change from the usual brown/green stoneware which is in danger of becoming a New Zealand stereotype.

Graeme Storm's skill and ideas have been stimulated by widespread travel between 1959-62, especially in Scandinavia. Born in Auckland in 1936, he is another potter who discovered the craft at Teachers College. He has worked as a full-time potter in Auckland since 1964. In 1965 he was awarded a Queen Elizabeth II Arts Council Grant and in 1967 was invited to teach at a school for potters in Quebec and later to give a lecture and demonstration tour throughout Canada for the Canadian Guild of Potters and the Canada Council.

He says:

'While making and enjoying the usual run of domestic ware, I am also drawn to an aspect of pottery in which because of form, colour and sense of 'rightness' a piece begins to exist for its own sake, rather than for some function.

'I am delighted by small pots with detail on a limited surface . . . also by tall cylindrical forms suggesting things growing — swinging upwards and fully ripe globular shapes suggesting maturity.

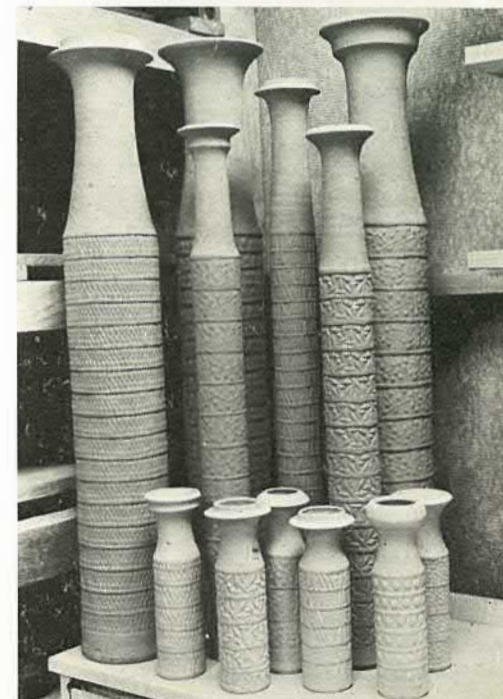
It gives me immense pleasure to work with colour at high temperatures—particularly from changes in kiln atmosphere in the course of firing'.

Margaret Harris

Bowl, 8 inches diameter, wax resist.



Wine bottle, ash glaze, 12 inches high. Slab and thrown cylindrical forms, 9 to 36 inches high.



Anneke Borren —

The work of this young Dutch born potter is very different from what we have seen before. She places aesthetic pleasure before usefulness. 'I make things to be handled and looked at. I intend them to be bought, because they are beautiful. A use may be found later'.

Gay and highly decorative bird whistles, clusters of hanging balls, sea-horses and candle holders in bright turquoise, yellow, green and brown are fun sculptures and are frankly light-hearted. They are derived from the traditions of the cottage crafts of the northern winter. Bowls, jugs and other ware all made to exacting standards of craftsmanship show the influence of people rather than of the elements; emphasis is on careful modelling by a sensitive hand rather than the effects of fire.

Anneke is of the firm opinion that there is too much Japanese influence in New Zealand pottery, however close to the ideal it may be. 'New Zealand is populated by people of European descent who should be aware of other cultural backgrounds in pottery. Too much influence from Japan can lead to imitation of style without the spiritual affinity of the Japanese philosophy and way of life which originates that style'.

One of a family of eight, Anneke Borren came to New Zealand with her parents eight years ago. As a child in Holland her unusual talent and enthusiasm was recognised by her father who enrolled her for night classes at an art academy and who has backed her all the way ever since. On arrival in this country, after a year at Heretaunga College she decided to make pottery for a living. With no specified training available in New Zealand (she considers this a lack, the Waimea apprenticeship scheme was not operating then), she went to Art School in Christchurch for a year's basic course in art history and design which she found most valuable. Then she wanted to go to Europe. 'To look for sources of inspiration and learning in



the area where I had my roots'. And for practical experience.

In 1967 she worked first in the experimental department of the Porcelaine Fles, Delft, Holland, and then had private tuition in the chemistry of glazes from Emmy van Deventer and worked with Lile ter Kuile, a well-known Dutch potter, in her artist-studio in the Hague. The following year she worked as an individual artist at the Kahler Keramik Denmark, a small fourth generation family factory, employing thirty people, then later at the Swedish Industrial School of Art in Gothenburg. These experiences were lessons in working on designs for possible mass production and in being part of a production team. Six weeks study tour of the United States were filled in before returning to New Zealand.

In October last year she established herself in her own studio workshop at Paraparaumu and began testing her overseas recipes to make them fit local materials. In April, this year she had her first exhibition at the Tesswell Studio, Cuba Street, Wellington, followed by another in Christchurch.

For an attractive twenty-three-old, Anneke Borren has shown single mindedness and dedication to her profession to a remarkable degree.

Margaret Harris

— To be
looked at
and
handled . . .

Anneke Borren
in her pottery.



A&C ARTS AND COMMUNITY

Dear Potter,

It is my belief that the urge that makes you as a potter an artisan practising your craft, expressing your feelings through the medium of the clay, is the very same urge that makes an artist paint, a musician play, a sculptor sculpt. My point: Man cannot live by clay alone (ascetically, of course). "Arts and Community" fulfills that role of the wider horizon.

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Kenneth Clark

Ken Clark, expatriate New Zealander, and owner of a substantial and sophisticated London pottery, returns to New Zealand for a brief visit in mid-October.

His field is in earthenware, with potent colour and strong graphic design. He is prepared to demonstrate techniques to groups of limited size. And also to lecture and show slides. This could lead to a new direction in New Zealand potting, for those who are becoming just a tiny bit tired of the round brown pot. A marriage of graphic design with stoneware methods and glazes could be very interesting indeed.

'Potter' readers will be familiar with Kenneth Clark's articles for the magazine as its London correspondent. Others will no doubt know of his books, 'Practical Pottery' and 'Ceramics' published by the Studio, London, and 'Pottery Throwing For Beginners' (Studio Vista).

Ken's wife, Ann Wynn-Reeves, is a



well known potter in her own right, and is actively associated with him at the London pottery, now situated in the Covent Garden area, Dryden St., W.C.2.



Photo: Marianne Haiselden

Stephen McCarthy held his first one-man show in Rothman's Cultural Foundation rooms in the Display Centre, Wellington. His work shows an artistic sensitivity combined with technical ability and a refinement of detail.

NEWS OF PEOPLE, POTS & EVENTS

Moves

Jim and Rhondda Greig moved in July from their charming 100 year old cottage in Greytown to their permanent home and new pottery at Matarawa, near Carterton, Wairarapa.

One kiln is in production and another under construction, both placed to make use of a single flue. A second 100 year old cottage has been transported from its site in Greytown (with TV cameras looking on) and is to become the pottery.

A labour of love will go into the restoration of the elegant but neglected two storey white farm house, sited against a backdrop of trees and the hills of the Wihine Gorge. The 'Potter' hopes to cover these activities in more detail in a coming issue.

Mirek and Jane Smisek left Manakau in March for their own four acres in Te Horo, that part of the Manawatu where a few totaras of the original landscape still survive. Kiln building has proceeded in a fog of red tape and by laws (everybody **knows** that men in these parts milk cows and grow spuds—but **potters**—what are they?).

However, the 'Potter' does not doubt that right will prevail, and hopes that Mirek has been permitted to put a roof over his new kiln by this time.

Auckland Happenings

Len Castle has a tentative order from a group of property developers and designers in England, and it seems likely that they have seen his work in the Studio Year Book of Decorative Art. The National Gallery of Victoria is displaying two Castle pots, and the National Gallery of South Australia has recently added another of his bowls to their collection. This year much of Len's time, and a lot of hard work, has gone into clearing enough of his new section to allow building to start soon. The kiln shed is to house

a two-chambered down-draught kiln which he hopes will have a trolley car loading system.

John Kingston and his wife, Gigi, have been in New Zealand for some months, and recently stayed with Helen Mason at Waitakere. While there, John designed and built her a ceramic fireplace and was working to complete the fountain commissioned by the Birkenhead Trust Hotel, before they returned to America in August.

Tauranga now has a very active group of potters, who in June organised a most successful week-end throwing school tutored by Guy Mountain of Katikati. Nine wheels were in use, and the aptitude shown by the eighteen potters reflected their enthusiastic approach and the persuasive teaching of their tutor.

Bronwynne Cornish, who will be remembered for her strikingly original chess set in last year's National Exhibition, held a successful exhibition in New Plymouth in July.

Martin and Nancy Beck are back potting after a trip to Noumea and Australia. They have moved into a flat at Castor Bay with a large workshop which makes an ideal pottery.

Michael Lucas has bought an old house and eight acres of land at Puhoi where he has established his pottery.

Mary Hardwick-Smith, who has forsaken her electric kiln for an oil-fired Cowan type jet burner kiln, is planning an extension to her house and studio to meet the needs of a changed pattern of work.

Peter Anderson who potted with Mary during his university vacations did some interesting work on celadon glazes as a follow-up to a series of lectures given by Ivan McMeekin last November. He now has his B.Com. and is accounting at Kinleath and assists Mr. Koning with evening classes at Tokoroa.

Auckland studio Potters

Auckland Studio Potters started the years' activities with a primitive style firing held at a farm at Hunua. The potters brought their raw, handbuilt pots, made from a mixture of Crum clay and 40% grog and they were placed in large bonfires built around a base of heavy logs. Smaller pieces of wood and green willow branches from the nearby river banks covered them, and the firing was on . . . In a second bonfire they tried salting the pots, simply by throwing handfuls of salt onto the fire, and the pots did actually achieve a pleasant warm flush on the rather pale body. The pots that went home varied in their success, some having the satisfying ring that goes with a well fired pot, others crumbling apart when they were washed, but nobody was very worried by this, it had been an exciting experiment and when the weather improves we hope to repeat it.

The geological classes given by Jim Schofield gave a good grounding for people who were new to that side of a potter's work, and added to the knowledge of more experienced potters. There were four lectures, starting with recognition of rock types and the use of geological maps, continuing with the chemistry of clays, technological examples of clays and glaze recipes using local materials and ending with New Zealand natural glazes, frits, etc. All this material and more is to be published in book form later.

During the course there were two very interesting field trips.

The first was to Kopuku open-cast mine and the area around it, where we saw several different types of clay, diatomaceous earth and papa rock. The second was to the Whitford area and Kawakawa bay where we saw more clays and papa rock, pumice and a deposit of manganese. Needless to say each time the bus returned bulging with rocks and clay. We were fortunate to have two perfect days for the field trips and were able to picnic in the sun and scramble up and down cliffs and cuttings. A wet day would have made it far less enjoyable.

In July we had a weekend school tutored by John Kingston, who has been in New Zealand

for several months. He has been commissioned to build a ceramic fountain for the Birkenhead Trust Hotel, and during the school showed some of his ideas for the fountain, working quarter scale in clay. He also demonstrated how to go about making a ceramic mural, and the students worked on murals in groups of four. It was interesting to work on a much larger scale than usual, and although no work was taken home to be fired, it was a very stimulating weekend, which should bear fruit in the months to come.

Doris Dutch

Briar Gardner

This pioneer New Zealand potter who had her first introduction to burning clay last century on her father's farm on the Kaipara Harbour — then on the New Zealand frontier, died in October, 1968, at the age of eighty-nine. We will comment on her life and work in the next issue of the 'Potter'.

Potters notes from Christchurch

Since last writing, we have had here a regional potters exhibition, displayed very suitably at and by courtesy of Gardenways Nurseries in Riccarton Road. 36 potters exhibited 150 pots, and it was good to see some of the less experienced potters moving towards higher standards. A sequel to this show, a few weeks later, was a very lively evening of criticism by Michael Trumic, aided by slides taken at the exhibition. This valuable critical appraisal of the work showed in unequivocal terms the faults and strengths of almost all the potters and Mr. Trumic wasted no time on false praise. A very profitable evening for the large audience of interested potters.

A month ago at Several Arts Gallery, Mr. Dennis Hadfield, of Amberley, showed recent work of high standard and modest prices. I found the casserole lids too high and the egg-

cup-like knobs clumsy, but his domestic ware as a whole is well conceived (especially the mugs) and professionally glazed.

Different in style were the decorative ceramics (including a large chess set, with tile board) displayed by Anneke Borren at Ilam, showing a more sophisticated concept of design and shape, with suave semi-matt coloured glazes. The international nature of this Dutch potter's work was in striking contrast to the pots shown in the two local exhibitions. Her interest lies more in inventive decorative pottery than in domestic ware.

At a recent meeting, the Canterbury Potters Association elected to mount a National Exhibition here in September, 1971, at the C.S.A. Gallery. We invite the co-operation of all other regional societies.

Doris Holland

News from Dunedin

These last few months have seen few developments in the Otago potters group itself. We held a very successful open day, the proceeds of which swell our building fund, and we also gained some new members. In Oamaru the Potters' Group has opened its new workshops 'Ceramic 44'. In Palmerston the small group there has built a stoneware kiln which is working now, and the members are being initiated into the excitement and challenge of oil firing.

Exhibitions in Dunedin have been few—Ian Gray-Smith at Dawsons' gallery displaying ceramic murals and pots inspired by seed pods and fruit pips. Bruce and Estelle Martin showed a collection of domestic ware and slab pottery at 'The Connoisseur' — all most competently made and beautifully finished. There was also a display of Ikebana using the Martins pots. We saw some very vigorous work from Doreen Blumhardt who was the guest potter at the Otago Art Society's annual exhibition.

Nan Menzies and Ian Gray-Smith have both held exhibitions at the Gallery Bookshop at Oamaru and Beryl Jowett was guest potter at

the North Otago Art Society's Annual Exhibition. The Potters Group as a whole sent a selected exhibition to Balclutha by invitation, and our own annual exhibition is to be held in the Otago Savings Bank again this year in November.

Beryl Jowett

Oamaru forms group

CERAMIC 44 was officially opened in April this year as the home of an enthusiastic group of Oamaru potters.

The house—which is being rented—is over one hundred years old, and in addition to providing us with a very good workshop will, we feel, preserve a little of the past history of Oamaru as well.

After one or two alterations, we now have a large workshop for three electric and two kick wheels, a wedging table, two work tables, and ample shelving and cupboards. In addition there is a very efficient space heater for providing warmth during the cold weather, thus enabling members to work whenever they wish to do so.

We also have a spray room with a compressed air glaze sprayer, and storage bins for clay and a design room for members not doing wheel work. An attractive gallery for displaying our work is also included, and we hope eventually to be able to sell some of our wares to finance a kiln. In the meantime, pots are being fired in members' own kilns.

The opening ceremony was performed by Mrs. Ina Arthur from Dunedin, who ceremoniously sliced a piece of clay and turned the first pot, after which she presented Ceramic 44 with a plate designed by Kawai—one of Japan's leading potters. This was later signed by club members, and will be glazed and hung in a place of honour in our workshop.

Any fellow potters who may be passing through Oamaru in the future, can be assured of a warm welcome—our address is 44 Tyne Street.

Beryl Stott

And Wanaka

We have had a letter from another new pottery group in Wanaka, Central Otago, which would appreciate contact with other potters. The secretary writes:

'We are a very new group of absolutely rank amateurs having had one term of evening classes and three workshop evenings during the May holidays conducted by Lawson Fraser from Dunedin. Being so isolated we are working completely on our own. The group consists of fifteen members.

'Could we make an appeal to any potters who are holidaying in Wanaka to call and see us and perhaps offer some advice and criticism? We have much to learn and having no direct contact with an experienced potter is a handicap.

Please contact me, as the group meets in our basement, the corner of Tenby Street, Wanaka—phone 99M.'

Mrs. M. Trimble, Secretary.

Never too young

Pottery has an appeal for children quite different to that of the conventional art subject relying mostly on paper, pencil and brush, so its interesting to note that pottery is being done now in a number of secondary schools. Mrs. Marie Tohill, President of the Mount Pleasant Pottery Group in Christchurch, tells of work she is doing with boys at a Christchurch School—Christ's College.

'For the past seven years pottery has been taught at Christ's College. It is a sideline and an extra to art classes. It is taught by a specialist teacher coming in and is mostly practised as a hobby.

'The teaching capacity is not great and there is keen competition to become a member of the pottery group and a long waiting list. Two classes are held each week during the long lunch hour and one class is held in schooltime.

'The boys are most enthusiastic. They love to experiment, especially in the aspects of glazing and firing. Whether they achieve objects of use or not, is not important. To the young potter the achievement of producing a form

in itself is something concrete, that very often is of value to the person creating it.

'On leaving school, some boys have joined country groups and have been most welcome. Others have helped with teaching pottery when on Volunteer Service Abroad.'



Derek Hart and Richard Acland examine the products of a small back garden kiln.

Credit

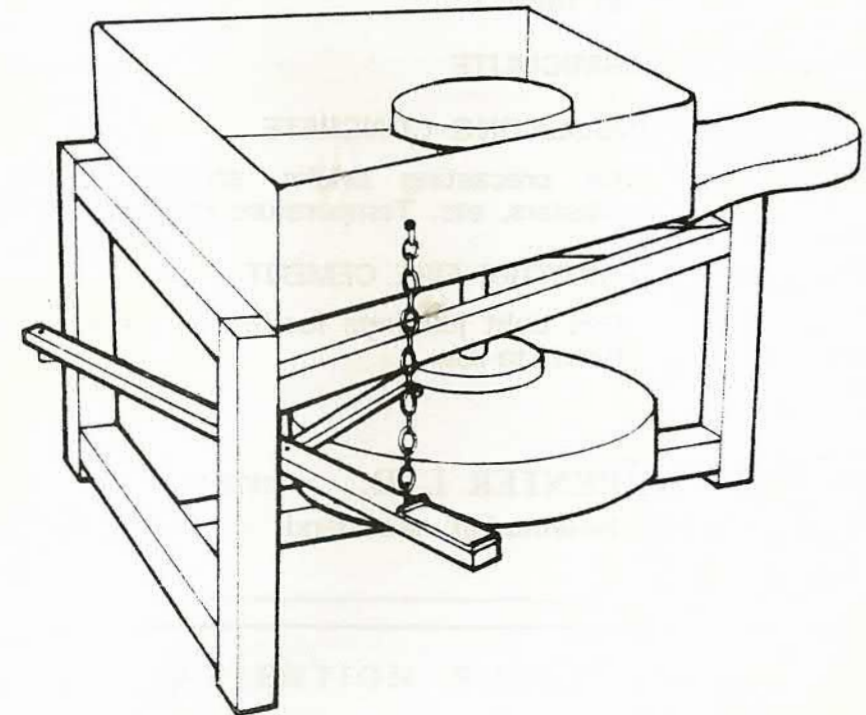
The 'Potter' regrets that it omitted to credit Pat Conneally for taking the two fine photographs, 'In The Larger Sizes' pages 48 and 49 in the last issue, Vol 12, No. 1.

STOP PRESS

DISPLAY OF CURRENT WORK

A small but choice two-man exhibition of stoneware by potters Warren Tippet and Jeff Scholes was on display for one week, August 31 to September 4, at Media, the New Zealand Handcraft Gallery in Karori, Wellington.

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a little over-fired . . .

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In this issue of **Potter** you will find a Subscription Renewal Slip. If you would like the **Potter** again next year, please fill this in and send it with your remittance either now or as early in the New Year as possible. The **Potter** operates on a calendar-yearly basis and early receipt of subscriptions means greater ease of administration for our semi-voluntary staff. It will also mean that **you** will receive **your Potter** as soon as it is printed. For those of you who may still need it, we plan to send an informal reminder in February.

Back Copies:

A limited number of copies are available of the following back issues of **Potter**—

Vol. 9 Nos. 1 and 2
Vol. 11 Nos. 1 and 2

Vol. 10 No. 2
Vol. 12 No. 1

