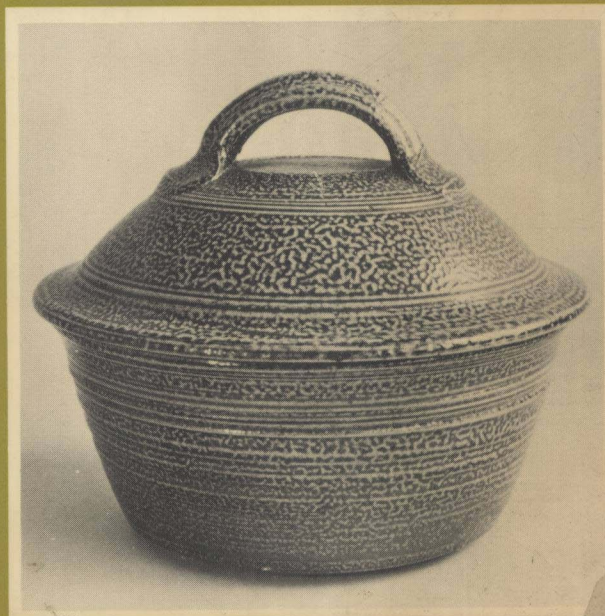


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Saltglaze

Peter Starkey



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I dedicate this book to my wife Frances and our son Daniel.

Preface

I write this book not as an expert, but as an enthusiast. The contents of this book describe methods and techniques which I have used. In no way are they intended to be dogmatic statements or rules about how to saltglaze.

The principle of saltglazing has been known since the fourteenth century and has had a chequered career in its application. Over the years saltglazing has been put to a wide variety of uses, from delicate figurines to sewerage pipes. However, despite its familiarity, and unlike most of the other mediums employed by the studio potter, saltglazing is still a relatively unexplored technique. The opportunity for genuine discovery or re-discovery is multifold. When embarking on saltglazing, the potter has before him, or her, an unlimited opportunity for extending the scope and range of the technique in a very personal way.

There are many variables inherent in saltglazing: the very nature of the method is the use of a vapour, which is not the most controllable of agents. The glazing takes place during the firing of the clay, at a time in the making process when the influences of the potter can only be indirect. Each kiln seems to behave differently, often giving very unexpected results, even when previously known formulae have been used. The saltglazer's kiln is a very personal piece of equipment.

The methods outlined in this book are ones which I have used to give the kind of results that I wanted. They are by no means definitive of the possibilities open to the potter. The really exciting thing about salting is that the standard of achievement has yet to be set. For me, it is the most exciting way of making

pots, often very exasperating, but never dull or predictable. The possibility for consummate elation or depression seems infinite.

Above all else, enjoy salting for its delights, despite the inevitable accompanying disappointments. Opening a kiln might not be quite like Christmas Day (there may be *no* presents!), but the anticipation and excitement at the prospect of the contents is, for me anyway, a recurring pleasure and a spur to further endeavour.

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1 Early Saltglaze

The technique of saltglazing was discovered around the 16th century in Europe, probably in Germany, just how is not known. Its most common form was in its application to the making of wine jars and bottles in Germany and Holland, and by the 17th century John Dwight of Fulham was manufacturing salted ware in England.

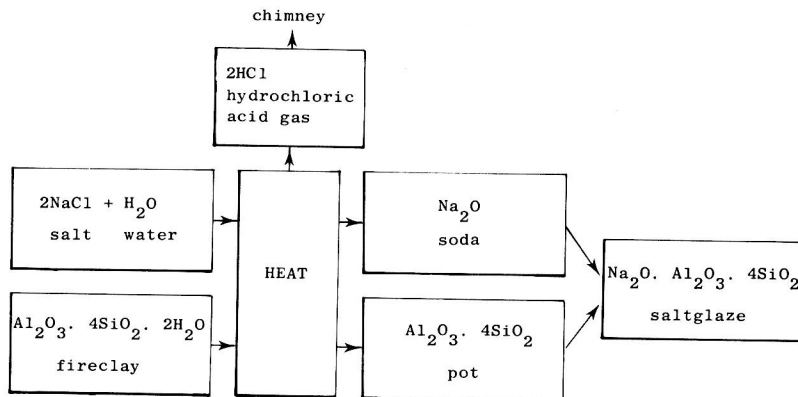
Salting produces a very hard, well-fitting glaze and has the advantage of not requiring an intermediate biscuit stage. This meant that pottery could be produced more cheaply and quickly than by other methods. Despite a rich period of manufacturing during the early 18th century when many beautiful articles were made at Fulham and in Staffordshire, the technique, because of its economy, was employed almost exclusively for the making of utilitarian, disposable items. With the exception of the Martin Brothers at the end of the 19th century, salting had become the prerogative of the sewer pipe and heavy clayware manufacturers. This is not to say, however, that the simple bottles and crocks made by the thousand are without their charms. Many have very attractive surfaces and forms which are both strong and honest and offer to the modern, more self-conscious potter a lesson in sound craftsmanship and fitness to purpose. Many of these items can still be bought very cheaply and offer a point of reference for anyone interested in salting.

Technical principles

The basic principle of salting is very simple. Salt (2NaCl) is thrown into the kiln during the firing at a temperature when the clay is maturing. The salt and the clay ($\text{Al}_2\text{O}_3 \cdot 4\text{SiO}_2$) combine on the surface

of the pot, thereby forming the glaze. Put more simply, the salt vapourizes with the heat and passes through the pots. The gas contains soda, which is a flux, and this melts the silica in the clay, forming the glaze (sodium silicate).

For those who enjoy such things, below is a diagram of the chemical reaction.



The nature and quality of the glaze is determined by the type of clay from which the pot is made. This can be modified by the use of slips composed of different clays. However, the first prerequisite of the salt-potter is a suitable clay body.

Clay is composed of varying proportions of silica, alumina and fluxes. The salting process is principally concerned with the combination of silica and soda. Silica is a glass former which, when melted by the fluxing soda in the salt vapour, forms the glaze. Alumina also plays its part in the reaction to form a sodium-alumino-silicate. The silica in the clay is most active when vitrification temperature is reached. Providing this takes place at a temperature high enough for salt to melt, saltglazing may be successfully employed through a wide range of temperatures.

The amount of silica, alumina and iron in the clay, the temperature of firing, and the methods of salting, all govern the final results. The desired effects are the prerogative of the individual potter to determine. The following information outlines certain basic principles — what is good or bad salting is for the potter to decide.



Fig. 1.1 Figure, white saltglazed stoneware. It is inscribed 'Lydia Dwight died March 3rd, 1673.' This is a portrait of his daughter made by John Dwight, Fulham 1673.

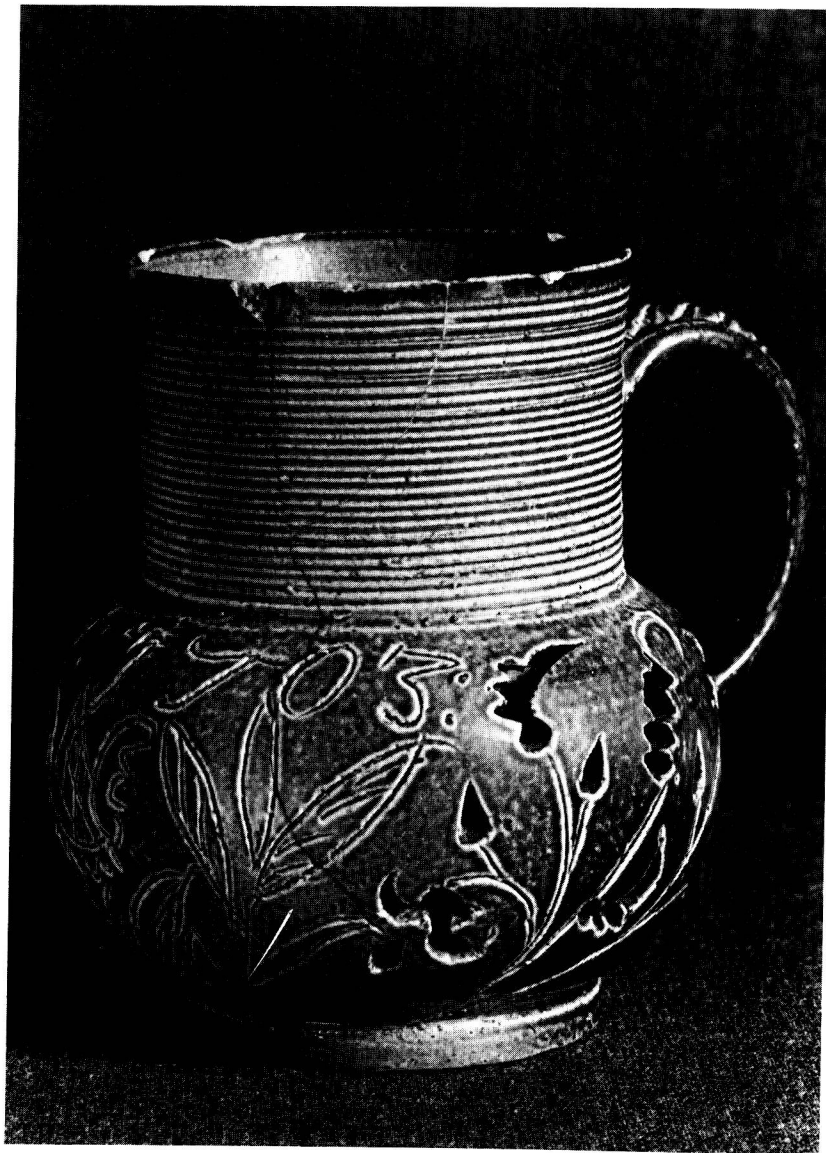


Fig. 1.2 Jug, brown saltglazed stone-ware with pierced and incised decoration. This was made at Nottingham in 1703. The height is 4 inches.

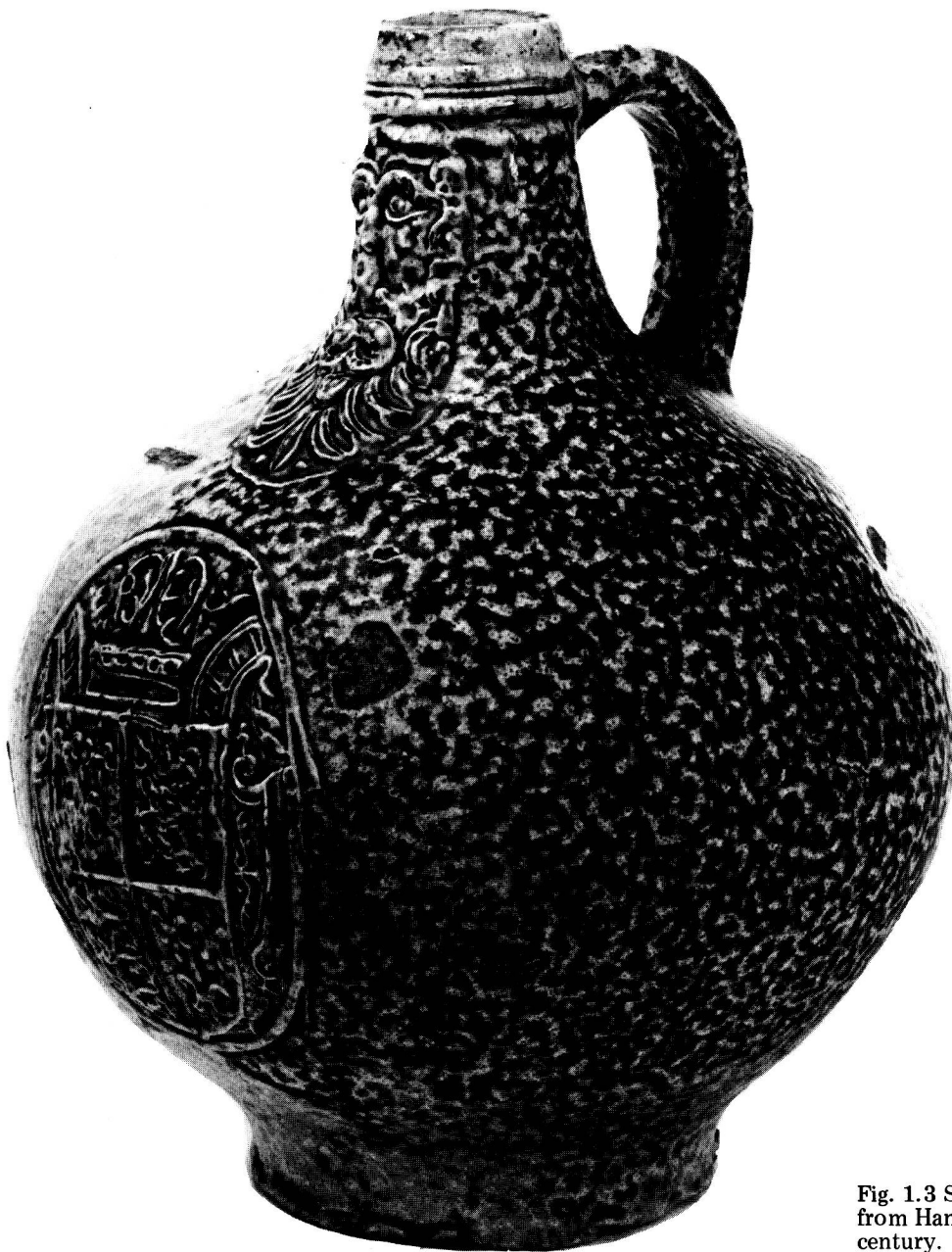


Fig. 1.3 Saltglazed stoneware pitcher
from Hampton Court Palace, 17th
century.



Fig. 1.4 Mug of saltglazed stoneware with 'scratch-blue' decoration. This was made in Staffordshire in 1752. German beer mugs made today still use the same technique and have the same finish on them as this did over 200 years ago.

Fig. 1.5 This is one of a set of seven plates. It is again saltglazed stoneware and is painted in blue on the rims and in red on the middle. The illustrations on each plate are different and each one recounts one of the Aesop's Fables. These plates are English and were made in Staffordshire about 1760. Each plate is 9 inches in diameter.





Fig. 1.6 Houses by Ian Gregory.

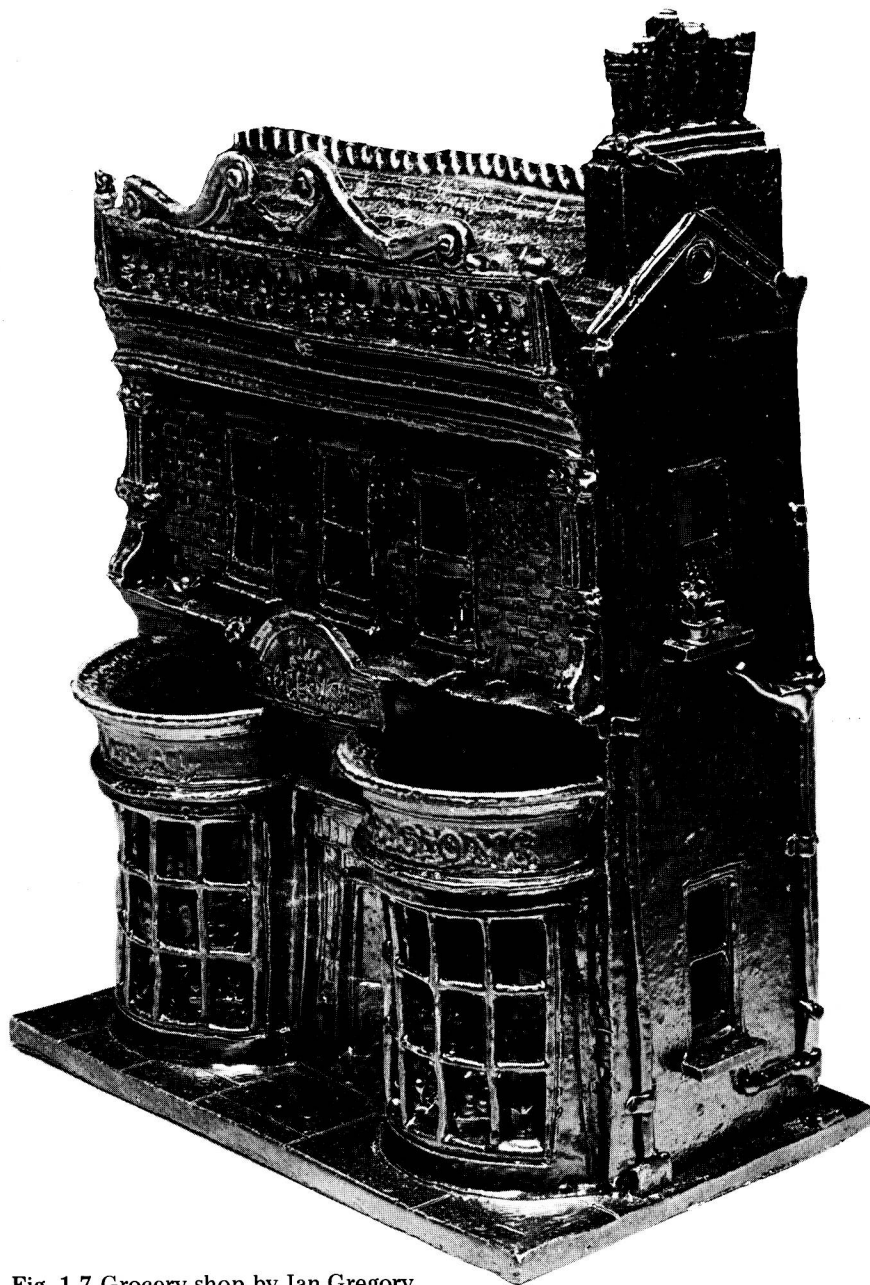


Fig. 1.7 Grocery shop by Ian Gregory.

