



VERREVILLE CHINA VASE.

About 1830 (Kidston's), height $22\frac{1}{2}$ ". Raised flower decorations, with butterflies painted in enamel colours. The borders are painted in burnished gold.

Lent by Conrad Cochran, Esq.

SCOTTISH POTTERY

BY

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“That I, for poor auld Scotland’s sake,
Some usefu’ plan or book could make.”
BURNS

GLASGOW

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PREFACE

HITHERTO there has been no book dealing exclusively with Scottish Pottery, although one or two writers have touched casually on the subject. As Honorary Secretary for the Earthenware Manufacturers of Scotland for almost twenty-five years, having succeeded my late father, who had been previously Honorary Secretary for forty years, I was often pressed by my friends to write the story of Scottish Pottery, and I have yielded to their solicitations.

Largely owing to the deaths of the older Scottish potters, both employers and operatives, the absence of records of the changes wrought in the trade by the gradual introduction of machinery, and by other causes, I had to contend with many difficulties in securing the history of the facts, and had to make frequent changes during the long time the book was in progress, as fresh information became available ; sometimes from the most unlikely sources. While I have made every endeavour to be accurate, I am only too well aware that errors may have crept into my narrative, and for these I crave the reader's forbearance.

I trust this book (the only one of its kind) will meet a want long felt by all interested in Pottery, whether as manufacturers or collectors, and will do something to disperse the mist that has hung so long over the operations and wares of the Scottish Potters.

In compiling the various chapters I have had the willing assistance of a host of friends. To all these I tender my grateful thanks, especially to Messrs. A. O. Curle, W.S., of the Royal Scottish Museum, Vernon

Roberts, John M'Nay (Chairman Scottish Earthenware Manufacturers Assoc.), and Frank H. Wedgwood, who read through my proofs and gave me much useful advice.

I am indebted to Messrs. T. & R. Annan & Sons for the great pains they took in making the photographs from which the illustrations have been reproduced. The illustrations of the various throwers' wheels have been kindly lent by Messrs. Wm. Boulton, Ltd., Burslem, Staffs.

J. ARNOLD FLEMING.

LOCKSLEY,

HELENSBURGH,

September, 1923.

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INTRODUCTORY NOTE

THIS book is a welcome addition to Pottery literature, for it breaks new ground. Scotland has in the past been for some reason overlooked by the Pottery collector, and those interested in our craft have failed to search for Pottery history north of the Tweed. This defect has now been remedied, for Mr. Fleming here places before us an interesting and authentic record of the best that Scotland has produced. Not only are new explorations set forth, but the method of dealing with these discoveries both in text and illustrations is in accord with the democratic spirit of our age. In the past it has been the vase of rarity and luxury which has been described and portrayed with fine elaboration, thus the millionaire alone could leap the walls of Paradise to possession : how different is it with this book, where the delightful illustrations of chimney-piece ornaments and other simple useful wares are found with full descriptive details !

Here we have a history of the Scottish people in clay : a story in which the poor man plays his part equally, at least, with his more wealthy neighbour, so that our angle of vision is unusual as well as intimate. Thus, an appeal is made to a very wide circle of readers, for within the covers of this book we get continual glimpses of the life and progress of every-day Scotland during the eighteenth and nineteenth centuries, with consequent interest spreading surely far beyond the mere Potter's point of view.

We may consider one of the attributes to genius to be the power to take infinite pains. Again, Scottish

Pottery might be superficially considered to be a subject too slight for serious study by potter or historian : even a cursory glance through this work, however, will prove that the author was justified in his choice of subject, with which he was so conversant, though the story is told so simply that we are apt to overlook the great amount of detail placed before us : detail which cost the author long months of the most patient ingenuity and research.

To the Staffordshire Potter the summary of the whole position in Scotland, focussing the information scattered throughout the chapters, and giving a comprehensive survey, is of the deepest interest. A record it seems at first of tragedy flecked with humour, where misfortunes far outnumber even moderate fortunes ; yet it must be borne in mind that the history covers some two hundred years, so that final failures must not be allowed to overshadow long years of prosperity. We may, however, in passing emphasise the fact that in the manufacture of Pottery there are many disturbing influences ever at work, hence its absorbing interest.

The description of the numerous factories found in this book prove to us Mr. Fleming's intimate knowledge of his subject, both from the practical pottery and the artistic points of view ; and indeed no one could be better equipped to carry through a work of this kind. Mr. Fleming inherited from his father, Sir James Fleming, so well known in the pottery world, much valuable information, but besides being the son of a Potter he has had a lifelong experience as an enthusiastic Potter himself. For many years he acted as the Honorary Secretary for the Scottish Earthenware Manufacturers' Association, and in this capacity came into constant contact with his brother potters of North Staffordshire, whence it resulted that, with the formation of our pioneer Industrial Council, that of Pottery, Mr. Fleming naturally became a representative upon the Council from Scotland, devoting himself whole-heartedly and large-mindedly to the welfare of our industry.

INTRODUCTORY NOTE

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In the full hope and belief that Mr. Fleming will receive that appreciation for his book so well merited by him, and with deep appreciation of his wish that my name should thus be coupled in some sort with his work, I have had pleasure in complying with his request to write an introductory note.

FRANK H. WEDGWOOD.

ETRURIA, STOKE-ON-TRENT,
July, 1923.

INTRODUCTION

“ And has not such a Story from of Old,
Down Man's successive generations roll'd,
Of such a clod of saturated Earth,
Cast by the Maker into Human mould ?

“In that old Potter’s Shop I stood alone,
With the clay Population round in Rows,
And strange to tell among the Earthen Lot
Some could articulate, while others not :

“Then said another, ‘surely not in vain,
My substance from the common Earth was ta’en,
That He who subtly wrought me into Shape
Should stamp me back to common Earth again?’”

Rubaiyat of OMAR KHAYYAM.

IN this story of Scottish Pottery I have tried, so far as possible, to avoid making a dry record of the different potteries throughout our land, and have attempted to give as well an idea of the difficulties peculiar to each place, taking into account coincident activities in other spheres of labour.

At times, while I was dealing with the less prominent and later factories, relating the facts as I knew them, it was almost impossible to avoid a kind of cataloguing effect. Yet I felt it incumbent on me to mention all the potteries I knew had existed in Scotland, so that we should have as complete a record of the industry at this date as it was possible for me to compile.

Some may say that some of the chapters are like the 'begetting chapters' in the Bible, but these are necessary points, since to the real lover and collector of

pottery no detail is insignificant, no matter how uninteresting it may appear to the general reader.

One of the outstanding features of the early pottery works was their instability, a failing not confined entirely to potteries, but one that frequently beset other industries in the pioneer days in England as well as in Scotland. Even the best managed factories seem constantly to have changed proprietorship, and frequent repetition of the story of their rise, subsequent financial or other difficulties, and the ultimate inevitable downfall becomes sometimes rather monotonous. This instability is, however, easy to understand and appreciate with regard to Scotland if we reflect for a moment on her history in the early part of the eighteenth century.

To begin with, the Scottish people were greatly disappointed at not deriving more immediate benefit and financial relief from their union with England in 1707. After the rebellions of '15 and '45 poverty and distress, especially in the Highlands, was prevalent. To relieve this situation Government organized emigration to Canada and other Colonies on a large scale from Scotland. These drastic schemes did not help the commercial situation at home, and only tended to denude Scotland of her population.

The wants of the people were few. When the English officials came to Scotland after the Union was passed they spoke slightly of the Scots as men of no invention, or enterprise, and probably they were justified in this poor opinion of us at that time.

Potters up to the middle of the eighteenth century had been content to bury themselves in a lonely glen, beside a clay-pit and a running stream, there making primitive water pitchers and household vessels on their wheels, assisted by members of the family. The wives, when sufficient crocks had been baked on the rude fire of whin and heather, would load them up on panniered-ponies and go to the nearest town to barter their wares for the necessities of life.

Such a simple mode of living and narrow outlook passed away among the many changes that took place by the middle of the eighteenth century.

Yet, let us remember, Robert Burns first saw the light of day in "an auld clay biggin," a characteristic dwelling of his time, built of stone and plastered outside as well as inside with soft plastic clay. The floors were also made of clay dried and hardened.

The romance and failure of Prince Charles' adventures in '45, and his march down through the Lowlands of Scotland to the heart of England, did more than any political movement could have done to break down the prejudices that had grown up through ignorance between the Scots and English. It is interesting, for potters particularly, to learn that Prince Charlie and his clansmen, after passing through Newcastle-under-Lyme and the fringe of the 'Potteries,' met with such resistance from the Staffordshire folk that they were compelled to commence the tragic retreat a few miles south of "The Five Towns." There are places in Burslem, such as Scotia Road and Scotia Burn, which may have been named from some association with those wild Scots!

Worcester was a stronghold of the Jacobite cause, and it is asserted that to appease this political ferment the Whig Government of the day encouraged the idea of a china factory. From which it may be inferred Jacobitism had some say in establishing the pottery industry in that city.

Time has its revenge. In Stoke-on-Trent market-place stands a statue of Colin Minton Campbell, M.P. He was chief of Minton's china factory—a public-spirited and good-hearted gentleman, and a Highlander. There he stands benignly looking down Trent Vale Road along which his hostile ancestors may have marched two hundred years ago.

After the suppression of the Highland rebellion there was considerable distress—estates were confiscated, and the Highlanders swarmed again over the Lowlands and

into England, but this time in search of employment. Many became famous gardeners, although, curious to relate, gardens were unknown in the Highlands. 'Capability' Brown, Wedgwood's gardener and friend, was a fine type of Scotsman who found a good home in England.

Affairs, however, took a sudden change for the better a few years later, and potteries among other industries grew up all over Scotland. Glasgow was already making great progress with regard to manufactured goods. In a few years work was so plentiful that a traveller of that time tells us, "every child was at work, and not a beggar to be seen."

The English had misjudged the Scots entirely, for within a generation of the Union, and certainly before the close of the eighteenth century, the injustice of the remark that the Scot was not inventive nor enterprising was to be fully borne out.

Scottish potteries had certainly, at first, to obtain much of their skilled labour from England, and the allegation that they were more imitative than inventive has to be admitted in their case, when we examine the close resemblance of Scottish pottery to similar ware made in England at that period. But no such assertion can be made with regard to the great Virginian merchants of Glasgow, who displayed such wonderful enterprise, and who with remarkable foresight realized before their English friends did, the lucrative business to be obtained in Virginia and other colonies, and, in consequence, rapidly amassed huge fortunes.

The Glasgow tobacco lords were renowned. In 1772 Glasgow imported 49,000 out of the 90,000 hogsheads of tobacco that came from America to Britain. The Farmer-General of France obtained all his supplies of tobacco through his agents stationed in Glasgow.

The American War of Independence in 1776 stopped for a time this lucrative trade.

But Scotland had made use of her profits gained in

Virginia to develop her internal resources, such as her hitherto unknown coal and iron ore deposits, thus transforming a large part of Scotland from being a pastoral country into a busy manufacturing and enterprising nation.

A remarkable revolution about 1750 took place in commercial history. It was as great a period for England as for Scotland. Chelsea, Bow, Derby and other potteries had just been established. Wedgwood by 1769 had opened his renowned Etruria Pottery.

It is, therefore, most creditable to the early Scottish potters that they had the courage to establish potteries on the English models so early as they did.

Let us try to picture some of their difficulties. There were no roads, far less railways, from England; travelling was uncertain and dangerous. Materials, such as moulds, colours, and other utensils, had all to be fetched on panniered-horses, taking probably two weeks or more to perform the journey from Staffordshire to any of the Scottish potteries.

Potters, painters, and other skilled artizans had either to make the whole journey on horseback or travel to Liverpool, and there get a small sailing-vessel to take them round to Port-Glasgow. I remember it was no uncommon occurrence for potters to tramp from Staffordshire to Glasgow in clogs thirty years ago.

The great invention of the steam-engine by Watt, and its application, rapidly improved locomotion, and soon all these primitive conditions were changed. Little did Watt imagine that Sabbath afternoon in 1765, as he was walking from his lodgings in Delftfield Lane along the banks of the Clyde at Glasgow Green, when the great solution of his experiments dawned on him, that the whole outlook of Britain was to be changed even during his lifetime, and that Britain should in so short a space of time become "the workshop of the world."

We should keep in mind the difficult conditions then existing under which pottery had not only to be manu-

factured but distributed. Frequent changes took place in the proprietorships in the English factories as well as in Scotland. On the Continent it was different; there the factories, such as Sèvres and some of the German potteries, were erected and subsidised by government, while here the potteries were initiated and carried on by the people as private enterprises or joint-stock companies. Our native pottery, therefore, actually represents the genius of our race in its unaided efforts. British domestic pottery to-day stands supreme for quality and durability.

As the nineteenth century opened considerable changes began to make themselves felt in the political life of the people. The French Revolution had left its mark on Britain, it may be said, in a very indirect way, yet we profited by its lessons.

By 1832 the great Reform Acts, and other legislation affecting the working classes and improving their conditions in employment and their social status, were passed. Factories were hastily constructed to meet the extraordinary craze for the new industrial system that had now arisen—this all had an unsettling influence on commerce, and as a result many financial booms took place with their consequent reaction, bringing depression and failure in their train as was the case in some of the potteries.

We look back with amazement on those days when we recollect with what antagonism and panic of fear the introduction of machinery and labour-saving appliances into factories was met, not only by potters but by all classes of workpeople. In many cases the premises were actually broken into and the machinery destroyed, which gave these disturbances the name of "Machinery Riots."

Any retrospective survey of the industrial conditions of this period is apt to be somewhat depressing, unless one has the courage to look beneath the surface and see the sound commonsense of our working folks, maintaining a steady progress through all the changes.

It has been my lot to associate with pottery workers for forty years, and among them I found leal friends who stood by me through all weathers.

“ The rank is but the guinea’s stamp ;
The man’s the gowd for a’ that.”

The work of a potter is one of the most creative of all crafts. With his own hands and unaided, if he be so minded, he can take a piece of clay from its pit, purify it, and fashion it as mind and eye command his hands to form, whether into a common tea-cup or into a national treasure.

Such an occupation naturally tends to make a man imaginative and self-reliant. It has also the tendency to keep him apart from his fellow-workers in other industries—which from some points of view is to be regretted, as the potter could often learn much that would benefit him in his own occupation from observing methods used in manufacturing other articles.

He is loath to forsake the tradition and training that has been handed down to him from his forefathers, and timorous of violent changes.

It is said, “ Aince a potter, aye a potter.” Indeed the art of potting would appear to be hereditary, the finest workers being those whose parents have been associated with the trade. In this way there grows up the ‘potter’s instinct,’ which term I use for lack of a better.

It was this peculiar instinct that led the potters of bygone days to select spots where good clay was to be procured, without understanding anything of the principles of geology as we now know them.

A pottery must have hearty co-operation if it is to run smoothly. The employers and the operatives of necessity come much in contact with each other, as, almost daily, unforeseen troubles arise owing to the varying and uncertain qualities of clay, and to the many other dangers that beset the delicate operation of successfully firing and

finishing the ware. These difficulties for long kept the size of a pottery down to a comparatively modest scale, so that the proprietor could supervise every detail. This was one of the features of the trade, and tended to a close relationship between all parties. But such concerns have had largely to give place to more extensive businesses with competent departmental managers, each specializing in his particular duties, so that pottery may be produced by the most up-to-date methods and on the most economical scale.

Nothing delights the heart of a keen potter more than to see a fine assortment of well glazed ware coming out of the kilns. Indeed the whole factory is influenced by the success or failure of the ware being 'drawn' from the kilns, glazed and ready for the market. When the result is good, everyone rejoices, while a badly fired kiln casts a gloom over everyone concerned. I have heard it affirmed that it casts its shadow even into the homes of the potters, not excepting my own.

It is difficult to explain why this industry has not taken a deeper hold in Scotland, which is most favourably situated as regards obtaining all necessary raw materials, and possesses moreover an abundance of coal and the finest fireclay in the world.

There is only one commodity lacking, and that is sufficient labour, and in this Scotland is deficient—a fact which was evident, it may be recalled, at the very inception of the manufacture of white earthenware.

Pottery was an alien industry in Scotland, and had to be imported, as it were, from elsewhere. It takes some generations to produce potters, and in Scotland there are too many counter attractions in other industries, requiring no apprenticeship like the pottery trade.

Another difficulty Scottish manufacturers have had to face is that the home consumption is not so large as that to be found in England, with its crowded centres of population. We had to depend principally on an export trade, and we had to compete more with the



LUGGIE. EGG HOOP. CAUP. BICKER. QUAICH. COG AND HORNSPOON.

WOODEN WARE.

Smith Institute, Stirling.

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cheaper Continental labour in selling our wares in foreign markets.

But those drawbacks don't altogether account for the dearth of distinguished potters, and I have asked people whom I thought would be able to give me a satisfactory explanation, but with so far no convincing reply. The wages and conditions in Scotland, as we will see even in Delftfield Pottery as far back as 1748, shows that they were practically the same as those paid in England, and have practically remained so ever since.

The Scot, moreover, has all the natural capacity for making a good potter, being intelligent, industrious, and careful. The enormous fireclay sanitary-ware industry has been largely developed by the Scottish potter, who to-day in such centres as Staffordshire is much in evidence in producing the finest qualities of white-enamelled ware.

Nevertheless, I have reluctantly to admit that the manufacture of pottery in its finer aspects has never 'caught on' as one of our peculiar national industries. Whatever the cause may be, even England has produced very few great artists in the plastic art. Flaxman and Tassie in their separate spheres were distinguished men, and their work for Wedgwood bears the distinction of their personality, but we have yet to produce original artists in clay such as the Della Robbia family and Palissy.

The Renaissance sprang from Italy, its birthplace, across the face of Europe with an outburst of painting, sculpture and pottery. The only symptom of that marvellous movement to reach our island was the brilliant period of Elizabethan literature. Yet during that time of great social changes in our national life pottery is scarcely mentioned, and I do not recollect a single craftsman of note in the plastic arts. Perhaps our cautious Scottish temperament is not imbued with the necessary passion for such creative work as pottery. The Tassies, although of Scottish birth, had Italian blood in their veins, which may explain their wonderful artistic productions.

It is hoped that this book may inspire some unknown Scottish Palissy to arise and emulate the production of the finest pottery wares ever made in our country.

These random observations I have made do not, of course, apply to any particular pottery, but are bearing on a general survey of the industry in the past two centuries.

The factories in operation throughout Scotland at present are controlled by men whose knowledge of the craft is both intimate and practical. It is an advantage for any country to possess and maintain as large a variety of industries as possible, so that fluctuations in employment may be less likely to ensue. Another reason why such an artistic industry should be fostered is, that it offers an admirable outlet for our art teaching and the lively ambitions of our young lads and lassies at present attending our schools.

CHAPTER I

EARLY DOMESTIC CONDITIONS

"How drink gaed round in cogs and caups."
Holy Fair, BURNS.

THE early inhabitants of Scotland had a peculiar preference for wooden vessels for culinary purposes. Indeed, it would almost appear as though they had an aversion to crockery. This may be attributed to our national sense of economy, since the primitive homes of bygone turbulent days did not afford much protection for fragile articles. Besides this, however, tenure of land was insecure, which would have governed the establishment of potteries and kilns, for these present more difficulties than the primeval callings of shepherd or fisherman, the principal industries of early Scotland, as well as home industries, which could be moved easily from place to place.

It is exceedingly difficult for us to realize how little progress was actually made in the social conditions of Scottish domestic life, even of well-to-do people, as regards the use of pottery-ware in the home up to the middle of the eighteenth century. In this respect England was not much better. Even during the great Elizabethan period, when many household and social changes took place, the use of pottery is hardly mentioned as one of the improvements. The first factory to make china in England was either Bow or Chelsea, and the dates of the foundation of these concerns vary from 1744 to 1750. Before these

dates the primitive potter held sway, using entirely the local raw clays wherever he happened to settle down, and in consequence making little progress, so that many of the pottery articles now in daily use had to be made in other materials in those days. Leather bottles, wooden plates and bowls were used instead, and by and bye as taste improved, and more personal comfort was sought after, pewter articles made their appearance, and very gradually ousted the wooden ware. Steady progress was made in domestic articles used by the housewives, from wooden or 'treen ware' platters to pewter ware, and then gradually to common pottery made of coarse clay, coated with a rough lead-ore glaze, which in turn was superseded by the finer tin-enamelled 'delft ware,' with which I really commence my story of the manufacture of pottery in Scotland in 1748.

Haliburton, a Scottish merchant trading with Holland during the fifteenth century, leaves an account in one of his ledgers of pottery being imported from Delft.

White-enamelled 'delft ware' was cheaper than the pewter articles, besides it was also easier to clean, and with attractive blue painted scenes, and flowers over the surface of soft white glaze, must have completely transformed, with its bright colour effects, the shelves and racks of the 'desbuyrd' (dishboard) or kitchen dresser, especially if pewter plates had been the occupants before. But to return to the period previous to the introduction of 'delft ware,' let us glance inside a Scottish farmhouse as it existed towards the end of the seventeenth century, and even later, as no great change was apparent till the year 1750. We will then be able to see how primitive, one might almost say how barbarous, the mode of living was. It was simple in the extreme, requiring very few of all the articles we now deem essential for the most ordinary meal in the home of the humblest.

The interior of such a farmhouse was illuminated with several rush-lights, very odoriferous and very smoky, since the rush-light was supplied with oil in a small '*cruisie*'—or

'cruske.' The word 'cruisie,' or 'cruse,' or 'cruise,' so often met with in the literature of those days, is an old Saxon word signifying 'a small cup' (usually for holding oil). In the Highlands we find the word written as 'cruisghean,' which is a Gaelic word, and strictly means a small jug or pitcher, especially a *broken* one, such as no doubt was often used in place of a proper lamp. The wick of a good rush-lamp lasted about an hour. Even when gas was introduced in 1802 the 'cruisie' was in general use in farmhouses throughout the country. In Ireland they still speak of a 'cruisken of whisky.'

Candles, a great improvement on all previous lighting devices, began to make their appearance, but only in the better class houses, after our union with England in 1707, the candlesticks being then mostly made of wood instead of chinaware.

The two chief receptacles for food and drink at that period were the 'cog' and the 'quaich,' and the most commonly used domestic articles were cogs, caups, bickers, and luggies. They were all composed of wood, chiefly ashwood. (Trenchers did not make their appearance till late in the seventeenth century.)

The mid-day meal in a farmhouse was a simple affair of one course only. Soup and meat were put into one large bowl, called a 'cog,' placed in the centre of the table. (When this was a wedding present to a bride, as it frequently was, it was called a "Bride's Coggie.") The family sat round the table on stools or trestles, and not only the indoor servants but also those who worked out in the fields joined in the meal, and each one brought his or her horn spoon to sup with. The men often kept this spoon inside their bonnets, and nearly all had their spoons, with which in the early morning they supped their porridge from the porridge 'cog,' fastened somehow to their persons. The porridge was boiled very thick, so that as they plunged their spoons into the bowl each made a hole for himself till ultimately the walls fell in. The 'cog'

was also termed a 'krug,' or 'krugan,' from which we derive the word 'crock.'

Among Princess Mary's many wedding presents there was probably none more quaint than the one sent by the inhabitants of the Orkney Islands—certainly none was more typical of the home of the donors. The present consisted of two oak, Orkney, straw-backed chairs, a spinning-wheel, and a 'bride's cog'—the latter being associated with an ancient marriage custom of the Islands. It was customary after the wedding for the bride to take a sip of the home-brewed ale, with which her wooden cog was filled, and then to hand it to her bridegroom. Whereupon he faced the assembled guests and said, "I wish all the company good health and prosperity," at the same time drinking from the 'cog' where the bride's lips had touched it. Subsequently the 'best man' secured the 'cog,' and when he had drunk to the toast, "Here's to the bride and bridegroom, may they have many happy days together," it was passed round so that all might drink from it.

Fingers and teeth did duty for forks and knives on the very rare occasions when meat appeared in the full 'cog.' The meat—very probably an old cow or diseased sheep (braxie mutton)—was cut up in small pieces by the farmer himself with the clasp-knife he invariably carried with him, called a 'Jockteleg' (after Jacques de Liège, a famous cutler who supplied these knives to Scotland during the reign of James VI.).

The townspeople used their 'whingy' or 'dagger,' with which they were experts, to cut off pieces of meat, which, after being again divided were handed round to the company of guests, while juicy bones were held between the fingers, sucked and picked till bare, since even knives were a scarce commodity. Even in 1720 we read, "It is not decent to fill your mouth too full," and "do not gnaw your bones too clean"—remarks that are quite amusing and instructive for us even now.

A '*bicker*' was smaller than a 'cog,' and was also made

of wood, but not so small as a 'quaich.' From the 'cog' the ale was ladled out into a 'bicker' for drinking. "My bicker is fu' and skailing," is the old Scottish rendering of "My cup overflows" in the 23rd Psalm.

A '*caup*' was a mug still smaller than the 'bicker,' and was used chiefly for drinking such potions as the Prestonpan's famous "tu'penny ale." Its holding capacity was half a pint (a Scots pint being equal to two English quarts). In the Smith's Institute, Stirling, is to be seen the Hangman's Caup—the town officer in Stirling (who also acted as hangman) had the right, as part of his emoluments, to a 'caupful' of grain on market days; so he took from each sack exposed for sale in the market a handful of grain till his caup was full.

A '*luggie*' is used in most farmhouses to this day, especially in the East Coast of Scotland. A 'luggit' dish is frequently mentioned in old Scottish literature. In the west it is known as a 'porringer,' and is used, as the name implies, chiefly for holding milk when supping porridge.

It was in its earliest days made, like the other articles mentioned, of wood, and was shaped like a cup, or mug, with an ear or lug fixed to one side, hence its name. They are now made in pottery, and were probably among the very first articles to be attempted by the local potter. A very good example is illustrated in Plate XXVIII. of an early Scottish '*luggie*' made in earthenware.

The wooden *platters* were at first square, and latterly round in form. Slowly we observe the change from a flat board into a deeper plate more like our present soup plate. In England these plates are called 'trenchers,' and in Scotland 'trunchets.' We read in one of Ballantyne's poems of "Ane treen truncheon and ane rams-horne sponne." This word '*trene*,' 'tree-en,' or 'treen' was derived from the Anglo-Saxon word 'treowen.'¹

The wood used most generally for all these domestic articles was ash, beech, oak, or any hard close-grained

¹ Many confuse 'treying-cups' as trying or measuring cups, whereas they are actually and only wooden cups.

wood. The thorn tree was often employed for making the double egg-hoops so much in evidence a generation ago, but any close-grained wood served the purpose equally well so long as it was easily cleaned, and did not absorb the grease of the meat, or milk. The very simple meal and mode of living that has just been described left its impression on the literature and proverbs of our country. "Help is gude at a' thing, except at the cog," is a saying familiar to our old folks, though not now in general use and beyond the understanding of this younger generation, as both the article and mode of helping oneself belong to a past age.

In Burns' *Address to a Haggis* is the following passage: "Auld Scotland wants nae skinking ware that jaups in luggies," and again, in Burns' *Halloween*, those well-known lines occur:

"In order on the clean hearth-stane
The luggie's three are ranged."

"Meikle fa' between the 'cap' and the 'lip'" is still true. It is interesting to note, in passing, the word 'caup' altered into 'cap,' as we have dropped the 'a' and adopted the 'u' instead, and we now speak of a 'cup' in its place, which is the 'caup' of our forefathers, and is still used in much the same sense.

A cupboard was originally a table, or board, for displaying cups, not for hiding them. In old Scottish literature it is usually termed a 'cap-almrie.'

The people of this period were both genial and sociable, and although glass vessels were not yet much used at table the ale after dinner was handed round in a 'bicker'—the guests being enjoined to drink with no 'heel-taps.' When drinking out of the common bowl you were expected to drink up your share, and empty the bowl, so that the others would not have your 'blown' drink to partake of. This proves, I think clearly, that drinking vessels were scarce, and that one only, out of which each partook in turn, was used at table during a meal. After



WATER PITCHER.

PAINT OR WATER POT.

PICKLED BEEF POT.

JAR FOR BEER.

BROWN DOMESTIC POTTERY.

Smith Institute, Stirling.

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the meal was over we can imagine the state of the diner's fingers, and that it was necessary for a bowl or basin of water to be handed round into which the guests might dip them and remove any grease or stickiness.¹ Forks and knives were rarely found in the houses of ordinary people. In 1754 it is recorded that three farmers were hardly able to muster half a dozen forks and knives among them, and even by 1760 these articles did not count much in the 'house plenishings.'

A house was plastered both outside and in with clay, the floors even were of clay firmly and evenly trampled down. These must have been difficult to keep clean, for guests were usually reminded that it was "uncivil and disobliging to throw anything on the floor during the dinner." All of which primitive state of affairs makes us probably better able to understand Burns' anxiety as to his table manners when he "sprachled up the brae" to have his "dinner with a lord":

"There lonely by the ingle cheek
I sat and eyed the spewing reek,
That filled, with hoast-provoking smeeke,
The auld clay biggin."

BURNS, *The Vision*.

Pewter platters became fashionable only among the richer classes shortly after the reign of Charles II., and by the end of the seventeenth and the commencement of the eighteenth century we find two-pronged forks beginning to take the place of fingers, although in Scotland it was still quite common for well-to-do people to eat with a pointed knife in one hand, using the fingers of the other as a fork. The country was poor, and only a few people were fortunate enough to possess silver spoons and forks, which were kept more for ornament than use.

The failure of the rebellion of the '45 was fortunately soon forgotten in the triumph of peace, and after 1746 a

¹ When the basin was made of pewter or silver it was termed a 'laver' (French, *se laver* = to wash).

surprising revolution took place in the affairs and customs of the Scottish people, when the whole system of our traffic, trade, and industry was completely altered. Progress had been very slow, and the country was, as we have just read, very poor, very self-contained, and much less advanced than richer England, but industry now began to make rapid progress, and increased communication with the Highlands and the Lowlands, and then again with England, broke down the barriers which ignorance had served to raise.

The constant wars for freedom had made the nation poor but independent, and left its mark in their character which brought forth a race rich in men of marked ability.

It was about this time of extreme hardship that many Scotsmen went south to seek their fortune, and not to spend it, as is so often done now-a-days. Dire poverty compelled men of even high degree to go abroad, for there was little money about, and rents were paid in kind; a copper bawbee being the favourite and most commonly used coin. Soap, imported chiefly from Flanders, was hardly known. Carpets were not laid on the floors—the word ‘carpet’ at that time signifying a table-cloth, for which purpose it was used if there happened to be such a thing in the house.

In winter the people were half-starved, living mostly on salt meat cured in the coarse ‘lame pigs,’ while only in summer did any one get fresh meat and food with good vegetables.

The year 1750 saw the dawn of a new era, when comfort and prosperity began to spread not only over Scotland but also over England. The monotonous meal at twelve o’clock gave place to a more elaborate repast. Up to this time it is hardly to be credited that such vegetables as potatoes and turnips were rarely eaten, as they were not generally grown by the farmers. But this was now all changed; our rapidly increasing foreign trade and intercourse gave us finer conceptions of how home life

ought to be conducted, and, as prosperity arrived, the family sat down to a dinner of three and even four courses, washed down by claret from France. Such innovations naturally caused quite a revolution in household equipment, and entailed a great alteration in the method of running a house, as well as a considerable increase in the plenishings of the home. The hall, which had hitherto served as kitchen and dining-room, ceased to be a 'living room,' and the meals and family were removed to more secluded apartments. Among the articles then coming from France were "3 dozen fyne lame (earthenware) potes for desertis."

Large quantities of crockery-ware—jugs, plates, cups and saucers, etc.—were now in pressing demand, and, in consequence, potteries sprang up in Scotland and flourished. Stools and trestles were put aside, and chairs took their place at table—beds were used instead of coarse heather. The people had hitherto seldom washed their faces, so toilet-ware was now introduced as a novelty. Animals, which were at one time attentive companions at meal-times, ceased to come into the dining-room while dinner was being served.

By the year 1750 the cost of living had doubled, yet there was no great poverty, work being plentiful in the rising industries around, among which pottery-making held a prominent position. But although affairs were so prosperous, capital was still scarce and in very small individual amounts, and we cannot fail to notice how it took several men to start most companies—only by putting all their resources together could they procure sufficient funds to carry on an enterprise of any size as a 'joint-stock company.' From this time, potteries ceased to be the primitive family concerns they formerly were, the industry was compelled to change its entire methods, and the uncultured potter had to improve his wares. The master-potter became a capitalist, and the potteries organized concerns. For example, the pioneer china works in England, although employing only some thirty

or forty operatives each, had to start on entirely fresh lines.

The potters themselves became specialized artists, devoting their whole mind and energy to modelling in clay the beautiful figures, or useful wares as the case might be. Others specialized as decorators, painting the designs on the china after it came from the kiln, while some devoted themselves to the firing or glazing of the ware, and all the varied processes were undertaken by men skilled in their separate tasks. It was a great evolutionary period, and brought the manufacture of pottery to great perfection. Wedgwood, even if he had done nothing else, was the first to create the factory system, as we now understand that term, on a large and organized scale.

W. E. Gladstone, in opening the Wedgwood Institute at Burslem (Staffs.), at which he gave one of his finest orations, stated "that Wedgwood the potter, in my opinion, was our greatest pioneer in that industrial awakening that so enriched our country from the end of the eighteenth century and throughout the century which followed."

EARLY DOMESTIC POTTERY WARE

The earliest types of pottery were large jars, stoups, or pitchers used by the country folks about their homes for carrying water, and 'piggis' in the kitchen for holding food, or, as in the case of the 'saut-bucket,' for pickling fish or preserving meat during the winter. No article could have served this purpose better than those large brown-ware jars, holding from two to four gallons.

The clay for these pitchers was dug from the local clay-pits, and weathered in the fields by rain, frost and sun. It was then mixed with water in a tank, and stirred up into a thick fluid 'slip,' thus allowing the coarse gravel to settle to the bottom. After passing the 'slip' through a coarse hair sieve it was run on to stone slabs in a covered shed, but open at the sides to the air, where it slowly dried

by sun and wind, after which it was piled up in a clay cellar to mature, thus improving its plasticity for the 'thrower.'

The pots were glazed with crude lead ore, or galena—native sulphide of lead, which was pounded by hand to a fine powder and dusted over the surface of the clay pot. During the process of firing the lead ore became lead oxide, and in fusing dissolved some of the silica and alumina in the clay, thus producing the thick brownish glaze we see coating and trickling down old red pots.

The early primitive Scottish potter only made the simplest forms of jars and bowls. Any platters that were then in use were usually of wood (ash), or latterly of pewter.

There exists a specimen ¹ of these early water and wine pitchers, covered with a copper green glaze, made in the thirteenth century. It is decorated with the heraldic device of a man with a straight sword encountering a lion rampant, as is seen on the seal of the Constable of Scotland—Roger de Quincey—of that period.

The chief productions of the early potters were these stout common 'stoups,' sometimes quaintly termed 'lame pigs,' 'lame' being the broad Scots pronunciation of the English word 'loam,' meaning clay of a sandy nature, and 'pig' an old-fashioned term signifying common delf. Down to the end of the nineteenth century this word 'pig' was in general use throughout the country districts to denote common earthenware. We still meet with the word in the term 'a hot pig' in our beds, meaning a stoneware hot-water bottle. The first time you come across a hot-water bottle just take a look at the yellowish colour of the ware, and you will notice that it has a remarkable resemblance to the skin of a porker when freshly scraped of his bristles.

Some etymologists maintain that the word is handed down to us from the Gaelic word 'pigeon,' meaning a small jug. Other experts say it is derived from the word

¹ Collection of mediaeval pottery of Thomas Bateman.

‘pigin,’ or ‘pighad,’ a pitcher or jug made of very coarse earthenware.

In England we have the word ‘pipkin,’ meaning an earthenware vessel or jug, and it is believed to have come from the same source, but what is still stranger is that this word ‘pig’ itself is found in use in many parts of England, as, for instance, in the sign of the ‘pig and whistle’ over the doors of inns, especially in Midland Counties. The actual significance of these two apparently odd and nonsensical words is, however, now easier to understand—‘pig’ here is an earthenware mug and ‘whistle’ is the good old English word ‘wassail,’ which in the course of time has deteriorated to ‘whistle’!—there are many examples of old words becoming thus changed so as to be unrecognizable from their original form. We have the ‘Cat and Fiddle’ near Buxton, the highest inn in England; this is actually two words, ‘Catus,’ watchful, and ‘Fidelis,’ faithful, transformed in course of long usage. In Sussex a ‘pig’ has the same meaning as with us. A ‘Sussex pig’ was a term used for any drinking vessel made of the common red clay of the district, coated with a rich yellow or green glaze, and often made in the model of the animal itself.

It will be noticed that there was a peculiar similarity in the meaning of the term ‘pig’ in England and Scotland, which may be accounted for in the following manner.

We have authorities, such as Skeat, telling us that the word ‘porcelain,’ which is derived from the resemblance of chinaware (in respect of its finely polished glaze) to the polished univalve shell of the same name ‘porcelana,’ known in this country as the ‘Venus Shell,’ and forms the foundation of the term porcelain. The word ‘porcelain’ was first applied to pottery in the thirteenth century, when Marco Polo, the great discoverer, introduced the earliest examples of Chinese pottery—the word is found in the French version of his “Adventures.” Again, Littré gives the Italian word ‘porcellana,’ the Venus or cowrie

shell, as having the same derivation as this word *porcelaine* (having the resemblance to the back of a pig).

In those early days the word *porcelain* was employed to describe all manner of pottery ware that had a sheeny and white appearance, but the generally accepted idea is that it originated from the Portuguese or Spanish languages as '*porcellana*,' which is composed of two words, '*porc*,' a pig, and '*llana*,' the back of an animal, and this term came into use, as we know it now, during the early part of the sixteenth century.

The Portuguese introduced the beautiful early Chinese pinholed pottery into Europe in the year 1518, after their discoveries in the East. The matt or dry surface of this old Chinese ware had a yellowish tinge, and had a mottled surface with small pinholes in it similar to what is seen in the egg-shell of the ostrich, and also extremely like the skin of a pig with the bristles shaved off. France adapted the word to '*porcelaine*,' and it is not so very long ago that the French Academy declared that this term should only apply to translucent ware like china-ware, and the word '*faïence*' should apply only to earthenware. The old French '*porcelet*' shows the derivation even more clearly—'*porc*' = a pig, and '*let*' small, as applied to any small vessel, usually a mug made of pottery in old France.

Scottish folk in old days employed the term '*pig*' when they referred to a pottery-ware chimney-can, and used to say after a storm that "a pig had fa'en off the lum" (a chimney-can had fallen).

When we were children we, no doubt, had penny pottery banks. These were called '*Pinner*' or '*Pirlie*' banks, or '*pirley*,' '*pennar*,' and '*pinner pigs*.'

These banks were usually small brown earthenware jars with a slit sufficiently large to admit a penny. The only method of withdrawing the savings was by a dexterous manipulation of a knife, or similar instrument; but I believe the quickest and most popular and generally employed method of gaining admittance from a boy's point

of view was to 'break the bank,' by dashing it on to a stone floor, where it was immediately smashed to pieces and the money released !

Anything made of clay and fired in a kiln in Scotland was termed a 'pig,' even broken pieces of pottery known to a past generation as 'wallies,' were called 'pigs.' Many a 'wally' garden walk I have made with broken delf, allotting to each path a different colour—they were quite attractive, and looked especially bright after rain ; I'm afraid they took their toll of shoe leather. 'Wally,' was rarely applied to good crockery or whole dishes. I venture the opinion that the word is derived from the obsolete verb 'walow' found in some of the old ballads, meaning to whiten or turn pale, as in :

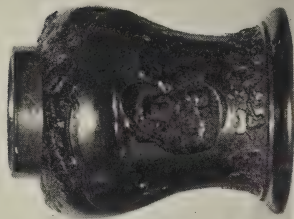
“ When first she looked the letter on,
She was baith red and rosey.
But she hadna' read a word or two,
Till she *wallow*'t like a lily.”

In passing along a country road, when the sun is shining brightly, we usually see bits of broken white crockery glistening and sparkling in the fields, where it has been thrown with the refuse from the towns—its whiteness suggests the word 'wally.' This word was not unknown to Burns, for in some versions of the *Soldier's Return* he uses the word 'wallow't,' given as an alternative to 'paled,' which makes the meaning plain. Similarly, 'peelie-wally' is an everyday Scotch expression, meaning pale and sickly-looking.

Our grandmothers spoke sometimes of a 'wally flet' when they meant an earthenware saucer, and still another example is to be found in 'a wally egg,' the usual term in country places for the china egg put below a hen to encourage it to lay. In children's games, when wee girls are playing chuckies, they speak of their 'wally stanes,' and boys, while playing marbles, speak of their 'wally bools,' but, nevertheless, the word is not now found in the English dictionary, and is not in general use



16TH CENTURY WATER PITCHER.
Calton Ware.



18TH CENTURY
SNUFF JAR.



16TH CENTURY WATER PITCHER.
Calton Ware.

The Corporation of Glasgow, People's Palace Museum.

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by the present generation. Another possible derivation of this word may be from the old Scottish adjective meaning select, or pretty, which comes from 'wale,' to pick or choose. We still talk of picking and 'waling' fruit. The word is always pronounced 'wah-ly,' and never 'way-ly,' which may assist students of such words to explain its origin.

But the word 'pig' in Scotland also applied to articles other than pottery, for metal articles made in imitation of pottery were also termed 'pigs.' We have the notable instance of the well-known and treasured 'Pirley Pig,' or money-box of Dundee. It was made in 1602 of pewter, and not so many years ago might have been destroyed had it not been discovered by accident in a heap of scrap metal ready to be melted. It originally belonged to the Corporation of Dundee, who purchased it back again. It is now called a 'Fines Box,' and is the only one in existence. It is shaped like an orange slightly flattened, and measures six inches in diameter and three inches high. At the side is a slit by which the fines for non-attendance or lateness at meetings were dropped in. It has a remarkable ornamentation round it, unusual in pewter ware, which makes me think it has been copied from some actual earthenware 'pirley pig' bank; it is inscribed, "Lord Blesse the Provest and Counsell of Dundee, Sir James Skrimgeour, Provest." "Gang to pigs and whistles" is the old Scottish way of saying, "go to wreck and ruin," as similar to the way of the bulk of pottery ware. A 'pig wife' was the woman who went about selling crockery in Scottish country districts. The 'pig-man' was well-known in the villages as the general and itinerant dealer in delf ware.

Money was very scarce, and sales were conducted by bartering pottery for rabbit skins, scrap metal, etc. Indeed, this system still exists where modern railway facilities have not so far penetrated. In the Border counties the pottery-dealer was also known as the 'mug-man'—Sir Walter Scott makes reference to these 'mug-men' in *Guy Mannering*. The gipsy hawker trading

in pottery in Kirk-Yetholm neighbourhood is termed a 'mugger,' and this term is often used indiscriminately of all or any members of this wandering race. A story is told of a Glasgow clergyman who when preaching in the gipsy village began to exhort his hearers as "Ye Muggers of Yetholm," much to their indignation. 'Muggers' were also an important body of potters who made a measured type of mug used in the inns and taverns throughout Scotland. Between the years 1760-1810 the making of these mugs was brought to great perfection, since there was a great demand for them, neither wine glasses nor tumblers being available at that time in sufficient quantities.

Loving cups are common to most countries, but these made in Scotland in the eighteenth century would be better termed as 'fuddling' cups, the principal feature of which was their astonishing number of handles, which ranged from two to as many as twelve. It is supposed that the purpose of this equipment was that the cup might pass from hand to hand, and each guest have a fresh portion of the rim to himself, no doubt an excellent arrangement for the first time round !

The usual form of a 'fuddling-cup' is a cluster of half-a-dozen good-sized cups joined together. When it is realized that these six cups communicate with each other internally, so that to empty one you must empty all, the force of the name 'fuddling' will be apparent.

The potters made many playful varieties of such ware, probably none was so widely known as the puzzle jug. Below the rim are a number of holes, from which it will be seen that the liquor must be extracted in some unusual way if the drinker wants to get his full measure, and has any respect for his clothes. The bead between the perforations on the body of the jug and also the handle are hollow tubes communicating with the interior of the jug by a hole at the foot of the handle, through which the contents must be sucked from the spout in the front of the jug, a feat presenting no difficulty to the initiated.

The decoration on 'puzzle jugs' was usually carried out in brilliant underglaze colours, and the design was so arranged as to frequently camouflage the secret of the jug. Considerable skill was necessary to make them, and it was the ambition of every apprentice potter to be able to make such jugs successfully, as they were considered a proof of the young man's handicraft. Very few, if any, are made now-a-days. To add to the amusement of the drinking performance, a doggerel verse was inscribed around the jug, such as :

"From Mother Earth I claim my birth,
I'm made a joke for man,
But now I'm here, filled with good beer,
Come taste me if you can."

Another variety was the 'surprise mug,' usually decorated with a lizard or toad painted in vivid colours as realistically as possible. The animal did not come into view until more than half the contents were consumed, and if the imbibor felt he had been drinking too freely he began to think he was 'seeing things,' and that it was time for him to take his departure. These mugs had also their mottoes :

"The De'il and Maut
Do seem united,
Don't smash the pot
Nor be sair frightened."

Sports of all kinds, from 'coursing' or 'shooting' to horse-racing, are frequently depicted, especially on salt-glazed stone-ware pitchers so popular in all farmhouses and inns throughout Scotland up to some sixty years ago. The embossed figures were made in 'sprig' moulds from a whiter pipe-clay than the body, and after being carefully pressed into the embossed mould, the 'sprig' of clay with these scenes on it was fixed with water or clay-slip on to the body of the jar. Latterly they were embodied in the mould of the jug itself and 'pressed' like

ordinary pressed ware. Some of the scenes on tobacco jars and on snuff barrels of stoneware are very good, of homely folks enjoying their pipes and pinches of snuff. A large potato made in pottery, and coloured in natural tints, was another of the 'joke' series. It was simply made by taking a mould of an actual potato. Out of this mould a hollow pottery-ware potato was fashioned, with a hole at one end into which a cork was fitted, forming an excellently disguised whisky flask. Another 'camouflaged' flask took the form of a book with a hole cunningly devised where the leaves should be; very often the book was a copy of some classic that had not the remotest connection with whisky—at any rate the ones I have seen usually advocated the temperance cause.

On the East Coast of Scotland the fisherfolk are famous for their gallery of 'wallie' dogs, lions, parrots, cats, etc. The Aberdonians call them 'dabbities.' Cottage chimney-piece ornaments became, with changing taste, for a while unfashionable, but they have lately recovered their lost prestige. Some of the 'dabbities' are remarkably well-made, and require a good potter with some artistic taste and skill to 'pot' them properly.

The country folk for a long time used only bowls for their meals. These were of all sizes—from the size of a tea-cup, for which purpose it was used, to one of two gallons, with an earthenware lid, for holding 'kail' or broth like a tureen. They were decorated in beautiful and brilliant colours. One of the best-known patterns was 'Sunflower'; there was also 'Pansy,' 'Rose,' and 'Tulip.' These patterns were all painted by hand, in 'underglaze' pinks, French and Victoria greens, with black or brown stems, and very often a cobalt blue star inserted by means of dabbing the pattern with a cut sponge. The simple design was very effective, the full brush marks of the artist are quite visible, and add distinctly to the charm of the decoration.

After the bowl came the 'mug,' which was always more used in Ireland than here. In the days of our

grandmothers the cups were often without handles, termed 'can cups,' and resembled small bowls or mugs. Saucers were not in general use, as is apparent from the fact that in old coffee or tea sets only one set of saucers was supplied, which had to do duty for both sizes of cup. The saucers at that time were deep, rather like shallow bowls, so as to enable folk to cool their hot tea by decanting it into their saucer or 'flat' as it was familiarly called, and no foot was modelled in the well to receive the cup; it was quite common in those days for ladies to drink out of their saucers, making, of course, as little noise as possible! 'Cups' were known as 'tassies,' and we find the same word in Burns' "Gae bring to me a pint o' wine, and pledge me in a silver tassie." We have copied many usages and words in our domestic arrangements from the French, such as the double egg-hoop; and the soup-tureen, 'cruse,' a deep dish, from 'creuse'—deep, the casserole, the cream pourie (old Scotch for a cream jug), as also the word ashet (flat dish) (French assiette = a plate), all remind us of the "Auld Alliance with France."

CHAPTER II

POTTER'S MATERIALS

HISTORY

“ Our trade to work in clay began
Ere the first man was made
For out of clay was made the man
And thus began our trade.”

POTTERS quote these familiar lines to demonstrate the importance of their craft, and how clay was employed in Creation by the greatest Potter of all. It will be admitted their claim is stated concisely, and apparently potters have an advantage over their fellow-craftsmen in this respect.

Jacquemart, the French writer, graphically describes the chance discovery of clay to man :

“ On the day when man walking on the clayey soil, softened by the floods, or rains, first observed that the earth retained the prints of his footsteps, the ‘ plastic art ’ was discovered, and when, lighting a fire to warm himself, he remarked that the surface of the earth changed its nature and its colour, and that the reddened clay became hard, and impervious to moisture, the art was revealed to him of making vessels to contain liquids.”

We are therefore compelled to believe that the necessities of man led to the origin of the potter's art, which in the opinion of many authorities was the earliest of all. But it is also argued that man would first require a spade or other implement with which to till the ground, and that

the worker in wood or iron must have been the pioneer craftsman.

Potters, on the other hand, assert that the potter was the earliest craftsman, as jars for holding grain and water so essential in the East were of prime necessity. After all, the most wonderful invention was fire, without which none of the trades mentioned could have been of much service.

It would seem that no sooner did man make his appearance on earth than he began to work, and what more natural than that his work should take the form of making vessels for his domestic needs out of the clay which was there ready all around him lying to his hands. In doing so he little thought he was providing the most valuable transmitter and medium of history the world has ever possessed, since we are indebted to the art of the potter, more than to any other source, for the knowledge of the history of the peoples of past Ages.

From earliest times the plastic nature of clay has appealed to man's creative instinct of modelling, and seems to have inspired his imaginative skill more than any other substance.

Since human wants are alike in all countries, there is a great similarity in form and in design of all common and domestic pottery vessels. There are common powers of suggestion inherent to man which lead him to produce the same things in clay in all the ages and in all countries. It is for this reason we observe the potter at his work making similar objects spontaneously and independently among various races of man. Almost identical forms of jars and vases and styles of decoration are made by all potters, which in their very crudeness and primitive character have a marked similarity.

Therefore, historians find that pottery is a factor of the highest value in their researches. Even small fragments are able to impart to the initiated some story. For a well-fired kiln will produce ware that will ever retain the minutest detail—the potter's thumb mark can be

still distinctly observed on the tiles and bricks of Babylon. Iron, which alone can dispute with pottery its pre-eminence in utility to man, may rust and corrode, and consequently disappear. Documents of paper may last a while, but ink fades. There remains, therefore, nothing so imperishable as pottery. We can decipher letters cut with a stiletto on the bricks of Nineveh in the later Babylonian, or wedge-shaped, writing which reads, "I am Nebuchadnezzar, King of Babylon, and restorer of the temples of Sag-ih and Zida, the eldest son of Nabopolassar, King of Babylon." It was customary for brick used in public buildings in Babylon to bear the stamp of the king in whose reign they were made.

Some time ago a series of drawings in Egyptian tombs, executed 4000 years B.C., were brought to light, showing an Egyptian potter at every stage of his work. First he is shown kneading the clay with his feet, then working this clay on the potter's wheel, and baking the articles he has made in his kiln, and finally decorating his finer pieces in a variety of colours.

"And they said one to another, go to, let us make bricks and burn them thoroughly. (*Genesis xi. 3.*)

These words point to the fact that brick-making was known very early in the existence of man, and if bricks were made and burnt at that period there is some ground for believing that pottery would be made as well, and baked in a kiln much after present day methods. Indeed, history, as we have seen in the case of pictures to be seen in these Egyptian tombs, bears out this contention.

The Bible, wonderfully descriptive as well as instructive in its writings, appears to take the potter peculiarly to itself as an example to man, and we notice how frequently throughout Scripture the potter and his clay are used to exemplify and illustrate some moral lesson.

This interest of the writers in the Bible is perhaps further brought out in the First Book of Chronicles, chapter iv., verses 22, 23, where we find the actual names of the potters mentioned,

The praises of potters were also sung by the greatest of Greek and Roman poets. Cowper has translated a poem by Homer addressed to potters, who while busy making their wares saw him approach and called to him, promising him a present of their commodity if he would sing to them, whereupon he sang :

“ Pay me my price, potters ! and I will sing,
Attend, O Pallas ! and with lifted arm
Protect their oven ; let the cups and all
The sacred vessels blacken well and, baked
With good success, yield them both fair renown
And profit, whether in the market sold
Or streets, and let no strife ensue between us.
But O ye potters ! if with shameless front
Ye falsify your promise, then I leave
No mischief uninvoked to avenge the wrong.
Come, Syntrips,¹ Smaragdus,² Sabactes,³ come !
And Asbestus.⁴ Nor let your direst dread
Omadamus⁵ delay ! Fire seize your house !
May neither house nor vestibule escape !
May ye lament to see confusion mar
And mingle the whole labour of your hands !
And may a sound fill all your ovens
Such as of a horse grinding his provender,
While all your pots and flagons bounce within.
Come hither also, daughter of the Sun,
Circe, the sorcerer, and with thy drugs
Poison themselves and all that they have made !
Come also Chiron, with thy numerous troop
Of Centaurs, as well those who died beneath
The club of Hercules as who escaped,
And stamp their crockery to dust ! Down fall
Their chimney ! Let them see it with their eyes,
And howl to see the ruin of their art.

¹ Syntrips (1) and Smaragdus (2) express the breaking of the earth to pieces. Asbestus (4) is the fire that cannot be moderated. Sabactes (3) characterizes the misfortunes of workmen whose work is destroyed, and Omadamus (5) is the destructive force which nothing can resist.

While I rejoice ; and if a potter stoop
To peep into his furnace, may the fire
Flash in his face and scorch it, that all men
Observe thenceforth equity and good faith."

Translation of an Epigram of Homer by
WILLIAM COWPER.

Clay is found in almost every country and is easily procured, deriving its value solely from the amount of work the potter puts into it, by refining and improving the general quality as to its plasticity and purity from extraneous matter. The skill shown by shaping, as well as by moulding it into beautiful forms, and the decorations executed on it are, after all, the invention of the potter, no matter how primitive he may be, so that the pottery of a country might be said to indicate the measure of its civilization. Thus, by comparing the various kinds of pottery produced throughout the ages by different races with the pottery made by the most primitive races existing to-day, whose conditions we are able to study at first hand, we can deduce the religion, social customs, and the art of those who peopled this earth thousands of years before the birth of Christ.

We have an excellent example of this in the history of the Roman occupation of Scotland, which can be traced by the fragments of pottery the Romans left behind them wherever they had formed a camp.

It is peculiar that wherever the Romans penetrated into Scotland, they preferred to make clay bricks rather than employ the easily hewn sandstone, so abundant in our country, for their works.

This interesting subject is inclined to lead me away from my own, but, as it has been ably dealt with elsewhere by students who have confined themselves to the study of Ancient Pottery, I will limit myself to what we know about the pottery of our early Scottish forefathers, and even this I will merely touch upon.

Professor Wilson, the well-known antiquarian, says :

“It is altogether impossible within the limited amount of accurately observed facts with which the Scottish archæologist has to deal, to picture and classify into distinct periods the pottery found in the ancient tumuli and cairns. Many of the fictilia are so devoid of art as to furnish no other sign of advancement in their construction from the most primitive state of barbarism, than such as is indicated by the piety which provided a funeral pyre for the dead, and even so rude a vase wherein their ashes might be inurned.”

The rudimentary form of the cinerary urn is that of the common garden flower-pot, still retained as the easiest and simplest form into which the plastic clay can be modelled. From this simple shape was gradually developed the varying forms both of sepulchral and domestic pottery found deposited with the dead; inurning the sacred ashes and the costly tributes of affectionate reverence, or placed in the graves with offerings of food and drink designed to sustain the deceased in his final journey to the world of spirits.

During the period of Roman occupation in Scotland many articles of pottery made by Scottish potters of that time have been brought to light. Nevertheless the work is so lacking in individuality as to convey nothing of consequence. During the last Pagan epoch in Scotland the ware produced was of a rough grey colour, ornamented with parallel grooves and was coated *internally* with a greenish glaze. These vessels usually had ‘lobs’ or ears on either side attached to the brim, and a cover or lid attached by holes to the body of the jar which allowed the contents to be closely covered.

The position of early pottery in Scotland is analogous to that of England in that the primitive and even mediæval domestic ware was made in the commonest forms and of the crudest materials. It is difficult, therefore, to say much about the domestic ware used in the very early days of Scotland, which may have been merely baked in the sun, and would in consequence be extremely

tender and fragile ; its fragments not being very durable makes loss of sequence in our records of history in pottery readily accounted for. This constant liability to breakage in pottery makes the work of the potter, to the wise, a vivid imagery of the fragility of man's existence on this earth.

There were two distinguishing periods of Man's early existence in Scotland, namely, the 'Stone Age' and the 'Bronze Age.'

STONE AGE

The earliest examples of pottery belong to this period. The clay employed was very coarse, and contained a large quantity of gritty quartz sand. The pots were not made on a 'thrower's' wheel. The most common forms were shaped on a foundation of wickerwork in the shape of a basket, round which clay was built. After this was accomplished the pot was placed in a rude kiln, when the wickerwork would catch fire and burn away, leaving only the clay jar. The shapes of the jars, in consequence, were usually cylindrical, rounded at the base, and without feet. Indeed it is generally believed that the shape of an egg suggested itself to the primitive potter as a suitable receptacle for food and drink. The ornamentation was usually crude, and made with incised lines on the pot, or with marks made with a leather thong twisted and tightly held round the plastic clay, and then suddenly released, leaving its impress on the pot. The finest examples in existence are those of cinerary urns, which were usually burnt hard, not merely baked in the sun, for they were often placed on the funeral pyre of the body whose ashes they were ultimately to contain.

BRONZE AGE

A remarkable improvement in the quality of pottery ware becomes apparent, for the jars were made *on the potter's wheel*. The clay was finer in texture and more carefully

prepared. The forms, also, had become more varied, and the urns for storing grain and water larger in size. Much greater care was taken in the decorations, which were more varied, and were frequently composed of spirals, etc. Many fine examples of leaves of plants, especially fronds of ferns, and also of shells pressed firmly in the clay pots are to be seen in our museums. The clay had to be in a stiff condition for this purpose, otherwise the vessel would have been squeezed out of shape. It was in what potters term, 'a leather-hard condition' of stiffness. The herring-bone pattern which belongs to this period is one of the most familiar of these designs.

There is, therefore, remarkably little difference in the essential system for dealing with plastic clay between that of the untutored savage and the methods adopted by the finest artists of to-day. For, in dealing with the plastic art, the clay has to be moulded by hand, which in turn is guided by the brain of the potter. This is as true of the sun-dried brick as of the finest porcelain vase, since the very same processes have to be observed in each case.

THE CLAY OF THE POTTER

We know some of the real things clay can do, that when softened by rain it forms a sticky nasty mud which adheres firmly to our clothes and shoes, and is very slippery to walk upon. In other words, clay becomes plastic when sufficient water is mixed with it, and when it is in this state it can be moulded by our hands, and will retain whatever shape we form it into.¹

No scientist has yet been able to describe definitely this plasticity in clay. It is impossible to produce any earthy substance by any known chemical process as plastic as the natural clay found in a pit.

The plasticity, due to peculiar natural causes, is something inherent, and forms to the physicist a great puzzle, the solution of which eludes his most diligent research.

"Hath not the potter power over the clay"—*Rom. ix. 21.*

The question, therefore, as to what potter's clay is, is the cause of much controversy and also gives rise to the vexed argument as to whether clay is a 'mineral substance' or not.

Descartes, the French scientist, says: "A mineral is a naturally formed inorganic substance which has a constant chemical composition and constant physical properties." A definition to which clay generally conforms.

Of all the materials used by the potter, clay is the most essential, and forms the basis of all his 'bodies.' The composition of these is given in the next chapter, "A Visit to a Pottery."

Clay enters into practically all the glazes and many of the colours that are used by the potter.

Its chemical and physical properties are of vital importance in the production of every species of pottery ware—no matter whether it be the coarsest ordinary domestic household articles of utility or the very finest chinaware ornaments of luxury.

Chemists tell us that clay is an irregular mixture of various minerals, and that it chiefly consists of silica and alumina, which potters claim must always be the essential constituents of any 'clay.'

The natural formation of clay is one of the 'wonder works' of nature.

Although clays vary greatly in their composition they are nothing more than mud derived, through countless Ages, by the rocky surfaces of mountains being constantly worn away, and flowing into the sea. There is thus delivered into the sea tons of clayey mud.

The primary origin of clay is found in the decomposition of the felspathic constituents of rocks of granite. These constituents are essentially the complex double silicates of alumina and the alkaline earths.

There are two theories explaining this decomposition. One is that it is due to atmospheric action from above, such as rain water saturated with carbon dioxide forming soluble carbonates with the separation of silica; at the

same time alumina and silica as a compound is attaching water to itself, and forms the substance known as 'Kaolinite.'

China clay, for example, is derived, says Dr. Boase in his *Geology of Cornwall*, from the decomposition of 'protogene'—a granite which contains talc as an ingredient, and is the most peculiarly liable of all granites to undergo extensive disintegration to what is called 'china clay' in Cornwall. The formation of this substance (china clay) is generally attributed to this decomposition. It must, however, be acknowledged that if such be its origin the elements have greatly transcended their usual operations.

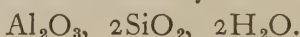
On the other hand there is a theory that the action of gases emanating from the interior of the earth cause this decomposition.

In the granite masses of Cornwall, that rise like islands in a sea of clay, some portions have their felspar so decomposed as to be converted into clay. Other portions are less decomposed, and are of somewhat different composition, and these supply 'Cornish stone.' These decomposed portions are always associated with compounds of fluorine. Many scientists therefore believe that the decomposition of the felspar has been effected by the gases of fluorine and other substances coming up from below, and not by carbon dioxide as carbonic acid and rain water acting from above. The natural clay-rock, being a decomposed granite, consists of Kaolin, crystals of quartz, flakes of mica, and undecomposed felspar. The bulk of china clay comes from such granite which has been decomposed *in situ*, because we can see in many cases its gradual passage from clay-rock (clarclazite) and large porphyritic crystals of felspar, as being changed into Kaolin without losing their form, which may explain the appearance of some of the natural deposits, especially of china clay. The latter theory more completely satisfies the explanation of how such clays are formed and deposited.¹

¹ Collins, *Geology of Cornwall*.

Probably both causes are constantly at work in producing clays, but there can, in any case, be no doubt as to the composition of clays. They are mixtures in varying proportions of 'clay substance,' quartz, felspar, and certain adventitious elements such as iron oxide, lime, organic matter, etc.

The technical formula for clay is :



CORNISH GRANITE

One of the best illustrations of the wonderful metamorphosis of rock into clay is this 'china stone,' as it is more familiarly termed, which forms a necessary part of the 'body' used by the potter. We will follow the process so that we may be more able to grasp the rather technical subject of how clays are formed.

'Cornish granite' or 'stone' corresponds to the substance mentioned in all books pertaining to Chinese pottery as 'Petuntse.' The term, however, is somewhat incorrectly applied, for in Chinese 'petuntse' actually means the stone ground down into an impalpable powder, dried and put up in small bricks suitable for sale and transport. This brick 'petuntse' was the condition in which it was used by the Chinese potter for making his mixings for the manufacture of porcelain. 'Stone' is a felspathic flux. It is a granite consisting chiefly of quartz, felspar associated with small parts of mica and often fluorspar. It is found in various degrees of decomposition. The felspar is geologically termed 'orthoclase,' while chemically it is called 'potash-felspar.' It is from this rock that china clay is chiefly derived.

An analysis of 'stone' may be given as :

SiO ₂ , Silica	-	-	-	-	63.60
Al ₂ O ₃ , Alumina	-	-	-	-	18.70
Potash, lime, iron, water, etc.	-	-	-	-	17.70
					<hr/>
					100.00

There are several qualities and colours ; some of it is 'hard purple,' which is the finest and most sought after quality on account of the high percentage of felspar it contains and for its whiter colour when burnt in the kiln. It is a better flux¹ than the 'buff' or yellow grade, which, although easier to grind, does not contain as much felspar, and therefore does not assist in binding the 'body' of the ware so firmly as the 'purple' variety.

China clay is the highest grade of clay used by the potter. Its purity, whiteness of colour, and the general quality of silky fineness commends it for many purposes other than that of pottery, such as paper-making, weighting, and finishing of textiles. Indeed, it is asserted more china clay is used for such purposes than in the making of pottery wares.

The clay received this peculiar title because it was originally used for producing china-ware. Very little of it ever came from China itself. The first china clays used in the English and Scottish potteries came from mines in Virginia, America.

Wedgwood imported some of this clay till Cookworthy, the Plymouth chemist, discovered in 1755, and patented again by him in 1768, the china clay deposits in Cornwall, from which place all such clays are now procured for the manufacture of china and white earthenware.

European and American potters employ this clay, and large quantities are shipped to many foreign potteries from Fowey yearly.

Alumina is the decisive and predominating element in china clay, varying in extent from 35 per cent. to over 50 per cent. The earliest attempts at producing aluminium by an electric furnace was from an aluminous china clay.² Bauxite has this property, but lacks the plasticity of clay, and is now generally used instead

¹ That is, a material which in combination with another makes a fusible compound.

² I was present as an assisting apprentice chemist in the production of one of the first ingots.

in the aluminium works for the manufacture of the metal.

In the country of China this clay is termed 'Kaolin,' derived from two words 'kao,' and 'lin,' a high hill or ridge. The word actually referred to the hill from which the Chinese potters obtained their clay for producing fine porcelain. The clay is white, and great care is employed by the Chinese in preparing it by a process of levigation, which allows the fine particles of clay to get rid of any micaceous sand, native rock, etc.¹

In Cornwall china clay is procured from what is locally termed 'growan,' which is more or less the decomposed Cornish granite. By a washing process also, the fine white clay is separated from the coarse particles of granite, mica, and felspar. The clay is run off in a thick creamy 'slip' condition on to large drying pans called 'dries,' till it is hard enough to break up into lumps for handling.

It is now ready for use by the potter.

It is again important to note that china clay is obtained from the original location of the granite masses in Cornwall, and thus forms a convenient example of how clay is formed. An average analysis of china clay is interesting and worth while examining :

Silica	-	-	-	-	-	-	46.40
Alumina	-	-	-	-	-	-	39.70
Iron, lime, water, etc.	-	-	-	-	-	-	13.90
							<hr/> 100.00

If this is compared with the analysis of Cornish stone already given some remarkable differences are at once apparent. The silica of the felspar in the granite has disappeared, and the whole of the potash has practically disappeared. If the potash had remained in the china clay it would have rendered the clay useless for the potter,

¹ South China has a wide distribution of 'original' granite rocks from which Kaolin is derived, and the consequent occurrence of large deposits of this clay.

as it would have formed a flux in the clay, and the article during the firing in the kiln might have melted, or at least warped so badly as to be useless.

The alumina has been increased 21.00, while the water, etc., makes up the loss of 13.90. Therefore, china clay may be not entirely decomposed granite as many maintain, but may also result from the decomposition of 'albite,' a white felspar, an ingredient of some granites in which soda replaces the ordinary potash usually found in spar.

All this interests us in Scotland, for we have an abundance of granite, and yet, strangely enough, we possess no fine white china clays such as I have been describing.

The reason is that our Scottish granites, according to Mr. Sorby, F.G.S., well known for his microscopical examination of these rocks, are ever so much harder than Cornish granite. He states that Highland granites indicate a pressure, when being consolidated, infinitely greater than in the case of the granites of Cornwall.

The Cornish granites belong to the 'secondary' formations, and indeed are newer even than the 'carboniferous.' They were in their primitive condition of igneous origin, and not of aqueous origin, and are of a much looser texture than that of our granites. This accounts for no 'growan' being formed in our Highlands, and consequently no fine china clays being extracted.¹

Highland granite and quartzite make excellent millstones for grinding flint and 'Cornish stone,' indeed, they are capable of grinding the latter into an impalpable powder in a few hours. These 'runners,' as they are termed, are in use in most potteries of England as well as in Scotland. 'Lagnaha' quartzite² is particularly favoured for millstones. According to Messrs. Lloyds' Proving House, Kentallen granite has a crushing stress of 6.05 tons per square inch, and the quartzite 6.78 tons per square inch.

¹ Prof. Haughton.

² From Ballachulish.

There are pockets of 'bauxite,' an aluminous mineral, in North Ayrshire, but as this, not being a plastic mineral, is not used by potters I have passed it over.

BALL CLAYS

Ball clays are more generally used in potteries for stoneware, and clay tobacco-pipe manufacturers use them as well as whiteware factories.

They are found chiefly in Devonshire and Dorsetshire, and are tougher and more plastic than china clays; the reason being that they generally arise from a natural process of levigation. Mountain torrents and streams are all capable of wearing down masses of rock, the debris of which they carry away in suspension.¹ Eventually the force of the current of water so diminishes that sediment begins to settle out, first the coarser, sandy particles. The deposit last laid down, being exceedingly fine and argillaceous, that is pure clay, constitutes ball clay, or other variety of a siliceous clay according to the amount and character of the associated materials. We have this clearly illustrated in such clay beds as that of Portobello and Glasgow. In the latter the sand has been deposited at Tollcross and the clay in Calton, and many similar beds of sedimentary clays clearly separated from the coarser sand which lies not very far away, are to be found in Scotland.

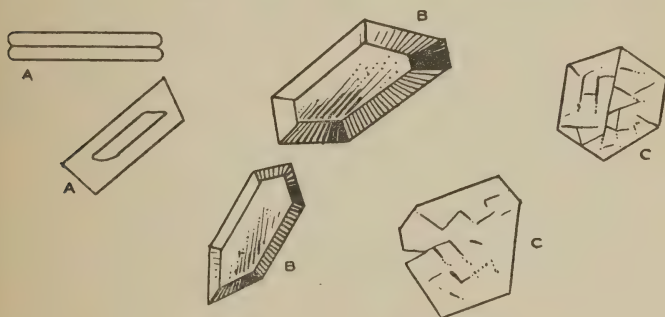
If we examine the magnified particles of clay illustrated here we will first of all notice that clay is crystalline in form, even when all the quartz and undecomposed rock have been separated from it. These crystals are pyramidal in form and hexagonal in shape; we will also notice that the crystals show cleavage planes, and are actually crystal plates.

This is an important fact, as these plates explain more clearly the plastic nature of clays, no matter their colour.

¹ An American geologist recently stated that 12 inches of the earth's surface is thus washed away in 8,600 years.

A very simple experiment may be made to demonstrate this. If we take two used glass negatives with no photo films on them, and put a speck of clean water between them, we will discover how remarkably easy it is, with the thumb and forefinger, to make the plates slide one over the other. But let this speck of water evaporate without our touching the plates in any way, and we will be surprised how firmly the two plates, now that they are dry, adhere to one another, and can only be separated by a sharp knock on their edges.

The Israelites complained to their masters the Egyptians that they could not make bricks without straw, a



CRYSTALS OF CLAY SUBSTANCE.

a, a. Show edges of crystals and the cleavage planes.

b, b. Show pyramidal crystals.

c, c. Show hexagonal shape of crystal plates.

saying which in common use means it is impossible to do certain things without the materials. Why?—for the very same reason that stuck the glass negatives so firmly together. The very rapid drying of plastic bricks in the hot Egyptian sun caused the outer surface to dry, and consequently contract as the clay displaced the water driven off. The heat-generated steam in the heart of the brick could not now find a vent by which to escape, and in consequence had to force a way out through the hardened outer skin, cracking the brick asunder, thus spoiling all their handiwork. Straw used in the eastern

bricks is as fine as chaff—and quickly rots away by fermentation in the broiling sun, leaving in its place the requisite air vent holes through which the hot vapours in the heart of the clay bricks or tiles may escape.

Brickmakers in our country add sand to their clays, and potters put ground flint or silica into their 'body,' very much for the same reason, to open or free the 'body,' and also to make their clay articles 'stand up' to a good hard baking in the kilns or ovens.

In examining a piece of slate we observe very plainly the concoidal plate formation. *Slate* is a form of clay that has been deposited millions of years ago, and has been subjected to great heat as well as pressure. It is, therefore, no longer able to absorb water and become plastic as common clays.

Fireclays are another excellent example of clay formation. As we handle them we can detect the colloidal and plate formation, and also the greasy 'fat' nature of the richer 'clay substance.'

Oil shales are also composed of clay into which oil has been sucked up from the interior of the earth and retained till mined and put into a retort so that the oil may be driven off.

Chemical analysis cannot predict with certainty the physical properties of clays, and gives only the percentages of silica, alumina, lime, etc., but nothing of the manner or condition in which they may exist. Clay is refractory, and so also is lime; but clay in the presence of lime becomes a flux, and lime in the presence of clay a flux. Each, therefore, fluxes the other, because the silica of clay forms silicic acid, and lime, being an alkali, forms a flux.

All the colours in clays are produced by the combinations of iron. It is known that oxide of iron, which in the majority of cases must be considered the only colouring constituent, may produce variations from white, through yellow, orange, red, blue, brown up to black, according to its state of division; it will always assume

a darker colour when the clay is exposed to a high temperature.

Silica in the shape of calcined flints is the decisive factor in the refractory power of clays, and lime is deleterious to its use.

Clays may be divided into four groups:¹

1. Clays high in alumina and low in iron. These turn white or to a scarcely noticeable colour.

2. Clays high in alumina containing moderate amounts of iron; their colour ranges from pale yellow to buff.

3. Clays low in alumina and high in iron, the brick clays burning red.

4. Clays low in alumina and high in iron and lime, the brick clays burning yellow or clay marl (like London brick clays).

While describing various factories in the succeeding historical chapters frequent reference is made to different classes of ware. To prevent wearisome repetition it is better we should know something about these now.

Delft ware was made from calcareous clays, *i.e.* clay of which lime is an essential constituent. After this pottery ware came from being fired in the 'biscuit'² kiln (the colour of a biscuit, hence the term) it received a coating of tin enamel composed of 3 to 3½ parts of sand to 1 of kelp (ashes of burnt seaweed which contain soda, potash, and magnesia salts); this mixture was fused primarily into a glass or 'fritt' furnace, after which it was ground very finely in water and a sufficient percentage of oxide of tin added to it to produce a soft white opaque enamel. This enamel was expensive, and frequently we see it applied only to the face of plates, while the back is smeared with a cheaper transparent litharge glaze.

The charm in decoration of old delft ware lay in the delicious softness of the blue colour in the painted surface. This quality was accomplished by applying the cobalt blue colour *on the top* of the glaze *before* it was

¹ Seger's writings, p. 109.

² This word 'biscuit' was first used by the Rouen potters.

fused in the 'glost' kiln, and while still in the powder condition. During the firing process the blue, being on the top of the glaze, gradually sank into the molten mass till it finally reached the ware, and in so doing lost all hardness of line, giving to the design an element of richness which the artist was unable to obtain by any other method.

We now paint such blue patterns on the 'biscuit' ware, and *then* cover them with glaze, which makes all the difference.

Egyptian black or *basalt* ware is so hard and dense as to be capable of receiving a high polish on the wheel of a lapidary. It was sometimes made of 75 per cent. blue clay, 11 per cent. calcined ochre, and 14 per cent. oxide of manganese. This latter mineral was the decisive factor in obtaining the black colour of the 'body.'

Fawn or *chalcedony* was a favourite tint of clay for figure work, composed of 90 per cent. yellow clay, 6 per cent. china clay, and 4 per cent. calcined flints.

Bone or *phosphatic china* depends on the percentage of bone-ash used in the mixture of the 'body' for its translucency, which is its distinctive feature. An early account gives 50 per cent. bone ash, 23 per cent. Cornish stone, 23 per cent. china clay, 4 per cent. flint. It becomes translucent at an approximate temperature of 1250° C.

When Verreville made china they procured the necessary bones from neighbouring butchers, and during the process of boiling and calcining them such a stench resulted as to create a nauseous nuisance to the whole neighbourhood! Old potters told me the smell was 'somethin' awfu'.' 'Bone ash' has replaced this, and is now obtained from the large deposits of phosphate of lime (bones) discovered many years ago in Rio Grande, Brazil.

Rockingham glaze, now so generally used on common home teapots, was at one time used on chinaware. Manganese binoxide is the colouring agent of which we have this example of bygone days:



STATUETTE 'DIANA' (Parian Ware).
J. & M. P. Bell, Glasgow Pottery, 1850-1860.
Lent by Joseph Turner, Esq.

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Fifty per cent. litharge, 30 per cent. Cornish stone, 20 per cent. flint. Add 1 of manganese to every 8 of the foregoing.

Jasper, one of the triumphs of Josiah Wedgwood, occupied his attention for a long time before he achieved the success he desired, and it was not till late in 1776 that this lovely ware was produced in quantity. I cannot give the exact recipe, but this analysis gives us some idea of its component parts :

Fifty per cent. barytes, 15 per cent. Cornish stone, 10 per cent. Cornish china clay, 25 per cent. ball clay. $3\frac{1}{2}$ drachms of blue calx was added to arrive at the blue tint of the ware.

'Mocha' dip for 'green' or unfired 'bodies' was one of the earliest forms of decorating mugs and jugs. Two parts manganese, 2 iron scales from a smiddy, and 2 parts blue clay, sounds a very simple and homely composition for this dark brown colour.

Puce (*mulberry*) or *aubergene* was a favourite underglaze colour among old potters, but somewhat unreliable in its results ; it was made with 8 parts oxide of tin, 8 of cobalt zaffer, 2 of borax, 4 of Cornish stone, and 10 of manganese binoxide.

'*Parian*' ware was vitrified in the ordinary 'biscuit' kiln, and every maker had a different composition, either to suit the article he was producing or the temperature to which he fired his kiln. Some recipes are 4 of Cornish stone, 2 of ball clay, and 1 of flint. Its great fault was the extraordinary shrinkage of the articles during the 'biscuit' firing, amounting to about 25 per cent.

There is a good deal of nonsense talked by collectors about the 'patina' of the surface of the glaze on old china and earthenwares. In my long experience, and I have tried it on 'glost firemen' who have been among various glazed ware all their lives, those of us who are practical potters have the greatest difficulty in determining by the appearance of the glaze whether a piece is old or not on the same species of ware. Strange to admit, connoisseurs

and others say they have no such difficulty, although they have no experience of making or firing glaze. The 'touch' of glaze is often delusive. I have frequently made a matching of old china so like the originals that it almost amounted to guesswork to assert which was old and which was new.

CHAPTER III

A VISIT TO A POTTERY

"Arise and go to the potter's house, and there I will cause you to hear my words."

Then I went down to the potter's house, and, behold, he wrought a work on the wheels.

And the vessel that he made of clay was marred in the hand of the potter: so he made it again another vessel, as seemed good to the potter to make it.

Then the word of the Lord came to me saying,

"O, house of Israel, cannot I do with you as this potter?" saith the Lord. "Behold as the clay is in the potter's hand, so are ye in my hand, O house of Israel."

Jeremiah, chap. xviii. v. 2 to 6.

THE above, written many hundreds of years before our Lord, is a vivid picture of a simple and direct story, so that the lesson is obvious. A pottery at work is always of interest even to the uninitiated in this art. As we stand watching the clay being fashioned into different shapes, and see the evolution of a vase under the skilled hands of some worker, and think how little the process has changed since the time of Jeremiah, we cannot help feeling a deep respect for a craft that has survived the ages, and continues to arouse interest and admiration to this day. The clay is still 'thrown' on the wheel, and the potter exercises the same power to make or mar a vessel that he possessed in the days of his forefathers, which is so often and so dramatically described throughout the Bible.

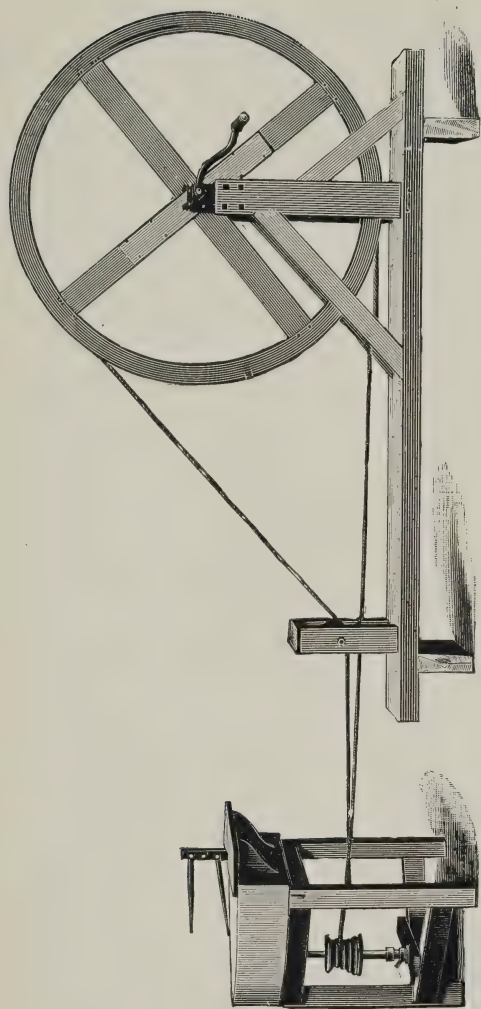
I only intend giving here a short account of the methods employed in preparing clay for use in a whiteware pottery,

a slight knowledge of which will make for a clearer understanding of the succeeding historical chapters, and in doing so I will avoid technicalities as much as possible.

I have explained the peculiar nature of the potter's materials as a whole, and pointed out the difficulties that must be overcome before even the simplest cup can be made. We will now examine these materials more specifically as they are employed in the production of the various wares, and at the same time we will note the preparation necessary in each case.

The manufacture of whiteware differs from the manufacture of all the commoner forms of pottery in that it employs carefully balanced ingredients, which have to pass through many preparatory steps requiring both care and attention, whereas the other wares are made from clays practically in the condition in which they are dug out of the earth, except in a very few cases where a simple preparatory process is necessary. The materials used in the making of white earthenware are clays procured in Dorsetshire and Devonshire, and are known to the potter as 'blue' and 'black' ball clays. These terms are supposed to indicate the natural appearance of the clays as they are dug out of the pit; not very accurately, however, as there is only a bare suggestion of blue or black in their colour. When they are burned they are both fairly white, and may be called cream-coloured, and are to the potter stronger and more plastic than china clays. There is also the clay found in Cornwall, termed *china clay*, which, both in its natural state and after it is burned, is much whiter than the foregoing clays, but not so tough.

From Cornwall comes the felspathic rock known as *Cornish stone*. It is brought to Scotland in lumps, exactly as it is quarried from the hillside, and is ground in water at the potteries by large chert millstones revolving in large circular iron pans about twelve feet in diameter, filled with water. These grinding stones come chiefly



A PRIMITIVE POTTER'S (THROWER'S) WHEEL.
Hand-power and rope driven.

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from Ballachulish in the Highlands, and each stone usually weighs 15 to 18 cwts.

Another method of grinding is by means of large flint pebbles in revolving drums. Another, and the final ingredient in the making of earthenware, is flint in the form of small boulders. Those known as *chalk flints* were got out of the chalk, chiefly at Gravesend, and were brought here by sea (called 'sea-flints' in the early days). Latterly potters have preferred what are known as 'boulders,' or French flints, which came originally from the chalk cliffs of England; but they have been rolled about in the bottom of the English Channel for a long period of time until all the chalk has been removed, and have got the rounded smooth surface of a pebble. They are thrown up on the shores of France for many miles on either side of Dieppe, and large numbers of women are constantly employed there gathering these 'galets de mer,' in baskets slung on their backs. Large quantities are brought to our country every month as ballast in returning coal boats. These black flints are first calcined in a flint kiln to render them more brittle and friable, and consequently more easily ground. They are put in layers of ten inches, with layers of coal dross between each alternately, in the special kiln used for the purpose. The heat drives off the colouring matter and the combined water, and leaves the flints a very remarkable pure white colour. They are afterwards ground in the same manner as the 'Cornwall stone' already described.

Flints were first introduced into the manufacture of pottery in 1720. They are used chiefly on account of the purity of their colour, being whiter than any of the other ingredients. From its effective hardness flint may be called the 'bones,' while clay forms the 'flesh of the body' of all white earthenware. After being ground in a tub, and the properly ground material run off, a process of washing (levigation) is gone through so that the rougher particles, which settle first at the bottom of the 'wash tub,' may be returned to the pans for further grinding,

till all may pass through a sieve (120 meshes to the inch).

It is surprising how many materials other than clay go to the making of fine earthenware. They are mixed in the varying proportions which each manufacturer considers best suited to the ware he produces. In commoner qualities the 'blue' and 'black' clays predominate, the finer qualities having more of the china clays, 'stone' and flint. To make certain they are thoroughly mixed they are put into a mixing tub called a 'plunger,' into which water is introduced, and after being churned up for several hours the mixture becomes in appearance like a thick cream, when it is called 'slip.' At this stage a small and varying quantity of ground prepared oxide of cobalt is added, the object being to counteract the yellowish tint of any free iron oxide that may have remained in the clays after passing through the electro-magnets.

It gives also a slightly bluish tinge to the ware, and must be most thoroughly mixed through the clays. Some potters use this very sparingly. On being run out of the mixing tub this mixture is passed through fine brass sieves, and still finer silk lawns, in order to catch any sand or grit that may be still in the clay. The mixture is then forced by hydraulic pumps into filter presses, lined with strong cloth, which retains the clayey mixture and allows the excess water to flow away. The clay, or 'body' as it is called, comes out of these presses in sheets about an inch thick. Afterwards it is passed through a pug-mill, an iron cylinder about five feet long, having in its centre a shaft with knives attached corkscrew fashion, which force the clay in one direction and finally out through an aperture at the other end. The object of this is to render the clay thoroughly solid and of the same consistency throughout, otherwise objects made from badly 'pugged' clay would warp in the drying process after the ware was made.

When machinery was being successfully applied to the textile industry, one of the great inventors of the time, Richard Arkwright, gave his master-mind to see what he

could do with clay, and he made some clever machines to receive clay at one end, intending to deliver the finished articles at the other. I examined such a machine many years ago in the mould loft of an old Yorkshire pottery. Probably, if the great inventor had known something more of the nature of clay plasticity he might have achieved success. The chief obstacle in the employment of machinery in pottery manufacture is the peculiar plastic property of clay, and many potters still maintain that hand-made pottery is the best and soundest article, and are of the opinion that machinery has its limitations. But in spite of all these remarks a great change has come over the scene, and there has been quite a revolution in the use of machinery in the last fifty years, in which Glasgow played an important part. English potters came to Porteous of Paisley for their friction-plate 'jiggers.'

One of the earliest improvements was the introduction of the *pug-mill*. Previous to this the potter took a lump of clay (which, by the way, at that time had the moisture driven out of it by heat, in long shallow drying pans with flues underneath, a process which was superseded by the clay press already mentioned), and with a brass wire cut it in halves. Then he lifted the upper half and dashed it on the under portion, and repeated the process until he 'wedged' the clay quite solid and of equal consistency throughout. The pug-mill does this all at once, and more efficiently, and relieves the potter of what was not only a slow but laborious process. The potter's wheel was then driven by hand, as were the discs on which plates, bowls and other round articles were formed; all these are now made by the application of machinery instead of by the potter's wheel that has stood so long before the world as almost part of the potter himself. It was pictured more than fifty centuries ago in the tombs of the Pharaohs, and has been used nearly as long by the potter of the East. But it is rapidly disappearing, and a beautiful art is becoming nearly extinct. Many of the largest potteries have entirely dispensed with it, and are making

all the articles, previously produced on the wheel, by various types of machinery.

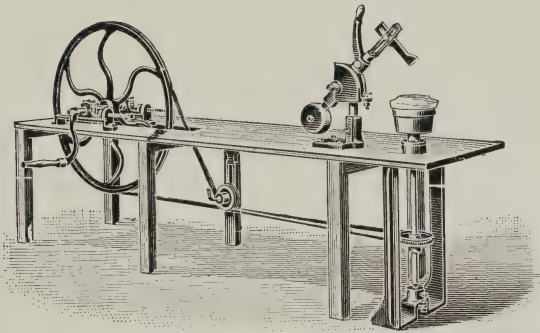
Throwing might be said to be the first manipulation of the clay after it has been prepared as a 'body,' and after it has gone through the process of 'slip-making.' Of the potter's wheel it has been said, "the bending figure of the careful workman over his wheel, the wheelturner's outstretched arms, and the attentive 'taker-off,' made a picture that the world has looked upon with interest, not unmixed with reverence." It is still with us here and there, but the desecrating hand of the engineer has been upon it, and the whirr of the wheels has replaced the comparative quiet of the old potter's 'thrower,' as the worker at the wheel is called.

We are somewhat brutal with our clay, as Omar Khayyam noticed when he wrote the following lines :

"For I remember stopping by the way
To watch a Potter thumping his wet Clay,
And with its all obliterated Tongue,
It murmured—'Gently, Brother, gently, pray.'"

Fitted usually in the corner of a room there is a box with a curved front about four feet square, in which is fixed the thrower's wheel, consisting of a spindle, or axis, which turns vertically on a step, and is steadied and supported by a 'collar.' On the upper end is fastened firmly the head, a circular disc of hardwood, which during the operation moves horizontally. At one time on the spindle, near the bottom, was a pulley with grooves of varied diameters for easing or increasing the force required for different vessels. In this pulley worked a thick cord, which passed under a pulley-guide to a wheel about four yards distant, placed near the wall. This wheel was approximately six feet in diameter, and a woman drove it round by a handle, keeping her eyes constantly fixed on the thrower's operations, increasing or decreasing the power and speed as was necessary to the successful 'throwing' of the pot.

PLATE VI



HAND JIGGER WITH LEVER 'JOLLEY.'

Used in potteries where there is no steam or other power available. A great advance from the old thrower's wheel in that a plaster mould forming the outside of the article is now used while the rib fastened to the jolley forms the inside of the pot.

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At a strong bench beside the wheel is a 'baller,' usually a girl, with a large lump of prepared clay, cutting it with a brass wire, and slapping the pieces down on the mass, and repeating this laborious operation until the intersected part presents a smooth homogeneous surface without any appearance of air bubbles; because, were any of these left in it, their expansion during the firing of the kilns would burst and spoil the article. The 'baller' then cuts off a lump with the thin brass wire and weighs it, when the vessel requires to be of a definite size; next she squeezes and knocks it well together, and forms it into a ball, which she hands to the thrower as he requires a fresh supply.

The *thrower* sits on a low seat in the corner of the box frame, with his legs one on either side of the disc or wheel head, but outside the 'slorrie-box,' with his arms resting on his knees, thus keeping his arms steady while they shape the ball of clay into the desired form. On the side of the frame he places a peg, with gauge sticks, to indicate the height and expansion of the vessels he must throw. The wheel being now in motion, he takes a ball of clay and casts it very forcibly on the disc or 'head,' and, to make still more sure of no air bubbles, he forms it several times up and down into a cylindrical or conical figure; then inserting the left hand or finger, according to the size of the article, and with the other or right hand on the outside of the vessel, he gives it the rude shape of the vessel outside, and with a rib or pattern (formed of thin slate) he smoothly finishes the inside of the pot, and then with a brass wire cuts it loose from the wheel. The 'baller' now hands him another ball of clay, and dexterously lifts the pot off the disc, placing it on a smooth and perfectly flat wooden board, on which it remains until it is sufficiently dry to bear the manipulations of 'turning' and 'handling.' Manual driven wheels have now given place to steam power.

TURNED WARE

The turner's lathe resembles that employed by mechanics, only the spindle is longer, and some of them have a collar, movable by a catch, for the particular operation once called 'engine-turning.' On the end of the spindle, outside the head-stock, is a screw for the several 'chucks' required by vessels of different sizes. There is a pulley with three grooves of various sizes on the spindle, on which is the cord, which is passed round the driving wheel, which in turn is fixed on a crankshaft. Connected with this crank is a treadle; and beside the frame which holds the spindle stands the 'treader,' usually a young woman, who, by a motion of one foot, keeps up the velocity necessary, and at the same time performs some finishing touches and sponging to the turned articles, without the turner's attention being distracted from the article in front of him.

Near the 'treader' is a yellow pine board, probably the same board that was beside the 'thrower.' On it are the pots to be turned, which she hands up one by one to the 'turner' as he requires them. Standing in front of his 'chuck,' the turner fixes his pot on it by a slight pressure with his tool, as the spindle has a reverse motion; then, the forward motion being communicated, with a tool of soft iron, properly sharpened by filing, he takes off the superfluous quantity of clay. The 'treader' now catches hold of the cord and gives the spindle a reverse motion, during which the turner lays a broad polishing tool on the article which gives to the outside a certain polish or finish. After which he applies a sharp tool to cut it loose, and then he places it on another board in front of him for the 'handler' to stick his handle on, or he leaves it to dry, ready to be fired in the biscuit kiln. The days of the 'treader' have passed, and the turning lathe is driven by steam power and belting, similar to any other power lathe.

MOCHA TORTOISE-SHELL, AND DIPPED OR
DIPT WARES

This form of decoration was applied to the common drinking-cups, bowls, and mugs of a hundred years ago. It consisted in making the outer surface of the bowls or cups, brown, green, or yellow, with ornamental rings round them, and was done in the following manner :

Having rendered the exterior of the article smooth, but not polished, and of the desired shape, the turner immersed it in a proper mixture of 'slip' of the required colour, or applied the fluid by a sponge, and placed it to dry while he proceeded with others. Afterwards it was fitted on a 'chuck,' and the parts which were to appear white under the glaze were tooled or turned out ; while other articles were decorated by a mixture of various colours and water applied through a feather quill from a globular vessel, into which the turner blew air to force the fluid clay 'slip' out on to the article as it revolved slowly on the lathe.

Another decoration was arrived at by dabbing the ware with a naturally rough sponge filled with coloured 'slip.'

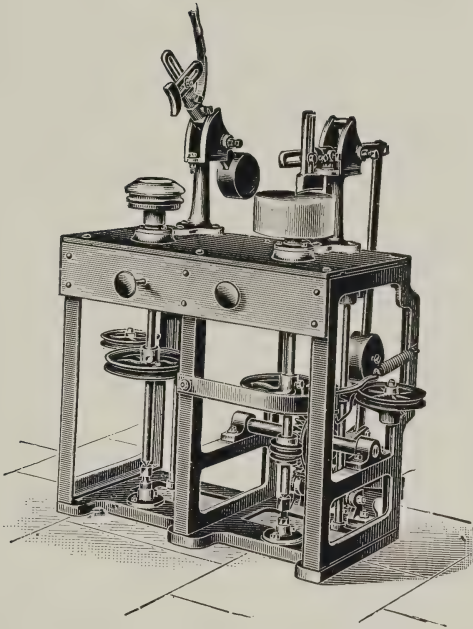
Mocha ware has a style all its own, and is probably the most mysterious and extraordinary of all the old-fashioned schemes for decorating the pottery used by the country people of a generation or more ago. On dark brown Mocha colour a drop is let fall of a saturated infusion of tobacco, turpentine, and acid, which ramifies it into the resemblance of trees, shrubs, etc., when it is applied to the ware in the clay or 'green' condition.

Nearly all the operations in a pottery are on a piece-work basis, and a peculiar survival of old times is the amount of ware that goes to make the potter's dozen. We have heard of a baker's dozen, but the potter's is a peculiar and varying quantity. It is determined by the amount of space occupied in a common height 'sagger,' such as 12 full-sized dinner plates, 36 cups or saucers,

24 large jugs, 3 basins or 6 ewers ; but these vary according to size and capacity, such as jelly cans, from 36 to the dozen to as few as 6, which latter holds about 2 lbs. of preserves.

While machinery has superseded a great deal of hand-work there are still many articles that can only be made by hand. Whatever is not round (and even then if the form is not comparatively simple) is made by the individual craftsman, in which case he is aided by moulds made of plaster-of-Paris, which absorb part of the moisture in the clay, and thus, as the clay shrinks in drying, the mould parts company easily from the clay-formed article. In this department considerable skill is required, and the intelligent workman can leave on his work the impress of his individuality. The workman, by the assistance of these moulds, is able to produce his work in quantity, without carefulness and finish ; but in quality and even in the quantity produced, the interested potter, from his closer inspection, can usually excel those who in their work make their standard simply what will pass.

The potters who make these articles are called ' hollow-ware pressers '—for example, in making a soup tureen the working potter beats out a piece of clay on a plaster block with a plaster mallet, called a ' batter,' to the thickness required for one of the sides (this cake of clay is called a ' bat '). He fits this into a mould of one side, then the same process is gone through for the other side of the tureen, and also for the bottom of the foot. These three moulds with the clay in them are then joined together by a belt of leather, and are thus held in position. At the joinings the potter neatly puts small rolls (wads) of clay, and with his hands works these into the joints and seams of the pieces, and thus makes the body of the tureen. He uses a fine sponge to smooth the joinings and to make the whole perfectly solid. He then deals with the cover, handles, etc., in similar fashion. The moulds are then passed through a hot chamber, and as moisture leaves the clay it contracts, loosening its hold on the



POWER DRIVEN BATTING MACHINE, JIGGER AND
JOLLEY COMBINED.

For making plates and saucers.

In the hands of a good potter about 300 saucers
or 150 plates can be produced per hour.

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mould ; when it is taken out, and after being 'fettled' and trimmed, and sponged off, it is ready for the process of burning. In the making of articles such as plates, etc., the mould is in one piece and forms the face of the plate. A tool of iron called a 'rib' has the form of the back of the plate, and, while the mould revolves on a disc wheel, the tool, which is attached to a lever, is brought down on the bat of clay placed on the mould, and (at the same time) forms the foot, after which the plate is made. The cake of clay to be put on this mould is prepared on another revolving disc, called a *batting machine* ; the potter puts on it the requisite quantity of clay, and while he is making a plate a lever comes down automatically and presses this clay 'bat' to the required size and thickness. When finished, the mould is put into a drying stove where the moisture is withdrawn from the clay, which shrinks and parts easily from the mould.

This process of making plates, or such flat ware, is called *jiggering*, and that of making cups and bowls *jolleying*, and is done by what are known in a pottery as 'jolley girls' (these pottery workers do not, I may add, belie their name). The making of a cup is somewhat similar to that of the plate in that it requires a mould ; the chief difference being the exact shape—only it is a little larger to allow for the shrinkage of the clay inside the mould. A piece of clay is put inside the mould, and the iron tool rib is brought down *inside* while the mould revolves to shape the clay to the side of the mould. When finished, the mould with the clay cup inside is put in the drying 'dobbin' (a revolving stove), and when 'leather-hard' it shrinks and drops easily out of the mould. The handle is made in another mould, and when it is dry enough to lift it is stuck firmly to the cup after it has been finished by means of ball clay 'slip.'

In 1845-6 a great fear possessed the potters as to the introduction of machinery. The 'jolley' for cupmaking was nick-named 'the Scourge,' and so determined was the resistance that such appliances were delayed almost

twenty years. The potter lost a great deal through the delay, for machinery produced the ware more economically and cheaper, demand doubled, and employment increased.

Great progress has latterly been made in a system called *casting*. This system is not new, it has been employed, especially in the manufacture of china-ware, for fully a hundred years. But the following discovery made not long ago gave *casting* a fresh lease of life, especially in earthenware manufacture and in the making of large articles, such as lavatory basins, crucibles, etc.

The clay for this process is in a liquid slip state, and contains as much actual clay as possible, which must not be too thick to run into the moulds. The plaster moulds being porous suck up the moisture in the slip, and potters by this method are able to make clay vessels as thin as a visiting card. The clay 'slip' works better if it is thin for this purpose, and it is rendered so by the action of an electrolyte, containing silicate of soda, upon the thick 'slip,' which transforms it immediately, making it thin, and yet retaining a very large percentage of actual clay.

Another important discovery of recent date was the purification of fireclays by the 'electro-osmic process.' Clay can be deposited electrically in a similar manner to copper and silver. The water splits up the electrolyte into electrified particles, and every little particle of clay takes upon its surface one or more charged particles—they run away from one pole and collect at another pole. The experiments have proved most interesting, and their ultimate success only requires experience and time to make many poor clays found in Scotland, which are at present unsaleable, into good and valuable potting materials.

After the potter has completed his part the important process of baking in the kilns takes place. The kilns in which the ware is burned are not, after all, so very different from those in use during the last hundred years. They are in outward appearance like huge ginger-beer bottles, or like familiar straw beehives. A great amount of atten-

tion is being devoted by potters to this important question of firing, since coal has become so dear. Many improvements are being carried out. Kilns have gradually increased in size from the old style, both in width and height. The fireplaces, of which there are about ten to each kiln, have been altered and improved, with the result that much less fuel is required, the heat being thoroughly utilized before leaving the kiln.

The ware is twice under fire ; first it goes into what are termed 'biscuit kilns,' and after it passes through these kilns it is called 'biscuit-ware,' which is dull in appearance and has not got the familiar glossy appearance. It undergoes the greatest heat here, and must be thoroughly baked, or hardened, so that it rings like a bell. It may be remarked that at no previous time was ware so thoroughly baked as it is now. The kilns are continuously under fire from fifty to sixty or more hours, and the fireman is a skilled man, as it is of the utmost importance that the ware should be solidly baked, not having merely a hard skin but be equally hard right to the very centre. Before putting any kind of ware into either biscuit or glost kilns (the latter will be referred to later) it is placed in *saggers*.¹ These are made in fireclay and are usually oval in form (like a band-box), about twenty inches long by fifteen inches broad, and of height varying from about six to sixteen inches. They are built up on top of each other in bungs inside the kiln, from the sides to the centre, and from the floor to the crown, leaving enough spaces between for the flames to penetrate through the kiln. When the kiln is filled the door is sealed up with firebrick and clay. The flames play round the saggers which protect the ware from the direct action of the heat. Indeed, in the biscuit the 'saggers' next the hottest places have a roll of fire-clay between them to keep out any dust from the fires. Inside the 'saggers' sand is used, the ware rests upon it, and, being a yielding

¹ The origin of this word is obscure : it is believed to be a corruption of 'safeguard.'

body, it permits of the ware contracting regularly all over as the heat is operating upon it.

In ordinary wares most of the decorations are put on by hand while the ware is in the biscuit state. Although it is hard it yet possesses a certain porosity which enables it to receive and hold colours.

There are three methods of applying decoration :

(A) The application of the design or decoration before the article is glazed (underglaze).

(B) The whole of the design and colour above the glaze (overglaze or enamel).

(C) A combination of the first two mentioned—that is to say, a part of the decoration under the glaze and the remainder on the top. In early times decoration of pottery was all hand-painted. Copper plates, having the patterns engraved on them, are now the principal mediums of decoration. The pattern is printed from the copper plate on to a specially prepared kind of tissue paper, which is then placed on the ware, and by means of flannel rubbers, or brushes, the colour is rubbed on to the ware; the paper, being prepared by soluble size, parts easily from the ware whenever it is put into the tub of water, leaving a clear impression of the print on the article. To enable the engraving to carry sufficient quantity of colour it is kept on a steam stove. In the olden days only fire stoves were used. The system of taking individual impressions of a flat plate of copper is rapidly disappearing in favour of the printing machine, thus doing away with any art there was in taking off the beautiful clear prints that one sees on old printed ware, and which constitute its charm for the connoisseur.

The ware, after being printed, has to pass through a small kiln called a muffle, in order to burn the oil off that is used with the colour in printing, otherwise it would not receive the glaze. Simple patterns are also painted on with a camel's hair brush. The term 'Persian' is much used in connection with these painted patterns, but they are not at all after any design seen on Persian ware, beyond



WARWICK VASE. Parian Ware.

Bell's Glasgow Pottery, 1850.

The Corporation of Glasgow, Kelvingrove Museum.

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the fact that the principal colours used are red, blue, and green.

An interesting process of decoration is also done on the biscuit ware by means of portions cut out of the smooth root of a sponge, which are dipped in moistened colour and then brought into contact with the ware, leaving a stamp of the pattern, and this is repeated probably a dozen times with one supply of colour in the sponge. Hence it is by far the most rapid and cheapest method, and yet it is very effective in its colouring of 'cottage pottery.' This style of decoration, many maintain, had its origin in Scottish potteries, and certainly it is more widely practised and sold in Scotland than anywhere else.

It is usually forceful in design, and executed on plain but good forms evidently destined for the rank and file of working folks.

The ware having been decorated is then ready for glazing, that is, receiving the glossy surface, which is really a thin film of a special kind of glass adapted for the purpose, varying to some extent according to the composition of the 'body.' Borax is the principal ingredient. It is fused in a special furnace called a *fritt kiln*, with requisite quantities of ground Cornish stone, ground flint, clay and whiting. When this mixture is melted it is run off in a liquid, molten state and cooled, the fused material is then called 'fritt.' The lead used in glaze is also fused, forming lead-silicate, being first mixed with a certain proportion of flint and stone so as to render the glaze free from soluble lead and quite innocuous to the 'dipper,' as the operative is called who glazes the ware. The 'fritt' is now ground in large pans or cylinders, similar to those used for grinding stone or flint, for it takes several days to reduce it to a sufficient state of fineness for use. Quantities of flint and china stone and a percentage of lead 'fritt' are added to the borax 'fritt' in these grinding pans. When all is run off the pans it passes through very fine silk lawns, and then runs into cisterns where it is allowed to mature and the mixture becomes

ready for use, when the ware is dipped into it in special tubs and absorbs a sufficient coating. The appearance of the raw glaze is like a rich cream in colour and texture. On the decorated ware being taken at once out of the glaze after being dipped, it is found to be covered with a fine white opaque coating, which when fused in the 'glost' kiln gives it its glossy surface. The process of burning in those kilns differs from that of the biscuit kilns in that it gathers heat slowly to get the thorough baking, whereas in the 'glost' kilns, the heat, being required solely to fuse the glaze, may be as rapid as possible; always provided that the fireman so regulates the heat that it permeates the kiln evenly throughout.

The 'saggers' in the 'glost' kiln, to secure protection to the dipped ware inside them, have placed on their upper rim a thin roll of soft fireclay called a 'wad,' so that one 'sagger' placed over another presses on this 'wad' of clay and hermetically seals up the ware from any direct action of the fires. The inside of the 'sagger' used in the 'glost' kiln is washed with a glaze to prevent sucking away any of the glaze from the articles placed in it. In the 'glost' kiln each piece has to be kept separate, otherwise, as the glaze is melted, the ware in the 'sagger' would become stuck together and come out a solid mass. Various ingenious methods are used to prevent this, and, at the same time, to have the 'saggers' properly filled. A number of sharp-pointed articles enables this to be fairly well accomplished. These articles are termed stilts, spurs, thimbles, devils, dumps, etc. With the ware steadied on these points, it will be seen that it is important that the 'bungs' of 'saggers' are securely built up, and are properly 'scutched' by pieces of brick placed between each. These 'pin' or 'stilt' marks are easily observed on the backs of plates and flat ware.

From the moment the brick-built door of the kiln is built up, and the fires are kindled, the progress of the heat must be continuous. Serious would be the consequences if a kiln were allowed to fall in temperature. Too great

heat or the reverse produces damaged ware. The fireman must have a thorough knowledge not only of the heat but how it is operating in all quarters of the kiln. At various times efforts have been made to use gas for firing the kilns. When Britannia pottery was built about 1856 some of the kilns were built to fire with gas, and on a continuous system, in which Siemens, the great German engineer, was associated and in which he was greatly interested. It was, however, not a success, and was abandoned after a brief trial. At Glenboig it was in later years successfully installed by the late James Dunnachie for burning fire-bricks. At present there are numerous schemes for utilising the waste heat from each kiln as it is fired off, and it is hoped real success will attend those most desirable efforts.

The ware, on being taken out of the 'glost' kilns, when it is sufficiently cooled, and after being examined and 'sorted' of any sharp-pointed 'stilt' or any other marks, is ready for the market. Much of the finer decoration, however, including hand-painting and highly artistic decorations, as well as all the gilding, is executed on the top of the glaze, or 'overglaze' as it is termed. The gold used on really fine ware is pure gold. In some instances a certain amount of alloy of silver or bismuth is used. In recent years a cheaper gold has been extensively used for commoner classes of pottery. It is called 'liquid' or 'Glanz' gold, and as the latter word suggests, is of German origin. Its use is now quite general. One of the proofs of a genuine piece of old china is the tint of the gold decoration. It should have a rich egg-yellow lustre, and not be of a greenish shade, which indicates an alloy containing too much silver or bismuth. The old china painters used only the 'best' gold as it was termed by decorators in a pottery.

The colours used on glazed ware are called *enamels*, and these, as well as the gold, are fired in a gold 'muffle,' or 'enamel' kiln, at a specially fixed temperature, according to the nature of the colours used and the design. To

obtain the finest results sometimes as many as six firings have to be performed (these are, of course, among the most expensive styles of decoration).

LUSTRES

A charming method of decorating china, brown, and white earthenwares a hundred years ago was by applying a thin coating of lustre, which gave a marvellous metallic sheen when lavishly painted over richly glazed articles, especially Rockingham brown-ware, or if gold lustre was used it had the appearance of shot silk.

These were limited largely to the following metal compounds; all were applied over the glaze.

At a fixed temperature suitable to the glaze, reducing gases were at one time passed through the lustre muffle. This was achieved by means of wood smoke, such as the insertion of branches of broom, whin, or heather. At one time there was a good deal of mystery and superstition about this reaction. Artists in olden days were convinced the wood had to be Cedars of Lebanon, while, as a matter of fact any resinous pitch pine shavings could perform the trick equally well.

Nowadays treacle is sometimes employed as the medium for painting the lustre on to the ware, as it also contains carbon it serves the purpose of a reducing agent in absorbing some of the free oxygen in the metal employed. Great care has to be exercised in firing lustres in avoiding the combination of the metal with the glaze of the ware.

Purple or rose.—Is actually ‘purple of Cassius,’ made by dissolving gold in aqua regia, and adding a little granulated tin to the solution. When almost dry it is mixed with balsam of sulphur and turpentine, when it is ready for use.

Brown or yellow.—A saturated solution of iron in nitric and hydrochloric acids mixed with brown tar.

Copper or bronze.—A dark brown-coloured ‘body’ is always employed in the manufacture of articles to be

covered with this lustre, for the purpose of enhancing its sheen both in depth of tint and brilliancy. The inside of the articles were usually coated with a white clay 'slip.' It is very rarely produced nowadays.

Steel.—Platinum dissolved in 3 parts nitric, 2 parts of hydrochloric acid, and mixed with refined spirits of tar.

Silver.—Same as steel lustre, only laid on *twice*. This was very expensive, and is rare, as it was difficult to obtain a solid coating satisfactorily. This was chiefly employed in imitating old silver or 'plate' teapots, etc., in which case the lustre covered the whole field of the piece.

It is well to remind possessors of old lustre pottery that washing such ware with hot water is deleterious to the lustre, which may vanish under such treatment. Lustreware should only be dry dusted. People of artistic taste hold that the florid colouring and lavish gilding with lustres warrants no praise at all, but no collection can be said to be complete without a few examples.

Among the numerous changes which have come about during the last few years, not the least noticeable is the greatly increased variety of shape, designs, and styles of decoration which the potter is compelled to produce. In the old days he was content to work away year after year at the same articles, and with the old tried patterns and shapes. The old custom of getting expensive dinner services or tea-sets, which were to last a lifetime or longer, has completely passed away. These expensive sets were only used on special occasions, but now people use their best and often their only sets for daily use. Consequently, they buy less expensive ware, and instead of matching them as formerly a new one is purchased, which, if not an improvement, must be at least something different from what they had had previously.

It must be, however, admitted that most of the old costly ware was made with great care and devoted skill, as plenty of time was spent on it to obtain satisfactory results; the same remarks apply to the decorations, hence

the remarkable quality of some old pottery. There are quite as good artists and potters now as formerly, but everything is now too much specialized, and in consequence the personal interest in single pieces has been largely sacrificed to producing pottery in large quantities instead of quality. There is, fortunately, now a steady improvement in producing pottery at a moderate price, although not so elaborate as that which was bought by our forefathers.

The processes appear so simple and fascinating that it is only when we attempt some apparently simple scheme of decoration that we discover the troubles and difficulties to be overcome in this part of the process alone. The making of pottery in some respects is not unlike the making of a pin—the article looks a simple one, yet the process is not a little complex and elaborate. In no industry must closer or more continued attention be given to the essential details if the best results are to be obtained. As in scientific investigation the smallest gleam of truth has its value and its place, so in pottery every ascertained fact has its value also, which if it gets its right place will bring its reward in the ultimate result.

After reading this, or better still, after visiting a pottery, if the opportunity presents itself, and having seen for ourselves how intricate the process is, we will cease to grumble at the prices asked for pottery, and will instead doubtless begin to wonder how it is possible to sell it so cheaply.

THE POTTERIES OF SCOTLAND

CHAPTER IV

THE POTTERIES IN GLASGOW

INTRODUCTION

IN the following account of the various pottery works we may be inclined to imagine that too many English ideas permeate the production and improvement of Scottish pottery during the eighteenth century. I have stated what appeared to be the actual conditions and varying circumstances of the factories as faithfully as possible, and I maintain that the works illustrated were after all produced by Scottish potters. We must recollect that the early English potters derived their inspiration also from other countries. The porcelain factory founded at Bow made no secret of its endeavours to imitate the porcelains of China, Japan, and the East, for in the Patent granted in 1748 to Thomas Frye the founder that is clearly stated. Indeed, the works were at their inception called 'New Canton,' and we have in our museums specimens of ware marked "made at New Canton, 1750."

Worcester, again, offers a similar example. Its aim was also to copy and emulate in material and design the beautiful porcelain of China; so thoroughly did the artists carry out these endeavours that many of the early pieces painted in blue are marked in *Chinese characters* in the foot of the jar to imitate the originals still more closely.

After a time Dresden and Sèvres offered excellent examples for the early English potters from which to make their wares. In some cases even the trade mark of these

Continental potteries were employed by the English artists.

We have the notable example of Wedgwood himself, calling his works 'Etruria,' and devoting his superb energies to reviving the masterpieces of the Etruscan potter.

Therefore we must be lenient and circumspect in our criticism of the specimens made during the early efforts of our Scottish potters when they brought down English potters and artists to help us in establishing the industry.

While studying the industrial history of Scotland during the eighteenth century I was struck by the extraordinary capacity of the citizens of Glasgow for adapting themselves to the varying conditions of life, and by their energy and foresight in adopting such industries as pottery manufacture already flourishing in England.

Edinburgh remained aloof from these new and vigorous ideas in Scottish life, and thus Glasgow drew to herself the Highland folk after the '45 and the poorer people from other rural districts. She became not merely legally and politically united to England, but her commerce and industries so intermingled as to lead to a closer relationship.

It is therefore only giving Glasgow its due that, as it is the largest pottery centre as well in Scotland, I should commence describing the factories in this district first, and Delftfield in particular, on account of the distinguished men who initiated it, and were instrumental in putting pottery manufacture in Scotland on a commercial basis.

DELFTFIELD POTTERY

Among the earliest potteries in Scotland during the eighteenth century probably none was either so large or so important as this factory. Josiah Wedgwood speaks of it in his common-place book as an important pottery in Scotland.

Its designation was appropriate, for it commenced operations by producing delft-ware, of which class of ware it is believed to have been the pioneer in Scotland. Indeed, I have come to the conclusion it was the only pottery in Scotland to undertake seriously the manufacture of tin or white-enamelled earthenware.

This particular kind of pottery, as its name will suggest, came originally from the town of Delft in Holland, where it was invented towards the end of the seventeenth century to imitate the Chinese porcelain ware then coming to Holland from China and the Dutch East Indies. When William III. came from Holland to be king of our country, many Dutch potters, among other craftsmen, followed in his train. Coarse slipware pottery was already being made here, but these Dutch potters by the excellence of their products largely altered the whole system of manufacture, and raised the quality to such an extent as to revolutionize the pottery industry in Britain.

No doubt this beneficent enterprise in course of time reached the ears of enterprising men in Glasgow, and influenced them to improve likewise the native pottery by introducing these new Dutch methods. Glasgow had during the eighteenth century considerable and intimate commercial relationships with Holland. Textile weavers and other workers were already being imported from that country to teach our Scottish workpeople. In establishing such an industry as was contemplated in Delftfield, the native potters would require to be instructed not only in making the pottery, but, what was of more importance, in making the soft white enamel glaze required for coating the ware, and how to acquire the proper methods of fusing it in the kilns at the proper temperature, and thus obtaining the smooth white surface on the articles that was the distinguishing feature of delftware, in contrast to the grey mottle-brown stoneware hitherto in use.

The word 'delft' for this reason from about the middle of the eighteenth century became synonymous with any

white piece of crockery ware among Scottish housewives, and is still so applied by them even to this day.

The factory is still more interesting on account of the associations of some of the founders of the works. Probably among the distinguished firms in Glasgow during the eighteenth century none was more highly esteemed than the firm of Dinwoodie & Co. (or Dinwiddie). Of this firm two of the members, Robert and Laurence, were the prime movers in establishing the pottery industry in Glasgow. But before we proceed further with the personal history of the proprietors it would be better for us to know some particulars of the position and size of the place.

One of the earliest facts that are available of the foundation of Delftfield Pottery is a missive dated "6th October, 1748, from James Campbell of Blythswood to Laurence Dinwoodie, Robert Findlay, and Company, concerning the erection of the flint mill." The Company, however, was actually formed in April of that year, and was composed of Robert Dinwoodie, Laurence Dinwoodie, Robert Findlay, tanner, and Patrick Nisbet, when they purchased eight acres of land in the Broomielaw Croft from Campbell of Blythswood, the superior of all this part of Glasgow. The land joined the old village of Anderston or Brownfield to Glasgow on the north bank of the Clyde, and reached down to that river's banks. The present James Watt Street was before its reconstruction called Delftfield Lane, as can be seen in a map of Glasgow, 1849, and passes through what was the site of the works as it goes down from Argyle Street to Broomielaw. It is appropriate that this street should be so called, for James Watt the inventor once lived in this locality, and actually worked in one of the potters' workshops evolving his marvellous schemes; indeed it is even claimed that in these potters' shops he brought some of his ideas to a successful fruition.

Watt, so far as one can gather, was not an operative potter here, but there is proof which we will examine later

showing that Wedgwood spoke of him as his "Scotch potter friend." There is a copy of such a letter from Wedgwood in my short article on James Watt.

Certainly Watt was deeply interested in pottery, and the proprietors of Delftfield would no doubt benefit for their kindness to him.

The view of Old Glasgow at the end of the eighteenth century, so often to be seen on the walls of many old homes, shows a large cone or beehive construction. This was situated at the north-east corner of Jamaica Bridge, beside the present Custom House. It did not belong to Delftfield as many suppose, but was the cone of the Glasgow Glass Bottle House Company.

The construction and general plan of the "Pott-Work" of Delftfield was on a generous scale, and everything was laid out to produce large quantities of delft-ware. When the large variety of pottery wares the factory ultimately manufactured were in full swing the place must have employed a large number of people, and had an extensive trade for the concern was managed with considerable enterprise.

One of the principal buildings was the potters' shop, built of brick and in two storeys. This was a great improvement, for up to this time potters usually had worked in rough wooden sheds erected around the kilns. The internal dimensions of the building were 100 ft. long by 30 ft. wide. The walls were 3 ft. thick and faced with sandstone, and were so thick as to call forth the caustic remarks of the potters that the building was "mair liker a kirk than a pottery." The capital of the business was about £12,000. We have a few details as to the cost of this building—£400 for timber and £90 for stone—besides, there were bricks, plant, and the various kilns to be accounted for. It was discovered in course of practice that the building ought to have been 10 ft. wider, so that the kilns could have been erected inside, protected from the weather, and also the heat from the kilns while being fired would have dried the ware and warmed the

workshops. Further details as to the fittings are extremely interesting to a practical potter. The 'workboards' were made of yellow pine, 6 ft. long by 1 ft. broad, the word 'stillage' is used for the racks for supporting them. The 'slugs' and 'saggers' were made of fireclay. All these were made very much in the forms that are still in use in the most modern potteries, so that not much actual progress is evident in some of the essential details in a pottery of to-day in comparison with this evidently up-to-date factory of 175 years ago. We have at the same time described for us the construction of a 'fritt' kiln, and the raw material required to make 'fritt,' a process and term still in use in every whiteware pottery. There are many other particulars, which I discovered in an old legal extract made by the late Dr. Hill of Barlanark, too technical for such a book as this.

Having now in a general way depicted the works, it becomes necessary to describe some of the proprietors, who were interesting characters and prominent citizens, and whose influence extended beyond the borders of their native land. In doing so we will be able to visualize the rapid progress Glasgow was then making, and the position she was achieving in the wider sphere of affairs in Britain and her Colonies over the seas.

Two of the original founders, as already stated, were Robert and Laurence Dinwoodie. This old and well-known family came originally from farming stock in Dumfriesshire. Matthew Dinwoodie when he came to Glasgow purchased the estates of Germiston and Balornoc in 1690; unfortunately he was compelled to sell them a few years later on account of business misfortunes, a frequent occurrence in those early and unstable days, when capital was scarce and there existed practically no such banking facilities as we now enjoy. Matthew's younger brother Laurence, however, a few years later was fortunate enough in his affairs as to redeem these family possessions.

The brothers carried on a large merchant business under the name of Dinwoodie & Co., and had an exten-

sive connection with America and elsewhere. Besides, this, Laurence was a public-spirited man, and, being a Town Councillor, he was ultimately promoted to be Lord Provost during the years 1742 and 1743, when our country was much disturbed by Jacobite disaffection.

He proved himself to be a man of surpassing energy and influence, not only in managing the civic affairs of Glasgow but also in the services he rendered to the State during the troublous and anxious time of Prince Charlie's adventures.

Government appointed him, therefore, one of the 'Six Commissioners' to try the Highland rebels of the '45.

General Wolfe was then stationed in Glasgow in command of the English troops, and through his tact and ability obtained the loyal co-operation of the citizens, and ultimately the allegiance of Highlanders with whom he had recently been at war. The hero of Canada, although born in Westerham, Kent, was distantly connected with the pottery trade, through his cousin Thomas Wolfe, a Staffordshire master-potter, who named Wolfe Street in Stoke-in-Trent after his illustrious relative.

Laurence was also one of the original members of the famous 'Glasgow Arms Bank.' A man of large ideas and wide knowledge, yet despite all his power of place and position he remained modest in his bearing to all his fellow-citizens, who loved him for his genial disposition and respected him for his abilities. After his term of office was over he became familiarly referred to as 'our Old Provost.' He could, however, be pretty crusty at times, as we shall see, if things went wrong in the pottery.

Both brothers lived in a lodging on the west side of the then newly formed George Square in Glasgow.

Robert, the other brother, was no less distinguished a Scot. Indeed, these two men's lives might quite well form the groundwork of an interesting and romantic story. In 1751 he was appointed Lieutenant-Governor of Virginia, in America. Those who are familiar with Thackeray's novels may remember that this Governor

Dinwoodie is mentioned in his *Virginians*. During the year 1749 our troubles with the French, who were then chiefly settled in Canada, and who had also annexed a large part of America began.

The French made Canada their headquarters, but they had no intention of confining their energy to that territory, for they soon began to invade the valley of the Mississippi, where they at last established military posts and attempted to monopolize the fur trade of the Indians. They invaded Ohio, which they also did their utmost to seize and colonize. This greatly moved the jealousy of the settlers in Virginia. Dinwoodie was by this time Lieutenant-Governor, and he dealt with the matter promptly, but with considerable tact, for, before proceeding to declare actual war, he determined to make a serious protest against this intrusion into what was considered British territory. A document was therefore prepared by him setting forth the British claim to the valley of the Ohio, and warning the French not to advance further. This dispatch was entrusted to a young surveyor, who was then only twenty-one years of age, who set out on his perilous journey with only four companions and one guide from Williamsburg, Va., to General Ste. Pierre at Presque Isle on Lake Erie.

This young surveyor was none other than George Washington, who was a few years later to make so much history. He had just obtained his first commission from Governor Dinwoodie and was then known as Major Washington.

In perusing some of Josiah Wedgwood's correspondence in the Museum at Etruria, Stoke-on-Trent, I came across the following remarkable prophetic letter, describing a sermon preached by a Rev. Mr. Davis to Captain Overton's Company of Indian Volunteers in 1766. This minister, while speaking of the rising of the country to repel the depredations of the French and Indians, said, "As a remarkable instance of this I may point out to the public that heroic youth Colonel Washington, whom I



ROBERT DINWOODIE, GOVERNOR OF VIRGINIA.

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cannot but hope providence has hitherto preserved in so signal a manner for some important service to his country."

This in some ten years was fully justified in the Declaration of the Independence of America.

There were many relics of Dinwoodie's reign in Virginia. He presented the mace and many books to the University of William and Mary in Williamsburg, Va. These unfortunately were all destroyed when the University was burnt down during the Confederate Wars. The town of Norfolk, Va., still possesses the silver mace, surmounted with the Royal Arms, the only one of its kind left in U.S.A., and presented by Dinwoodie. He was an LL.D. of Glasgow University. He returned from Virginia broken in health and died in this country.

There were several other partners actively engaged in conducting the business. One was Mr. Martin, who managed the workpeople. He lived in a house quite close to the works. The only interesting thing to say regarding him is with reference to a servant-maid he had in his house, who, for a time, created a religious craze throughout the country. Her maiden-name was Elspeth Simpson. She was born in Banff in 1738, from which town she came to Martin's house as a servant when she was twenty-two years of age. While in service she made the acquaintance of one of the potters in the works, who falling in love with her (she was forty-six by this time) became her husband in due course. This potter's name was Robert Buchan. Mrs. Buchan seems somehow to have changed her whole outlook after her marriage; her husband was a quiet and inoffensive mortal, but she became a religious fanatic, founding the notorious sect known as the 'Buchanites.' I will not venture to discuss the traits of this peculiar society further than to say that she succeeded in calling forth the wrath and irony of Robert Burns in a letter of his dated 3rd August, 1784, anent her representing herself as the Holy Spirit, and actually breathing 'salvators' on her dupes,

Another partner, William Young, was apprenticed to the firm in 1760. He carried on the works till they finally closed, and transferred his interests to the Caledonian Pottery, where he remained till he died in 1820. It is due to a descendant of Young that we are indebted for the specimens, illustrated in Plate XI., of china made in the pottery.

When at last these two brothers Dinwoodie passed away, Gilbert, the son of Laurence, succeeded to the 'Pot works'; his share in the business was nine-twentieths. Gilbert did not long survive his father, for he died quite a young man in 1820, when his fortune and the estate of Germiston passed to his next-of-kin, his cousin, William Lockhart of Milton-Lockhart, Lanarkshire.

Never was a 'pot-work' launched under more distinguished and favourable auspices, the situation on the banks of the Clyde and the various buildings appeared to be all that one could desire. The one thing lacking, and an urgent matter, was the requisite technical knowledge of 'potting,' so that the factory should produce excellent ware, and on an economical and profitable basis. As none of the proprietors possessed this practical skill in a pottery, it behove them to engage men from Lambeth and Fulham in London, then the cradle of the delft industry in Britain. Dinwoodie & Co. had a London agent named Finlay, and he was empowered by them to secure with all speed a good competent works manager. A potter John Bird was duly fixed upon and dispatched to Delftfield. Provost Dinwoodie took Bird over the works, and after some discussion with the various partners he was confirmed by Dinwoodie in his appointment as the works manager, with a share in the profits of the business. He received £67 17s. to buy some raw materials, and was sent back to London to procure sufficient skilled potters, or 'wheelmen,' for everything was then made on a potter's wheel, and 'painters,' to produce the finest quality of delft-ware.

Unfortunately the manager proved to be quite incom-

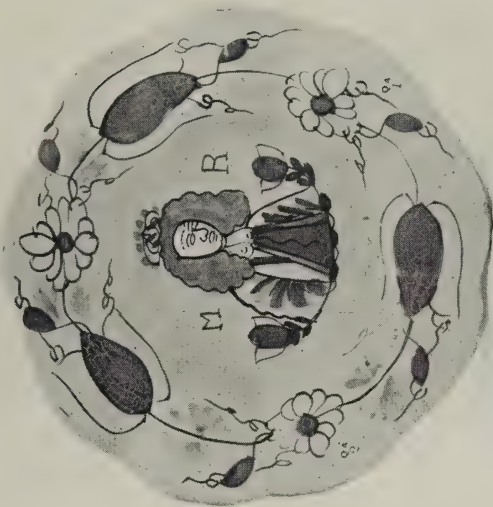
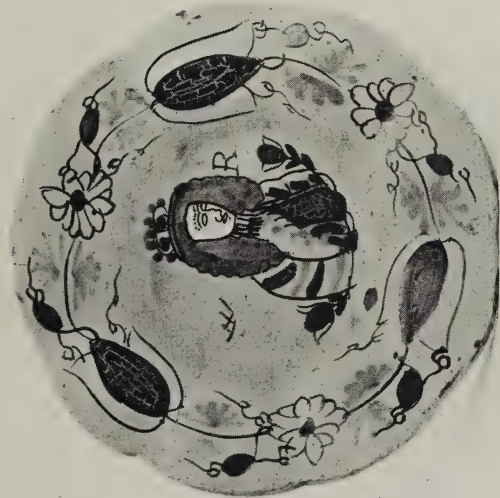
petent, despite his boastful assurance "that he was one of the best potters in England," and the Company suffered in consequence several severe losses.

The first loss was due to trouble with the clay. Provost Dinwoodie had shown Bird the clay on his Germiston estate, who after examining it proclaimed it to be quite satisfactory, and eminently suitable for delft-ware. In England, Scotch clays, through their absence of lime, had already been tried, and found dangerous to use for this class of ware. 'Old Provost' Dinwoodie, when he discovered his clay was unsuitable, lost all control of his temper, and said "he would never have ventured on a pottery unless it had been to use the local clays."

The works by this time were almost erected, and Robert Findlay, one of the partners, saw no good purpose could be obtained by quarrelling, and meanwhile discovered from Irish friends where the Liverpool delft-ware potters got their clay. These people told him that the firm Kirk & Cobham in Carrickfergus were the principal shippers of such calcareous clays to the Liverpool Delft-potteries. Findlay, therefore, wrote them from his tannery, as it was considered inadvisable at that stage to divulge to these Irish clay merchants the existence of a Glasgow 'pot-work,' in case they might decline to supply the special clay, owing to the jealous opposition that might arise from Bristol and Liverpool delft-ware makers, asking them for a quotation of their calcareous clay. In reply they quoted "for 100 ton lots 5s. 6d. per ton of 20 cwts., or six score tallies for one hundred. This price to include delivery on the Quay, but the Irish duty of 2d. per ton and the Harbour Master's fee, 8s. to 10s. according to the size of the vessel were charged extra." Accordingly Findlay on 16th June, 1748, chartered a vessel and filled it with coal for ballast, dispatching it at the same time to Ireland, and asking Kirk & Cobham to sell the coal on his account and ship fifty tons of the clay to his tannery.

Now that the proper kind of clay was on the works the next process was to turn it into pots, fill the 'sluggs' as they were then termed ('saggers') with the clay articles, and with these 'sluggs' fill the kiln till it was full. The door would then be bricked-up and the fires around the kiln set away. In the diary of the concern we have a full and clear account of the first kiln of ware.

The first kiln was set away too rapidly, a large supply of wood was consumed during the early hours of the burning, and latterly coal was used; but in starting a new kiln great care has to be exercised in bringing the heat up very gradually, or the flues are wrecked. The kiln had been lit on Friday, but by Saturday afternoon the smoke and heat, instead of going through the flues and into the kiln, was blowing back, filling the workshops with dense volumes of smoke. The fires had to be withdrawn, and as soon as the kiln was cool enough on Sunday the door was taken down, when the cause of the disaster was discovered to be due to the 'saggers' having all heeled over one on another, choking completely the flues. The cost of the damage was over £40 in ware alone. Another kiln of ware was immediately made, and fortunately it went off quite successfully, and turned out good clear yellow 'bisket' ware. The next process was painting the white enamel glaze on the ware, after which it is again placed in the 'sluggs,' or 'saggers,' for the 'glost' firing. This first 'glost' kiln of delft-ware turned out a complete failure, and was their third serious misadventure. The enamel proved to have been badly mixed, for it was so dry and rough on the surface as to be quite unsaleable. The manager's excuse was that though the fusing mixture had been weighed quite correctly, it had been quite upset by the soft nature of the Highland grinding-stones used in the mill imparting some of their refractory particles to the enamel. The statement afterwards proved to be quite incorrect, although the Duke of Argyll obligingly replaced the stones complained of with fresh ones



TIN-ENAMELLED DELFTWARE PLATES. WILLIAM AND MARY.

Attributed to Delftfield Pottery.

Smith Institute, Stirling.

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from his quarry, as it was discovered later wrong proportions had been used in weighing the ingredients of the enamel. This other kilnful of ware cost the Company another £60. But what was of more serious consequence to the concern was the loss of confidence in the whole process, and in their imported potters, for these men were drawing 16s. to 20s. per week in wages, and nothing was coming in out of all the work they had produced. Not only had the Company engaged English potters but they also had brought over one John Chummock from the Delft potteries in Holland. Difficulties in consequence arose, and the manager was dismissed; he in turn sued the Company for damages for wrongful dismissal, as any one may read in the "Delft-work case, state of mutual processes betwixt John Bird late of London, Potter, and Robert Dinwoodie, London, and Laurence Dinwoodie, Merchant, and late Lord Provost of Glasgow, Potters, and Patrick Nisbet, and Robert Findlay, Tanner, Glasgow."

The first good kiln of finished ware was at last drawn on 11th February, 1749, and it is gratifying to learn that in the opinion of the local china merchants it was quite as good if not superior to the delft-ware of Bristol or Liverpool, for these were the two rivals of Glasgow. The Glasgow wages were based on the Liverpool scale, for we have preserved a note of the following arrangement between the Company and their employees, "agreeing to accept Liverpool rates of pay, and the 6s. discount usually allowed off the £ as arranged with the potters in England."

Trouble also arose through the potters limiting the number of apprentices, and not training a sufficient quantity to cope with their increasing business; an old and familiar complaint not only in potteries but in other trades as well! The business was a progressive one, and Scotsmen soon became competent to take charge of the various processes of manufacture. William McAdam was the Scotsman who ultimately put the glazing of the

articles on a successful basis, and John Irvine, another local potter, took charge of the 'clay-end,' and for the next thirty years the Company turned out large and increasing quantities of delft-ware. One of the firemen complains that the work is so increasing that it is getting too heavy, and that 20s. per week was not a very handsome pay 'to fry and sweat for.' There was a renowned tavern in Glasgow called 'The Black Man,' it was the favourite house of call for the potters, as well as the colliers who gave it this peculiar title.

The general technical quality of delft-ware left much to be desired, for it was 'soft-fired' in the 'biscuit' kilns, and the enamel cracked, and 'crazed' easily in consequence. It was also easily damaged by scratches from the pointed knife and two-pronged fork then only being introduced into our Scottish homes. The housewives of England also complained of the bad wearing qualities of delft-ware, as it was also very fragile in general use. We must also take into account that people had hitherto only been used to wooden or pewter wares, and would not handle the crockery ware with practised care—they might let a wooden or pewter article fall on the stone floor of a kitchen with comparative impunity, but not a piece of this 'easy-fired' delft-ware!

To overcome such grave objections Wedgwood invented his harder and more durable 'Queen's Ware.'

The Delftfield Company at once adopted this great improvement in the manufacture of white earthenware, and in 1770 they made the necessary alterations in the pottery to carry out this new grade of ware.

In the manufacture of this ware china clay was an essential ingredient. Virginia and Carolina in America were the original countries from which potters in Britain drew their supplies of this clay. Governor Dinwoodie was in a particularly favourable position for knowing anything about this new and valuable pottery material, and no doubt would be in correspondence about it with Wedgwood. Wedgwood, in his anxiety to get some of this clay shipped

over to his pottery, asked his friend Lord Cathcart, then High Commissioner of Scotland, to lend him any assistance, and he advised him "to apply to Garbett, a Scottish potter, who, no doubt, would give him the required information." Shortly after this Cookworthy made his great discovery (1768) of the superior Cornish china clays, from which place Wedgwood and other potters have ever since obtained their supplies. In this connection it is interesting to add that Wedgwood was again in correspondence with another Scot, James Watt, to advise and help him to secure a competent mine-manager to look after his interests in the clay-mines situated in Cornwall.

The following letter of Wedgwood shows a friendly intercourse existed between the two firms :

[*Copy.*]

"Write to Thomas Beckett of Liverpool that two casks of Cornwall clay, and two casks of Cornish stone have been forwarded, and that he is to lose no time in sending them to the Delftfield Company at Glasgow, and he is to charge the expenses forward.

Sent June 14th 1787.

D. F. C.	2 casks clay 12 cwt	}
	2 „ stone 10 cwt	

It was omitted to number them to distinguish the clay from the stone, but one of the casks of clay is the largest of all the four, the stone will rattle by the casks being shaken which will easily distinguish them.

(Sgnd) JOSIAH WEDGWOOD."

The shipment of these raw materials may refer to some trouble they had been experiencing in the process of making Queen's ware, or it may have reference to the chinaware which the Company began to make about this date.

Further, to the foregoing letter from Wedgwood we have Beckett's interesting and instructive reply :

[*Copy.*]

MR. WEDGWOOD

" Liverpool 26th July 1787.

Sir.

I received your Mr. P. Swift's fair of 19th and 25th last month, and have shipped the two casks stone, and two casks clay D.F.C. on board the 'Active Duncan Gray' for Port Glasgow with proper Direction for the Delftfield Company in Glasgow, the vessel is now ready to sail.

I am

Sir, your most humble servant

THOMAS BECKETT."

The initial difficulties in producing the superior white earthenware were eventually overcome. Clays were now regularly imported from Cornwall and Devonshire. The glaze was no longer a thick soft white opaque paste, but had a clear limpid transparency, and was very durable. Delftfield was now advertising fine dinner sets decorated with the customer's crest, or coat-of-arms of the purchaser, for which as much as £30 was demanded, and other high-class wares.

The Dutch potters found their soft wares could not compete, and Delft became a ruined city. Our harder baked, and whiter ware was now in demand all over Europe, throughout our Colonies in America and elsewhere. With this general improvement in the ware, shapes and patterns were likewise more finished in form and design, and a greater scope presented itself to the modeller and artist in the factory.

Now that the cream-coloured ware was thoroughly established the management introduced the making of Queen's 'Bone China.' It was made in excellent style, and quality experts tell us "that considering the rapid progress of the pottery, and the short time they had been

making it, the quality was good, and quite as well finished as the china coming now into Glasgow from the well-known English China factories." The gilding, under the management of William Young, one of the managing partners, was particularly fine.

The full capacity of the works was not finally accomplished till the manufacture of 'Egyptian Black,' and 'Black basalts' in limited quantities was added to the already extensive assortment of pottery manufactures. Statuettes in black basalt and classical ornaments were then very fashionable.

A well-finished punch bowl (Plate XI.), holding about six pints, is made of white china covered with a beautifully smooth and soft rich glaze. The decoration is in 'Crown Derby style.' The gilding, however, displays originality, and is of burnished gold painted on the ware in a very effective manner, and must have been executed by skilful artists.

A plate measuring $9\frac{1}{2}$ inches (Plate XI.) is also made of china, the quality of which is not so apparent on account of the face of the plate being overlaid with a 'matt' black enamel, a French style of decoration then much in vogue. The process consists in first coating the ware with a stiff ground-laying oil which is carefully bossed level with a silk boss to remove any brush marks. The colour is then 'dusted on' through a muslin bag, and the surplus colour blown off. This old method of 'ground-laying,' as it was termed, was dangerous to the lungs of the artist, as he sometimes inhaled dusty particles of the enamel which contained a compound of lead as a necessary fusing ingredient for fixing the colour to the ware. An aerograph now admirably carries out this process, and as the colour is in a wet condition, and the blowing on of the colour is done under a glass hood to which an exhaust fan is attached, all danger to the operator is now eliminated.

Plate XIX. is a covered sugar bowl; similar black pots were made from Mount Blue clays, and mixed with black

oxide of manganese to turn the 'body' jet black during the firing process in a kiln. John Anderson made similar pots, which were termed 'Firestone' from their fire-resisting quality.

The china ware was also coated with a soft velvety umber brown glaze similar to that made in the famous 'Rockingham China Works.' This idea originated in China and is now extremely rare; very few pieces are to be seen anywhere outside our museums.¹

China tea was 30s. per lb. in the latter end of the eighteenth century, and cynics declared that the fashion to possess a brown-glazed china tea-set was from a motive of economy, in making the cup of infused tea from far Cathay appear stronger than it actually was! At any-rate we have Swift's indictment of tea as provided for him by the ladies of that period, when he says, "the weak brew was no more than water bewitched!"

The *Ingoldsby Legends* deal largely in food, and most of us would echo the following lines:

"How our ancestors managed to do without tea
I must fairly confess is a mystery to me."

The china-ware produced in the factory became so renowned that the Prince of Wales (afterwards George IV.) bestowed on the proprietors his patronage and privilege to announce themselves as "Potters to H.R.H. Prince of Wales."

It is remarkable that very few pieces of such a large and distinguished pottery should now exist. Unfortunately the Company never marked their ware in any way.

Many assert that most of the crockery made was shipped abroad, and certainly Governor Dinwoodie would be an important factor in popularizing his china and Queen's ware, etc., in Virginia.

I am indebted to Mr. Graeme Watt, a great-grandson of William Young, who has given me what assistance he

¹ Coffee and teacups are still made here in brownware covered with a dark cobalt blue glaze, which produces jet ware, for use in South America.

could. Mr. William Young's son James had quite a good collection of Delftfield ware. His widow gave it to a nephew, William Young Arthur, who took it over to America, where he died, and the collection was dispersed and lost.

SCOTTISH EXPORTS OF POTTERY IN 1771.

America.

Boston, . . .	Stoneware, . . .	1,860 pieces
Philadelphia, .	Delfware, . . .	2,600 „
Maryland, . .	Delf and Stoneware,	19,100 „
	Earthenware, . .	10,720 „
Virginia, . .	Delfware, . . .	12,828 „
	Earthenware, . .	37,526 „
	Stoneware, . . .	25,078 „
	Tobacco Pipes, . .	309 gross

West Indies.

Antigua, . . . Earthenware, . . . 105 pieces

Total shipments, including other countries :

Delf and Stoneware, 64,077 pieces

Earthenware, . . . 49,046 „

IMPORTS.

Thirty-six tons 'potter's clay' from Carrickfergus, Ireland, for use in Delftfield Pottery.

In 1766 the Company introduced on a limited scale the manufacture of white stoneware, which was harder than 'delft-ware' in the 'paste,' but this gave place in 1770 to the production of the finer grade of cream-coloured ware.

The trade of Glasgow with America, West Indies, and other countries at one time exceeded that of Bristol, and we can gather from the following returns the rapid increase in shipments of pottery, among other goods, that were now being shipped.

The sailing vessels ranged from 200 to 240 tons burthen, and did not omit to advertise "splendid accommodation for passengers to Maryland and Virginia."

In 1791 there was shipped from Port-Glasgow :

Earthenware—1,050 pieces—3,738 dozens, 6,400 lbs.
 Delftware—6,794 dozen pieces, . . . 14,900 lbs.
 Queensware—450 „ „ . . . 45,330 lbs.

Five years later we have another shipping return, which is satisfactory as displaying a continued increase in pottery manufacture in Glasgow.

1796 SHIPMENTS TO VIRGINIA AND CAROLINA.

From	Coarse Pottery.	Queen's Ware.
Greenock,	29,300 lbs.	147,942 lbs.
Port-Glasgow,	64,800 lbs.	21,000 lbs.
	<hr/> 94,100 lbs.	<hr/> 168,942 lbs.

It is quite possible, therefore, that pieces of the various wares of Delftfield Pottery may still exist in some forgotten cupboards in the homes of old families in those Southern States of America. A friend of mine, however, informs me that these old Colonial homes have been the happy hunting ground for many years past of wealthy Americans in search of genuine antique furniture and furnishings that were at one time in the possession of the old British settlers.

In 1810 the pottery ceased operations, and the buildings and ground were sold. All the workshops were levelled to the ground, and not a trace remains, not even a landmark of this old pottery. The moulds and patterns were removed in the year it closed to the Caledonian Pottery.

NOTE.

"The Delftwork Law Case," which came before Lord Erskine in the Court of Session in Edinburgh during the years 1748-9, throws considerable light on the stage at which the development of the pottery industry had arrived in Scotland at that period.

The papers theranent were discovered among various documents bequeathed to the Faculty of Procurators Library in Glasgow by the late Dr. Hill of Barlanark. To the members of this Faculty I tender my best thanks for their kindness and courtesy in allowing me to peruse and examine their various valuable contents.



CHINA PUNCH BOWL.

Decorated in "Derby" style.

Delftfield Pottery, 1780-1800.

Lent by Miss Lang.

CHINA PLATE.

Black enamel ground with wreath of flowers.

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CHAPTER V

THE POTTERIES IN GLASGOW—*contd.*

VERREVILLE POTTERY

For citizens of Glasgow this is one of the most interesting factories in the history of their city. Fortunately, a complete record can be given of the many changes in its proprietorship, and also of the various styles of work it produced from time to time.

The village of Finnieston, where this pottery stood, was owned by a Glasgow merchant, Matthew Orr; he so named this part of his estate in memory of his old tutor at Barrowfield, the Rev. John Finnie. Orr was also the proprietor of the Camlachie Coalpits, from which most of the early 'potworks' drew their supply of fuel.

He feued three acres (six steadings) of this land to James Young, a manufacturer in Anderston, who sold it again to Patrick Colquhoun for £400 in the year 1776. From this year the project of erecting Verreville Works may be dated, the first glass work in Scotland to manufacture fine flint crystal table glass.

By the year 1777 Colquhoun had erected the beautifully proportioned cone that stood as a landmark in Finnieston for a century and a half. The cone was well constructed, and stood 120 ft. high from the ground, the walls were thick and strong, and even in those days of cheap labour must have cost a large sum of money. It was so large inside at the base that it contained three glost kilns, which Kidston constructed when the manufacture of glass

was given up by him and when earthenware took its place.

The centenary of building the cone and workshops was duly celebrated in a fitting manner in the Queen's Rooms, Glasgow, on the evening of the 5th January, 1877. This happy occasion also reminded us that Verreville Pottery was then the oldest public work existing in Glasgow. The chairman, Robert Cochran, the eldest son of the founder of the firm Robert Cochran & Co., was chairman of the gathering, and he was accompanied on the platform by Dr. Marcus Dods, Messrs. Cassels, Lawson, Buist, Fleming, Lockhart, Wardlaw, and Purves. There were over 900 guests present. During the proceedings the chairman gave a most interesting history of the works.

Patrick Colquhoun, the founder of Verreville, was born in Dumbarton, and had already some connection with the glass trade in that town, and had visited Virginia on business, but returned to Glasgow after a brief sojourn. He was a prominent man, and was Provost of Dumbarton in 1782. In later years he migrated to London, and is credited with being the organizer of the Thames Police Force.

Patrick Colquhoun eventually did not carry out his original intention of being a glass manufacturer. He formed a Joint-Stock Company along with Alexander Ritchie, another Glasgow merchant, Charles Williams, Isaac Cookson, Joseph Robinson, Evan Deer, of North Shields, and John Ritchie of Glasgow, and founded the firm under a co-partnership of Williams, Ritchie & Co. This Company built the necessary buildings, and those partners from South Shields, being practical glass-makers, installed the plant, and the whole factory was given the very appropriate title of 'Verreville' (glass town).

The firm shortly after underwent some change in its selection of partners, for the ubiquitous Gilbert Hamilton joined the Company, becoming the principal partner, and changed its name to Hamilton, Brown, Wallace & Co.

There can be no doubt as to Hamilton being head of the house, for in his correspondence with Josiah Wedgwood the potter, at Etruria, England, he makes no mention even of his partners.

Sir. "Glasgow 14 April 1789.

Yours of 5th December with invoice of Cornish stone and clay came duly to hand, and beg you to excuse me for not remitting you sooner, but it escaped my memory. I now enclose you Arch^d. Grahame on Smith, Payne, & Smith, @ 40 dys £60 7/- in full for the same, which please to own receipt.

I am Sir,
Your most obedient servant

GILB^T. HAMILTON.

To JOSIAH WEDGWOOD
Etruria " 1

This letter has also an important feature in that it shows us that the works were not only making glass, their original purpose, but were also turning out 'Queen's or cream-coloured' pottery ware by this date.

In 1795, Brown, one of the partners, in a letter to a friend, complains that the business was not making sufficient profits, and that they were contemplating handing over the whole concern to John Geddes, who had been their works manager since 1785.

Geddes had been manager of the Broomielaw glass-works up to that date. His father, also called John, was the patriarch of a large family who nearly all in some way or other were identified with glass or pottery manufacture in Scotland. The family originally came from farming stock at Esbie, Lochmaben, indeed from the same countryside almost as the Dinwoodie's. Archibald, the eldest, was owner of the Leith Glassworks, and it was there that John had received his early training.

It is therefore very likely that John's genius for glass and pottery making had been behind the whole operations

¹ Original letter in Etruria Museum.

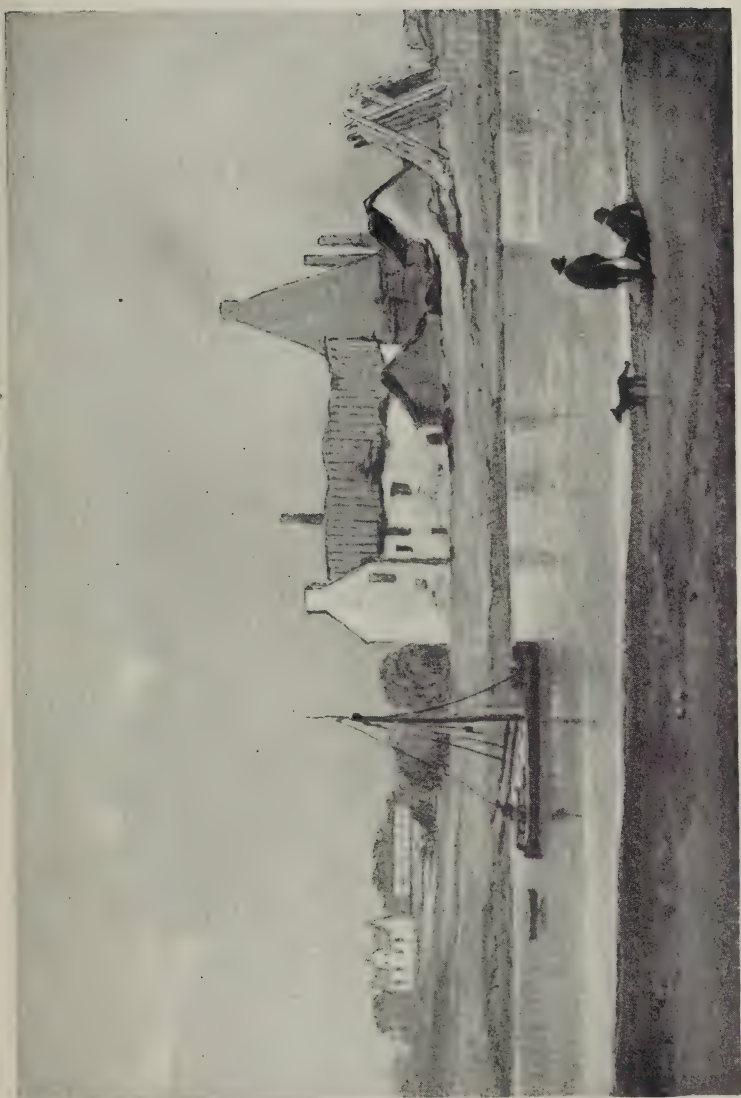
for some time, for Gilbert Hamilton, although an able banker and merchant, after all knew nothing of the complex troubles and problems to be overcome, especially in starting a pottery or glass-work.

In 1806 Gilbert Hamilton and Archibald Wallace sold the works to the Dumbarton Glass Company. In the same year, however, this important Company sold Verreville to John Geddes on condition that he would not make any green or black glass bottles, or compete with them in certain grades of glassware. Geddes now became sole proprietor of the concern, and this sale proves that he had hitherto no interest other than that of servant to the previous Company.

Although the works were originally built for glass-making as its title implies, it gradually developed from its earliest years the production of pottery, and finally devoted its whole energies to producing beautiful china and white earthenwares to the exclusion of glass.

Finniester at this time consisted chiefly of thatched cottages, and was delightfully situated on the right bank of the Clyde quite apart from Glasgow. The merchants and their families came from Glasgow to Finniester to spend their summer holidays. Many visitors wrote of its healthy situation, its green fields, fine trees, and the pleasing view of the sloping banks of the river. It possessed a fine sandy soil, and the natives, often annoyed at it being taken away, put up a notice intimating that no sand was to be removed. Complaints were made, also, of people racing their horses and coaches through the village, creating dust and danger to the pedestrians. A traveller in a coach passing through the village on his way to Dumbarton in 1828 describes its pleasing aspect, and even as late as 1836 it was a comparatively quiet backwater.

The quays on the north of the river only extended to Hydepark Street, and on the south-side to West Street. At the foot of Finniester Street the river at low tide was fordable, being only a few feet deep.



THE CLYDE AT FINNIESTON ABOUT 1836.

With cone of the Verreville Pottery on right and John Geddes' house and gardens on left.

From sketch by the late Mr. Andrew Macgeorge.

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The view on Plate XII. is instructive, not only from the interesting feature of the rural scene, but because we can more clearly understand the great changes that have occurred in this part of Glasgow during the past eighty years. The view is taken from the tow-path on the south-side of the river in 1839.

My father often recounted to me gala swimming competitions, the great event being the annual race from the Finnieston (Napier's) boat-yard to the Ferry at Govan. The potters were keen competitors, and my father among them joined in the contest and was sometimes successful in carrying off a prize. They had also outrigger racing boats, and were sporting contestants in the rowing races at Glasgow Green.

The making of the Queen's Dock in 1877 altered the whole district, which ceased to be the peaceful village the old potters had once known.

In this picture of Finnieston the large mansion house to the left was John Geddes's home which he built in 1820 so that he might be near to his work. It faced Finnieston Road, now Stobcross Street. A fine lawn sloped down to the Clyde, and gardens, vineries, and fine trees surrounded the house. On the high ground behind he built large kennels, for he was a keen courser with his greyhounds.

There is a Grace Street leading northward from Stobcross Street, which Geddes made in part of his demesne. He named it so in memory of his younger daughter Grace. One night while dressing for a ball in her bedroom, her muslin dress caught fire and she was burnt to death.

Geddes was a tall handsome man, and a 'ken-speckled' figure in Glasgow. He was Colonel-Commandant of the Anderston Volunteers, nicknamed 'the Anderston Sweeps' or 'the Sugarallie Corps' from their black-coloured uniform, which he raised in 1803. It mustered 900 strong. Colonel Geddes, as he liked to be addressed, had a large protuberant nose that was a source of delight to the caricaturist. A story goes that the cocked hat

he wore was a little too large, and its plumes too long and conspicuous, but, any way, he was popular, and was the admiration of the whole village as he rode at the head of his battalion on his large black Arab charger. Blind Alick, a character in the streets of Glasgow at that time, immortalized him in the following heroic lines :

“ Like the fiery God of War
Colonel Geddes does advance
On a black Arab that belonged
To the murdered King of France.”

Colonel Geddes was presented with a fine sword for his patriotic services, and his wife presented the battalion with a flag which is now in the possession of the Glasgow Corporation.

Geddes had several sons, one of whom, William, was works manager, and also one of the proprietors of the Anderston Glass Company. He married Catherine, a sister of A. G. Kidston, and their daughter Mary married William Geddes Borron, a well-known sportsman in his day in the coursing field. He was, it is said, the first Scot to gain the Waterloo Cup.

John Geddes was a man of wide culture, versed in chemistry and natural philosophy, and entered upon his work with skill as well as enterprise. Soon after he took over the place he introduced one of Watt's early steam engines, quite a novelty those days, to drive his machinery and flint mills.

When Verreville started large numbers of workers had to be imported from Holland, Flanders, and Lambeth. Geddes, to overcome this difficulty, opened a technical school on the factory to train his fellow-countrymen in the 'Art of potting.' An English visitor to this school admits, "that some of the natives have made such progress in their training that they now paint in quite a masterly style." Another visitor, Brown the historian, allows his enthusiasm to run away with him in describing the excellent work going on in the Academy. Geddes,



BISCUIT CHINA VASES.

Kidston & Co., Verreville Pottery, (*circa*) 1820.

Lent by Muirhead Moffat, Esq.

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although of a kindly disposition, occasionally was rather irascible and severe on his men. On one occasion one of the potters, a thrower, had been off work drinking for a fortnight. The first time he returned to his work Geddes completely lost his temper, and pushing him off his wheel carried him out to a shallow pond in front of the potter's shop, and there, ducking him over the head, growled, "Drink your fill noo, ma man; drink your fill noo!"

In 1820 the production of china was added to the manufacture of earthenware. The south half of Verreville was now built, and from that date on to 1835 glass, china, and earthenware were all made.

No brownware from local clays was ever made in this factory.

The works prospered, and even during the 'Short Corn Year' of 1826 it was fully supplied with orders from America and other foreign parts. The operatives in other trades, especially the weavers, were in great destitution owing to unemployment. The potters were working overtime, and they generously found work for as many of the unemployed as was possible in the various processes on the works.

There was sound reason for educating the native labour, for the potters that came from England were not always desirable characters nor satisfactory tradesmen, good men could find then regular employment at home. Among the letters of Josiah Wedgwood, at Etruria, I came across the following, evidently from a potter who had bolted away from his debts at Etruria Pottery, and was now regretting his hasty and criminal action.

"JOSIAH WEDGWOOD SEN^R ESQ.

Sir,

From a sincere sense, and repentance of my former sins, and transactions, especially against you, I humbly ask you pardon, and hope you will forgive the same, and if you will take me in your employ again, I will work six

days, and four half nights for 15/- per week for three years (if the Lord spare me) in order to pay you principal, and interest, what I owe you.

In hope of your accepting this offer

I remain, Sir, your most obedient servant,

JOHN MAYER.

Verreville Pottery

Finniester near

Glasgow Scotland

September 17. 1826.

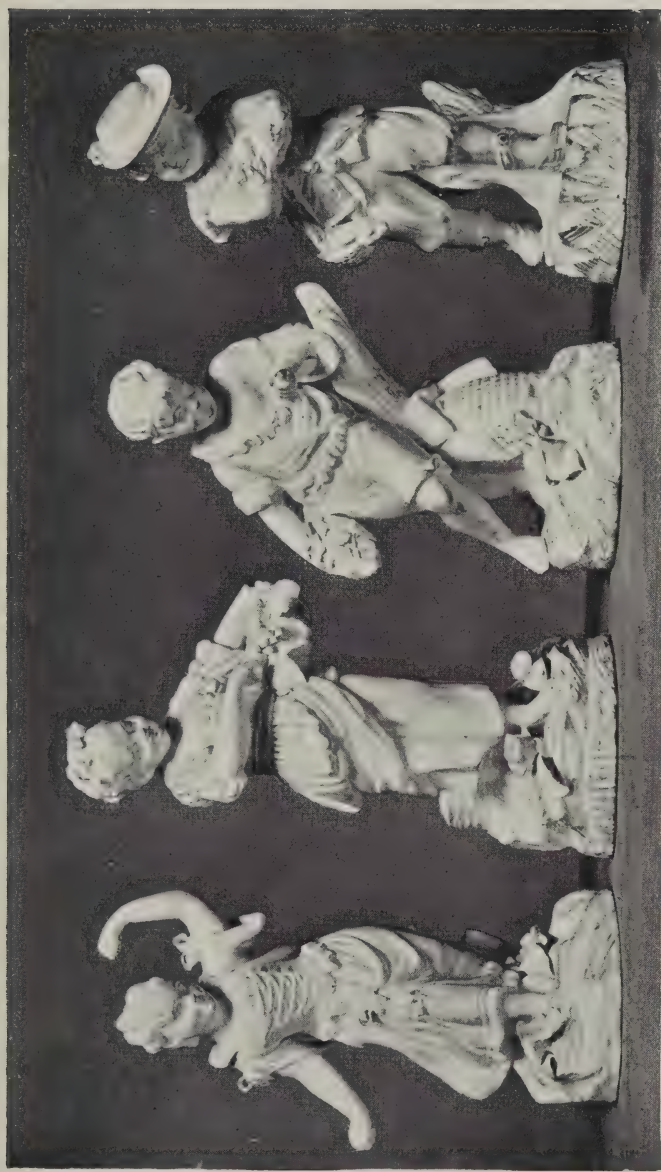
P.S. Honoured Sir, I hope you will give order to Mr. H. Greatbach (works manager) to send for me and I solemnly assure you by the God of Jacob you shall never have occasion to repent it. I only wish for an opportunity to convince you of my ammendment in life, and practice."

This was no extraordinary case, skilled men were scarce and were always moving about from place to place. Wedgwood and contemporary manufacturers all speak of the rapid increase in industry, and the great difficulty there was in obtaining and training sufficient skilled potters to overtake the rapidly increasing demand. Those difficulties also beset Geddes in Verreville.

Not able to produce sufficient ware for his clients, Geddes was forced to purchase some from Wedgwood, who supplied him with ware not only in Glasgow but also his warehouses in Perth and Greenock. One of Geddes's sons, Archibald, had a share in Greenock Pottery, and it was probably there that Wedgwood sent his pottery ware.¹

In 1824 John Geddes assumed one of his sons as a partner, as can be seen from orders to Wedgwood being signed "John Geddes & Son." The firm, eventually, in 1827, became Geddes, Kidston & Co., and continued so till 1834. They opened a branch warehouse in Belfast,

¹ Wedgwood's entries to John Geddes in Glasgow date from 1819 to 1829, to Perth 1821 to 1829, and to Greenock from 1825 to 1828.



"VERREVILLE" BISCUIT CHINA.

"The Four Seasons" (1820).

Lent by John Cochran, Esq.

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and there also maintained a friendly and considerable business connection with the Wedgwoods.

John Geddes called in his friend Alexander Waddell to be trustee over his affairs, and arrangements were made to sell his interests to Alexander Kidston and Hugh Price of Lancefield Pottery for the sum of £9,000.

The firm's name became Alexander Kidston & Co., and the Geddes family passes from the scene.

John Geddes did not long survive his retiral, for he died shortly after, and lies buried in the graveyard of Ramshorn Parish Church in Ingram Street, Glasgow, where the family tombstone, let into the wall, is still to be seen.

As soon as Kidston took over the works he introduced many ideas and improvements. He was already an experienced china manufacturer in the neighbouring Lancefield China Works. To enable him to carry out his plans he took with him Robert Purves, who had been his modeller, and promoted him to be works manager at Verreville, where he worked for the remainder of his life, as he continued in this capacity when Robert Cochran ultimately took over the business.

The Lancefield China Works were now closed, and the business was entirely transferred to Verreville.

Purves came originally from Prestonpans, which was a justly famed pottery district for turning out competent potters.

R. A. Kidston in 1838 became sole partner, and for the succeeding ten years brought to Verreville skilled potters from the celebrated Derby China Works, while Coalport, and several of the more famous Staffordshire china works, supplied him with excellent potters, gilders, flower and landscape painters. He was not content with the men Geddes had trained, and he was not even satisfied with his English workers, for he induced skilled artizans to come from France and Flanders. In this manner he in a short time produced chinaware of the highest quality.

Some of the Glasgow chinaware produced at this period is as fine and elegant as the widely known china of the more historical and advertised china factories in England of that same period.

The purity of the 'body' and the texture of the glaze is amazingly fine. The vases illustrated (Plate XIII.) are specimens of superb workmanship, not only of the potter, but also of the firing in the kiln, which would require to be most skilfully managed, and lastly of the artists who conceived the design. The dainty modelling in the china figures of the 'Four Seasons' (Plate XIV.), speaks for itself. But it is impossible to adequately describe in writing the painstaking care required in making such articles, and the admirable rich coating of glaze, fired to perfection, and still as fresh as the day the china came from its final firing in the kiln.

The large covered vase (Frontispiece), which stands 22 inches high, appears to have been 'fired' at a very high temperature, for the glaze is inclined to be harsh; but the outstanding merit of the whole is the clever modelling (each petal separately made by hand) of the groups of so many varieties of flowers. The flowers are painted exquisitely in enamel colours, and the deftly hand-painted butterflies call forth our unstinted praise. The filigree ornamentation round the rims of the vase and lid was painted with a fine sable hair brush, the amount of time and patience required for such tracery can be easily imagined by artists. In some respects the design follows vases that can be seen in the Victoria and Albert Museum, London, belonging to St. Cloud china factory near Paris. The vase in the frontispiece gives one the impression of being French in its conception.

The 'twig basket' illustrated in Plate XVI. was another cleverly conceived style of ware. It was made in a soft creamy white 'china body,' with painted raised flowers, and differs in many salient features from Leeds ware or other basket work done in porcelain.

From the illustrations and these brief remarks we may



Lent by Miss Balfour.

LARGE CHINA HAND-PAINTED JUGS.
Verreville Pottery, 1830 (*circa*).

Collection of Author.

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admit Kidston was an artist of surpassingly fine taste, and devoted extraordinary energy in producing the most elaborate chinaware it was possible to make. 'Verreville Chinaware' was similar to the English Bone China of that period, and would be probably made from a recipe brought down by one of the English potters. Money was not spared in its production. Unfortunately, Scotland was unequal to undertake the purchasing of such expensive wares, for which, besides, there was a restricted local demand, and Kidston in 1841 obtained the assistance of his friend William Johnstone. Four years later the Union Bank helped the firm in various ways, which still retained the name of Kidston & Company.

The concern had had a brilliant if somewhat chequered career, and was destined shortly to resume a still more active course under fresh management. These were only temporary expedients. Kidston had engaged as his assistant a young man Robert Cochran, who knew the possibilities of the works, and in 1846 he became more closely associated with Kidston as managing partner, and the firm became Kidston, Cochran & Co. This arrangement lasted a year, for in 1847 Cochran took over the whole affair, having meanwhile arranged matters with the Union Bank.

The firm's name became altered now to Robert Cochran & Co.

Cochran was a man of unbounded energy; he scrapped forthwith many of the fine and artistic but unfortunately unprofitable ideas of Kidston, adopting in their stead all the labour-saving devices he could discover, and improving by means of machinery the manufacture of pottery of domestic utility.

His inventions created a great amount of interest and stir at the time. One of the most important was the 'Cochran down-draught kiln,' which he patented on 11th October, 1852. It was a great advance on anything hitherto accomplished in this important operation in a pottery. Siemens, the German scientist, was greatly

interested and impressed when he came over to inspect its ingenuity. It was an original scheme for the continuous system of firing kilns, and was the first to have gas applied in burning clayware. The chief idea was to employ the waste heat from the kiln that was being fired off to warm the next kiln that was full of ware and ready to be set agoing. Gas firing was proved unsatisfactory, but the internal construction of Cochran's kilns were so efficient that half the fuel was now required for the same quantity of ware.

Another of his improvements was a method of drying 'slip' by steam pipes instead of in the open pan with fire flues. This method was, however, shortly superseded by the mechanical wooden filter press now in general use.

Another invention was the 'batting' machine patented on 23rd June, 1864. It prepared bats of clay ready for the platemaker, and was a most successful labour-saving contrivance.

Not so generally known was his patent printing machine for pottery. It was the precursor of the machine patented by Turner of Tunstall, Staffs., and was based on practically the same principle, only the roller was larger and more like a drum.

It must be admitted Cochran's genius is surprising, for he was never trained as a practical potter. Before entering Verreville he had been in partnership with James Couper as 'Cochran & Couper,' China Merchants, at 35 Buchanan Street. This firm had also been interested in the 'Port-Dundas Pottery.' In Wedgwood's ledgers these names appear frequently, till the firm ceased in 1837, when, it is believed, Cochran went to Verreville.

One of his most familiar patents was 'Cochran's necked 2 lb. jam jar.' He was the first to make this a commercial success, and 'Cochran's 2 lb.' became a household word in the jam-making industry, then only commencing. Previous to his jar, jelly cans had all been made straight-sided, as for home use still. But when pre-

serves were made in larger quantities in factories, and had to be shipped long distances, the contents, if the jam-pots had accidentally become inverted, slid down on to the paper cover, spoiling the contents. The neck inside the jar prevented this, hence its immediate and popular success.

Robert Cochran, it will be observed, had a better trained business mind than any of his predecessors. He gave Scottish pottery a tremendous impetus, and did not dissipate his energies on variety. Besides, he formed an extremely shrewd opinion of the limited capacities of his workers, and also the conditions of 'potting' in Scotland. He, therefore, set himself to build up a large output of good, sound white domestic earthenware, nicely finished, and attractively but inexpensively decorated.

By 1856 the making of chinaware was entirely dispensed with.

It was replaced by a new and more durable type of ware, 'Royal Ironstone China,' or 'White Granite.' This was an imitation of the white heavy porcelain made then in France, and was in great demand by the Americans, to which country this French porcelain was sent in large quantities. They largely lost this trade, for the British 'Ironstone China' manufacturers produced cheaper and more serviceable ware.

Ironstone china required a much larger proportion of ground calcined flint and Cornish stone than the old white earthenware 'bodies.' To obtain a sufficiency of those ground materials Cochran leased the 'North Woodside Mill,' which he ultimately purchased, on the north bank of the Kelvin, opposite the Botanic Gardens.

This mill at one time was a barley mill, and was erected early in the eighteenth century. In the *Glasgow Journal*, 15th June, 1758, we read "that the mill is for sale, application to be made to the proprietor, or to Alexander Stevenson, Commissary Clerk of Glasgow."

By the latter half of the century, a flour miller, David Jackson by name, worked the mill; he gave his name to

the dam which invests the Botanic Gardens with such charm to-day, and which was popularly known for many years as Jackson's dam.

For some time the mills became idle, and were occupied as a temporary school. Then, during the Napoleonic wars, the mill was restarted and ground gunpowder, then urgently required for our forces during the Peninsular campaigns.

After the war was over it reverted to a meal mill, and since Cochran took possession it has been grinding sterner stuff than barley, and has been successfully tackling calcined flints, and is doing so at this hour.

There was another water-mill on the other side of the road, where the yard for storing the raw materials now is. It was demolished some years ago to allow the Corporation to lay their main sewage-pipe along the bank of the Kelvin. As compensation for its loss the height of the dam was raised and the weir at Kelvinbridge lowered. A narrow tree-lined road ran between Botanic Gardens and Windsor Terrace, West, on the south side of the river. It was known as the 'Khyber Pass,' and led to the 'Pear Tree Well,' which was cut out of the solid rocky bank of the Kelvin. There was at this spot a halfpenny toll-bridge spanning the river, belonging to J. B. Fleming. The well was much frequented for its pure water, and was for long a favourite trysting-place for Verreville potters, my father among them, attracted also no doubt, by the flint mills. It was a beautiful sylvan dell, the steep wooded banks covered with primroses, anemones and blue hyacinths; besides there is always something picturesque about a water-wheel driven mill. Sir Henry Campbell-Bannerman's country house stood not far away from the mill.

The old Garrioch Mill stood near this spot, and below the Pear Tree Ford, and on the same bank as the North Woodside Mills. It was destroyed by fire, and the buildings and all that remained were swept away many years ago. The whole neighbourhood became less attractive



CHINAWARE BASKET.

Painted view and flowers. Verreville Pottery, 1830-1837.

Lent by Conrad Cochran, Esq.

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with the making of the Caledonian Railway Kirklee Station, and its approaches have altered the woodland scenery entirely on that side of the river.

Before leaving this subject, these 'Garrioch Mills' also ground materials for Verreville, chiefly glaze and colours, which had all to be conveyed on pack-horses for lack of roads.

When I went to 'Britannia Pottery,' as a boy, an old 'Verreville' potter, Johnstone Wardlaw, who became manager of 'Britannia,' used to delight me with the stories of his boyhood days, and of catching trout in the mill lades at 'North Woodside' and 'Garrioch Mills.' One of his most graphic stories was his account of fetching the ground flint in small kegs slung on each side of pack-donkeys. He had charge of six of these animals, and he often looked back with a shudder to the time when he had to manage his sometimes stubborn pack-train over the hill where Park Circus now stands and down Finnieston Street to Verreville during a winter's storm. His path lay over a bare hillside : that is not seventy years ago, there being then no defined roads of any kind far less streets.

Robert Cochran, Sen., became a prominent citizen of Glasgow, taking an active part in many philanthropic schemes. He died in 1869, when he was succeeded by his eldest son, Robert Cochran, who carried on the business successfully till he passed away some years ago, leaving the pottery to be continued by his only son, Conrad.

Mr. Robert Cochran, Jun., was a well-known figure in Glasgow, where he was highly esteemed and much liked by all who came in contact with him. He was a particularly fine type of gentleman. The works latterly were much hampered by its situation. When the Caledonian Railway made the Central Underground it bought an important part of the works, somewhat spoiling its general arrangement. In 1918 the works were sold, and are now demolished. The large engine-works of

the Clan Line cover the spot where once stood the famous cone.

BRITANNIA POTTERY

Canada in the fifties of last century became recognized as a rich and favourable country, attracting large numbers of Scottish emigrants.

One of the results of this was that Scottish manufacturers found a new market for their wares among their fellow-countrymen.

Verreville was already benefiting, and had extended its premises as far as its available ground would allow. Robert Cochran with commendable foresight, after looking at several sites, fixed on Glebe Street whereon to erect a new pottery, and to which he gave the title 'Britannia.'

Operations on 'Britannia' were started early in 1857, but many great events were to happen before its completion. The Civil War in America broke out a few years later, and the consequent scarcity of raw cotton for our mills, and other commercial difficulties, brought our trade to a standstill.

The history, therefore, of erecting 'Britannia Pottery' was a chequered one, and the story of its ultimate completion and success is more romantic than the usual humdrum account that we are so often compelled to write in describing the erection of buildings and plant, and the establishing of a business.

After Robert Cochran, Sen., had taken over Verreville from the Kidston's, he engaged some fresh young lads to assist him. Among these was James Dykes Campbell, a tall handsome man with red hair, who for this reason, and because of his dandified appearance, was nicknamed by the potters the 'Duke of Argyll.' He was chosen by Robert Cochran to go out to Montreal, and there open a warehouse for the 'Verreville Pottery' ware, and also to push the business for this contemplated new pottery.



WHITE STONEWARE JUG.
Matt blue panels.
Britannia Pottery, 1860.
Collection of Author.

CHINA JUG.
J. & M. P. Bell.
Lent by Joseph Turner, Esq.

WHITE STONEWARE JUG.
Britannia Pottery, 1860.
Collection of Author.

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After carrying on the business for two years Campbell intimated his wish to return, and my father (the late Sir James Fleming), another of the young men then employed by Cochran, went out in 1858 to take over the Canadian business.

Campbell was a most lovable man. When King Edward VII. visited Montreal, as Prince of Wales, Campbell presented to the Prince a large Newfoundland dog. After Campbell returned to 'Verreville' he did not remain long in the business, and migrated to the Mauritius Islands, where he became very successful. He retired to London and became a well-known litterateur and author. His *Life of Coleridge*, a relative of his, is considered a classic.

But to revert to our subject. My father often told me of this first voyage over to Canada in a 500 ton sailing vessel. He knew nothing at all about sails, yet he had to turn-to and help the sailors, so stormy was the passage over !

When he arrived in Montreal he discovered Toronto was growing rapidly into an important town as the centre of distribution in the Province of Ontario, then largely virgin soil, and also because emigration was tending towards the 'Golden West.' In consequence, he moved his warehouse there.

The Civil War of America broke out in 1860, and business came to a standstill ; he was, therefore, compelled to look around for anything that would keep him alive. As a youth he had served in his native town, Rutherglen, as a Cornet in the Ru'glen Company of the old Blythswood H.L.I. (now the 7th H.L.I.). This training, mild as it may have been, procured for him a post in the Northern Army. He never actually witnessed any fighting, but he ever retained a vivid recollection of the miseries of war, especially the sufferings of an army during a winter campaign.

He heard Abraham Lincoln speak several times, and although a devoted admirer of W. E. Gladstone, he had

no doubt in stating that Lincoln was the more impressive and greater orator of the two.

Another interesting impression he retained was the burning of the original Chicago, several years after the war. The city was then composed entirely of wooden shanties—it was an awesome sight to behold.

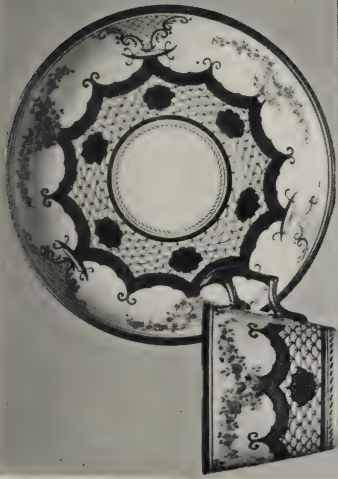
During the Civil War of America the dollar, or 'green-back' as it was called, had so diminished in value as only to be worth a few British pennies. Notwithstanding his military duties, my father kept Robert Cochran informed of all the events passing around him, especially those that might eventually prove of advantage to the pottery. Cochran saw no actual business was possible under the unsettled circumstances, but suggested to Fleming that the purchase of paper dollars at their low current value might eventually prove a profitable speculation. On this good advice, and as Fleming also foresaw that the purchase could be made with comparative safety, as many dollars were secured as they could finance together.

When the war was over and the United States of America became an accomplished fact, the dollar regained its former value. Still more important, Britain, then the 'Workshop of the World,' saw her opportunity in supplying that great empty country with railroads and all manner of merchandise, and a boom in trade followed.

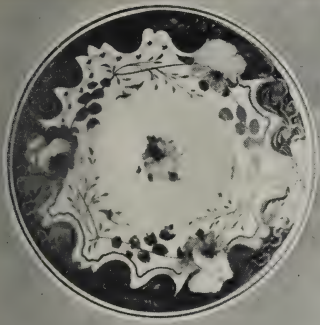
Cochran seized this opportunity also, and reconsidered his original plans for Britannia Pottery. Instead of the modest works he had planned, he erected one of the largest potteries in the country at that time. Money was not spared in installing the best appliances available. The requisite means had been speedily made and provided from the profitable realization of the dollars purchased in America during the war.

In connection with the building of the works an amusing incident is told. One day, when the frontage of the pottery was nearly finished, its handsome appearance was attracting some attention, a friend asked Cochran what was the building to be? Rather nettled at such a

SEMI-PORCELAIN
CUP AND SAUCER.
"Derby"
Decoration.
Cochran & Fleming,
Britannia Pottery.



CHINA TEAPLATE.
Verreville,
1820-1830.



CHINA CUP AND SAUCER.
Verreville. Turquoise panels and acid gold decoration.
Collection of Author.



"CLASSIC" CHINA CUP AND SAUCER.
Hand-painted landscapes and gold border.
J. & M. P. Bell, 1860.
Lent by John Weir, Esq.



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remark he tersely replied, "you may be d——d sure it's no to be a Kirk." Between Verreville and Britannia one of the first private telegraph connections were made in Scotland for the convenience of the two works, a good instance of how well equipped the place was.

The whole lay-out of this factory was a great advance on any then existing, even the potteries in England had no finer plant.

More machinery was placed in this factory than any previous one. When the machinery was in motion the noise was deafening, for it was driven by cast-iron tooth and pinion spur wheels—no leather belting and pulleys were then in use, nor steel shafting, but heavy short sections made of cast iron.

The pottery was confined to supplying the requirements of the American market, from which place orders flowed in for many years.

In 1863 my father returned from America to take up the management of this factory, and when his friend and employer Robert Cochran died, leaving Verreville to his eldest son Robert, he left Britannia to his younger son Alexander, with my father as managing partner.

This arrangement allowed both works to follow their own devices, as they were now producing ware in quantities that totally eclipsed anything that ever had been dreamt of by the older potters.

Britannia went in for 'mass production.' One thousand dozens of plates, and as many cups and saucers were turned out daily, besides other articles.

Napier, the great engineer and shipbuilder, whose works were contiguous to 'Verreville,' invented the 'Napierian Coffee Machine,' with the glass bulb and earthenware stand and vase, which is still reckoned among the best for making good coffee. The experiments and the successful fruition of the idea were carried out in 'Britannia.'

The pottery at first made other qualities of ware, but 'Royal Ironstone China,' or 'White Granite,' fired hard

and very durable, as its name implies, was the special feature. Its one objection was that it was thick and heavy. The glaze was now thicker and stiffer, and no longer a thin blue cobalt-stained glass—the ware, in contrast, was stained with oxide of cobalt till it possessed a distinct bluish hue to match Continental porcelain. The greatest achievement was the ‘Ceres’ pattern. It was modelled by Chetwynd, who was reckoned one of the finest modellers in Staffordshire. This pattern consists of sheaves of wheat and barley modelled in a raised conventional design round the brim of the articles. The pattern, used in a great variety of domestic articles, was in demand by farmers and their folk wherever wheat was grown. In Spanish South America it was equally esteemed as ‘Espiga,’ as with the Australian or Canadian wheat-grower as ‘Ceres,’ or ‘wheat.’ When it was first introduced there were no railway lines like the Canadian Pacific Railroad. It was nothing strange in those pioneer days for a china merchant in Ontario to set out with his waggon of ware, and his farewell to his friends was, “I will burst or make good,” which really meant he was going ‘out west’ into the unknown and exposed Western States. The ware had to be, therefore, thick and hard-fired in the kiln, to stand all the abuse it was likely to get over the rough prairie tracks those days. This class of ware was latterly used largely on ships, but it was too heavy to handle, and a finer quality gradually displaced this most useful, hard-fired class of ware, for it well deserved the name ‘Ironstone China.’

It is difficult to conceive a pottery with 600 operatives subsisting on *one single* pattern, such as ‘Ceres,’ for fully fifteen years without a hitch in its prosperous career.

The largest makers of ironstone chinaware were Messrs. J. & G. Meakin in Staffordshire, their Eagle Pottery being considered for a long time one of the largest and best equipped potteries in the world. James Meakin, once visiting Glasgow, was so impressed by its natural conveniences that he almost purchased the ground on



PLATE. "Syria" Pattern.
Britannia Pottery, 1860.
Collection of Author.



PLATE. "Damascus" Pattern.

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which the Singer Sewing Machine Manufacturing Coy. ultimately placed their huge factory.

It was only the lack of skilled labour that prevented this project being carried through. If the Meakins had settled in Scotland the whole outlook of Scottish pottery would have been immensely improved. Unfortunately for us labour was at that time abundant and cheaper in Staffordshire, and the factory was erected there.

The prosperity of those factories supplying the States of America has suffered several severe checks. Protective tariffs have been raised, especially the one by President McKinley, and more stringent ones still have since been passed, so as almost to prohibit our wares entering that huge market. Despite such heavy duties America still remains our largest market for our finest wares, preferring the superior quality of our goods to the native ware produced in their potteries.

The 'body' of the ware was improved and altered when printers were introduced. Some of the earliest patterns were very fine, particularly the 'Syria' (Plate XIX.), which is still a favourite, and is to be seen in nearly every farmhouse of Scotland, on the shelves, or still in use; also 'Damascus' (Plate XIX.), and 'Oriental,' these patterns being printed in a clear pale cobalt blue have an attractive clean appearance. From their title it is obvious that their motives were from Eastern scenes. The cost of engraving those elaborate patterns, even when labour was cheap, was considerable. The bill for the original 'Syria' engravings amounted to over £687.

Another successful feature was white stoneware jugs with embossed patterns, such as we see illustrated in Plate XVII. The embossing was touched up with a brilliant underglaze matt blue. The jugs were only glazed in the inside, the outside obtained a smear of glaze during the firing in the 'glost' kiln from a special wash of glaze that had been put on the inside of the 'sagger.' This smear allowed dirt to gather easily on the embossments, and the necks of the jugs were usually so narrow that the hand

could not get inside to clean them. They had a great run for many years, but for the latter defect were gradually given up.

'Ivory' ware was also a popular invention, and was a great change from the cold blue tint of the ironstone china. It was more adaptable for decoration. Square shapes were now the fashion, and one of the best patterns of the day was 'Cochran & Fleming's Lily' on table ware of all kinds.

In the International Exhibition of Glasgow in 1888 the pottery made great efforts to make a worthy display of their wares. Mons. Geraldin, a distinguished designer in Paris, was engaged to model several fine shapes.

Also in the 1901 Glasgow Exhibition the factory had a prominent position in the main avenue, where one of the earliest thrower's wheels to be operated by electric power was in use to interest the visitors. By this time tiles had been added to the numerous departments of the works, and these in printed and embossed majolica designs added considerably to a very effective display.

The Historical Section of the 1911 Exhibition received from the potters in the works many very instructive reproductions of the efforts of primitive man; also specimens of old productions of a former generation, for Britannia had taken over many old moulds of ware from the Caledonia and Annfield Potteries.

'Marle,' or 'agate' ware, was one of the quaintest revivals of the methods employed by the primitive peasant Scottish potter in decorating his wares. The Scottish workman mixed various tints of clay by superimposing sheets of these and 'wedging' them together, after which he made the vessel on his wheel, and after it had hardened slightly he 'turned' his pot with a sharp tool, scraping away the outer skin, thus displaying this 'marbling' effect. It was often made in imitation of horn tumblers, to which it had, if well done, a striking resemblance. It is a tedious and expensive process to make the articles properly, and, I fear, required the old craftsman's patience and skill.



TERRA-COTTA ETRUSCAN VASE.
J. & M. P. Bell, Glasgow
Pottery.
Lent by John Weir, Esq.



BASALT STATUETTE.
"James Watt."
Britannia Pottery.
Collection of Author.



BLACK FIRESTONE-WARE
SUGAR BOWL.
John Anderson, Kingfield Pottery.
Lent by Miss Lennox.

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Further improvements were made in the 'body' of the ware. The 'Scotch Sifter,' coupled with electromagnets patented by myself, was installed not only in Britannia but in some of the potteries in England, and was the beginning of a more detailed purifying system of our clay.

By 1896 the works had developed a distinctive trade of its own, supplying ware for many of the finest steamships, and a varied selection of pottery. In this year, having been works manager for some time, I was made a partner in the firm, which became *Cochran & Fleming*. A few years later Alexander Cochran died, and the works were carried on by my father and the 'young fellow,' as I was called in the factory, till in 1911 my father, feeling the weight of years, resigned. I carried on the business myself till it was sold in June 1920 to the 'Britannia Pottery Company, Ltd.,' who are carrying on the works, producing fine designs on a semi-porcelain 'body' suitable for all markets.

Sir James Fleming was well-known for his public services. He was esteemed by every one connected with the pottery industry not only in Scotland but in Staffordshire, where he was for many years a partner with Mr. W. H. Grindley in the Woodland Pottery, Tunstall.

He took a deep interest in Education as a member of the School Board of Glasgow and as Governor of the Royal Technical College, and similar institutions. His chairmanship of the School of Art, whose destinies he guided so admirably for twenty-five years, and which became recognized as one of the best art training centres in Britain, was considered his best work.

For these faithful services he received the honour of knighthood in 1906.

Born in Rutherglen in 1831, he witnessed the advent of railways, steamers, the floating of the first large iron vessel in the Clyde not far from Verreville, and many other wonderful changes which took place in his eighty-three years of active life. A Liberal in politics, he never

doubted the wisdom of introducing the Factory Acts, restricting hours (which were seventy-two per week when he started work) and improving the general conditions of factory life.

He often looked back on the warm friendships he had formed with many of his old pottery workers with great pleasure and satisfaction. He felt the old feeling was vanishing, and that the personal interest in each other's welfare no longer had a place in modern life in a public work.

In his young days lads and lassies came to a factory and stayed there for years—it became a family connection—sons and daughters came to fill their parents' places. That spirit has all changed, electricity and unrest have usurped the old system, which, with all its faults, was after all more human.

There were many notable visitors to Britannia, but none were more popular than Lord Rosebery while he was Prime Minister. His visit occurred a few days before the running of the Derby, in which race Rosebery's horse 'Ladas' was a favourite. As his lordship passed through the kilnyard the potters and kilnmen begged him to give them a good 'tip' for the race. He laughingly replied "back Ladas," which they did. It was a glorious victory and was duly celebrated by the workers taking a holiday and spending their winnings!

TRADE MARKS.

Figure of 'Britannia,' with name of pattern above and initials of firm below.

ROYAL
IRONSTONE CHINA



TRADE MARK



COCHRAN & FLEMING
BRITANNIA POTTERY
GLASGOW

COCHRAN & FLEMING

SEMI-PORCELAIN

C & F
G

'FLEMING'
IMPRESSED IN THE
SOFT CLAY



ALLANDER POTTERY WARE.

Milingavie.

In coloured glazes, curdled by additions of raw oxides of tin and other metals. Some of the vases are also covered with crystalline enamels.

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CLAYSLAPS

This name is immortalized in a small street running from Argyle Street to Sauchiehall Street, which if followed would lead us to the banks of the Kelvin, where a few years ago a mill dam was to be seen. At this spot about sixty years ago a small pottery was working, using the local red clay for making crocks, hence the title of the street 'Clayslaps.'

ALLANDER

This was a delightfully situated small factory, started in 1904 by an artist friend of mine, Hugh Allan, on the banks of the river Allander at Milngavie, a few miles to the north of Glasgow. Allan laid himself out to make only artistic and decorative earthenware. He gained a remarkable aptitude for using coloured and crystalline glazes, as can be seen in illustrations of a few of his pots (Plate XXI.), which he presented to the Kelvingrove Museum. The work had only a brief career, for it was closed in 1908.

CHAPTER VI

THE POTTERIES IN GLASGOW—*contd.*

CALTON POTTERIES

IN Glasgow there were two large beds of red clay. The larger of these two beds was the 'Mount Blue' bed located in the north-east part of the old town; the other was situated in the south-east, on the left bank of the river Clyde, on the estates of Shawfield and Polmadie.

The 'Mount Blue' bed of boulder clay is well known to geologists. The clay when newly dug has a bluish cast in it, hence this name 'Blue.' Its colour, however, is sometimes a dark purple shade of brown. Strong red bricks and tiles were produced from it by exposing them to a low heat in the kilns, on account of the clay being very easily vitrified.

This part of old Glasgow was at one time bleak and barren, and it became on account of this forlorn condition the Gallows Muir, where condemned men were wont to be hanged in the old days. Gallowgate now runs through this Muir.

Matthew Orr of Barrowfield opened the Camlachie Coalpits in the eighteenth century, which are in close proximity to the Calton, and this altered the whole condition of this hitherto neglected part of the town, in encouraging factories to be established in it. If we consult old maps and directories of this district we are surprised to notice how rapidly the Calton village became a hive of industry. Among the factories mentioned

there are the Bagnal, Claythorne, Clayknowes, Cubie, Kingfield, Camlachie, Purves, Thomson, Williamson, Campbellfield and other potteries.

The claybed is clearly defined, and lies to the east and north from Glasgow Cross, through what was once called the Calton open, and on to Parkhead.

The first mention of a pottery is in an old Glasgow Record dated 1668, wherein James Colquhoun makes the following request :

“ I crave permission from the Glasgow Corporation to start a pottery. (Signed) James Colquhoun.”

This pottery also made red clay tobacco pipes from clay obtained from Lumlock, near Auchenairston, Cadder.

Reference is also made to the ‘ Pig Hoos ’ as a prominent landmark of the district. In 1722 it is mentioned again in reference to another pottery being erected by William Maxwell, who also “ craves permission to erect a pottery near the ‘ Pig Hoos ’ for the purpose of making pigs, earthen-potts, and other vessels.”

The ‘ Pig Hoos ’ was the potter’s tavern, or public-house. I explained in another chapter the derivation of the word ‘ pig.’ This old inn was still doing business when Queen Victoria was reigning.

There was another pottery near the ‘ Pig Hoos ’ called ‘ Kingfield.’ The site of this factory can be described by the present landmarks as having been situated at the corner of Anderston Street and Chalmers Street, with an entrance through a pend-close from King Street in Calton. Part of the old potters’ shop is still standing.

The first proprietor of this potwork was John Anderson, who died in 1811, and was buried in Glasgow Cathedral Churchyard, and for whom the citizens of Glasgow showed such regard.

He was Glasgow’s largest pottery manufacturer during the eighteenth century ; not only did he make domestic pottery in his extensive works, but bricks and tiles also for all manner of buildings.

He owned, himself, two acres of clayfields, but this

was insufficient for his growing trade, and he leased other five acres from the authorities of Glasgow University, then situated in High Street. The site of this huge claypit is indicated in a map as being east of Barrack Street.

By 1826 the pottery reached the zenith of its prosperity. The *Glasgow Chronicle* of that year states that the works were regularly turning out 80 dozens of black earthenware teapots per week, beside large quantities of cream pouries or jugs, bowls, mugs, etc. The articles were carefully made, and held in such esteem by the Scottish housewives for their general durability that the teapots especially received the name of 'Firestone,' which we would now term 'fireproof.' Tea was dear, and every particle of good had to be extracted from the leaves; in order to do this the teapot was placed on the warm hobs of the open fireplaces when the tea in the pot was being infused.

The basalte ware produced had no distinguishing mark of any kind; the covered sugar-basin (Plate XX.) is a good example of its kind. The modelling of the figures is clearly defined, and the general finish of the pot and its covering of bright and clear lead glaze could not be excelled in any pottery to-day. The teapot with its curiously modelled ornamental handle illustrated on Plate XXXVIII. is another fine example of the work of the pottery.

John Anderson's bricks were also considered by builders to be of good quality. Glasgow was then rapidly increasing in population, factories and dwelling-houses were rising up all around, many of which were built with his bricks and roofed with his tiles, while the chimneys even were finished with his red 'lums.' Many of these red brick houses are still to be seen in old parts of Calton.

Anderson tells us his output was easily absorbed till the Government swooped down on brickworks as a source of revenue for the then depleted National Exchequer.

In 1780 Government put on a tax of 3s. per thousand bricks, which made them dearer to employ than stone. It has been said that but for the incidence of this heavy duty Glasgow might have been a brick-built city instead of being constructed with the cheaper sandstone.

In spite of this heavy burden Anderson in 1791 shipped 45,000 'tyles' to American ports. After Anderson's death it was carried on by the Kingfield Pottery Company till it finally closed one hundred years ago.

In a map of Glasgow of 1778 it will be seen how much Calton was given over to the pottery industry. Where Duke St. Prison now stands, a man Pettigrew had a pottery.

Potteries also existed at Claythorn and Clayknowes, hence these names, and were owned by John Johnstone, who for many years turned out serviceable domestic pottery from the local clay.

It is surprising that all these old works have entirely disappeared from this veritable 'potter's field.' We have Claythorn Street, Clayton Terrace, Tylefield Place, and Clayknowes to remind us of the clay pits that have been filled up to make way for the progress of the city.

Occasionally, when excavations are made, old pitchers and fragments belonging to these old potteries are brought to light.

The Corporation Water Department in 1912, while digging a deep trench for a water main, came on interesting fragments (Plate III.), which were carefully cemented together again.

Therefore, should any one digging foundations in this district come on any old pottery rubbish they should advise the Museum authorities who, I feel sure, will gladly take care of any specimens which may remind us of the busy clay industry of a century ago.

In this respect, the following story was unearthed in 1912 with the assistance of my old friend, the late Thomas

Lugton of the People's Palace Museum. He was instrumental in discovering some old moulds in an old pottery building that was being demolished, and between us we were successful in ferreting out information about the pottery that once stood there.

BAGNAL'S POTTERY

Before describing to you this pottery it is necessary to have an idea of the religious feelings and political excitement existing in the country during Bagnal's time.

In reading Dickens' novel *Barnaby Rudge* we find recounted somewhere the religious and fanatical upheavals of that period. The uneducated people were much perturbed over the passing of an Act relieving His Majesty's subjects professing the Roman Catholic religion from certain penalties and disabilities, hitherto imposed on them by Acts XI. and XII. of King William III., which Acts had been passed at that critical time in our history "for further preventing the growth and increase of Popery." This Bill was passed, and received the Royal Assent on 15th May, 1778.

Great disturbances as the result arose all over the country, fanned by Lord George Gordon, and on account of this lord's intervention were called 'The Gordon Riots.' It is well to have these incidents recalled here, for they seriously affected the affairs of this old factory.

Bagnal was said to have come from France, and was a Roman Catholic. Others state the name is a Staffordshire one, and that he came from a pottery there. It is not an important point. I am inclined to think he was a Frenchman, for he constructed a street up to his works, and named it after his compatriot the great French Admiral Turenne. I cannot imagine an Englishman doing that. This street was reconstructed many years ago, and its original name Turenne was converted into Tureen, which is quite erroneous. Perhaps the author

of this alteration thought he was bestowing an appropriate title to a street that once contained a pottery!

Bagnal was a devout Catholic, for he allowed his fellow-countrymen and co-religionists to gather for worship in one of the potters' workshops which had been turned into a temporary chapel, there being then no public place of worship for the Roman Catholics.

On Tuesday, 9th February, 1779, a general holiday had been declared as a King's Fast Day. It is asserted that Bagnal recklessly ignored this Royal Edict, and permitted his potters and kilnmen to carry on as on any ordinary working day. This is scarcely credible, for, from what we can gather, Bagnal was a law-abiding peaceful citizen; indeed he was a man of rather a retiring disposition.

But if he actually kept his factory going on that holiday he was soon to suffer for his imprudent act.

That evening a large and rowdy mob assembled at the east end of Gallowgate, and was soon marching up that street till they reached the pottery. The crowd was so inflamed that they lost no time in forcing an entrance into the works, and commenced burning and destroying everything possible. After destroying all they could lay hands on, and not yet being satiated with their deplorable actions, they proceeded down to Bagnal's home and warehouse in King Street and wrecked the whole place. For many years after it was called 'Bagnal's Rabble.'

The magistrates of Glasgow became alarmed at this riotous conduct of the citizens, and called upon the Western Fencibles to assist them in quelling the disturbance. Fortunately, peace was restored without incurring any bloodshed, and further mischief was forcibly stopped.

A proclamation was soon afterwards published giving positive assurance to the people that the 'Papish Bill,' as it was generally termed, had been dropped. At the same time a reward of one hundred pounds was offered by the city authorities for information leading to the

arrest of the ringleaders of the mob. Needless to state the culprits were never discovered.¹

A public meeting of citizens was called a few days after these stirring events. Dean of Guild Alexander McCaul and the brethren of this Guild Court, after carefully examining the whole facts of the case, came to the following decision, "that this town of Glasgow will pay cheerfully every farthing of the loss though it were twenty times more than it is." This judgment does the Council great credit when we consider how unsettled the people were over the political situation of the moment.

Bagnal in due course sued the Town Council for the sum of £1429 1s., and this amount was duly paid to compensate him for his loss.

Considering the comparative value of money in those days and now, we get some indication of the extent of the works and the value of the materials the riotous crowd had destroyed.

The population of Glasgow was then only some 38,000 inhabitants. We have no exact data as to the size of the works, but they were never rebuilt.

Bagnal was a well-known citizen, and was held in high esteem by his neighbours, who all deeply sympathized with him and his family in their loss. As an instance of this, three of the neighbouring Presbyterian clergymen willingly gave food and lodging to his wife and family in spite of the tense religious feeling then prevailing. It is not surprising to find it recorded that "these good men were compelled to do this in an unobtrusive manner."

There cannot have been many Roman Catholics in Glasgow when they could all be accommodated in a small potter's workshop.

Very few specimens of Bagnal's workmanship remain. He made small medallions, like cameos, figures, cruci-

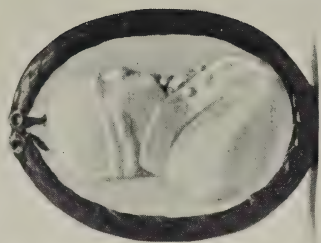
¹ Bernard Palissy, the great French potter, embraced the Protestant religion, for which during the St. Bartholomew persecution he suffered imprisonment and his pottery was destroyed. He died in the Bastille in 1562 at eighty years of age.



MINERVA.



LAST SUPPER.
Bagnal's Pottery, Calton.
Collection of Author.



CAMEO.

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fixes, plaques, etc., in quite unique styles, and different from other potteries; indeed, his work has the appearance of having been modelled by foreign potters. For example, 'The Last Supper' (Plate XXII.) illustrates the fine quality of his work, and the 'Trafalgar Memento' on Plate LV. shows the high standard he aimed at.

He chiefly employed the local red clay, but he also imported the finer English clays with which to make some white earthenware.

There is no distinctive mark for this pottery, and these illustrations, and the few specimens to be seen in the People's Palace Museum, are replicas from moulds Mr. Lugton and I found in the remains of the pottery.

It is unfortunate we have so little information of evidently an interesting character, and that we possess so few specimens of his artistic work. It is quite possible James Tassie did some modelling for Bagnal, and that some of the medallions are his workmanship.

MILL-ROAD POTTERY

About a hundred yards east of Bagnal's works stood Millroad pottery, established there about 1780. Some of the pottery workshops are still standing at 36 Mill-road Street, for the factory flourished up to the year 1852.

The pottery works turned out a large variety of ware, some of which is worth our attention. Towards the end of its career the manufacture of general earthenware was entirely given up, and the works confined itself to making tobacco pipes, in useful and elegant forms.

The outstanding pattern of these clay pipes was the clever caricature of the famous Lord Brougham with his well-known shepherd-tartan trousers to which was added a sporran, making the entire get-up a humorous skit on his Scottish attire.

The following story is told of how Lord Brougham, being on a holiday to Inverness, acquired the supply of

shepherd-tartan trousering which served him for a lifetime, and became his characteristic garb.

Visiting the Capital of the Highlands, he went to the establishment of Mr. McDougall there and ordered cloth for three pairs of trousers, an order which this Highland tailor mistook for three pieces. The three pieces were sent, and his lordship got three pairs of trousers cut out of the cloth and returned the rest. But the Highlander with characteristic perseverance again sent the pieces to Brougham, who for the humour of the thing, consented to retain them.

Another tobacco pipe, representing an ass with a tail-coat (Plate LV.), illustrates the saying of Bumble in *Oliver Twist*, "the law is a hass," which sometimes still expresses the opinion of many a disappointed litigant.

The modelling and general design of these clay pipes are above the ordinary standard of such articles.

The proprietor was a man Wyse, one of a well-known family in the Calton. Thomas Wyse, the founder of the concern, came as a potter from the celebrated Crown Derby China Works, which may explain the original and artistic work turned out.

There is ample proof of many good tradesmen coming to the various Scottish works and leaving the impress of their ability in the productions of those factories, belying the statement, then prevailing, that there was no room for Englishmen in barren Scotland.

Thomas Wyse had a son James, who was really the moving spirit of the place. He made good pottery, and showed exceptional artistic ingenuity in his quaint styles and patterns.

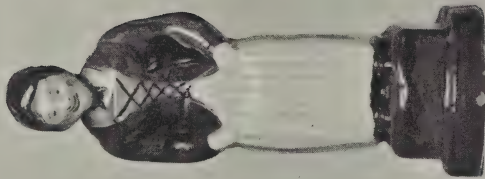
James, unfortunately, did not long survive the death of his father, who had died in 1809, as he passed away the following year, a comparatively young man.

Fortunately his widow was a capable woman, and she carried on the business till her son James was old enough to take over the works on his own account.

James Wyse, Jr., carried on the business very success-



TAILOR.

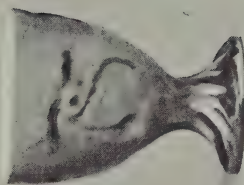


COBBLER'S WIFE.



COBBLER.

James Wyse, Calton Pottery Ware.



EGG CUP.

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fully for fully thirty years, when he finally closed the works in 1852, for the town was now encroaching on his clay pit, and he was compelled to cease digging his clay there. After he had demolished most of the pottery he erected some tenement property on the ground, in which he interested himself for the remainder of his life.

He died in 1870, and the family disappeared from the Calton district after living there about one hundred and fifty years.

The illustrations (Plate XXIII.) display remarkable vigour in design and skill in their manufacture. The quaint statuettes are admirably modelled, artistically decorated, and allow us to visualize what these old local characters must have looked like.

The cobbler and his guid wife, and the old tailor ironing his cloth on his 'goose' give one a capital idea of working-folk of the period. They are beautifully moulded, and display not only artistic ability but a sound knowledge of the best pottery technique in their method of manufacture.

The pottery made also useful domestic articles of every-day utility for the humble folks around.

Before proceeding further east in my description of old Calton potteries along the Gallowgate, I should like to draw attention to a kirk we pass on our right, at the foot of Sword Street, and opposite where Thomson's pottery once stood. This is St. Thomas's Wesleyan Chapel, which was long known as the 'Potters' Kirk.' The cradle of the Wesleyan faith is Burslem, one of 'the Five Towns' of the Potteries. John Wesley opened there his great evangelical campaign, with the result that the Staffordshire potters became imbued with his religious ideals. Thomson and a few other pottery manufacturers in Scotland originally came from Staffordshire, and as they brought down many workers with them the Wesleyan faith took hold and increased in our midst. The erection of this chapel is evidence of their zeal. The Presbyterians became alarmed at their energy,

and wanted their privileges curtailed. In the *Glasgow Mercury*, 1789, "the increase of Methodists is much complained of, and it is seriously recommended as the subject of Parliamentary inquiry." "We hope at the same time, that the increase," adds the *Mercury*, "of block-heads in the Church who drive people from it will also be enquired into!" In the neighbourhood we have Wesleyan and Williamson Streets, this latter name was that of a prominent man in the chapel and proprietor of the

WELLINGTON POTTERY

This factory was established in 1797, and produced all manner of household wares, as well as flower-pots. It is safe to say that nearly every garden in Scotland has had flower-pots or some terra-cotta garden ornament and statuary from this famous and familiar pottery works.

Their clay pit was at their door, now covered by Williamson, Cubie, and Wesleyan Streets. About twenty years ago the works were closed down and the clay pits filled up.

The office of the works was at 601 Gallowgate. In 1830 the Cubies came from Prestonpans, and transferred their whole business to this factory, but in 1844 the old name of the Williamsons re-appears.

I think John Williamson, the new proprietor, was a son-in-law of Adam Cubie. The works prospered greatly for the next twenty years. John died in 1864 and his son, A. C. Williamson, succeeded him, who, with a William Clough, successfully carried on the business for thirty years till it was sold to Austin and McDonald, who, finding the clay pits exhausted, transferred their business to Canal Street, Port-Dundas, where it is now being carried on. Ware stamped:

WILLIAMSON
WELLINGTON POTTERY



WILLIAMSON
WELLINGTON
POTTERY
GLASGOW



WHITE STONEWARE JUG.
North British Pottery.



JUG PRINTED AND LUSTRE.
Lockhart & Arthur's Pollokshaws Pottery.
Lent by Miss Balfour.

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Tylefield Place, as its name implies, is also reminiscent of the tileries that once were in operation on that ground. (The Palace of the Tuileries in Paris is a reminder of the tileries that once were at work there. 'Tuile' is French for 'tile'.)

In King Street there was a small place owned by Alexander Paterson. Williamson induced him to dispose of his place to them, and he was for many years the practical manager in Wellington Pottery.

ELGIN POTTERY

This was a small factory erected at 30-32 Davidson Street by James Johnstone in 1855. He sold it a few years later to Charles Purves, who had been a potter in Verreville. In 1868 his brother Thomas took over the works, allowing his brother to devote his attention to the new pottery he was erecting in Govan.

The pottery devoted itself entirely to the manufacture of white earthenware. It has been closed thirty years. In the Exhibition of 1911 there was a very creditable display of ware once made in this factory.

MILE-END POTTERY

Was erected in Avenue Street by Charles Purves and Mr. Denny, the firm's name being Purves, Denny & Co. Denny was a relative of the famed Dumbarton shipbuilding firm. He retired a few years later, and Purves carried on the works till they were closed at the end of the nineteenth century.

BLUE-VALE POTTERY

Another of the numerous small 'pot works' of the district. It was erected by John Brinkley, who came from the Staffordshire 'Potteries' to supervise the

grinding of flint and Cornish stone at the flint mills on the Kelvin belonging to Verreville.

He was apparently in need of assistance to carry on his enterprise, for he obtained the help of a Mr. McBean, and the firm became known as McBean, Brinkley & Co.

The factory made white and decorated earthenware for general utility purposes. The place was evidently not very profitable and only lasted a few years, when the partners dissolved partnership and closed the pottery.

MOUNT-BLUE POTTERY

This is perhaps the oldest of all the Calton potteries, and was quite close to the Blue Vale works. In old maps it is marked 'Mountain-Blue Pottery.'

During the latter part of the nineteenth century it was owned by James Brown, and after his death was carried on by his widow, and the works were known by everyone as 'Mrs. Brown's pottery.'

She was a great favourite with everyone, and lived to a ripe old age. She carried on the pottery very quietly, using the local clays for flower-pots, and covering the butter-crocks and jars with the primitive litharge glaze of our forefathers, and was quite content to earn as much money as sufficed her modest wants.

Her jars were in great request for pickling beef or eggs for winter use. Also her large butter-crocks were of excellent quality.

I remember as a boy making many expeditions out to her with my dog, for I was almost sure of raising a rabbit round the kilns or in the fields surrounding the works. It was a great treat to be sent out to 'granny' Brown's with any message. She was always so kindly, and I fear those that sent a boy out on an urgent errand laid themselves out for disappointment.

Mrs. Brown passed away many years ago, regretted by all who knew her.

The works remained idle for some years till a Limited Company was formed to purchase them. Stoneware jam jars and similar articles are now turned out in large quantities.

There was a firm, Lyon & Co., who carried on a small work which they quaintly entitled the 'Mountainbleau Pottery.' William Lyon was a sugar planter in Jamaica, and when he started these works it is said he called them mountain-blue after the Blue Mountains of that delectable island.

SUMMERS STREET POTTERY

Was erected by a Staffordshire potter named Henry Prescott. It produced ware made from the local terracotta clays.

CAMLACHIE POTTERY

This large factory was built by Messrs. Watt & Co. to use the local red clays for bricks, tiles, and ornamental work in buildings. The firm specializes in architectural claywork.

GALLOWGATE POTTERY

These works were erected about a hundred years ago by David Mills & Co., and are situated in East Nelson Street.

The operations carried on here differ entirely from the other factories of this district, in that the place confines itself entirely to producing fireclay white enamelled sanitary ware.

Towards the end of the nineteenth century it became better known as the 'Crown Fireclay Works.' Latterly the pottery has been under the management of Mr. Steel of Steel & Shanks, who took over the place many years ago from the original company.

The works are now one of the foremost of their kind, and turn out beautiful white enamelled sanitary ware in the most modern styles.

HOLDEN'S POTTERY

The oldest record of potteries existing on the south-side of the Clyde at Glasgow relates to a small potworks situated at Blackfaulds. It was established about the year 1595, and made chiefly water jars and tubs from the red clay around Shawfield.

There was another pottery not far from the Gorbals Kirk, owned by a potter John Holden by name, in the early part of the eighteenth century, which also made wares from Shawfield clay.

Besides producing domestic articles, Holden added the manufacture of red clay tobacco pipes.

The pottery was for many years a prosperous and well-known place. When it ultimately closed a prominent notice of its termination appeared in the local press.

In a Glasgow journal dated 28th April, 1781, there is the following announcement: "This pottery is for sale, and that it will shortly be put up at public auction." This was its final appearance.

GOVAN POTTERY

This was established by Charles Purves in 1869. It was not a large place, but turned out very serviceable Rockingham, cane, majolica, jet and gold decorated pottery. It ceased work about thirty years ago.



THE BOWER.
David Lockhart & Sons, Victoria Pottery,
Pollokshaws.



CHINA DESSERT PLATE.
Pierced brim and gold decoration, with painted flowers in centre.
J. & M. P. Bell.

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CHAPTER VII

THE POTTERIES IN GLASGOW—*contd.*

GLASGOW POTTERY (J. & M. P. BELL)

THIS widely-known pottery was established by two brothers, John and Matthew Perston Bell, early in the nineteenth century. It was situated on the banks of the Forth and Clyde Canal in the Port-Dundas district of Glasgow, and was thus favourably situated for getting in its raw materials.

The factory at its inception did not produce the fine ware by which it became latterly so well known. At first it devoted itself entirely to making fireclay sanitary ware, garden ornaments, and similar goods, but about 1842 the Bells decided to introduce the manufacture of white earthenware and china, in which they expended their energies and enthusiasm.

Although the works bore the title 'Glasgow Pottery,' everyone became more familiar with the name of the two proprietors Bell, and, as the trademark was naturally a 'bell,' the works became generally known as 'Bell's Pottery.'

Many people still imagine Glasgow Pottery and Bell's Pottery are two separate places, when in reality they are one and the same.

Probably no other factory in Scotland made a larger variety, or did more to establish the good name of Scottish pottery than Bell's Pottery. The fine specimens that the firm contributed to the Great International Exhibition

in London of 1851 were remarkable, as we can see by the few pieces illustrated.

The most outstanding piece was the fine reproduction of the Warwick Vase (Plate VIII.), also classic statuettes (Plate IV.) in Parian ware. This class of fine pottery was one of the specialities of the firm. Verreville also made a little of it, but Bell's made it one of their highest achievements. The statuettes and other similar articles were made of biscuit porcelain, that is, porcelain with no glaze covering. The illustrations do not convey very well the fine grain of the paste. The figures display the greatest evidence of skill in their modelling and care in their manufacture, and have all the delicacy of white marble. The term 'Parian,' used by potters in describing this class of ware, refers to the outward resemblance it possesses to the Parian marble of antiquity. Many specimens are still to be found, for Bell's pottery made it in large quantities.

In planning the factory every facility was given for producing pottery in a large variety of ornamental shapes, as well as domestic earthenware and china, such as dinnerware, tea sets, and dessert ware. To carry out these ideas the works were planned on generous lines, and covered ultimately more ground than any similar pottery in Scotland, and everything of the best quality was employed in its construction. The frontage, in Stafford Street, which can still be seen, has a handsome and striking appearance.

After 'Parian' the next thing they excelled in was china ware. For a time 'Bell's' were more renowned for their fine quality of china than for anything else they made, which obtained a deserved reputation for its style of shape and tasteful decoration. This was accomplished by good artists, most of whom were Scotsmen. Landscapes of Scottish scenery, flowers, fruits, etc., were the principal 'motifs.' Indeed, but for the Scottish touch in the scenery, the painting resembles very much the fine hand-painted china made in these same years in Staffordshire Potteries.



"TRIUMPHAL CAR" DISH.

J. & M. P. Bell, Glasgow Pottery.

Lent by John Weir, Esq.

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The shapes of the tea sets are chiefly classical in design, as for example in Plate XVIII. The pierced china dessert plates are also well executed. Plate XXV. is a sample of this art of piercing china which requires great patience and skill, for the clay is at that stage exceedingly brittle, and the whole article can be destroyed by a momentary slip. The glaze on the china is beautifully soft to the touch, and is entirely free from iron specks—thus fully testifying to the great amount of personal supervision that has been expended on its production.

Most of the early products of 'Bell's' were designed and modelled by a man named Copeland. His work is distinguished for the tasteful simplicity of its form.

Eventually the manufacture of 'Parian' was given up, the fashion for possessing such ornamental pottery, which was rather cold and formal, having almost entirely passed away with the Victorian period of furnishing.

Other artistic productions, copies of old Etruscan vases and figures, were carried out in an encaustic style. They were made of the local red clays, and thrown on the potter's wheel, after which they were turned on a lathe. Plate XX. is a typical sample of their form and design. This vase is made in terra-cotta, and printed all over in enamel black, with pictures of Roman soldiers, whose accoutrements are 'touched up' in raised white enamel to heighten the effect.

The 'Bells' were the only potters to attempt this very interesting revival of classic pottery, which had a great 'run.' But the fashion changed, and it also has not been made for many years.

Another branch of this factory was the manufacture of the finest class of sanitary ware in a durable 'white pearl body.' It was decorated with 'best burnished gold' Greek borders, a high-class decoration which this firm was probably the first to employ.

The showrooms, which were well worth a visit, contained a fine display of all manners of ware produced in the various departments of the works, and were there shown

to the best advantage. The broad handsome staircase of the factory was lined with statuary, and the spacious hall was fitted with candelabra, large vases and pedestals for lamps, etc. After admiring this fine array of pottery wares it was not surprising to learn that the two brothers Bell spent a fortune in models. Unfortunately, the Caledonian Railway Company destroyed these rooms, when they purchased a large portion of the works to extend their Buchanan Street Goods Station.

In the manufacture of white earthenware they specialized in blue and white printed patterns. Many of these old patterns are based on Eastern ideas. The pattern most in favour with the Scottish country folk was 'Triumphal Car,' generally called 'T. Car' for short. It depicts an Eastern scene. In the foreground is a chariot drawn by two leopards, occupying the centre of the plate. In the background there are temples, palms, and marvellous palaces and balconies giving a good impression of the wonderful East. The border of the plate is broad, and has panels with a chariot drawn by wild beasts, in keeping with the central design. It was printed in a clear pale cobalt blue. (Plate XXVI.).

'Damascus' was a similar pattern, no doubt based on scenes from that ancient city. It was also printed in cobalt blue.

The 'Willow' pattern was another particularly well-engraved pattern, and is still deservedly appreciated by all collectors.

The firm had an extensive trade in Rangoon, China, and the Far East, for which markets they engraved many beautiful patterns, some of which were specially designed by Chinese artists. But many of the engravings, such as 'Triumphal Car,' were engraved by David Roberts, who worked here in his youth as a pottery engraver. In later years he blossomed out into Sir David Roberts, R.A., the painter. Another of their artists was a china painter named Wagstaff, who had been a pupil of Jules Lessore, the French artist.

The two brothers who carried on this business so successfully were indeed original characters in their individuality and love of seclusion.

John Bell, the elder, intended at first to be a lawyer; indeed, he took his M.A. degree in Glasgow University with this intention. But he changed his mind and joined his brother Matthew in establishing this pottery business.

The younger brother, unfortunately for the concern, passed away suddenly in 1869.

John, after his brother's death, was left alone to look after the business, as he never took another partner to help him. The trade-mark of the firm was a 'bell,' either impressed into the soft clay or printed on the ware when a pattern was being applied to the ware. After Matthew's death John caused the letter 'B,' and in some cases 'J. B.,' to be placed inside the bell. This was to show the customers that he was determined to carry on the business by himself.

Both men were held in high esteem by everyone who came into contact with them. They had, no doubt, many peculiarities, and many of man's failings, but to their workers they were ever considerate. At last the surviving brother John also passed away in 1880.

The two men built the fine Italian mansion-house 'North Park,' on the right bank of the Kelvin, which is now occupied by Queen Margaret College. They erected it as a museum and picture-gallery for holding the treasures they were then collecting, and never intended it for any other purpose.

Many stories are told of their eccentricities. One brother was a widower, who lost his wife after being married only six months, and the other was a confirmed bachelor. People imagined that John, who was the art collector, was 'taken-in' by his purchases of Old Masters, and that he did not know what he was doing. On his death it was discovered that his will in the opinion of some was not properly drawn up; it is believed there was some jotting in pencil leaving the house and its

contents to the citizens of Glasgow. Some of the prominent citizens thought the property and pictures to be of little or no value, and the house and its contents were all disposed of at public auction in 1881.

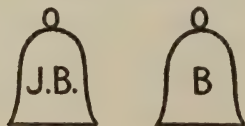
Many of the pictures were sold in London at Christie's, and to the chagrin of Glasgow and contrary to all expectations went for high prices. The Bells were, after all, shrewd men, and had been well advised in their purchases, and in consequence had been quietly building up a magnificent collection. John, particularly, had always been reticent about his purchases and possessions. The pictures by Quintin Matsys were among his treasures, and, to give an idea of the size of the collection, these works appear in the Sale Catalogue under "No. 437, 33½ in. by 43½ in. 'St. Jerome in his Study habited as Cardinal.' No. 516, 38 in. by 48 in. 'St. Jerome in Cardinal's Robe in his Study.'"

After John Bell's death the business was floated as a public limited company in 1881, and was directed by Mr. Murdoch for ten years, until he passed away. After his death Mr. Joseph Turner took over the management of the concern till it closed some years ago.

Some time ago the Caledonian Railway Company purchased a large portion of the works, and in doing so spoilt the plan and arrangement. It is felt that the railway company might have dealt more generously with the proprietors. On account of this transaction and for other private reasons the directors finally decided to close down, and cease pottery making entirely.

Mr. Turner and Mr. Weir, who were associated with the pottery all their lives, still carry on part of the works on a more modest scale.

TRADE MARKS.





J. & M. P. Bell.



Cochran & Fleming, Britannia Pottery.

TRADE MARKS.

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NORTH-BRITISH POTTERY

This factory was not always so designated. The original pottery was erected at 295 Dobbie's Loan about the year 1810. It was then called the 'Osley Pottery,' and was built by Henry D. Smith, Jr., & Co. After working in the pottery for a few years making, it is believed, chinaware, they ceased operations. The works then lay idle for some years. A Mr. Grant then occupied the premises till in 1860 David Penman & Co. purchased the place and commenced the manufacture of sanitary ware. They were unable to continue very long at this; indeed it is maintained they were rather before their time, and the buildings and plant were sold to Messrs. Miller & Young, who made special stoneware filters, and now ran the place for some years turning out among other articles stoneware jars.

About 1874 they sold the pottery to Alexander Balfour, who had started as a boy in Verreville and became in later years a partner there with Robert Cochran, Jr. The partnership by 31st December, 1873, was dissolved, and Balfour commenced as a master potter for himself in this factory. He quickly altered the pottery works to making a good quality of white earthenware for the home market. Latterly he developed a speciality of unique hand-painted designs for trade on the West Coast of Africa. Some of the native sayings of these parts found themselves, it is said, in print for the first time on covered bowls, etc., made in this work. The pottery ware was packed in empty palm oil casks, which were rolled over large tracks of land in far distant parts of Nigeria and neighbouring countries. They were filled when empty of crockery with palm oil and returned full to our soap and oil factories here.

Some West African mottoes :

"TANI FE KANI."

"OJU LARI."

"APA LARA."

"IN FE MO."

Among the articles made was a cow (Plate XXIX.) that served for a cream jug. It was a great success, and showed some ingenuity in its modelling. The handsome square jug (Plate XXIV.), was made in white vitrified stoneware, glazed thickly inside, but smeared only on the outside. The general design is admirably carried out. This style of ware was completely done away with almost fifty years ago, because the ornamentation was so very easily clogged with dirt and made the jugs troublesome to clean. The egg 'hoop' and cup remind us of old times. Plate XXIX. is a thistle-shape, made very light and thin. The 'hoop' is in imitation of the wooden and horn ones previously used.

Mr. Balfour was the last of the old school of Scottish master-potters, and was fond of retailing to me his reminiscences of the old potteries. He sold his pottery in 1904 to the Caledonian Railway Company and for a few years carried on business as a merchant. He finally retired from business altogether, and during these latter years he gave me a great amount of useful information which I have used in this book. He was bright to the end and passed away when over eighty years of age.

One of Balfour's old workers, who had returned to work after being away for several days, on being remonstrated with, coolly replied, "That the maister seemed worrit like, and would be none the waur if he would tak' a day off hi'sel' whiles." They were proper worthies in those days. Have we lost that old spirit of loyalty and friendliness to one another that existed then?

Alexander Balfour had a son 'Jack' who unfortunately never enjoyed robust health, and died a comparatively young man. He was an enthusiastic antiquarian; his interesting work, *The Book of Arran*, is considered a good example of his studies in this subject.

VICTORIA POTTERY, POLLOKSHAWS

This quaint old town, where 'the queer folk' are said to come from, gave to the world that genius James



PRINCE ALBERT AND QUEEN VICTORIA.
Pollokshaws Pottery, David Lockhart & Sons.

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Tassie, "one of the ablest artists born in Scotland during the eighteenth century."

In Cogan Street the Victoria Pottery of David Lockhart & Sons is actively engaged at work. There is a tradition that it stands on the site of an old and former pottery. At first sight there would appear to be some foundation for this story, for the word 'Cogan' is Celtic for a pottery drinking-vessel. But Mr. Lockhart informs me it has a more prosaic origin in the fact that a cotton mill once stood in this street belonging to a man Cogan, hence the name of the thoroughfare.

The present works were built in 1855 by two men, David Lockhart and Charles Arthur.¹ The factory from its inception produced good serviceable domestic articles in white and decorated earthenware. They also produced, as we see in the illustrations, Plate XXVIII., quaint kitchen ornaments still to be seen on the mantelpieces of our old folks. The design of these ornaments is full of interest. Great care and considerable trouble were taken to 'stick-up' the various sections, and are, if only on such account, worth recording.

The business for ten years continued to prosper under the care of these two men till 31st December, 1864, when Charles Arthur resigned and went to J. & M. P. Bell's Glasgow pottery.

The firm hitherto had been Lockhart & Arthur, but it was now altered to Lockhart & Co., and later to the more distinctive one of David Lockhart & Co., and remained so for many years, till in 1898 Mr. Lockhart assumed his two sons, Joseph R. and David H. as partners, when the firm took the well-known title of David Lockhart & Sons by which it has been known ever since. Mr. David H. Lockhart died in 1906.

David Lockhart, after spending his life and a long and honourable career in the pottery industry, passed away when over eighty years of age in 1912.

His surviving son Joseph took over complete manage-

¹ Learned his trade in Verreville.

ment of the business. He was for some years Chairman of the Manufacturers' Association in Scotland. He was a most public-spirited man, but unfortunately his enthusiasm for work among our soldiers during the Great War was beyond his strength, and he passed suddenly away in the prime of life.

He has been succeeded by his two sons David and Joseph, who now carry on the business with fresh vigour and enterprise. It is owing to the kindness of these friends I am able to give the figures.

TRADE MARKS.



LANCEFIELD, OR ANDERSTON POTTERY

This factory was situated in Lancefield Street, adjoining the Lancefield Glassworks. Indeed, the factories may almost be said to have formed one concern, so closely were they allied in their management. The works are supposed to have been started in 1820, but there was some delay in this, and it was not till 1824 that they were in full swing.

The original proprietors were the Kidstons and Archibald Geddes, a son of John Geddes of Verreville. Prior to this venture the Kidstons were already connected with the pottery trade, for they were wholesale china merchants, and their office was at No. 6 Queen Street, the firm's

title being William Kidston & Co., and the partners William, Richard, and Archibald Kidston. These men all lived in the Anderston district.

The pottery ran under the firm of Geddes, Kidston & Co., who in 1825 had purchased the works from the original builders of the pottery and glassworks.

One of Kidston's sons managed the pottery, and Archibald Geddes managed the glassworks. But in 1824 Archibald Geddes describes himself as a 'stoneware manufacturer' in an advertisement in the local press; for in those days pottery and glass manufacturing were often combined as in this Lancefield work.

The whole affair was not of much account. White earthenware and china similar to what was produced in Prestonpans were made here. Indeed, most of the operatives came from that district, for about this time the potteries there were giving up business. In 1828 Archibald Geddes left the firm and went over to Verreville.

The pottery in 1838 ceased operations, and Kidston, who had purchased Verreville, removed all the moulds and machinery to his larger factory.

It had also a large fine cone like Verreville. The view of Finnieston, Plate XII., in which a cone appears, is said by many people, including the late Mr. Robert Cochran to belong to this pottery. Other authorities maintain that Verreville was the more important and was actually built earlier, and that Lancefield cone was not even built when the picture was made.

Messrs. McHutcheon & Co., Galvanisers, 82 Lancefield Street, built their factory on the site of the pottery. A few years ago, while digging some foundations, the firm came across some broken pottery rubbish and also the flues of one of the old kilns.

There is some confusion about Anderston Pottery and its many changes which can be cleared up quite easily, for the Lancefield lands all belonged to Geddes, Kidston & Co. In the *Glasgow Argus*, 4th July, 1835, the boundaries of the property are given, and described as

"bounded on the South by the river Clyde, on the North by Finnieston Road (now Stobcross Street), on the East by Geddes, Kidston & Co.'s works in Lancefield Street, and on the West by Verreville Pottery."

In 1835 the firm sold Lancefield Pottery to a group of potters who called themselves the 'Anderston Pottery Company and Flint Glass Works.' This lasted only three years when Borron Price one of the partners retired, and Kidston took over the whole concern and removed it as we have seen to Verreville.

HYDEPARK POTTERY

This factory, as its name implies was established at 45 Hydepark Street in the Anderston district in 1837 by two brothers, John and William McAdam. The Hydepark Bottle Works were situated alongside.

The pottery was not a large one, and made chiefly Rockingham ware in teapots, etc.

John McAdam was the active man of the pottery. William concerned himself more with the adjoining Glass Bottle Works.

John was an intimate friend and constant correspondent of Garibaldi, and showed his admiration in calling his eldest son, a chartered accountant, Menotti Garibaldi McAdam, after the son of this great Italian Liberator.

The works were removed in 1844 to the Gallowgate in the east-end of the city. The site of Hydepark Pottery was sold, and is now covered by Messrs. Bilsland's Bakery.

The works only remained a few years in Gallowgate, for in 1850 William, who had meanwhile disposed of the bottle works, came to join his brother in the pottery. Their business grew so rapidly that they were compelled to launch out into larger premises in Campbellfield Street, and on this site they built the Campbellfield Pottery.



PIGEON. EGG HOOP.
Britannia Pottery.
Collection of Author.

GREEN GLAZED
"LUGGIE."
North British Pottery.
Lent by Miss Balfour.

COW MILK JUG.
North British Pottery.
Lent by Mr. Muirhead Moffat.

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CAMPBELLFIELD POTTERY

Rockingham ware had hitherto been the staple class of their products, but now they added the manufacture of white earthenware. Not many years after this factory was going they discovered it to be too small for their trade, and they again began to look for another place on which to erect a more ambitious pottery.

A great building boom was then sweeping over the country, and the McAdams like many others were tempted into schemes far beyond their resources. They erected a large pottery in Flemington Street, Springburn, which, in the seventies of last century, was quite in the country, and called the factory the

SPRINGBURN POTTERY

It consisted of a large square block built with red and yellow facing brick, with square towers at each corner. The floorage of the workshops was so extensive as to be out of all proportion to the kilnyard.

The apprentice potters used to run races round the empty flats—many a race I ran as a boy. The works, in many respects, were advantageously planned, and were the first to have a private siding from a railway. The McAdams might have ultimately converted the place into a workable pottery, but the crash came in the boom, which brought suffering to so many families in Glasgow. The pottery, in consequence, had to cease working, and was sold for what it could fetch.

William McAdam emigrated to New Zealand and started a small pottery near Dunedin, where he turned out quite serviceable teapots. Both these men died many years ago.

The works remained closed for many years. At last Mr. Currie, who had worked in Thomson's pottery at Annfield, got possession of the pottery and restarted it with the assistance of some friends under the name of

the Springburn Pottery Company. Mr. Webster¹ successfully managed the pottery for many years. Mr. Arnott became later the manager, and for a time the business flourished. Unfortunately, the market this pottery catered for became the dumping ground for cheap German pottery, and the works were closed and sold to the present proprietors, the Craigpark Electrical Cable Company, Ltd.

MARKS.

C. P. CO.

CAMPBELLFIELD



SPRINGBURN

ANNFIELD POTTERY

'Thomson's of Annfield' was one of the most familiar family names in the city of Glasgow sixty years ago. About 1816 the above works were erected in the east-end of the city. They covered an extensive area which had a frontage to Gallowgate, and stretched up Sword Street to the North British Railway. Indeed the railway passes over part of the pottery yards.

John Thomson was closely connected with Staffordshire, and most of his staff and potters came from Burslem in the 'Potteries.'

The ware produced was entirely white earthenware of a superior quality. Their chief market was Australia, to which country they shipped a large variety of shapes and patterns in teaware, printed chiefly in a mulberry tint of some eastern pattern. The engraving is good and clear, and the stamp inside the foot of the ware with the name of the pattern is 'J. T. & S.' Sometimes the name of the pattern appears in a circular ribbon over these initials. The firm had no trade mark.

The Australians are great tea drinkers, and Thomson's firm realized this before any other pottery, and controlled the market for many years in cups and saucers.

¹ Father of William Webster, Secretary of the Liberal Federation.

Thomson died in the early eighties of last century, and about 1884 the works were closed and the moulds and plant dispersed at an auction sale, with the exception of the flintmills. Annfield Mills are still running, grinding flint and Cornish stone; the driving-power is an old beam engine built by Watt over a hundred years ago. They were grand tradesmen in those days.

Not many years ago some kilns jutted out into Gallowgate. These were all demolished and a handsome row of tenements was erected.

Unfortunately, the trade Thomson had with Australia went to Staffordshire, and Scottish pottery was the poorer for the loss of this fine pottery going out of action.

John Thomson, the head of the firm, was a prominent citizen of Glasgow, especially in philanthropic work. He lived in Tylefield Street, not far from the pottery, in those days a pleasant part of Glasgow surrounded by well-kept gardens and orchards. He was one of the founders of the Mechanics' Institute in Bridgeton, Glasgow.

This was one of the oldest Institutes for providing working folk with a comfortable social club. It had a happy, useful, and successful career, and was absorbed in 1922 in a larger scheme of social welfare in the district.

MARKS.

J. T.
ANNFIELD

J. T. & SONS
GLASGOW

CHAPTER VIII

THE PRESTONPANS AND PORTOBELLO POTTERIES

INTRODUCTION

THIS district might justly dispute with Glasgow the priority of place in a book on Scottish Pottery, for we have accounts of the manufacture of earthenware and china here from very early times. From this old town the Art of making pottery wares spread to the surrounding towns and villages of Cuttle, Newbigging, Musselburgh, and Portobello. A district of 'Five Towns' of potteries similar to the larger prototypes of Staffordshire made famous by Arnold Bennett.

The earthenware figures here presented may be considered as poor relations of the finer china ones, for long they were considered only good enough for kitchen shelves; but now such old ornaments, with their sweet and fragrant memories of the past if we care to peer beneath their surface, are finding a niche in our drawing-rooms.

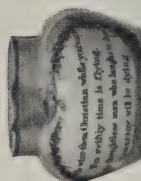
These old Scottish ornaments may have little artistic merit and may warrant small praise, but they form an interesting link in the social history of Scotland.

In the Loan Court of the Victoria and Albert Museum there are quite a number of such interesting ornaments, as well as jugs, etc.

Edinburgh from early times in Scottish history was not only the Capital and seat of the Government, but



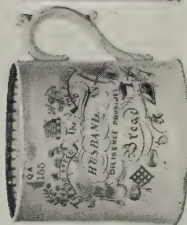
WHISKY FLASK.
Prestonpans Ware.



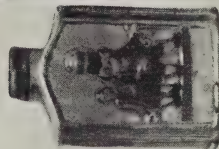
BOWL AND CREAM
JUG.



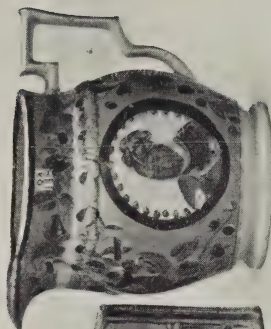
Britannia Pottery.



MUG.



TEA CADDY.
Prestonpans.



OVAL JUG.
With portraits of
Wallace and Bruce.

Smith Institute, Stirling.

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was also the social centre of the kingdom, till Glasgow by the opening years of the nineteenth century was beginning to assert her position as the commercial centre of Scotland.

After the Restoration towards the end of the seventeenth century the idea of producing a finer quality of pottery than hitherto produced occurred to Robert Douglas of Leith. In old Records of 1695 his name appears applying for permission to erect a kiln and the necessary workshops in Leith. He tells us that the expenses of doing so were far beyond his resources, and he was unable to complete the construction of the factory, and that some of his troubles "were owing to the course of trade for the last five years, he could get none to join him in such a public and expensive work."

'The Auld Alliance' between the French and the Scottish peoples influenced much of our domestic arrangements, and some of the crockery required for the table would be at first probably of French origin.

In 1703 two Scots, by name William Montgomerie of Machrie Hill and George L——, merchant in Edinburgh, evolved the idea of producing 'Purselane.' They probably had been in France as 'Scottish gentlemen of fortune,' not uncommon in those days, and had in their travels picked up some knowledge of this class of pottery from workmen in a French porcelain factory.

They successfully appealed to the Scottish Parliament for assistance, for in due course Act XI. 3. was passed, granting them protection in their enterprise.

The date is important and interesting, for it was some years later that Bow and Chelsea, the first china works in England, were established.

These men lost no time in erecting a 'Pott-house' and all the necessary conveniences for the production of "laim, purselane, earthenware, and for bringing from foreign countries the men required for their encouragement in their undertaking."

The Scottish Parliament awarded them further privileges in granting them "exclusive rights of making laim, purselane, and earthenware for fifteen years."

Robert Douglas on hearing of this proposition at once petitioned against such a grant on the ground of the considerable expenditure he himself had incurred on a similar undertaking. To prove to Parliament "that 'he was not so much concerned for his own private interest as the public good he was content to take Montgomerie and his partner into society with him,' so that the idea of producing porcelain might be more economically and efficiently carried on."

Public opinion however was averse to this proposal, and the monopoly was duly granted.

I have been unable to trace the site of this factory. Much later than the date of founding this pottery the following notice appeared in a London paper dated 24th December, 1764:

"We hear from Edinburgh that some gentlemen are about to establish a porcelain factory in Scotland, and have already wrote up to London to engage proper persons to carry it on."

This paragraph very likely refers to the actual introduction of porcelain manufacture in Scotland, and may refer to the early china works in Prestonpans, or it might refer to the following letter from the late Sir George S. Mackenzie to Wedgwood in 19th January, 1815, and dated from Edinburgh:

"The late Dr. Kennedy of this place, I remember, made a great many experiments in porcelain, and in looking among some of his papers in my possession I find some memorandum, and specimens of his manufacture, which perhaps you might wish to see. Some of the pieces, in my opinion, are very beautifully grained. If you desire, I will send them in a small box, or packet."

Wedgwood, in his reply dated 28th January, 1815, says:



MOTHER AND CHILD.



TWO WOMEN CARRYING FRUIT.
Prestonpans Pottery.

Lent by Vernon Roberts, Esq.



SOLDIER.

Uniform Grenadier Company
of the Royal Edinburgh Volun-
teers about 1800.

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"The memorandum, and specimens of the late Dr. Kennedy that you are so good as to offer, and for which I feel properly grateful will not therefore be useful to me.

(Sgn^d) JOSIAH WEDGWOOD."

I am of opinion that factories supposed to have been erected in the town of Edinburgh were more likely to have been built in the neighbouring towns of Portobello, Musselburgh, or even as far away as Prestonpans. There, coal was close to the works. The chief potteries, therefore, around Edinburgh lie to the south-east of the city, along the shores of the Firth of Forth from Prestonpans to Portobello.

PRESTONPANS

This is probably the most interesting pottery district in Scotland, and has aroused more discussion, especially among collectors of old Scottish ware, than any other place.

Unfortunately, first-hand information is rare. It is now forty years since the last potter working in any of the 'potworks' died, and it is to be regretted that much useful and valuable information, as to what precisely was made, has vanished with him.

The earliest authentic information regarding potworks in the locality is to be found in a Record dated 1754, wherein it is stated that "over 70 potters were employed in two potteries." Later in the year 1798 the *Statistical Records of Scotland* inform us that "the two potteries are busily employed making domestic ware of all kinds."

In the opinion of many potters of a past generation Prestonpans was considered the birthplace of fine pottery making in Scotland. Certainly its connection with our craft is very old. It is maintained by authorities that this was in no small measure due to the beneficent influence of the monks at the neighbouring Abbey of Newbattle. These monks were the means of establishing

the earliest coal mines in Scotland, and it is quite probable that, as plenty of good clay was at hand, they also started the manufacture of pottery, and that the embossed tiles, with designs of leopards, lions, and various geometrical patterns, such as were discovered in the ruined choir of the Abbey Church at Haddington, may have been made in the district.

Others maintain that the pottery trade in Scotland owed its revival, from the lapse subsequent to the Roman occupation, to our intimate commercial connection with Holland directly across the North Sea. The Dutch have no coal, and it is asserted that the Delft pottery manufacturers received considerable quantities of coal from Prestongrange Collieries. If this were so, it may have induced the Dutch potters to come over here, and settle in Prestonpans where their fuel would be much cheaper, and also because there was plenty of good clay to be had locally. But there is no proof, so far, of these interesting conjectures.

One of the best and early records of chinaware being made in Scotland is to be found in the pages of the *London Chronicle* of the year 1755, and is worth quoting :

“ Four potters well-skilled in the working of English china were engaged to go up to Scotland where a new porcelain factory is going to be established in the manner and process of that now carried on at Chelsea, Stratford-by-Bow. But we know nothing definite of the locality of this pottery.”

There are two large mugs made in porcelain (Plate XXXII.) of a similar paste and with the same ‘glassy’ glaze as that which we see in original Chelsea china.

They are well made and decorated, having the coat-of-arms of the Dalrymple family emblazoned in front, and at the back have the letters ‘Over Hayles’ in red enamel inscribed under the handle. On account of this inscription it is generally believed they were made in a china factory in Prestonpans, although there is no mark of any kind to denote the maker or their place of origin. The

mugs, which hold one pint, are, notwithstanding this uncertainty, worthy of examination, although they are, in my opinion, quite different from any other Scottish china.

The only defect in one of them is that the glaze is 'spit out' inside under the rim, where the 'dipper,' after having plunged the mug into the liquid glaze mixture, has not sufficiently shaken off the surplus glaze adhering to the mug. This blistering is evidence of some defect in the mixture of the china 'body,' or it also may quite as well be some fault in the glaze. This is a vexed technical question in which experts differ, as it still occurs on the best china.

The other mug has been 'easy' fired in the 'biscuit' kiln, and is, in consequence, yellower in appearance, and the glaze has crazed owing to the softness of the 'body.'

Prestonpans was one of the most prosperous parts of Scotland during the eighteenth century, and it is therefore not unlikely to have been the place most favoured in establishing a porcelain factory.

The original name of the place was 'Salt Prieststoun,' which in course of time changed to 'Salt Preston,' then during the process of usage the 'Salt' melted away and it became 'Prestonpans.'

The Englishman John Ray, while travelling along the shores of Prestonpans in August 1661, gives an account of seeing glass being produced from the local sand and kelp (seaweed). This mixture was calcined in crucibles made in a Prestonpans pottery from the local tobacco-pipe clay, which was found to be sufficiently refractory for that purpose.

The first pottery of any consequence, established in 1696, devoted itself chiefly to the production of pans, jugs, etc., for domestic use. There was another factory in operation about this year, but it mainly confined itself to roofing and other tiles, etc. At a subsequent date, and in the early years of the eighteenth century, there existed a pottery making whiteware and china. One of the

cones of the kilns had a stone let into it dated '1760,' but this only referred to the building of the cone, as the pottery had been in operation prior to this date. It was situated a little to the west of the old police office in Kirk Street. The works ceased operations long ago, and most of the workshops were levelled to the ground. We have among many records of this old place, one by the Lord Lovat of Carlyle's *Autobiography* fame, who brought his second son Alexander to be educated in the Grammar School at Prestonpans.

This Lord Lovat had in his possession what is believed by many to have been the earliest specimens of china-ware made in the Prestonpans China Factory.

Lord Lovat, in conversation with Dr. Struthers, LL.D.,¹ who was staying with him in his old home at Beaufort, relates that this china was specially ordered by his son, while he was at school, from this factory as a present to his father. The flints, he added, which were used in the mixture of the glaze, were collected on Strichen Hill, the seat of his ancestry in those days, by the boy while enjoying his school holidays there.

Lord Lovat said his earliest reminiscences of this china-ware were when, as a boy, his aged grandmother was wont to hold out to him and other young friends, as the very highest mark of her favour, the privilege of getting tea with her out of her precious Prestonpans china.

The two principal potteries manufacturing whiteware were Gordon's and Watson's. A larger quantity of ware was made here than ever was made at Portobello, and was more distinctive in character, such as the embossed jugs which were made here in large quantities. One favourite design had Toby Philpot on one side and the Blacksmith of Gretna Green on the other, while a typical piece of 'Prestonpans,' illustrating 'the Battle,' is an

¹ Dr. Struthers was for forty years Parish Church clergyman at Prestonpans. In a letter of his dated 9th July, 1874, he states, "There were potteries with glass works adjoining them, at or near Morison's Haven, during the last quarter of the 17th century."



"PORCELAIN" MUGS.

Decorated with Dalrymple Coat of Arms, with purple roses, red tulips, yellow barley, and blue forget-me-nots. Attributed to China Factory, Prestonpans, *circa* 1760.

Royal Scottish Museum, Edinburgh.

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oval jug with a cavalryman leaping over a cannon painted in vivid colours. Mutchkin spirit ovals or flasks in white and stonewares were also made here, some with a portrait or classical group depicted on the front and a suitable emblem or motto on the back.

GORDON'S POTTERY

This factory, erected by a potter George Gordon early in the eighteenth century, was situated towards the west-end of the town near Bankfoot, and was the more widely and generally known of the two whiteware potteries. It made, principally, white and decorated earthenware in an extensive variety of shapes and patterns.

It is difficult to exactly assign to this pottery the articles that were its special products, for no trade-mark was used except on some of the printed ware, where we may find the initials of the proprietor beside the name of the pattern in the 'semi' at the back of the plates.

It originally commenced operations on a modest scale, possessing only two kilns, the capacities of which were very limited in quantity.

Blue and white printed ware was one of the features of the place. Fortunately, some of the engravings are still in existence, and we are able to judge from these, as in Plate XXXIX., that the designs were chaste, and distinctly above the average of contemporary works of a similar grade. The 'Bird and Fly' was one of the best sellers, and many pieces of this design can still be seen in service.

Large quantities of jugs were made with embossed figures on the sides, and painted in light orange, brown, and grass green underglaze colours, with black and cobalt blue lines on the brims and handles. The wild scenes of fighting depicted on most of these jugs suggest an Irish 'Donnybrook Fair.' Others have so much orange predominating that they would admirably suit an Orange Lodge, but the bright emerald green present in the designs thoroughly destroys that theory.

The jugs are of two distinct forms, round and oval. The figures on the 'round' jugs are supposed to represent scenes from the 'Battle of Prestonpans,' the memory of which was still fresh with old inhabitants, who, no doubt, would ever be ready to enlarge on the events of those stirring days. General Cope took his stand on the banks of the wooden railway that led from the coalpits to the potteries and harbour.

The other form of these jugs was a peculiar narrow oval shape, with distinctive emblems and mottoes on the side panels. These were made specially for Jacobite clubs, which, when filled with water, allowed the members of these secret societies to pass their filled glasses of wine across the mouth of such narrow-mouthed jugs almost unnoticed when toasting the health of the 'King over the water.'

The general quality of the ware is good, the colour of the body, a creamy white, is covered with a thin glaze slightly tinted with cobalt blue stain.

The decorations may be considered crude, but they are effective and pleasing in their simplicity and directness of design and appeal.

Besides making whiteware, terra-cotta and jet, or basalt wares, were also manufactured from local clays. For many years Gordon worked a seam of clay at the Upper Birslie Plantation to supply him with sufficient raw material for such classes of ware.

This pit was worked on the 'in-gaun-ee' system; that is, on an inclined plane instead of an upright shaft. The quarry for many years after its disuse was known as the 'Clayholes.' This great open waste piece of land, which is still remembered in the neighbourhood, became famous as a covert for the badger, till the clayholes were finally filled up in 1870.

The beautiful old Prestonpans teapots and other wares in possession of Mr. Belfield, which I examined, display the excellent quality of workmanship of those days. Certainly, present-day potters are rarely to be met with



OVAL JUG.

Decorated in polychromecolours, on either side a heart-shaped medallion with bas-reliefs of children at play. One side inscribed "Sportive Innocence," and other side "Mischievous Sport." Under the spout W H is written in gold. Round the base an acanthus border.



FISHWIVES.

Decorated in underglaze colours.

Lent by Vernon Roberts, Esq.



OVAL JUG.

Decorated in underglaze colours.

Lent by George T. Rainy, Esq., Edinburgh.

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who are able to turn out such carefully finished pots : the handles, ornamental spouts and seams would alone test the skill of most ' pressers.' These pots (Plate XXXVIII.) were vitrified in the biscuit kiln, only the inside of them received glaze. The jetware has a fine smear of glaze all over it, which, from its glassy nature, in no way detracts from the sharply defined embossed patterns that encircle the pots, or from the high relief of the ornamentation of the knobs or handles of the articles.

Gordon, therefore, did not lack ability or enterprise in carrying on his business. We do not know who succeeded him, but, so far as can be learnt, the property never left the Gordon family till it was finally sold and the business wound up about 1832.

WATSON'S POTTERY

This was the other whiteware pottery, and was erected a few years later than Gordon's, about 1750, by the Watsons, an old family in Prestonpans. It was built on the shores of the Firth on a site a little to the west of the church.

The pottery made here was similar to what was manufactured in Gordon's factory in white and cream-coloured clays. It was larger than Gordon's, having three kilns, and was generally termed the ' Pott-Works ' by the inhabitants of the town. The firm was reputed to have given steady employment to over eighty potters alone, and to have reached a turnover of over £5,000 of whiteware in the year of its commencement.

The works extended from Ayres Wynd in the west to, and including a portion of, the soap work in the east, so that it is apparent the works attained a considerable size.

Watson, from all accounts, specialized in figure-making. To accomplish this project he introduced many English potters and decorators, and this explains why many Prestonpans figures are remarkably similar to

English figure-ware of that period, their distinctive feature being, however, the local characters portrayed.

A good example of this similarity was an earthenware punch-bowl, partly printed in underglaze blue with a floral or Greek fret border, and painted in approved Staffordshire style with groups of flowers in colours. The bowl was painted by an artist of the firm named Greig, who presented it to his sister on her marriage, and marked it with her initials "H. T., 22nd June, 1811." It became the possession of Lieut.-Colonel Green, who obtained it from this lady when she had reached old age, while she was living in Stirling.

These decorated bowls were quite common in the Lothians, for it was customary to present a piece of Prestonpans pottery, suitably decorated and suitably inscribed, to an in-coming tenant on a farm. Sometimes the present took the shape of a set of jugs, some kitchen shelf ornament, or chimney-piece china figures of bird or beast.

These articles are now fast becoming rare, and should be preserved, for they marked a genial and pleasant feature in Scottish peasant life a century ago.

The bulk of the early Scottish figures are supposed to have been produced here, such as Plates XXXI. and XXXIII. They differ from the figures of other potteries in that they are more tastefully decorated; colours are not so profusely employed, and for this reason the modelling is seen to better advantage, the general effect being clean and bright. The palette of colours used was a very simple one—cobalt blues, reds, greens, and browns, but these even are used sparingly. The modelling of the pieces are their principal joy, especially the draperies, which are most effective. The illustration (Plate L.) shows this clearly, and is one of the most charming pieces of pottery modelling I have yet seen.

Besides making whiteware, the Company made stoneware bottles in salt-glaze for holding the famous Prestonpans 'Ale' (tu'penny ale). This factory is credited

with making 'Grey Beards,' or 'Bellarmine,' which the Scottish potters insisted on calling 'Belmarines.' They were in common use during the eighteenth century.

The pottery during Thomson & Fowler's time advertised "plates, bowls, bottles, grey beards, etc.," among other pottery wares.

Watson, after many years of success, eventually got into difficulties, and was compelled to seek the assistance of Fowler, of John Fowler & Co., the Prestonpans brewers. In the end Fowler was forced to take over the entire property, and we hear no more of Watson.

Fowler never interested himself in the work of the pottery, and, being unable to carry on the business, induced his cousin, Cadell of Prestonpans, to become his managing partner.

A short time after Cadell withdrew his interest, and Thomson, a practical potter, was assumed as partner with Fowler in his stead. The style of the firm now became Fowler & Thomson. This Company appointed Charles Belfield to be works manager, of whom we will hear more later.

It is necessary to note all these varied changes of proprietors in this factory, for the operatives still continued calling the place 'Watson's Pottery' to the end of its existence. Sometimes this pottery is still called Cadell's and other times Thomson's, but they all refer to one and the same factory.

The new proprietors of 'Watson's' pottery were not content with making only whiteware, for they, shortly after taking over the works, launched out into making red clay bricks, tiles, field drain-pipes, etc., from clay in the vicinity of the factory; a scheme which did not succeed, and the tileworks ceased after being only a few years in operation.

Thomson, unfortunately, had other misfortunes. He had become surety for a friend called Laidlaw, who owned the Saltpans and Sulphur Works in the west-end of the town. The sum of money was £2,000, in those

days a considerable amount. Laidlaw became bankrupt shortly after this arrangement, and in turn brought down Thomson, as he was unable to fulfil his obligation when called upon to do so. Thomson never got over his misfortune; and died shortly after with a broken heart.

The loss of Thomson, who had really been the head of the business, brought the pottery to an end, and the whole affair was sold off in 1840. Very few pieces of the figure work are marked, but there are a few figures marked impressed in the soft clay, 'WATSON.'

PRINTED WARE PATTERN MARKS.

BIRD & FLY



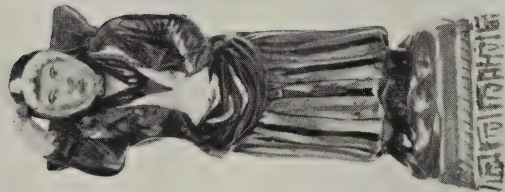
Before closing I would draw attention to the old-fashioned ink-wells made of local red clay and covered with a jet-black glaze illustrated in Plate LVI. These were in general use in the parish schools throughout Scotland till about forty years ago, and are reminiscent of the quill pen and the village schoolmaster. They are now rarely met with except in some remote Highland glen.

NEWHALLS

A small pottery of one kiln, making common ware from the local clay, existed for many years in this village near Prestonpans.

CUTTLE

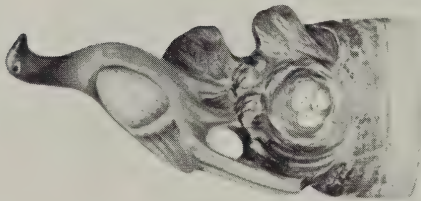
This place is also in the parish of Prestonpans, and had also a small pottery with a single kiln. It seems to have been carried on with energy and some enterprise for many years, manufacturing yellow ware in bowls, jugs, and crocks.



FISHWIFE.
Portobello Ware.
(Rathbone),
about 1840.



PENNY BANK.



PIGEON ON ROCK.



PENNY BANK.



Portobello Ware.
(Rathbone),
1830-1840.

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ROMBACH

Rombach, whose name has a Dutch ring about it, built a small block of workshops and a solitary kiln in the High Street of Prestonpans, and used the local clays for making domestic ware. The pottery was closed a hundred years ago.

CUBIE

A potter, Adam Cubie, also built a one kiln pottery not far from Rombach in the High Street, towards the east-end of the town. He made chiefly water-jugs, 'saut buckets,' butter tubs, etc., for the farmers. Cubie closed his works towards the end of the eighteenth century; the date is supposed to be actually 1797.

PRESTONPANS POTTERY

When Gordon and Watson's potteries closed it was felt by everyone that the pottery trade had left the district. Fortunately, Charles Belfield had faith in the local talent, and in 1832 he founded this factory. It is the survivor of those halcyon days of potting in Prestonpans.

Belfield, like many leading Scottish potters of the time, hailed originally from a Derbyshire pottery in the early years of the nineteenth century.

The Duke of Buccleuch had erected a small pottery with one kiln at the village of Cousland, near his Palace at Dalkeith. Cousland clay fires a soft cream-colour, and Belfield was invited down by the Duke to manufacture some fine dinner and dessert services from it, and have them suitably decorated in tasteful designs. Specimens of this pottery are still to be seen in the Palace.

When the work was satisfactorily accomplished Belfield left, and became manager, as we have seen, of Thomson's pottery in Prestonpans till he left in 1832.

By 1836 Belfield took his son James in as his partner and founded the firm Charles Belfield & Sons. The factory was erected in the west-end of the town, partly on the site of the old 'secret work' of the unfortunate Laidlaw. Some of the workshops are nearly two hundred years old. It is a quaint and interesting factory, delightfully situated on the rocky shores of the Forth. In winter a high and stormy tide sometimes penetrates into the kilnyard.

This is supposed to have been the first place to make white sanitary ware in Scotland of a superior quality. The quality was so good that very soon a fine connection was established, and the name 'Belfield' became associated with the great sanitary improvements in houses throughout Scotland of that period.

The fashion of this class of ware changed and it became unprofitable to make, and ultimately had to be discontinued.

The production of brown and yellow domestic wares from the local clays was then started, and 'Belfield' Rockingham teapots and other brownware became known wherever tea was a beverage.

Previous to 1852 the manufacture of 'hand thrown' drain pipes had been introduced by Charles Belfield, Sr., and these were added to the other branches of the pottery. These pipes initiated the immense drainpipe trade that has since grown up in Scotland.

They were originally formed by being 'thrown' by hand on the old potter's wheel! The illustration (Plate LVI.) is an excellent example of these now historic pipes. If we examine the illustration we may discern the wavy marks of the potter's fingers as he formed the tube on his wheel. The pipes are usually 15 to 18 inches long, and about 3 to $4\frac{1}{2}$ inches internal diameter. They taper in width so that the narrower end can be inserted into the wider end, there is besides a check formed in the narrow end to enable the joint to be made tight.



MUSTARD POT.

VINEGAR BOTTLE.

PEPPER.

SALT.

Prestonpans Ware.

Smith Institute, Stirling.

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Charles Belfield, not content with this primitive pipe, invented a method of forming them by 'pressing' them in a mould, at the same time introducing the spigot and faucet joint which is now in common use. Unfortunately, Belfield did not adequately protect his brilliant idea with a proper patent, and others reaped the benefit. Latterly, steam-power was applied to his invention, and the old order of piping was revolutionized.

These original 'thrown' and hand-made pipes were used for a number of purposes. Large quantities were employed for conveying fresh water by gravitation to the towns that were then rapidly springing up in the industrial parts of Scotland. In this work Belfield's firm became recognized as experts.

When gas was introduced these pipes, now coated with glaze, were the only means available to convey gas. Occasionally these are still dug up in various districts, and should be preserved as relics of an age that seemed quite happy although they did not know the benefits of sanitary drainage, water, or gas supplies such as we now enjoy. Mr. Belfield, the grandson of the founder, is still 'carrying on' the manufacture of all kinds of Rockingham ware and many other kindred articles in this old factory, and is maintaining the best traditions of this pottery centre for the quality of its wares.¹

The town in these days was a busy centre. There were two important pottery fairs held annually, and these provided a ready market for the productions of the various potteries.

In the Scottish census of 1796 mention is made of two large potteries and two smaller ones working, and employing altogether 252 potters. The Brick and Tile Works employed as well some thirty potters for their own special work. These numbers appear to us to-day to be comparatively small, but industrial progress in Scotland was then only in its infancy.

¹ To this gentleman I am indebted for much of the information on Prestonpans, where he has lived and worked all his days.

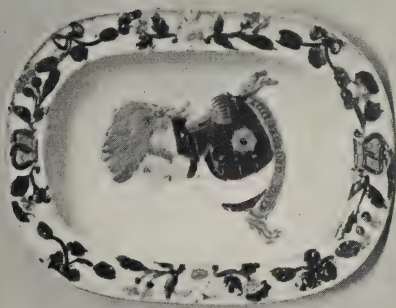
The potters were a thrifty and prudent class of workers. This commendable trait in their character is brought out in the successful management of their 'Potters' Friendly Society.' It had over a thousand members. This was in great contrast to the coal miners, who, although they were more numerous, had no such society in the town. The potters were therefore entitled to have a good conceit of themselves, and felt justified in having a grand parade every year on the first Friday of June. This gala day was most religiously maintained till 1840, after which year no records have been kept of this annual procession. Although the actual festival was largely abandoned, 'Potters' Day' was held in happy remembrance by the townsfolk for many years afterwards.

The 'simple' folks in those days had no expensive asylums to go to, and it was customary to employ them in many industries near their homes that were not dangerous, and on duties that they could perform easily.

Of this order was a 'wheelman' called Rabbie Smith, born in the town about the end of the eighteenth century. He dwelt with his sister Belle in a dwelling opposite the church known as 'Morrison's Buildings.' He worked in Gordon's pottery turning a wheel for a thrower, and, as he was the fortunate possessor of a drum, he became the unofficial drummer of the town.

If at any time there was a meeting of the Potters' Society, he was not slow in seizing the opportunity of sounding his drum to summon all the members to their assembly.

But Rabbie's day of days was the annual procession of the potters on their gala day. Long before the appointed hour he was at the door of each member of the society, rousing them up so that they should be in good time. Of course he accompanied the procession, with his drum slung over his shoulder, banging it loudly all the time.



DISH.

In white ware, with bas-relief polychrome decoration. Bust of George IV. in centre. Border with crowns, Prince of Wales feathers and floral ornaments.

1821.



PIPE.

In glazed white ware and decorated with various colours.

1820.



PLAQUE.

Coloured and glazed earthenware, figures of Bacchus, Venus, Cupid and Ceres, in bas-reliefs with enriched border.

1800.

Prestonpans Ware, Royal Scottish Museum, Edinburgh.

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TAXES

After our Napoleonic wars this country had so exhausted its financial resources that almost every industry was compelled to pay a share of the burden of refilling the National Exchequer. New taxes were imposed. Bricks and tiles came under the new schemes of taxation, which, in the case of bricks, amounted to 2s. 6s. per thousand, and in tiles 8s. per thousand (a considerable percentage of their selling price), and such heavy duties handicapped and hindered these trades then struggling to make a beginning.

A tax was levied on stoneware bottles amounting to 15 per cent. on the quantity *made*, not sold, which conditions were considered unfair considering the quantity that might be broken before being sold.

From the Records of the locality we learn that coal was cheap—a most important factor for a pottery. For example, in Gordon's and Watson's works twenty tons of fuel were consumed weekly in each place for firing their kilns, and the price was only 5s. 6d. per ton, and that included cartage into the kilnyards.

The wages paid for producing the ware, to our ideas of this vexed question, were apparently low. The wage of a potter over a hundred years ago averaged 1s. per day, but if he was an energetic man he could earn considerably more. On piecework a clever potter could earn as much as 15s. per week; probably he would be a figure-maker, of which he might produce forty per day. Boys received from 1s. to 2s. per week, and started at the early age of eight years. When they were nearly fifteen years old, they were bound as apprentices, to be made in course of time journeymen potters. All of which gives a good idea of the time it takes to turn out good potters, and explains the excellent grade of ware in Prestonpans. From what one can gather the wages and conditions in the Staffordshire Potteries were no whit better, nor were they in any other trade; in some trades

conditions were much worse. Coal mining was in a deplorable condition, and the workers were treated as serfs, or slaves of the pits, and lived under depressing surroundings.

The old Prestonpans potter was a craftsman, making his pots with care, and finishing them quite as well as similar ware was then turned out by his Staffordshire *confrères*. It is true, defects in the 'body' and glaze can be detected, as also in the crude colouring of these early pieces, but the whole appearance of the productions, and the general care in finishing the figures, particularly the draperies and features, are worth more than a cursory glance.

In criticising the early Prestonpans figures it must be remembered early potters knew very little about fine grinding of flint, or glaze. The 'body' inclines to be yellow, indicating a large percentage of Devonshire ball-clay in the 'body' mixture, and not being very well sifted is rather sandy in grain, the glaze thin and poor, with the result that prominent parts, such as a nose, or tips of fingers, or brim of a hat are exceedingly easily chipped, and it is very rarely we meet with a perfect example of an old figure—indeed, grave suspicion might reasonably be cast on a perfect specimen. The jugs, generally speaking, are better glazed, and have been fired harder, which has greatly improved their appearance.

Shortly after my father went to Verreville Pottery Gordon's pottery was closed, and many potters came from Prestonpans to Glasgow to find employment. Among these was a potter Robert Purves. He, by his ability, became works manager of Verreville, and my father and he became fast friends. In the course of many chats, of which my father left me notes, Purves said he never understood the reason of the white potteries closing after a successful career of a hundred years.

Purves was a typical Prestonpans potter; he was not only a fine craftsman in clay, but could glaze and fire the pots as well. Few potters are competent to perform the

whole process in these modern days of specialized trades, improved equipment, and organization in a pottery. Now-a-days a potter will keep to making plates, or jugs. That man is a platemaker, or jugmaker—not a potter. His outlook and interests are in consequence narrow and limited. This is a misfortune, not only for the individual operative but for the craft as well.

There was a certain 'esprit de corps' to turn out ware carefully finished and 'fettled.' This can be observed in the ware turned out of this town. The handles are carefully 'stuck-up,' the spouts and lips of jugs are of the same thickness as the edge of the article. The lids fit neither too tightly nor too slack. These are the details that show the good craftsman, for his character is not only to be found in the general design, but in the care and attention in producing the finished article. Therefore, Prestonpans figures especially are better modelled and 'potted' than from any other Scottish pottery. The quality of the ware and glaze may be defective, but the general quality of the work overcomes one's prejudices, and one admires the pose and general artistic finish of the characters portrayed, for there is no attempt to cover the defects with splashes of strong and brilliant colourings, and for this reason Prestonpans ware was a credit to Scottish pottery. Another prominent feature is that there appears to have been no standard pattern of pedestal, so often met with in a pottery, for sticking the actual figures upon. Each figure was made in conjunction with the base, which often is charmingly wrought and designed to form a background and support the figure as well during the delicate processes of firing.

CASTLE POTTERY

This was originally a factory built on the most modern lines about twenty-five years ago to produce tiles for decorative purposes in a variety of coloured glazes or enamels. It was erected by a man Clunas, who, after

a brief period, was compelled to give up the venture and close the place.

It was started again by the Scottish Porcelain Company, Ltd.

The works are under the management of Mr. Boyle, who at one time was in the Belleek Pottery at Fermanagh, in Ireland. The pottery produces small articles in lustre porcelain, with the coats-of-arms of various Scottish towns painted on them, and also a large variety of fancy ornaments, among which may be noted wicker baskets beautifully and delicately made of woven clay in the manner of the original Belleek ware.

DUNBAR

A large tile and brick work flourished at West Barns for many years, and made domestic pottery for local use. It was closed thirty years ago, and the works dismantled.

JOPPA

Joppa lies midway between Portobello and Musselburgh. A brick and tile work flourished for many years there. It made also glazed useful articles for domestic use. The saltworks are now one of the oldest industries in this old village, and have been in existence for fully two centuries supplying the local potteries with necessary sea salt for glazing their wares.

CHAPTER IX

PRESTONPANS AND PORTOBELLO AND OTHER CENTRES

PORTOBELLO

THIS historical district owes its prosperity and renown as a pottery centre to an abundance of good red clay of a fine quality found there, and also to its proximity to some of the oldest coalpits in Scotland.

On the banks of the Figgart Burn in the early part of the eighteenth century there was a stretch of country-side, the soil of which was so barren and clayey that it was impossible of cultivation. From time to time a few red bricks and tiles had been made by hand from it in a very primitive manner on the spot, but in 1764 a distinct change took place, transforming the quiet country-side into a busy hive of industry. Two builders from Edinburgh, Patrick and William Jameson, came on the scene. They had undertaken large building schemes in Edinburgh and were anxious about their supplies. They therefore set about erecting large brick and tile works, and were soon producing three million bricks per annum. This soon far exceeded the local consumption, so Jameson found markets for his bricks in Virginia and in Carolina in America, and on the Continent.

This year, 1764, was also the date noted in the newspaper referred to relative to the establishment of a china factory.

In a map of this district dated 1783 we will observe

marked on it '2 poteries'—the spelling is peculiar and worth noticing, as it shows the influence of France in spelling pottery—and also 'Jameson's Brickworks.'

In one of those potteries about 1770 a raid was made by the 'press gang' for obtaining seamen for the Service. The incident reminds us vividly of 'the good old days.' The party was successful in capturing a potter named Robert Hay. He was, however, so besmirched with clay from his occupation that he successfully pled with the sailors to allow him to go home, wash himself, and change his clothes, to which request they acceded. When Hay arrived at his home he went straight to his bedroom, and speedily raising one of the back windows, promptly made his escape.

John Hay, a descendant, became, as we shall see, proprietor of the Rosebank Works.

In the Scottish Historical Exhibition of 1911 there were among the various exhibits some interesting pictorial tiles made and designed by Benjamin Walker about 1770 in Portobello, which displayed considerable skill in their production. No actual trace of this factory can now be found.

Collectors of Portobello ware are more intimate with the names of the Brothers Scott. They were ingenious and enterprising potters, and although they had very little spare capital they confidently approached Jameson to help them in a practical manner about 1786, and he willingly erected a pottery which he leased to them, and the firm of Scott Brothers became established. This firm was well-known for its excellent quality of white stoneware. For many years their productions consisted largely of dinner ware and tea sets of a superior quality. Fruit services were also made and decorated in tasteful floral and ornamental designs. They also used the local red clay for many articles, both useful and ornamental, decorating them in a quaint manner with a pale pipe-clay slip. This latter ware had a chocolate colour, when covered by the glaze which had a rich lead-glaze appear-

ance. Latterly, models of beasts and birds were made in a grotesque fashion in this clay and highly glazed as well. They cannot have made large quantities of this class of ware, for it is now scarce and much sought after by pottery collectors, and the illustrations of a piece will give the reader a better idea of the genuine article than any amount of writing can do.

Unfortunately, like so many other articles of Scottish manufacture, a large proportion possess no distinguishing mark. Some, however, do have these marks stamped into the plastic clay (Plate XXXVIII.):



SCOTT BROS.

The pottery after being in operation for some ten years was closed in 1796, but not without leaving a permanent impression, for pieces of 'Scotts' are still to be found, and are, rightly prized not merely on account of their rarity but for their artistic and technical qualities.

Two men from Edinburgh, Messrs. Cookson & Jardine, purchased the works, and soon re-opened them, for the following announcement was published a few months after completing their bargain, "that the pottery was being reconstructed on Staffordshire lines, and that production would be enlarged, and business pushed forward on a liberal scale and plan."

Potters were induced to come from the neighbouring factories at Prestonpans, Musselburgh, Newhalls, and Newbigging. The firm now put fresh vigour into the concern and it became soon a most flourishing affair. In 1808 they sold the business to one Thomas Yoole, who then took over the management himself. He had been associated with the firm for some years as their practical manager over the potters, so he was familiar with the requirements of the trade, and was besides already an outstanding figure in the civic affairs of the town.

Thomas Yoole had two charming daughters, Janet and Grace (curiously enough a favourite name for the daughters of potters), whom he brought with him one day on a visit to Glasgow, which was rapidly becoming the metropolis and business centre for Scotland. Stories had probably reached him of the extensive potteries being erected there, and no doubt the fine shops attracted the young ladies. When they arrived they were hospitably received, for we hear of them visiting one of the largest of these potteries.

They were shown over the various departments by one of the clerks, a man named Rathbone, who, judging from his name, probably originally came from Staffordshire. In any case he seems to have made himself most agreeable to the guests, so much so that Yoole pressed him to come and pay them a visit in return for his kindness and courtesy, an invitation which the latter was not slow to accept, and we soon afterwards hear of him stopping with the Yooles at Portobello. He came, he saw, he conquered, and ultimately married one of Yoole's daughters, and it did not require much persuasion on the father's part to induce Rathbone to take up his abode permanently at Portobello.

His father-in-law made him a partner in 1810, and a new lease was granted by Jameson, of which we have this record: "To Thomas Yuille or Yoole, and partner, under the name of Thomas Rathbone & Co., white stoneware manufacturers, etc., etc."

Jameson was a brick and tile manufacturer, and it was, in consequence, stipulated by him that the new firm should confine themselves entirely to the manufacture of whiteware, and not make any articles from the local red clays, such as tiles, etc., while he, on his part, was willing to confine himself also to this class of work.

The chief productions of the new firm, besides the general class of ware already described, became more ornamental in character.

Rathbone was a man of most cultured and artistic



OMNIBUS TEAPOT.

EGG HOOP.
Imitation horn.

CAN CUP.

CREAM POT.

Prestonpans China Ware.
Smith Institute, Stirling.

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taste, and the works were now converted to producing, in rapid succession, daintily coloured and admirably modelled figures and plaques. These figures are still most interesting to us, as they depict the local characters, as well as the style of dress of that period. Fishwives, fishergirls, seamen, soldiers, peasants, and various local celebrities all furnished him with ideas for his work. Besides these, he produced a wonderful collection of farmyard and wild animals. Among the best models of this class of work was a reproduction in miniature of the famous lions which are to be seen at the entrance of the Loggia dei Lanzi in Florence. This latter was generally admitted to have been Rathbone's finest piece of modelling in this style of pottery ware.

All these figures were made rather thick, heavy to handle, and, although their general appearance is attractive, they do not possess the same quality in finish as the Prestonpans potters put in their work. The hole in the bottom to let the air and steam escape during firing in the kiln is usually a rough X. Indeed, in all specimens I have examined I have noticed this peculiarity. This aperture is done by the 'presser,' after he had made his figure with a 'pricker,' a tool somewhat like a hatpin, in the soft clay before he takes the hardened figure out of the mould to dry. In most cases this hole is made round, as if made by a disused gas-burner.

Small square and oval plaques with simple mouldings around the edge are also distinctive specimens of Rathbone's work. Some of these have portraits crudely illustrated on them, such as George IV., which was a popular piece to celebrate the visit of that king to Edinburgh; also one of Queen Victoria riding on horseback, also commemorating her first visit to Scotland in 1842. Others have scripture texts printed in U/G black in the centre surrounded by a gold lustre frame.

The most popular frames were square in form, and of a rococo pattern imitating in some cases the ambitious and elaborate designs of that 'genre.' Gold was rarely

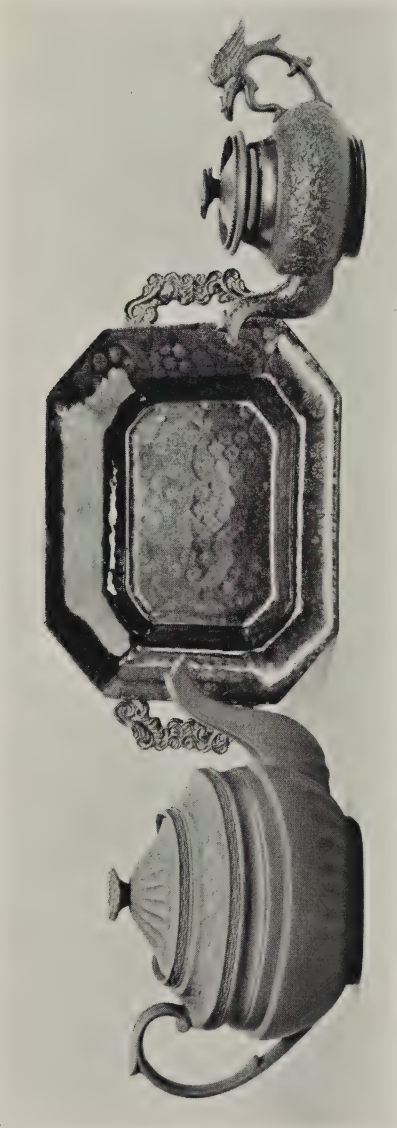
if ever used on these frames, which were covered with the same simple colours that decorated the design in the centre of the plaque.

The 'body' of the ware is cream colour, and the glaze that covered it, although clear and transparent, has a thin bluish appearance, the surface of which is inclined in parts to be rough, caused by insufficient grinding of the glaze.

Perhaps one of the most outstanding peculiarities of the coloured pottery is the frequent use that Rathbone made of a mulberry shade of brown, in some cases it verges on purple. This is produced by mixing oxide of iron, the base of all browns, with a considerable proportion of black oxide of manganese. This manganese was obtained from the local chemical works that made bleaching powder from chloride of lime. Some of the chlorine remained in the manganese used in the 'recovery process,' and in the reaction formed chloride of manganese (MnCl_2) a *purple*-coloured salt. The addition of this 'recovered' manganese to 'underglaze' brown colours was a fairly common practice; but in Portobello this shade of brown was cultivated, giving the colour in many pieces a very delightful soft purple or plum-coloured tint of brown, almost verging to what is termed 'Aubergene' in Chinese ware. The cobalt blue used was also a favourite colour, giving a clear and limpid effect wherever used in the figures. It was mixed with a soft flux of borax, or a mixture of common salt and flint, and is inclined to trickle where it has been laid on too thickly on the piece. Gold purple lustre is occasionally met with, adding a touch of richness to the article.

The other colours commonly employed were of the 'Overglaze' or enamel variety: coral red and emerald green being among the most popular. They are effectively used in fine lines, and tend to brighten up the whole scheme of decoration.

The 'underglaze' browns and blues form the foundation in decorating the robes and bases of the figures,



BASALTE TEAPOT.

(Wedding present to Mrs. Craig's
father or mother in 1815.)

Prestonpans.

DISH.

Chocolate coloured, with white
pipe-clay decoration, stamped
"Scott Brothers."

Portobello

Lent by Vernon Roberts, Esq.

Royal Scottish Museum, Edinburgh.

BASALTE TEAPOT, 1800.

Kingfield.

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while the features are carried out in pale tints of vermilion red enamel. The eyelids and similar fine outlines are delicately outlined in black, with a fine pen rather than with a hair brush.

The general impression of these articles is pleasing and attractive. Some of them are vigorously modelled and strikingly painted, the figures particularly depicting the social customs of a century ago are interesting not only for the pottery enthusiast but also for anyone taking even a slight interest in the past traditions of Scotland.

They were not costly to produce, and were chiefly sold to the country folk all over Scotland. I should imagine the manufacturer would only receive a few shillings for a figure, and about one shilling for a plaque.

Those of us who may have a knowledge of the Staffordshire figure-makers' work of the same period, for it had a great vogue then, cannot but be struck with the similarity of style and model and decoration between the English and those Scottish ornaments, proving that many Englishmen were working for Rathbone, and that they had a considerable share in improving and maintaining the high quality of Portobello ware.

The pottery was now a large and flourishing business. Its importance can be gathered from the fact that over one hundred potters—a large number in those days—were fully employed.

Rathbone leaves us a record of his many disappointments, and tribulations which he had to endure, and which, if he must succeed, he had perforce to surmount. His chief troubles were incurred in teaching and training up the native potters to produce the high grade of white and decorated pottery he had set his heart on producing. About the year 1845 he, it is admitted by his friends, attained the height of his fame and prosperity. In this year, also, we hear for the first time of his son taking an active share in the management of the works, as he was now assumed as a partner to assist his father in the business.

Unfortunately, shortly after young Rathbone had joined his father, old Rathbone passed suddenly away. The business, although apparently prosperous, had absorbed a considerable portion of Rathbone's fortune. The son, greatly handicapped for the lack of liquid financial resources, struggled away by himself for several years, until he was most reluctantly compelled to cease producing any more pottery, and the works were finally closed down. The town was deeply concerned over this stoppage, for the pottery had added to the renown and prosperity of the district.

The works remained idle for many years, no one apparently anxious to venture where such an able potter as Rathbone had failed. The works remained closed till 1856, when a welcome change took place.

The names of Yoole and Rathbone are not likely ever to be forgotten in Portobello. A small street which contained at one time dwelling-houses, is now absorbed in the extensions of the present Midlothian Pottery. 'Yoole's Place' is still to be seen on a name-plate at the corner of the street. While, on the Promenade, quite close to the works, there is a good-sized mansion-house which still bears the title 'Rathbone's House.'

In 1856 the pottery again came into prominence. Dr. William Affleck Gray, a well-known medical man in Edinburgh, purchased the whole concern, and brought up two of his sons, Alexander and William, to be pottery manufacturers.

MARKS ON RATHBONE'S WARE, IMPRESSED INTO THE
CLAY.

T. RATHBONE.
P.





BLUE AND WHITE PRINTED PLATES.
Prestonpans Ware.
Collection of Author.

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MIDLOTHIAN POTTERIES

The name of the pottery was now altered, and, as the sons attained proficiency in the management of the business, they were assumed as partners, and the style of the firm became W. A. Gray & Sons, Midlothian Potteries.

Dr. Gray, for reasons best known to himself, felt that Rathbone's expensive class of ware could not be profitably produced in the district. He, therefore, entirely changed the character of the productions of the pottery. White earthenware ceased to be produced, and the manufacture of stoneware was entered upon with enterprise and commendable energy.

The Rathbone family still maintained some interest in the works, for in a document dated 14th January, 1873, we have the following list of shareholders in the pottery :

- “ 1. John Rathbone, Glass Embosser and Stainer, 5 Norton Place, Edinburgh.
Annie Grace Rathbone, 5 Norton Place, Edinburgh.
D. C. Simpson, Curator for above.
2. W. A. Gray, M.D.
3. R. S. Riddell, Teacher of Music, Edinburgh.
4. Gentles, 1 Salisbury Square, Edinburgh.
5. Robert Wilson, at McLean & Hope's, residing at 11 Rumford Place, Liverpool.
Livingstone, Wine Merchant, Curator, Musselburgh.”

In this class of commoner stoneware the works very quickly became fully employed. Extensive additions were frequently made to the original works till they are now among the largest stoneware potteries in Scotland, producing a large variety of articles for the home, colonial and foreign markets.

In 1880 the firm, finding the original pottery of Rathbone too small for the demands of their ware, purchased the pottery at Newbigging, Musselburgh, and after carrying out extensive alterations the first white jam

pots completed in one firing were there produced. This was an important invention, as hitherto the white jam pots, such as made by 'Cochran' in 'Britannia,' the original maker of the neck jar, required two firings.

This innovation was considered of such importance that Messrs. Gray patented it in 1882. Many other stoneware potters attempted to copy this process, but were reminded by the capable and shrewd men at the head of affairs in the Midlothian Pottery that they were infringing the Patent rights of Messrs. Gray & Sons, and they were compelled to desist.

For many years the Company enjoyed the benefit of their Patent till at last it expired. The pots and jars made by this process required great heat to fire them efficiently, and the process brought the glaze into such intimate contact with the clay jar that the articles were non-crazing, and being thoroughly vitrified, that is non-absorbent, were admirably adapted for containing food of any description.

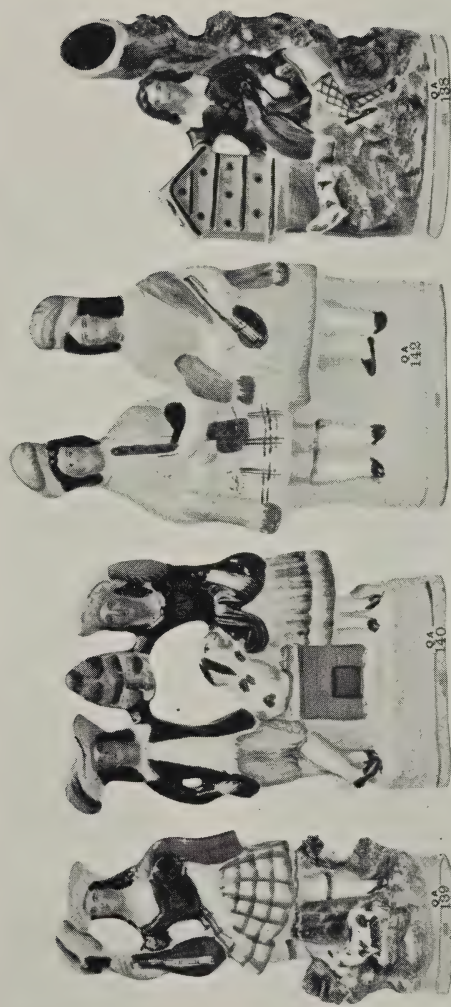
The Gold Medal was awarded Messrs. W. A. Gray & Sons at the Edinburgh Exhibition of 1886 for this 'White Vitrified Ware.'

Dr. Gray died in 1896. He had retired from the business a few years before this, leaving the management of the works to his two sons, the elder of whom, Alexander, as well as being a partner in the works, had already taken an active part in the local affairs of the town. Indeed, it is said he was during his office one of the youngest bailies in Scotland.

Among his fellow-manufacturers he was highly esteemed, and occupied for some time the chair at their meetings.

He died in 1905 at the comparatively early age of fifty-eight, and his brother William took over the entire management till he retired in 1919.

William was different from his brother in that he had been trained as a practical potter as a 'thrower' and 'turner,' and possessed all the necessary knowledge for



Portobello Ware.
Rathbone's Pottery.


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successfully firing his wares in the various kilns. He died in his seventy-second year in October, 1921.

William Richardson, who had been with the Grays all his life, has now taken over the business. While adhering to the past successful policy of the firm, he has installed the most modern plant, such as the 'casting' process, for producing his patent stoneware foot-warmers, etc.

A most interesting enterprise he has entered upon is the revival of the old brownware domestic articles of half-a-century ago. These are made from local clay, such as the Hays used in their Rosebank Works. This department is managed by John Hay, a descendant of Robert Hay who was chased by the press-gang. It is the only pottery producing now this most essential class of ware, viz. milk basins, crocks, bread cans, etc., and it is pleasing to note the venture is meeting with every success.

While visiting the pottery Mr. Hay showed me a finely modelled clock-stand made in the pottery during Rathbone's time. It is a massive piece. Unfortunately it received an accident while being lent to the Glasgow Historical Exhibition of 1911. It consists not only of an ornamental background and frame for a clock, but on a platform in front is seated the figure of Britannia on one side and the kneeling figure of a negro slave on the other, with chains falling from his folded arms, receiving his freedom, evidently, at the hands of Britannia, saying, "Am not I a man and a brother?" The whole piece lends itself to brilliant colour, all effectively shown up by the shining black figure of the negro.

In the decoration of the base there appears an important clue in deciding what are Portobello figures. The base of the figures is usually square, and made separately in the mould; on this base a rope or cable is formed as a moulding round the top edging, and decorated below with a 'Key Border'  in blue, put on roughly with a stencil or cut sponge—observe this peculiarity in Plate XXXIV.

While visiting the pottery I was shown several old and interesting moulds, one of which was a toby jug, which shows how much Rathbone was influenced by what was then being produced in England.

Toby jugs are much sought after by collectors for their quaint, humorous, and interesting shapes and designs. Genuine pieces are highly prized, and were naturally much copied. The jugs form an interesting tribe—the general form is recognized. It is in the individuals that much interest may be aroused. A common form shows a stout middle-aged gentleman seated and holding a jug. He wears brightly-coloured checked (in Scotland) garments, and usually a three-cornered hat that is coloured black, one of the corners forming the spout. He may represent any notable or popular figure. Very often he represents John Bull, or cross-legged, and with a face to suit the part, he is Simple Simon. His wife too often appears with no distinctive title other than that of Toby's wife. Large or small, he or she is the embodiment of well-fed contentment, and thoroughly deserves the full name of Toby Philpot.

PORTOBELLO OR WAVERLEY POTTERY

Another pottery not far from the Midlothian Pottery was erected in 1770, and was occupied for many years by W. & C. Smith, who are credited with being the men who produced bone china in Portobello. We have a vague account of their proceedings, but very little actual information as to the size of the place or the patterns they produced, for again no mark was put on any of their ware. The pottery was enlarged in 1786, but in a few years the enterprise proved unremunerative, and it was disposed of to the adjoining soapworks.

By the year 1830 the soapworks resold the pottery to two brothers, Hugh and Arthur Cornwall, who carried on the works for many years, making china and other wares under the firm of Cornwall & Co.



EARTHENWARE SAUCE
BOAT.

In green, with blue and
brown streaks on wings and
breast.

Gallatoun Pottery.

WHITE EARTHENWARE
JUG.

Painted on one panel an
allegorical scene, and on the
other side the order of Saint
Andrew flanked by thistles.

Prestonpans Ware, late 18th Cent.

The Royal Scottish Museum, Edinburgh.

TOBY JUG.
Raised crown on
bottom.

Musselburgh
Pottery, 1830.

EARTHENWARE GOAT ON
ROCKY STAND.

Gallatoun Pottery,
1820-1825.

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They latterly devoted their energies to the manufacture of stoneware jugs, jars, etc., in which they depicted hunting and other sporting scenes in a spirited, lifelike fashion. The demi-john illustrated in Plate LVI. shows the proprietors to have been excellent potters. It is one of the finest specimens of salt-glazed stoneware I have ever seen in any country.

The 'body' of the ware is mottled-brown, and the figures are made in a cream-coloured pipe-clay, the darker background throwing up the relief clearly, yet with a charm of softness not usually met with in such ware.

A few years later the firm was altered to Milne, Cornwall & Co. Not much change, however, was made in the pottery, only figures appear as well as animals. The individuality of conception, and the remarkable skill of this pottery is fully borne out by the 'saut-bucket' illustrated in Plate LIV.

The works in 1840 were sold to John Tough, who was already a master-potter at Newbigging. Tough took his son in now as partner, but the works apparently ceased manufacturing the higher grade of stoneware, and latterly only made coarse articles of common clay similar to those made in Newbigging.

About 1867 the Toughs gave up the pottery, and Mr. Buchan acquired a lease of it, ultimately purchasing the place. A few years later he was joined by J. F. Murray from the Caledonian Pottery, Glasgow. The firm now became Murray & Buchan, and continued so till 1877 when Murray resigned.

William Maclachlan, a brother of John of the Clyde Pottery, Greenock, took Murray's place in the management of the works for a few years, till he also resigned.

The business now passed entirely into the hands of Messrs. A. W. Buchan & Co., who have ever since carried on these works under their own name, producing large quantities of stoneware of every description.

These works on the quay side were built on the opposite side, from Rathbone's place, of the old harbour that had

been constructed by the Jamesons in the middle of the eighteenth century, which was so useful in importing the clays of Devonshire and Cornwall for the potteries and for shipping their finished products. This harbour, not much used now, has been filled up to make room for further extensions. Many of the old pier stones with rings attached that formed the original quay wall are still to be seen in the kilnyard.

WESTBANK POTTERIES

These works were also erected by the enterprising Jameson in 1770 for Anthony Hillcoat, primarily for making roof and drain tiles ; but, as business developed, he gradually added the making of brownware domestic pottery.

It was latterly purchased by a Clerk of the Justiciary Court called Alexander Guthrie. On his death his son William took over the management of the place. The works stood idle from 1880 to 1884. In 1890 the works were sold to Messrs. Peter Mitchell & Sons, and have since developed into one of the largest red pottery works in Scotland.

The clay pit became in course of time exhausted, and the works were recently removed a quarter of a mile to the south where another good bed of clay was fortunately discovered.

The site of the original pottery is now covered by the new and gigantic Electric Power Station of the Edinburgh Corporation.

NEWBIGGING POTTERY, MUSSELBURGH

This was established in 1820 by a potter John Tough (a good name for a potter!), who assumed a man Foster as a partner, and the firm's name became Foster & Tough. About 1840 the works were sold to one called Reid, who carried on the works successfully for many years till he

ultimately conveyed the works and business to the Grays, as an addition to their Midlothian works for the manufacture of their white glazed ware, and it is still actively engaged in this line of ware.

ROSEBANK POTTERY

This pottery was also a venture of Jameson's, who erected it in the end of the eighteenth century. It originally was a comparatively small concern, and had many changes in its tenancy in the early days.

Early in the nineteenth century one of the brothers Scott purchased it but did not retain possession of it very long, for he shortly afterwards sold it to a Dougald McEwan, a well-known man and character in the town. His name is still associated with the place in the 'McEwan Square.' He died about the year 1828. After his death the pottery was purchased by Mr. Martin, a merchant from Dundee, who in turn sold it to Reid, who lately had become proprietor of the Newbigging Pottery in Musselburgh, which he had purchased from Foster, Tough & Co.

In 1830, John Hay, grandson of old Hillcoat, the original tenant of West Bank Pottery, and also of Robert Hay, of whom I described an exciting incident, acquired the pottery. He introduced more modern methods, and, putting new machinery into it, soon succeeded in producing quite creditable pottery of a useful domestic order.

John was assisted later on by his son Thomas, who carried on the business under the style of J. & T. Hay. After the death of the father, Thomas continued the business, and was ultimately succeeded by one of his sons of the same name. The lease, however, of the works and ground expired in 1920, and the site having been purchased by the proprietors of the neighbouring paper mills, the old and renowned Rosebank Pottery was closed and the buildings demolished.

There were other factories, but these were more for manufacturing building bricks, tiles, etc. Among these I might mention Messrs. William Hunter & Co., Thornton & Co., and Scott Turner, Ltd., all well-known names in the clay-working trade fifty years ago.

CHAPTER X

(BORROWSTOUNNESS) BO'NESS POTTERIES

IN old Statistical Records of this district Dutch potters are said to have practised their craft on the shores of the Forth not far from this place. Very probably the primitive place Dr. Roebuck took over may have had its genesis from such people. The two plates (Plate X.) of William and Mary are of 'Delft' style of manufacture, and may have been made about here, for Mr. Macfarlane of Stirling stated they were "of local manufacture," but I think the pottery originally made here was ordinary coarse red clayware. It is quite possible that Dutch potters may have made some of their ware here and sent it over in the 'biscuit' state to be glazed in Holland.

The 'Macfarlane Collection' in the Museum of the Smith's Institute at Stirling has been found to be a very reliable one, and it is clearly stated that the two plates that I cite were made 'locally.' But as these articles bear no distinguishing mark of any kind I should say they were more likely to have been produced in Delftfield Pottery, Glasgow.

During the latter half of the eighteenth century Bo'ness was one of the most thriving places in Scotland. Between the years 1750 and 1780 it ranked as the third largest seaport in the country. Its prosperity was mainly due to the discovery of coal mines in its vicinity, and also to its good harbour, situated almost in the heart of Scotland.

It owed much of its development to John Roebuck, M.D., a man of original character and inventive genius, and deeply interested in all that affected the industrial welfare of Scotland. He was born in Sheffield in 1718, and came to Scotland as a young man, establishing chemical works in Prestonpans, wherein he produced many successful experiments in his 'Secret Works.' After spending a few years there he migrated to Bo'ness, where he became acquainted with the Cadells. This friendship may have grown up in Prestonpans, where the Cadell family had also large interests. In any case, out of this friendship grew up the idea of founding the great Carron Ironworks. Under the name of the original founders, Roebuck, Cadell, & Co., these works earned European renown through the manufacture of war material, such as the famous 'Carronades.'

Unfortunately, Roebuck parted from the Carron Co. and started operations on a most ambitious scale in coal and iron mining at Bo'ness. He became involved in all sorts of litigation, and found himself approaching financial disaster.

The pumping of water from the mines was a great source of trouble, and he begged James Watt to come to his aid, which he did, for in an outhouse in the policies of Roebuck's residence, Kinneil House, Watt carried out his famous experiments with his pumping engine. But the great inventor was too late in coming to his old friend's assistance, and poor Roebuck had to abandon his great scheme.

However, nothing daunted by this misfortune, in 1784 he established the pottery industry in Bo'ness on progressive and organized lines. He was then sixty-six years of age, and it says much for his strong will and character that thus late in life he ventured with such courage to start a fresh industry.

It is not known how he became interested in this particular class of manufacture. He may have been interested in the Cadell's pottery at Prestonpans, and

thought that a well-equipped place like Bo'ness should succeed also as a pottery centre.

Be that as it may he purchased the 'South Pottery' that had been erected in the town in 1766. It was a primitive place, making coarse brownware from the local clay. Roebuck, however, was not to be satisfied with such products, and he at once began improving the place, and importing the fine clays of Cornwall, Dorsetshire, and Devonshire, and also flints from Gravesend.

Roebuck soon had the works fitted out, and making fine cream-coloured and white stonewares of a good quality. No examples of his productions are known to exist, although, as he produced large quantities of ware, it is probable specimens are still to be found on the shelves of farm-houses around Bo'ness, or in Edinburgh. Unfortunately, no trade mark was ever used, and as the articles were chiefly bowls, cups, and saucers, etc., it is almost impossible to identify Roebuck's ware.

In those days the crockery was packed into large waggons and taken by road to Edinburgh, where it obtained a ready sale. Most of it was bartered for old rags, for the same waggons when emptied of their ware brought back rags to the 'Secret Works' of Robert W. Hughes, in which it is quite likely Roebuck, being a chemist, would have some interest.

Roebuck only lived a few years after founding this 'Bo'ness Pottery,' and on his death his friend McCowen, took over the place. He also made some very good ware. A few years later he sold the business (in 1799) to Alexander Cummings, who was succeeded by his nephew James C. Cummings. The pottery had three kilns, yet Cummings informs us it was the largest works to produce solely white earthenware in Scotland.

One of the best productions of Bo'ness was their punch bowls. One of these, dated 1794, was shown at the International Exhibition in Glasgow. Most of

the bowls have mottoes, the favourite inscription with the Bo'ness pottery artists was this unique one :

“ What art can with the potter's art compare ?

For of what we are ourselves, of such we make our ware.”

Another distinctive Bo'ness motto was :

“ Will the Love that you are rich in,
Make the fire that's in the kitchen ? ”

These quaint and homely sayings are fast passing from our ken.

A firm—Shaw & Sons—then purchased the works, and engaged Robert Syme, a well-known potter, as managing partner. In 1836 it was again sold, this time to Jameson & Co., who developed the business, having as many as forty potters regularly at work. The Belgian traveller, Guillaume Lambert, says in his *Treatise on English Potteries* “ that Bo'ness imported annually 355 tons of clay from Poole in Dorsetshire, not to speak of other clays.” The workshops were now on both sides of the Main Street, two kilns on the north side and two on the south side. The ‘ south ’ pottery supplied the local requirements. On the north side the works were hemmed in by the River Forth, so that they could not expand. This difficulty was overcome by steadily reclaiming the foreshore with the rubbish of the works.

The business, having improved its quality of productions considerably, now brought down skilled potters, painters, and printers from Staffordshire. Excellent blue and white printed ware was turned out, among the best of the patterns being one ‘ Bosphorus,’ for long associated with Bo'ness Pottery.

When Jameson died in 1854 the pottery was taken over for a short time by the Redding Coal Co., and was ultimately sold to Mr. John Marshall, who retained Robert Syme and the old staff in his service. Fresh energy was put into the business, and many improvements introduced.



OLD CHIMNEY-PIECE ORNAMENTS.

Bo'ness Ware.

Lent by John M'Nay, Esq., West Lothian Pottery.

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The foreshore was reclaimed by the rubbish from the Schoolyard Coalpit, and, as the ground was prepared, more workshops and kilns were erected for producing earthenware in plain and highly decorated styles.

In the days of the Cummings the conditions of the working people were very unsatisfactory. Even as late as 1799 colliers and saltworkers were 'bound' to their employers, and little heed was paid to their creature comforts, and we cannot but observe, in passing, the great improvements that have taken place in the conditions of the operatives in all trades.

The dismal appearance of Bo'ness was not in its favour, with black smoke issuing from the colleries in the east and the steam from the saltpans in the west. It was, notwithstanding, a healthy community.

Mr. Marshall was a pioneer of industrial welfare, and did all he could for the moral and intellectual uplifting of the workers. He opened a reading-room and social club in the house of William Cummings, which was successfully carried on for many years. One of its good points was that it was managed by the potters, who willingly contributed 1d. per week towards its upkeep.

Jameson and Marshall were public-spirited men, and took a great interest in local affairs, among which was the introduction of drinking-water into the town.

In later years William McNay was made a partner, and he likewise devoted much of his time to the good of the community.

Marshall died in 1870 and William McNay died in 1881, when Charles W. McNay became chief partner of the firm of John Marshall & Co.

The pottery ceased and closed down entirely about the year 1889. It was used as a foundry for a short time, but it has since been entirely cleared away, and no trace of it is now to be seen.

BRIDGENESS POTTERY

This was founded by Charles W. McNay in 1886, and was planned and built by John McNay, the late manager of John Marshall's pottery. Good useful domestic articles are made here, suitably decorated for a large variety of markets both at home and abroad. C. W. McNay died many years ago, and his two sons, Josiah and Charles, have since carried on the business with credit to themselves. The works have from time to time adopted the latest methods of manufacture, and the firm, which goes under the name C. W. McNay & Sons, has every modern equipment to produce white-ware both economically and of good quality.

GRANGEPANS

In the year 1890 the Co-operative movement in Scotland felt that a good opportunity presented itself to commence manufacturing pottery for their stores. They erected a pottery in this part of Bo'ness on the most modern lines, and everything appeared favourable to the successful attainment of Co-operation in a factory. This was one of the original factories of the Co-operative movement, and the experiment caused a great amount of public interest. Very likely, if it had been allowed to grow normally, and without undue interference, it might have been the desired success. The experiment only lasted a few years, those interested in the Co-operative idea incurring considerable monetary loss.

The works remained closed for a short time, when they were ultimately disposed of to a company formed of local gentlemen, who carried on the place for about two years, but with indifferent success.

Fortunately the company at this point secured the services of John McNay, who was appointed managing director, and the concern adopted the name of 'The West Lothian Pottery Co., Ltd.' McNay soon infused



OLD CHIMNEY-PIECE ORNAMENTS.

Bo'ness Ware.

Lent by John M'Nay, Esq., West Lothian Pottery.

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fresh vigour into the business converting it into the flourishing concern it has since been known throughout the pottery trade. Mr. McNay has secured not only the confidence of his company but of all his fellow-manufacturers, and was appointed Chairman of the Association, which position he at present fills with great acceptance.

Besides producing articles of general domestic utility in a good quality of whiteware, the factory has revived many old Scottish cottage ornaments made many years ago in Bo'ness pottery. Those illustrated in Plates XLII. and XLIII. are worthy of praise. The admirable modelling and decoration display vigour and individuality in their execution, and careful management in their successful achievement.

BO'NESS ROCKINGHAM POTTERY

A small work to produce brownware was erected about forty years ago in the Bridgeness direction by a man Davies. He was a very good engraver, and had done many of the best patterns for the brothers Bell in Glasgow. Unfortunately for him the pottery was not a success, and was closed after being in operation only a few years.

We cannot close this chapter on Bo'ness Potteries without referring to the Annual Fair held by the Potters' Guild. This Annual Fair took place on a day fixed as a general holiday for the town and district, and was one of great rejoicing, the principal feature being the trade's procession, a custom which, however, died out about forty years ago. All trades were represented in this procession, but the potters always took the most conspicuous place in the display. They were dressed in white trousers, an apron tied with blue ribbons, with a black-tailed coat and a tall beaver hat. Their costume, it will be admitted, was not lacking in originality and striking

effect. Besides carrying the emblems of the potters' craft, such as models of potters' wheels, kilns, and the various tools, model ships were also borne aloft. There was, of course, the usual concourse of brass bands, while flags and banners of all descriptions were to be seen at various points in the procession, making altogether a brilliant and interesting spectacle.

It is perhaps worth while noting here that the first passenger train to leave Bo'ness for Glasgow, about the year 1860, carried the members of the Potters' Guild on the first excursion of its trades' procession.

In the Glasgow Exhibition of 1911 many gaily decorated and admirable specimens of Bo'ness ware were exhibited.

From the inception of the pottery industry here the modelling of all kinds of animals seems to have been favoured by the operatives. Their general aptitude in this class of work is well displayed in the lively and alert expression of the Scotch terrier. The cockatoo and the hen are also above the general average of such kitchen ornaments. The cat has eyes which should keep mice away from any house ! A pair of lions, either 'couchant' or standing, I cannot say 'rampant,' are great favourites still among the folks that live in mining districts.

The feature of all these gaily-decorated animals is that they represent the desires of our countryfolk, and have no relationship whatever to the actual living specimens. They are 'wallie' or pottery beasts and birds, and as such they are to be admired. The colours are applied under the glaze, which allows these mantelpiece ornaments to be easily washed, and to be as bright and cheery as when they were first drawn from the kiln in a pottery. The Egyptians believed of old that the spirits of their ancestors lived again in the form of their familiar domesticated animals. Perhaps, unconsciously, we are carrying on the same idea.



TAM O' SHANTER JUG.

ABBOTSFORD

WARE CRIMSON VASE.

TOBY JUG.

SOUTER JOHNNY JUG.

D. Methven & Sons, Kirkcaldy Pottery.

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CHAPTER XI

FIFESHIRE AND NORTHERN POTTERIES

THE ' Kingdom of Fife ' has been noted throughout our Scottish history for its industrious and thrifty race of people, and the ' lang toun ' of Kirkcaldy, the largest of its towns, and associated with such men as Thomas Carlyle and Adam Smith (the writer of *The Wealth of Nations*), is one of the outstanding examples of this contention.

Besides being the seat of various other industries, it has for more than two centuries been a centre for the manufacture of pottery. Situated amidst splendid coal-fields, and possessing an abundance of good fireclay suited to the making of such coarse articles as bricks and saggars, as well as a rich bed of terra-cotta clay, everything was at hand conducive to the establishment of potteries along the most economic lines for manufacturing such ware as Rockingham, as well as all kinds of brown and yellow pottery of a useful and domestic nature.

KIRKCALDY POTTERY

This is the oldest factory, but it was not always known as the Kirkcaldy Pottery. When it was established in 1714, more than two centuries ago, it was called ' the Links Pottery,' on account of it being erected on the meadows, or links, at the west-end of the town facing the seashore.

The original deed of the works still exists, giving the proprietors the privilege of using all the suitable clay they can discover in the Barony of Abbotshall, in which most of the Raith Estate is situated.

The factory carried on for almost a century in a very modest way; but at the beginning of the nineteenth century the name Methven appears in connection with the place, and from that date the whole position changed. This well-known Fifeshire name gave the factory a 'cachet,' and at the same time started it off on a fresh lease of life under the style of 'David Methven & Sons.' The old name of the works, 'The Links,' fell gradually into desuetude, and in the course of a few years was entirely supplanted by the new and more important designation, 'The Kirkcaldy Pottery,' to which it laid claim, as it was the largest of the local works.

By 1840 it had attained considerable proportions, and new methods and improved machinery for making pottery, such as crocks and pans for the surrounding farm-houses, were introduced; which innovations, according to the proprietors of Raith, were contrary to the stipulations laid down in the original title-deed that "only bricks and tiles were to be made." The result was that during 1842-3 considerable litigation took place, culminating in the famous case in the Court of Session between Raith Estate and David Methven, in which the disputants waxed wrathful over the definition of the word 'pottery-ware.' The case was ultimately decided in favour of the Methvens, since which time the local clays have been employed in the production of tiles and other red-clay wares.

The Methvens, however, anxious to extend the scope of their energies, began experimenting in the manufacture of white earthenware. The great industrial changes that took place in the middle of the nineteenth century made themselves felt here as elsewhere, and to meet this state of affairs Andrew Ramsay Young, who had been with the Methvens from boyhood, and had displayed considerable ability, was promoted to be works'

manager. Under his competent management the works began to develop along new lines. The brownware originally produced was gradually replaced by the finer class of white-ware, made entirely from the clays of Devonshire and Cornwall. Young is credited with being among the first to develop the art of decorating ware with designs cut out of the roots of sponges, in conjunction with 'underglaze' colours.

'Dipt' ware, as well as the distinctive 'Mocha' design, were turned out in large quantities, and of an excellent quality.

The first printed pattern, the 'Verona,' in cobalt blue, was a marked success, and attained decided popularity, causing not a little excitement and wonder among the old potters then living.

David Methven died in 1861, and as none of his sons took an active interest in the 'Art of Potting,' Andrew R. Young took over the whole concern, having made arrangements with the trustees to become ultimately sole proprietor.

His indomitable energy was crowned with well-deserved success, as he rose from a humble position to that of an accomplished master-potter in a comparatively short period of time.

After the Franco-Prussian War of 1870-1 the works made immense strides. By 1878 new kilns were erected, workshops were extended, and the whole place reorganized on a larger scale of output than had originally been conceived. Modern machinery was installed and everything done to make it up-to-date.

Fortunately it was able to make these extensions, being possessed of ample space to the rear of the original works on the disused clayfields.

Hitherto Ireland had been one of the chief customers, but new markets for its wares were opened up all over the world.

Also, an artistic style of ware called 'Abbotsford' was now produced, decorated in a great variety of self-colours

on a number of beautifully modelled vases such as Plate XLIV. For many years it had a considerable sale, but like so many other vogues in artistic pottery it outlived its day. Fashion decided against it, and the demand gradually fell away.

In 1882 Andrew R. Young was joined by his son Andrew, and two years later by his eldest boy William. When these men attained sufficient knowledge of the business they erected further modern potters' shops for producing brownware, and resuscitated on more modern lines the original productions of this long established factory.

Andrew R. Young died in June 1914, after spending sixty-three years of his life in a pottery. He took a deep interest in the public affairs of his native town, and was for many years Chairman of the Scottish Earthenware Manufacturers' Association.

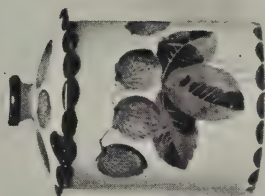
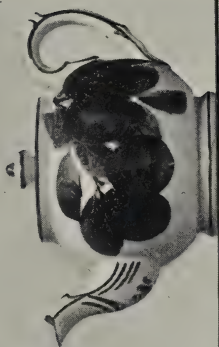
The business is being successfully carried on by his sons William and Andrew. A younger member of the family, James, was also a partner for some years. He died in Edinburgh, June 1922.

TRADE MARK



ST. CLAIR TOWN

St. Clair Town, or as it is now called Sinclairtown, is at the other or eastern extremity of Kirkcaldy, and forms quite a pottery centre by itself. The three potteries found here are all delightfully situated amid wide fields, and when I last visited them the flowers were all ablaze in the gardens, where the potters spend pleasant and profitable evenings cultivating them. What a pity



WEMYSS WARE.
Fife Pottery, Kirkcaldy.

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it is that we do not see more of this kind of thing in manufacturing districts ! The place has quite an old-world flavour with its red-tiled roofs, and especially is to be remarked the quaint bell-tower of the Fife pottery, surmounted by the figures of a woman and child, for all the world like the virgin and child, which, together with the diamond-paned windows, give one the feeling of entering some old monastery.

FIFE OR GALLATOWN POTTERY

Fife or Gallatown Pottery, established in Sinclairtown a century ago, has a fine record of steady and continuous progress ever since the day it was started. About the year 1817 two practical potters, Archibald and Andrew Grey, brothers, set up a small pottery at Wester-Gallatown. Their original effort was a very primitive affair. Indeed, the two brothers seem to have worked away quietly by themselves. In 1820, however, they discovered that their trade had grown to such an extent that they felt justified in looking out for a suitable site on which to build a larger pottery. On a parcel of ground, leased from the Earl of Rosslyn, they erected the present 'Fife Pottery.'

The name of 'Fife' has always been given to the works by the proprietors, but the potters, especially the older ones, insist on calling it the 'Gallatown' from its original site, hence collectors of this ware are frequently confused.

The Greys carried on the business for many years, making all sorts of useful pottery. In 1827 they sold it to John Methven, a master potter at the 'Links,' who introduced the manufacture of white earthenware, besides making Rockingham and yellow caneware. After some years Methven retired, and sold the factory to Robert Heron, who was duly succeeded by his son Robert Methven Heron, when the firm 'Robert Heron & Son' was formed.

Mr. Heron was a man of cultivated taste and artistic ability, having studied painting on canvas in the studios of Edinburgh artists and elsewhere. When he took over the Fife Pottery he introduced the highly decorative 'Wemyss ware,' so much admired by lovers of pottery.

Robert Heron died in 1906. He was well known in London, where he was as much esteemed as in his native town as an able and artistic potter. After his death the factory was taken over by his friends, the Messrs. Williamson, and by Mr. J. K. McKenzie, who had been intimately associated with the pottery during Heron's lifetime.

Though it is some forty years since the 'Wemyss' ware was introduced, such is its quality of freshness of decoration that it enjoys a considerable popularity even to the present time. The cocks and hens and various flowers and fruits of the design are painted with meticulous care. Many have attempted to copy it, but none have given the same character to the design in attention to many small but essential details in the making of the pots and jars as well as in the process of painting.

The Fife Pottery produces as well a large variety of white earthenware, Rockingham teapots, caneware, etc., and is remarkable in that it makes all varieties of useful articles in various clays under one roof as it were, which is so seldom met with in these days of specializing and 'mass production.'

SINCLAIRTOWN POTTERY

Sinclairtown Pottery was established in the middle of the nineteenth century by Messrs. George McLachlan & Sons, who manufactured ordinary ware for domestic purposes. It was next the property of the Kirk Brothers, who sold it to Laurence Buist, who after taking it over built on adjoining ground a larger and well-equipped modern pottery, and the firm became known as 'Laurence



"PINNER" OR "PIRLEY" PIG BANKS.
Rosslyn Pottery, Kirkcaldy.

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Buist & Sons.' This active up-to-date firm of pottery manufacturers make a large variety of household ware from the local clays; their teapots in particular are in great demand.

INVERKEITHING

For many years there was in operation here an extensive red brick and tile work. About thirty years ago it obtained the services of a teapot maker from the Caledonian Pottery, Rutherglen, who added the manufacture of Rockingham ware to their production.

ROSSLYN POTTERY

Rosslyn Pottery was erected in the latter half of the nineteenth century by Mr. Crawford, who died shortly afterwards, leaving the works ('Morrison & Crawford') to the management of his surviving partner, Mr. Morrison, who had joined Crawford shortly before his death. Both men came originally from the Kirkcaldy Pottery, Morrison having been the traveller while Crawford fired the kilns, so that they were well equipped to manage their own business.

Morrison was joined recently by his nephew, Mr. A. Hunter, who has become the active partner in the concern and indeed is now the proprietor, conducting the pottery with new vigour and enterprise.

It makes the usual Rockingham ware, including teapots, but their most interesting productions are the old-fashioned 'Penny Banks,' called all over Scotland 'Pinner' or 'Pirley Pigs,' so familiar to the children of a generation or two ago. Some of the banks are extremely interesting, representing farmyard animals, such as hens, pigs, etc., or small pieces of furniture, as a chest of drawers, etc. They are mostly glazed in a rich dark-brown Rockingham glaze, which shows up well the embossed ornamentation.

In 1883 the business had outgrown the capacity of the old pottery, and the more modern Rosslyn Pottery was erected on ground alongside of it.

The old place in Oswald Road, Gallatown, was most primitive, only hand power being employed at that date in potteries. Labour was cheap and plentiful, and the 'throwers' wheels, as also the turners' treadle lathes, were turned and driven by lads and lassies. Coal was also cheap, and the conditions totally different from those enjoyed in these changed days of electric power.

When the new Rosslyn Pottery was started, majolica ware was made in addition to Rockingham yellow, and caneware was also produced for baking and cooking purposes, also bread and meat crocks and other domestic requirements.

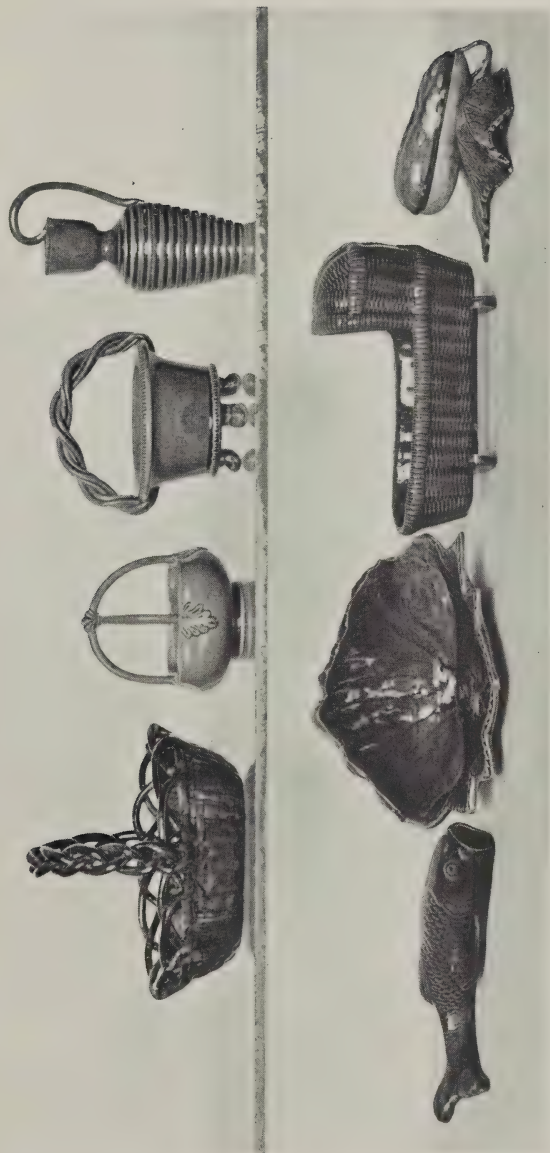
The Rosslyn Pottery has added not a little to the general pottery industry of Scotland, and to the varied industries of Kirkcaldy in particular.

DUNMORE POTTERY

Early in the nineteenth century there existed a small pottery at Dunmore, manufacturing tiles, domestic crocks, etc., from the red 'till' or clay found under the layers of moss that occur so frequently in Stirlingshire.

Until 1860 it was rather a slow-going unenterprising concern, after which it blossomed out into much greater activity. Peter Gardiner, a native of Alloa, where his people had been potters for many years, is credited with this improvement, having about that date taken full possession of the works. He began by putting the fine red clay to a better and higher artistic use than had formerly been attempted, with the result that 'Dunmore' became a flourishing pottery, producing teapots, not only in the usual brown Rockingham glaze, but also in cobalt-blue, copper-green, and crimson glazes.

The first teapots, glazed with a deep rich 'Mazarine' blue, are greatly admired by collectors.



DUNMORE POTTERY WARE (Peter Gardiner).
The Corporation of Glasgow, People's Palace Museum.

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Not content with the local clay, Gardiner still further improved his ware by bringing clay from Cornwall and Devon. The pottery, situated near Airth station, was on the estate of the late Earl of Dunmore, from whose title it took its designation. From the beginning the Countess of Dunmore took a deep practical interest in this young potter's operations, supplying him not merely with inspiration and encouragement but also with designs, even taking an active part in the business, and supervising the production of the wares. Also the Earl and Countess made use of their social connection in introducing the ware to the best china-dealers in the west-end of London, thus ensuring a ready and high-class market for the output.

While staying with the Earl and Countess about the year 1871, King Edward VII., then Prince of Wales, paid a visit to the pottery, and thus gave it a further advertisement, and caused 'Dunmore Ware' to become fashionable in Royal and Society circles, in every style and in all manner of shapes, sizes and colours. Indeed, the rich pure copper-green glaze on the red terra-cotta ware was very effective, and rivalled the green glazes produced by such eminent potters in Staffordshire as the Mintons.

The crimson glaze was also very rich, and had a soft deep luscious tint.

All these coloured glazes had to be fired with great care, and a vast amount of attention was required, not only in glazing and handling the articles, but also in managing the assortment in the kiln so that one colour would not 'strike' or injure another. For example, blues are very apt to stain all other articles in the same 'sagger' blue. So also, copper is a metal that 'strikes' the inside of the 'sagger,' and will injure whatever is put in the same sagger in future firings. But Gardiner saw to it that the whole style of the ware was suited to this difficulty in the use of coloured glazes.

The rustic dessert services, representing all kinds of

leaves and fruits as well as different animals, were arrived at by splashing various tints of brown, yellow and green glazes on the surface of the ware. It is generally asserted that 'Dunmore' introduced the figures popularly known as 'golly-wogs' among the young folk of the present generation. Their rustic tea-sets were also unique in design and execution. Many of the rustic ornaments and elegant vases, some of which I illustrate (Plate XLVII.) were from designs furnished by the Countess herself.

A popular and original piece was a teapot in the form of a tortoise of which the snout formed the spout.

Another characteristic style was the 'basket' or 'wicker work,' formed by weaving strands of clay, squeezed out of a 'squeezing box' or press, in style similar to Leeds Pottery.

In the Glasgow and Edinburgh Exhibitions, especially in the great show of 1888, a very fine display was made of this ware, and also at several subsequent Exhibitions.

Mr. Peter Gardiner had also sporting proclivities, and in his day was well known throughout Scotland as a trainer and breeder of Arab steeds. He latterly retired from business and he was succeeded by a man Johnston. But the estate ultimately changed hands, and the works have now been idle for some years.

Before closing the subject of Dunmore I should like to add a little more about Gardiner himself. A tall handsome man of jovial disposition, he was at heart an artist, and to visit him was always a delight, as he was invariably in the middle of some wonderful scheme for decorating his ware. I remember him showing me a room in his house, the walls, floor and ceiling of which were entirely composed of his coloured glazed pottery. Although a remarkable display of craftsmanship, I must confess that sitting in this room I was in constant dread lest some heavy portion of the ceiling might crack and fall down on my head.

He also took a keen interest in his garden, and delighted in showing his guests the quaint grotesque



ROCKINGHAM WARE.
Alloa Pottery.

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pottery figures and coloured glazed hens and dogs peeping out from under the shrubs and flowers in all sorts of cunningly contrived nooks, and no one enjoyed the surprise and occasional start of the visitor at those unexpected appearances more than himself.

THROSK POTTERY

Throsk Pottery was another red-clay work situated about two or three miles north of Dunmore, on ground belonging to Throsk Farm, which was the property of George Jeffrey, a brother of the Jeffreys who started the brewery in Alloa, now so well known. It made the usual domestic jars, tubs, bowls, and milk pans from the local red clay, and was also renowned for its roofing and tiling, great quantities of which were shipped to a pottery in Holland to be glazed. The boat employed for this purpose was a large glorified row-boat, into which the tiles were packed at the private wharf of the pottery on the Forth, manned by four or five men, and sailed over to Holland. After the tiles received their coating of glaze they were conveyed back to Leith for roofing the old houses in Edinburgh. This tedious process, however, did not last long. It is not clearly known whether it was Jeffrey, the owner of these works, or the manager Christie, but at anyrate one of them discovered the 'secret process,' as it was then called, of glazing the tiles, and introduced it into their pottery, and the 'Throsk' glazed tiles soon became famous all over Scotland.

The works ceased operations some years ago. The estate was bought by Government in 1916 for an ammunition store for the Navy, when the whole neighbourhood underwent considerable alteration.

One of the work's managers, George Christie, was well known in Stirling, where his son ultimately became Provost.

In the old statistical accounts of a century ago it is

stated that twenty-six men were regularly employed, their wages being from 11s. to 20s. per week. Jeffrey and Christie were considered model employers.

The surrounding countryside was tenanted chiefly by small landholders who in winter worked at the pottery, and when spring seedtime came and harvest arrived they left the pottery and laboured in the fields, thus ensuring steady employment and a fine healthy change in their occupation. It is to be hoped that these patriarchal methods may yet return.

If electric power were made available all over the country districts of Scotland there is no saying what benefits might accrue, for there is plenty of good red clays in the country districts of Scotland that might be developed in this way into important village industries.

CHARLES BUICK & SONS

These large works are situated at Hilton, Alloa. Among their various productions are terra-cotta ridges, finials, and other architectural fixtures. They also make white enamelled fireclay sanitary ware, whose excellence has been proved by various gold medals the firm has gained at various important International Exhibitions. The works are now carried on by Messrs. John and Charles Buick.

ALLOA POTTERY

There was erected in the town of Alloa about 1790 a small pottery for the making of coarse ware from local clay. It was situated beside Mr. Johnson's 'wine cellars,' and originally is believed to have belonged to a man Shaw, better known as 'Sheepy Shaw.' It is questionable whether he himself built the works or a James Anderson, but we do know that Shaw was a master-potter, and occupied the works, which were well known locally as 'The Pottery.'



BARVAS POTTERY.

Island of Lewis.

From Collection of late Dr. Paterson.

Smith Institute, Stirling.

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OF THE
UNIVERSITY OF CALIFORNIA

James Johnstone next became proprietor, but as he took no active interest in the industry he leased it to different people, among them the well-known James Anderson, father of Mrs. Cochran the china merchant in Alloa. Mrs. Cochran was the mother of the celebrated James Cochran, the minister of Cupar-Fife.

About 1814 a man Hamilton was in charge of the pottery, and then William Gardiner, a pioneer in making majolica in Scotland, took over the lease. The nature of the clay was suited to that class of ware, and the Rockingham teapots made at this time were particularly fine—the density of the colour of the clay lending itself to the making of such articles, which, when fired biscuit, gave a softness of touch to the glaze that was quite distinctive (Plate XLVIII.).

Joseph Bailey was the next tenant, and shortly after bought over the whole concern from James Johnstone. In course of time he took his two sons William and John into partnership, and called the firm 'Messrs. W. & J. Astbury Bailey.' Some idea of the scope of this concern may be gathered from the information that 26,000 Rockingham teapots were turned out and glazed and finished in one week. A new departure was also made in the making of 'jet-ware,' decorated with prints from engravings of ferns on teapots, jugs, bowls, etc., for which they obtained the medal in the Exhibitions of Paris and Philadelphia.

The pottery closed down in 1908.

BARVAS POTTERY

Barvas Pottery is probably the most Northerly pottery in Europe. It is situated on the west coast in the extreme north of the Island of Lewis, not far from the Butt of Lewis, and is reached by a long dreary moorland road from Stornoway. If we were to receive any of this coarse, ill-shaped ware, made without the aid even of the potter's wheel, we would readily believe it was a product

of the Stone Age. The design and formation is just as crude as pottery made in that period, which, of course, was before the discovery of the potter's wheel.

I would recall at this point what I have already briefly, and I hope clearly, described in a preceding chapter, viz. the wooden ware used by the Scottish people before pottery was made. But we may now ask ourselves what did the natives of these lonely islands use instead of wood at that time, since no trees or wood are to be found growing on some of these Western Isles.

On such a treeless island as Tiree coarse earthenware 'kroggans' (crocks) and 'cogs' were crudely made from the local clay, and were simply fired by dry whin and seaweed, and were produced as late as 1850.

The same reason may quite as well apply to the bleak island of Lewis, since clay was to be had there also, and the necessary heather, scrub, and dried seaweed to fire it. The knowledge of making simple vessels was so widely distributed in ancient times, and the remarkable similarity of the forms of pottery produced was so persistent at different periods of man's existence, and also in different countries, that for anyone to base the actual date of the origin of pottery from such specimens as have been produced in this far off island might be quite erroneous, and anyone making definite statements as to periods of production should proceed in his investigations very circumspectly.

In this 'lonely shieling' of Barvas, on the 'misty isle of Lewis,' this quaint and interesting pottery which we see illustrated is still made. It demonstrates to us the rude clay vessels that satisfied our forefathers in supplying the requisite articles for their immediate wants—not that they required teapots and cups!—and the very rough and ready method of producing even a common jar.

The ware, of a greyish slate colour, is very thick, with little or no decoration or comeliness in its form, and is utterly devoid of finish or glaze. It gives no sound like a piece of ordinary ware when you strike it with your

knife, showing that it has not been baked very hard in the primitive local kiln. For this reason it is best to handle the articles with considerable care, for they are really fragile, although their appearance would lead you to believe the opposite.

I am fortunate in being able in Plate XLIX. to illustrate a teapot, cup and saucer and sugar bowl, and a curiously shaped vessel, which are characteristic pieces of this peculiar ware. They may have been made only thirty years ago. These specimens belonged to the late Dr. Paterson, the antiquarian, of Bridge-of-Allan, a well-known collector of old Scottish pottery, etc.

SEATON POTTERY

This place makes chiefly bricks and tiles in works near Aberdeen for local consumption.

BRORA

Is a peculiar spot that we suddenly come on after passing through some of the wildest scenery of the North-east of Sutherland. There is a seam of coal here, and a small coalpit to work it. A calcareous clay is also found on the surface, and this is employed for the manufacture of bricks and other articles.

CHAPTER XII

WESTERN POTTERIES

GREENOCK

EARLY accounts of potteries in this district are of a meagre description, owing to the village of Crawfurdsdyke, where they were located, being a separate Burgh of Barony down to the middle of the nineteenth century. The village lay midway between Greenock and Port-Glasgow, and on either side was a considerable area of land, a sort of 'no man's land,' not included in either burgh. This dislocation of areas prevented a unity of interest, and a consequent want of continuity, or explicitness, in tradition or burghal records, so that the information as to trade carried on there or thereabout has been handed down largely by tradition, and from father to son.

Crawfurdsdyke was ultimately amalgamated with its larger neighbour Greenock, when its original name was altered to Cartsdyke, by which it is now better known.

There were two potteries in operation here a hundred years ago, viz. the 'Clyde Pottery' on the east side of the Ladyburn, and the 'Greenock,' ultimately called the 'Ladyburn Pottery,' on the west side. These factories were situated in Crawfurdsdyke, and in consequence no actual records are to be found of any of them.

In an old engraving of Greenock in 1811 by Sargent we see 'cones' like beehives, with dense smoke issuing from them. They belonged to the bottle works adjoining the Greenock Pottery at Crawfurdsdyke.



"ROBIN" PUZZLE JUG.
Britannia Pottery.

PRESTONPANS FIGURE.
Watson's Pottery.

Collection of Author.

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UNIVERSITY OF CHICAGO

'The Clyde' was the older and larger pottery of the two. Building operations were commenced in 1814, but the founders had many difficulties to surmount, and it was not able to produce any ware till 1816.

It was erected by two brothers, James and Andrew Muir, and was situated on ground at the west end of the James Watt Docks. This site was the ground on which the old 'Blubber Yard' once existed. Whale-fishing was at one time an important industry here, and the blubber obtained at the fishing was boiled down at this place. Pottery Street still exists, and the potters' shops faced the street.

The Muirs appointed a potter James Stevenson to be their works manager, of whom we will hear more later on.

In the *Glasgow Courier* of issue 5th November, 1816, we have the following interesting announcement :

"The Clyde Pottery Company

"Intimate to shippers and dealers that their works are now in full operation. They are manufacturing Cream-coloured, Fancy-Coloured Edge, and printed Earthenware of a quality which they can with confidence recommend.

"Orders addressed to this Company will be gratefully received and punctually executed.

"Clyde Pottery Greenock 30 October 1816."

It is a little misleading that the title should be given here as 'The Clyde Pottery Company,' for the name of the firm was then generally recognized throughout the pottery trade as Messrs. Andrew Muir & Co.

The class of business originally conceived by the Muirs was carried on by them very successfully for many years. About 1840 they parted with a share of their business to Thomas Shirley, who came from a Staffordshire Pottery. The control of the place gradually passed entirely into Shirley's hands, and the name Muir disappears, giving place in due course to the new title of the firm, Thomas Shirley & Co. The crockery was now stamped with the

initial letters of the firm, 'T. S. & Coy.' The pottery after some years became financially embarrassed, although every care and skill appears to have been employed in producing good reliable white earthenware.

In 1857 the Shirleys sold the works to a group of merchants who formed the Clyde Pottery Company, of which James Brownlie was the managing director and largest shareholder. This is the first mention of the Clyde Pottery as a joint-stock company. A few years after, in 1860, the business was reconstructed, and the name of the firm altered to 'Donald, McLachlan, & Brownlie.' Donald was the founder of 'John Donald & Co., China Merchants,' at Bristo Port, Edinburgh. This Company carried on the business for ten years, when John Donald retired. On Donald's retiral it became 'McLachlan & Brownlie,' and latterly, in 1872, further changes took place, when Robert Glen Brown, a well-known merchant in the town, became identified with the place, altering the firm to 'McLachlan & Brown.' McLachlan retired some years afterwards, and R. G. Brown took his brother, James D. Brown, in as partner. McLachlan was a potter, and had taken charge of the practical end of the business. After he left a Mr. Shedden succeeded him as works manager, but it is uncertain whether he had a share in the business or not. Shedden did not remain long, and the two Browns latterly carried on the business by themselves till they closed the works in 1903.

The trade mark of the larger portion of the ware made here is 'C. P. Co,' marked in plain letters, or printed in a 'garter' when any pattern was being printed. Mulberry or 'puce' was one of their special colours in designs of flowers.

Punch bowls were a specialty, and one of their best patterns was 'Lily of the Valley,' printed and enamelled in bright colours with a yellow lustre border.

When extensions of the harbour took place, the Glasgow and South-Western Railway purchased the ground

and buildings of the Clyde Pottery, and cleared the site, leaving only a few of the potters' shops still standing and facing Pottery Street.

TRADE MARKS.

C. P. Co

"CLYDE "

G.

"GREENOCK."

GREENOCK POTTERY

This was established at Ladyburn about 1820 by James Stevenson, who had helped the Muirs in starting their Clyde Works. White earthenware was also made here in painted and printed patterns, which can be easily recognized, for James Stevenson & Co., the style of the firm, stamped their ware with the mark of a ship inside a narrow oval garter.

There is an entry in the Port-Glasgow register of 184 tons Ball clay being imported in 1830 for this firm from Dorsetshire, and mention is made of the other clays from Cornwall, but we are not given any exact figures.

Stevenson sold the business to the Shirleys of Clyde Pottery, and confined himself to cultivating a merchant business. By 1826 he had already established a pleasant connection with the Wedgwoods of Etruria, as shown by letters in possession of that firm. Greenock was an important market for the Newfoundland seal-fishers, who carried large quantities of crockery among other merchandise back in payment for their oil.

Shirley sold the pottery afterwards to Clough & Geddes. Clough was a Staffordshire potter, and Geddes was a son of the patriarch John Geddes, at Verreville. These two men carried on the works from 1849 to 1856.

They altered the name of the works to the Ladyburn Pottery, as it was situated at Ladyburn, near Garvel Park.

In 1856 this Company sold the works to a Staffordshire pottery manufacturer named Dawson, who continued

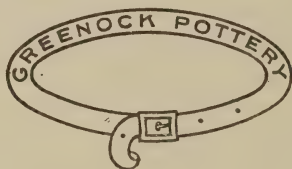
the works for a brief period, when he finally closed the concern.

All that remains of this old place are some dwelling-houses in Potters Row that were once potters' workshops.

In 1855 this pottery had such a large business in the North of Ireland that they started a branch at Larne. For many years Rockingham teapots and yellow-ware were made. In later years white-ware was added, and printed in many of the designs used in their Greenock Pottery.

At one time there were regular 'Pottery Fairs' for the Glasgow and other china dealers, who came not only to supply their wants but to renew acquaintance with other dealers, especially those spread over the Western Isles of Scotland. They were looked forward to by everyone as a holiday, as well as for transacting business. When the purchases had been completed, most of the ware was taken away in waggons, or small gabbarts (sailing boats) to the Highlands.

" Their memory and their name is gone,
Alike unknowing, and unknown."



DUMBARTON

Tradition and familiar rumour has always associated this historic town with having a china work. During the latter half of the eighteenth century it was noted as a glassmaking centre, but in no record can I find a china work ever existing here.

Some say that Anthony Ammatt from Derby China Works, and who also worked in Bristol, as well as Cham-

pion from Bristol Porcelain Factory, erected a small porcelain work here in 1760.

There was great rivalry between Bristol and Glasgow, and it is quite likely Champion through this would learn of Delftfield and other potteries being established in Glasgow. He had become financially embarrassed, and had sold his patent rights for the manufacture of china to the New Hall Pottery in Staffordshire, and probably he desired to spend the remainder of his life in some place away from his former scenes.

That, however, is supposition, for we have no direct evidence except that in 1770 the Dumbarton Glass Company (Dixon's) is said to have purchased a pottery, and on its site erected their famous and extensive glass-works. Provost Dixon came from the same family as the Dixons of Dixon, Austin & Co., the Sunderland potters.

OLD CUMNOCK POTTERY

This is one of the many quaint old places scattered over Ayrshire. It possesses a wider interest than merely a local pottery supplying the ordinary articles of utility to the farmer folk in the countryside around.

The works were established about 1786 by James Taylor.

He was a remarkable genius, born in the Leadhills in Lanarkshire in 1753. He very early in life showed he was a 'lad o' pairts,' for shortly after leaving his village school he was distinguishing himself at Edinburgh University.

In 1775 he became tutor to Patrick Miller of Dalswinton. Miller was the inventor of the plan for propelling ships by paddle wheels, which he devised to be driven by manual labour. Taylor became interested in his pupil's idea, and, being also mechanically inclined, at once suggested applying the newly-invented steam-power, but not having sufficient knowledge himself, he

thought of his old school friend William Symington. Symington had been brought up in the neighbouring village of Wanlockhead, and possessed the requisite knowledge, being already recognized as a clever engineer. He it was who, in 1801, devised the towing boat Charlotte Dundas, from which, it is said, both Fulton and Bell got their ideas for the construction of the Clermont by the former in 1807, and of the Comet by the latter in 1811.

So successful were the experiments that in October 14, 1786, the first steam-driven paddle-steamer was completed and launched unheralded in Dalswinton Loch, with Robert Burns, Nasmyth the painter, and Harry Brougham, afterwards Lord Chancellor of England, as passengers.

Extracted from a letter from Falkirk, dated December 4, 1789, we read: "Yesterday an experiment of the greatest consequence to commerce was exhibited here on the Great Canal by Patrick Miller, of Dalswinton; the application of the steam engine to sailing. This gentleman, who formerly made experiments on the same subject on a small scale, has in the present instance applied it to a vessel of considerable burden, with a degree of success which must be very agreeable to the public. The velocity obtained though very considerable—the experiment being not yet completed—cannot be particularly stated at present. The result, however, so far shows that this invention bids fair to be of the greatest utility to mankind."

In this venture Miller was associated with James Taylor, and was assisted by William Symington. In the experiment on Dalswinton Loch the engine was fitted on board a double-boat, with a paddle wheel in the interspace, and the trial took place amid a concourse of hundreds with perfect success. In the later experiment on the Forth and Clyde Canal at Falkirk Miller had the engine fitted on a much larger vessel, and succeeded in moving it at seven miles an hour. There can be little doubt that this self-made genius narrowly missed going

down to fame as the inventor of the steamboat, but, as Carlyle says of him (although the fact is questioned by others), "He spent his life and his estate in that adventure, and is not now to be heard of in these parts, having had to sell Dalswinton and die quasi-bankrupt, and, I should say, broken-hearted."

Symington alone understood and appreciated the importance and value of this steamboat, and unfairly seized the opportunity of taking out a patent in his own name, leaving out Taylor's name, from which, unfortunately, a bitterness grew up between the two old friends.

Latterly, Symington regretted his action and gave Taylor half the proceeds, as we see from the following letter :

Sir

"Glasgow February 1821.

In terms of our former agreement when making experiments of sailing by the steam engine, I hereby bind, and oblige myself to convey to you by a regular assignation, the one half of the interest, and proceeds of the patent taken out by me in the invention, when an opportunity occurs of executing the deed, or when required.

I am, Sir,
Your obedient servant,
(sgnd) WILLIAM SYMINGTON"

The interest of this enthralling story for us is that Taylor, meanwhile, had planned and erected a commodious pottery in Cumnock, wherein to manufacture homely and useful brownware from the local clay. Although his pottery wares showed that distinction of mind the owner possessed, there was nothing remarkable about them. It is therefore somewhat disappointing that a man of such brilliant ability in engineering did not leave his mark on the pottery industry. Many instances might here be given of distinguished men receiving their early training as artists and scientists in a pottery leaving our craft for wider fields of fame.

He died in 1825 and was buried in the old Kirkyard of Cumnock. The inscription on the tombstone is :

“ IN MEMORY OF
JAMES TAYLOR
THE INVENTOR OF STEAM NAVIGATION
WHO DIED AT CUMNOCK
18 SEPTEMBER, 1825
AND WAS INTERRED HERE.”

After his death Government granted his widow a pension for the distinguished services he had rendered to his country.

The pottery was taken over by the Nicol family. When old Mr. Nicol passed away he was succeeded by his sons and Mr. Dunsmuir, also a relative, who carried on the works steadily till 1919 when the place was sold to the local gasworks, and all that is left is the Potters' Row.

The works produced excellent Rockingham ware. But the ware by which it obtained a deserved reputation all over the world, especially where Scottish folks had emigrated to, was its 'motto ware.' It was made from the local red clays and coated over with yellow slip. By scratching through this outer yellow coating with a sharp-pointed tool, mottoes and other subjects were able to be executed on the red clay underneath. This showed up very effectively when covered with a suitable glaze.

There were many varieties of decoration, but the most popular were those Scottish sayings referring to the hearty and cheery hospitality customary in visiting an Ayrshire farmhouse.

A cream jug would have 'Straucht frae the coo.' A butter dish, 'Help yersel', dinna be blate.' A bowl, 'I'm no greedy but I like a lot.' Plates, 'Hane yer' breath to cool your parritch,' 'The proof o' the puddin' is i' the preein' o't,' and many other inscriptions of a similar nature.

Unfortunately, cheap German chinaware has largely taken the place of this old Scottish ware. It is some-

what insulting to see our good Scottish sayings emblazoned in glittering 'old German' characters on cheap china ornaments in shops at our coast and country holiday resorts.

J. & M. CRAIG, LTD., VIEWPARK POTTERY,
KILMARNOCK

This was built about the middle of the nineteenth century by Bailie James Craig and his brother, who were well-known men throughout Ayrshire.

Its chief production was sanitary ware, but, for many years after it was opened, domestic ware, such as jugs, cups and saucers, etc., were manufactured. Latterly, this department was given up, and in its stead the Company entered the tile trade, making glazed white and ornamental wall tiles.

A few years ago the works were sold to Messrs. Shanks, Ltd., of Barrhead, who now run it as a branch of their establishment under the management of Mr. Ronald Shanks, in producing vitrified sanitary wares.

VICTORIAN POTTERY, BARRHEAD

This was erected by Messrs. Shanks, Ltd., as an adjunct to their sanitary engineering works in this town. It is among the best equipped sanitary-ware potteries in the country.

Fireclay articles of the largest dimensions are made, and coated with a durable white enamel, also white and decorated earthenware table-top wash-basins, etc. One of the many specialities of the firm is the production of patented sanitary fittings for ships' use. Large passenger ships built in Scotland and elsewhere are fitted with such articles by this firm, which has a world-wide reputation as pioneers in modern sanitation.

This pottery is under the charge of Mr. Douglas Shanks, a director of the firm.

FERGUSLIE POTTERY, PAISLEY

These fireclay works were erected about 1839 by Robert Brown & Sons, who originally confined themselves to producing fireclay linings for furnaces, garden ornaments, and statuary for gardens.

By 1876 the business of the firm had so developed that the manufacture of 'white earthenware sanitary' was entered upon. As the pottery had plenty of space for expansion further extensions were made—workshops were erected, and suitable plant installed for producing wall tiles in a large variety of sizes and patterns.

Some years ago the factory was remodelled on the most modern lines, and such methods as 'casting' the large pieces were introduced.

Fireclay sanitary-ware is produced, and is coated with a hard durable enamel. The goods are designed on the most hygienic patterns, and find a ready sale all over the world.

J. & R. HOWIE, LTD., KILMARNOCK

These extensive works are situated at Hurlford, near Kilmarnock, and were erected in 1857 by John Howie, who a few years later assumed his brother, the late Robert Howie, as his partner. Robert died in 1871, and John passed away in 1895. The business thereafter was carried on by the sons, and in 1903 was formed into a private limited company. In 1885 the Company became interested in the Plann Fireclay Works, Cross-house, and ultimately became the sole proprietors. The Company make a large variety of white enamelled sanitary ware in the most approved styles, also enamel bricks in white and other colours are turned out in enormous quantities.

CHAPTER XIII

SALT-GLAZED STONEWARE (BRISTOL WARE) POTTERIES

INTRODUCTION

THIS coarse grade of pottery had its origin in London and Bristol, hence its name 'Bristol Ware,' by which it is still known to potters.

It is entirely made from Devonshire Ball clays, brought to Scotland in sailing vessels. This is a siliceous clay free from iron and coarse particles of sand, which vitrifies at a high temperature, producing a buff colour of ware suitable for all common and strong pottery wares.

It requires little preparation : often it is simply broken into small pieces and put into large tanks of water, called 'steeps,' till softened, when it is 'pugged' through a mill and is ready for the potter to use. Latterly, this process has been improved by 'plunging' the clay in large tubs and adding a percentage of china clay to improve the quality and colour of the 'body.'

The whole process of making and glazing is done in one firing in a kiln.

There are two methods :

- (a) 'Salt-glazing.'
- (b) 'Dipping.'

(a) Salt-glazing is a very ancient process, and is a very thin blush of a soda-glass on the surface of the pots, produced by volatilizing common salt in the 'cup-board' kiln. When the fire has attained a bright red

heat, its highest temperature (Sege Cone 8, $1350^{\circ}\text{C}.$), a certain amount of salt is shovelled and thrust through the top of the furnace into the kiln through special holes at regular intervals, sometimes with green wood, which gives the water vapour necessary to decompose the fumes of sodium chloride and set the alkali free for combination with the alumina and silica, forming a coat of colourless soda glaze on the surface of the 'body' of the ware.

The introduction of glazing pottery with salt into the town of Bristol is attributed to a German named Reid. The workers in the pottery, astonished at the ware coming out glazed without being dipped into a tub of raw glaze, and noticing dense clouds of steam with an evil smell (from the chlorine of the salt) was emitted through the hovel of the kiln, came to believe it must be some magic and the work of the 'De'il' himself—with the result that they rose up against Reid and he had to flee for his life.

Salt vapour cannot reach the inside of the vessels, owing to the fact that the pieces set on top of one another on shelves in the cupboard kiln mutually protect their inner surfaces from the kiln atmosphere. If 'saggers' are used they have large holes cut in the sides to allow the fumes to enter. The insides of the vessels requiring glazed surface have to receive it before 'placing' them in the kiln. The glaze has a peculiar pock-marked roughness on the surface different from the softer lead-glazes.

(b) The other process is merely 'dipping' the hardened clay or 'green' vessel into a tub of ground transparent lead-glaze before 'placing' it into saggers for the kilns, the ware being fired and glazed in a single operation.

Scotland is now an important centre for the manufacture of all varieties in this class of ware. The Scottish preserve manufacturers require millions of jam jars each fruit season. There are also the large chemical works

requiring vitrified stoneware jars and other appliances for conveying corrosive acids, etc. Electricity has latterly become an important factor for such potteries as produce stoneware insulators.

Stoneware ginger-beer and lager ale bottles are considered to be more suitable than those made of glass, being much stronger for shipping and not so brittle.

Then lastly, but by no means least, the demi-john and other wicker-encased stoneware jars are the best and safest receptacles for our Scottish whisky—till consumed.

CALEDONIAN POTTERY, GLASGOW

This should form a natural sequence to Delffield Pottery, on account of its close and friendly relationship with that factory.

Erected in 1790 it was not in full working order till close on 1800. Conveniently situated on the north bank of the Monkland Canal, at the head of Castle Street, St. Rollox, and on the side of Garngad Hill, it was able to get its coal and fireclay in to the pottery on the most economical basis. The canal had only been constructed a few years before, and it was already a great artery for bringing coal, etc., from the outlying coalpits into the centre of the city.

The first proprietors of the works were Robert Reid, Archibald Paterson (a partner of David Dale), Archibald Calder, and John Aitchison, who carried on the business under the style of Reid, Paterson & Co. This is an instance of the number of partners required to raise sufficient capital for quite a moderate-sized factory.

The Company christened it 'The Glasgow Pottery,' but this was altered later to 'Garngad Hill Pottery,' and the firm left out their own names and adopted the name of the works with the word 'Company' added to it.

Many think this was the first pottery to produce fine china decorated like early Worcester. There may be some reason for this assertion, for the works were managed

by a Staffordshire man named Josiah Rowley, who was reckoned a skilful and artistic potter.

The original firm in 1807 sold the factory to John Aitchison & Co., who, on taking possession, named it the 'Caledonian Pottery.'

About this time 'Delftfield' gave up producing pottery, after being in existence some seventy years. The moulds, patterns, and plant, and also whatever business remained, was now taken over by the 'Caledonian.' For many years the works carried on with considerable energy, using their own patterns and those of Delftfield on both china and earthenware.

We can still examine specimens of china cups and saucers made in the Garngad Hill Works about 1810. The groundwork is an egg-yellow enamel, and the gilding is carried out in a rich rococo pattern—the flowers are daintily painted in a style common to that period. Another specimen is (Plate LI.) a large white earthenware jug which has been 'thrown' on a wheel and turned, displaying the excellent quality of the ware. The 'box' handle affixed to it is also very well made. It is decorated in underglaze colours, and has the initials 'C. McC.' (a familiar type of a thrown and turned presentation jug), inscribed on the front with the date 1803 underneath.

The operatives were summoned to their work by several blasts blown by one of the clerks on a large cowhorn; a primitive system commonly adopted by many factories in the eighteenth and even in the early part of the nineteenth centuries, instead of by the more modern steam whistle.

About 1840 the works again changed proprietors and became 'The Caledonian Pottery and Townhead Grinding Works.' The new owners, James Couper and James Murray, became from this date familiar men in the pottery and glass trades throughout Scotland during the nineteenth century.

Couper, whose warehouse was situated at 24 Candle-riggs, was then the principal china and glass merchant in Glasgow.

The firm (now Murray & Couper) carried on the business for many years very successfully, but unfortunately in later years the two men disagreed about something and Couper resigned from the concern. He did not go very far away, for he started, in company with the Cochrans, the old St. Rollox Flint Glass Works on the south bank of Tennant's Basin at 20 Tennant Street, and he latterly built the City Glass Works in Kyle Street.

James Couper had a lifelong connection with pottery and glass, and, as he was of vigorous mind even to the end of his long life of ninety-three years, he was able to give me in course of many interesting conversations a clear survey of these industries for almost a hundred years, and it is to his good memory I am indebted for much of the information in this book. He was a public-spirited man, and was well known as Bailie Couper in the city of Glasgow.

After Couper's retiral Mr. Fullerton joined Murray in 1850, and the firm's name became Murray & Fullerton. The firm up till now had consistently carried out its programme of producing good sound white earthenware and china combining artistic decoration with every-day utility. The Glasgow Iron Works were contiguous, and were often a source of trouble, more especially in the making of white china, for sooty specks from the furnaces left yellow stains on the chinaware when it was in process of manufacture.

Therefore, in 1851, the firm decided to give up making whiteware, and from this date the partners devoted their energy to making stoneware bottles, jars, etc., for which there had sprung up a considerable and constant demand.

Plate LI. is made of their stoneware, and is coated with a clear glaze. It is a statuette of 'Heather Jock,' a Glasgow character, and is modelled with remarkable vigour and is a very life-like portrait. Another feature of the pottery was the manufacture of 'sour-dook' (buttermilk) jugs which were common even twenty or

thirty years ago, when the farmers' carts used to come direct into Glasgow with two large casks of this wholesome drink. The jugs were also a common feature on the counter of old taverns, as the figures modelled on them were often 'Souter Johnny' and 'Tam o' Shanter.'

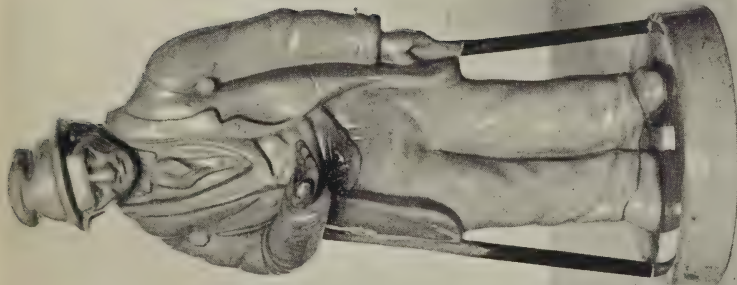
Murray, who was the prime mover of this business, was a brother of the founder of Murray's railway time-tables and diaries. His son, W. F. Murray, had been in the works for some years, and his father thought it was time he was made a partner. There arose some dispute over the allocation of shares among the three partners, and Fullerton retired.

Frederick Grosvenor now came forward and joined the Murrays, and the firm in 1867 became known as Murrays & Grosvenor. This arrangement only lasted a year, for again disputes arose among the partners, and Grosvenor severed his connection with the firm in 1868.

About 1870 the Glasgow Ironworks, desiring to extend their works along the banks of the canal, approached the Murrays with the object of purchasing the ground and buildings. The matter was amicably arranged, and the old Caledonian Pottery ceased operations in Garngad Hill in that year.

The Murrays moved their business to Rutherglen, where they had obtained an extensive and suitable piece of land from the estate of my forbears, namely Gooseberry Hall. It had the advantage of having direct access to the Caledonian Railway, and on this favourable site a large and modern pottery was established, the old name of 'Caledonian' being still retained.

In 1891 W. F. Murray carried out experiments in continuous gas-fired kilns, and created considerable attention and discussion especially on the matter of smoke prevention at the time. An interesting account of the work was given by him before the Philosophical Society of Glasgow. Unfortunately, the system did not achieve the success that was anticipated, and Murray found himself in financial difficulties. For a time he obtained



"BRISTOL" WARE FIGURE OF
"HEATHER JOCK."
A familiar figure in Glasgow
about sixty years ago.



SHEEP'S HEAD.
In tinted earthenware,
to form handle for
Malacca cane.



WHITE EARTHENWARE JUG.
Monogram C. McC., 1803 painted
in front.

Caledonian Pottery, 1800-1850.

The Corporation of Glasgow, People's Palace Museum.

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the assistance of his agent in Ireland, Mr. John McIntyre, and for a few years the firm was known as Murray & McIntyre. But the assistance arrived too late, and the business, unable to weather the storm, went into liquidation and the pottery finally closed.

The quality of stoneware produced was above the average and was held in high repute. Egyptian black wares were also made, in a laudable attempt to resuscitate this beautiful 'body.' The trade mark by W. F. Murray & Co. was a Scottish lion rampant.

The 'Ru'glen Rockingham teapots' made in this pottery were well known, especially in Australia and New Zealand. Murray is credited with being the first to introduce fireclay into his teapot clay to enable it to stand the heat of the fireside better. He also invented a 'spongey iron' water filter made in stoneware for ships' use. A Royal Commission awarded him their medal as a mark of appreciation of his patent. These old stoneware water filters were works of art, decorated with sprigs of figures in light pipe-clays, which were stuck on to the darker ground of the stoneware body.

Shortly after the works were closed they were purchased by an English clay company, who re-opened them under the name of the Caledonian Pottery Company, Ltd.

The pottery still carries on the manufacture of all manner of stoneware goods, as well as cane and Rockingham wares.

CROWN POTTERY, GLASGOW

This factory was occupied by Messrs. Miller & Young at 45-47 Garngad Hill, not far from the old Caledonian Pottery, about the middle of last century. It produced the usual lines of brownware, but latterly it made a very efficient stoneware water filter that was much in demand, especially for ships' use. The works became too small and were sold to Thomas Davidson, Jr. & Co. for their Caledonian Tobacco Pipe Works, while Messrs. Miller

& Young retained their business in the larger North British Pottery Works in Dobbie's Loan for a short time, till ultimately Mr. James Miller, the senior partner, possessing also the Port-Dundas Pottery, transferred the 'Crown Filter, and Pottery' concern over into this new factory.

PORT-DUNDAS POTTERY, GLASGOW

The manufacture of salt-glazed stoneware may be said to have been started in this factory about 1816. Part of the old original place still exists, indeed Port-Dundas Cottage, then the residence of whoever was the proprietor at the time, is still inhabited and stands at the corner of Milton and Bishop Streets.

For several years after the founding of the works there appear many changes in its owners. About 1838 Bailie James Couper lived for a year or so in the Cottage while he and Robert Cochran (latterly of Verreville) were running the place. But this lasted only about two years, for in 1840 the works were sold to George Duncan, who now occupied the house. Cochran and Couper somehow seem to have remained agents for the pottery at their warehouses in 36 Buchanan Street.

Finally the works were taken over by Mr. James Miller, under the style of James Miller & Co., who in later years reverted to the old and original title of the works, 'The Port-Dundas Pottery Coy.,' by which they are at present known.

When the works started, salt-glazed water pipes were chiefly produced to convey gravitation water to the homes of the townspeople before cast-iron pipes were invented. These were all made at the commencement by hand on a thrower's wheel.

The pottery latterly devoted itself to producing a great variety of salt-glazed stoneware—some of which, as can be seen in Plate LII., is of good quality and artistic design.

Besides making the ordinary staple lines of Bristol glazed ware, considerable attention has been devoted to



TOBACCO JAR.
"Bristol" ware.



FIGURED JUG.
Salt-glazed stoneware.
"Bristol" ware.

Lent by Port Dundas Pottery Coy., Ltd.

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the manufacture of electrical insulators of many types. There was for some years a branch of the works on the opposite side of Milton Street, but these were pulled down to make way for the extensions of the Caledonian Railway. The factory is at present carried on by Messrs. Frank and Stanley Miller, sons of Mr. James Miller, who died many years ago.

BATHGATE'S POTTERY, GLASGOW

Bathgate's Pottery was a small pottery in the vicinity of the foregoing works, owned by a potter James Bathgate, at 353 Dobbie's Loan. He had been a modeller in Verreville and other places, and having gained some practical experience, he for some years turned out useful domestic articles made from local clays. The late Harry Bathgate, Plasterer, in Duke Street, was his son, and a well-known citizen in the east-end of the city.

BARROWFIELD POTTERIES, GLASGOW

These large premises were erected in 1866 by the late Henry Kennedy for the manufacture of glass-lined stoneware, bottles, jars, and similar articles. Mr. Kennedy had started with the Murrays in Caledonia Pottery, but not getting on as he should have liked, started the Barrowfield Pottery, which at its inception was a very small affair, but, under his successful management, grew to be one of the most extensive of the stoneware factories. Mr. Kennedy died some years ago, and he was succeeded by his sons Joseph and John. John left the business and started Cleland Pottery, while Joseph converted the works into a private limited company and carries it on now under the style of Henry Kennedy & Sons, Ltd.

TRADE MARK.

Three bottles side by side beneath a ribbon bearing the words 'Established 1866.'

EAGLE POTTERY, GLASGOW

After Frederick Grosvenor had severed his connection with the Murrays he spent some time looking for a suitable site whereon to erect a pottery. He nearly fixed upon one in Grangemouth, and also thought of going at one time into the Clyde Pottery at Greenock to take over John Donald's shares, and manage the concern. But after a visit to the pottery, Grosvenor, not considering the offer favourably, returned to Glasgow, and in 1869 purchased ground in Boden Street, in Bridgeton.

The works was at first called 'Bridgeton Pottery,' but it was finally called 'Eagle Pottery,' by which name it has ever since been known.

Mr. Grosvenor had a good practical knowledge of pottery-making, and with remarkable energy he had his first kiln full of ware and lit within six months of digging the foundations of his large factory—surely a record of speed.

These works produce 'Rockingham ware' of all kinds for domestic utility.

'Bristol' and 'salt-glazed' stonewares are made for many purposes, such as preserve manufactures, chemical ware, and electrical insulators. Indeed, the variety of productions is large and comprehensive.

Frederick Grosvenor died some years ago, and his son Donald has since controlled the works under the style of F. Grosvenor & Sons, he having been a partner for some years with his father before he died.

TRADE MARK.

Eagle erect with outstretched wings.

STAR POTTERY, GLASGOW

This was built about 1880 by Johnstone Wardlaw, Jr., who had been a modeller in Britannia Pottery, for supplying the Scottish potteries with the 'stilts' and 'spurs' they required, and which hitherto had all to be brought down from Staffordshire. Besides these he made plum-bago crucibles in all dimensions.

Latterly, Rockingham and majolica wares were added. Unfortunately, a fire took place in the works, which were situated in a lonely spot in Possilpark, so that the whole place was destroyed before anyone was aware of the fire. The works were rebuilt, and whiteware was now made. Everything appeared to be in order for a prosperous career, but within a year of erecting the new works they were again completely destroyed by fire, and Wardlaw never rebuilt them.

TRADE MARK.



WOODSIDE POTTERY, GLASGOW

This place was owned by Murray & Stewart, and was for many years in the middle of the nineteenth century busy working a clay pit where Napiershall Street now exists. It was conveniently situated, for it obtained sufficient fuel from the coal that was found in strata in the neighbouring sandstone quarries. It produced red flower-pots and similar garden ware, besides a large quantity of glazed brownware, till the city latterly encroached so much on their clay pits that they had to stop and sell off their whole plant and buildings.

SARACEN POTTERY, GLASGOW

Saracen Pottery was established in 1875 by Messrs. Bailey, Murray & Bremner at Possilpark. Rockingham, cane, and jetware in teapots, etc., were the chief productions of the firm. Latterly Murray was the chief manager, and he produced large quantities of majolica jugs for holding 1 lb. of jam for the preserve manufacturers. Some years later the business was sold to Grieves & Ellis. For a few years the works stood idle, when Messrs. McDougall & Sons purchased them. Under the new proprietors a magnificent selection of Nautilus Porcelain ware was produced, both in ornamental and useful styles.

Earthenware was ultimately added, but the business, owing to various causes, was finally brought to a close, when the works were leased to Messrs. J. & R. Tennent, Ltd., of Wellpark Brewery, who have since purchased them outright. This company has remodelled the place to suit their own requirements of beer bottles, which practically keeps the factory going full time.

MARKS.

B. M. & CO
SARACEN POTTERY

Nautilus
Porcelain.

GOVANCROFT, GLASGOW

This pottery was erected some twelve years ago in Tollcross for the purpose of manufacturing stoneware. The principal director of the company is James Buchanan, who actively carries on the business.

CLELAND POTTERY, LANARKSHIRE

This small factory, erected in the country town of Cleland, not far from the fruit-growing and preserve-making centres in Lanarkshire, in consequence almost

entirely confined itself to the manufacture of jam pots. Erected by John Kennedy, a younger son of Henry Kennedy of Barrowfield, it had a comparatively brief career, being closed now for many years.

GLENBOIG FIRECLAY COY.

This extensive and well-equipped concern has several works in and around the Glenboig district, where they manufacture the various classes of products known all over the world as 'Glenboig fire-bricks,' gas retorts, and all manner of refractory claywares, as well as glazed pipes and fittings for sanitary and sewage purposes.

In these works one of the earliest installations of gas for firing kilns was introduced by the late Mr. James Dunnachie. The scheme was a success, and has been in use ever since.

GARNKIRK

Garnkirk, a village a few miles to the N.E. of Glasgow, was famous for the fine light colour of its fireclay when burnt. Owing to this excellent buff colour statuary, busts, and even fountains, were produced. Excellent reproductions of Bailey's 'Atlas,' 'Minerva,' 'Gleaner,' 'Eve at the Fountain' designs were among the most deservedly popular of such work, and gained admiring approbation at the great Exhibition in London of 1851.

The works were established about eighty years ago by Sprott, and were carried on latterly, till they were finally closed, by Messrs. Sprott, Gillespie & Cameron.

HEATHFIELD AND CARDOWAN

Heathfield and Cardowan are extensive fireclay works not far from Garnkirk. These extensive premises were erected by John Hurll and John Young in 1852. In 1874 Hurll & Young dissolved partnership. The works

were afterwards carried on by a company till the present proprietors, Messrs. A. & J. Faill, took over the whole business.

P. & M. HURLL, LTD.

Peter & Mark Hurl, sons of John Hurl, started the 'Gartlieston Fireclay Works' on the other side of the Caledonian Railway from the 'Star Works' of Glenboig. They also work the various seams of fireclay around Glenboig, and produce enormous quantities of all manner of firebricks, fireclay gas retorts, etc., as well as the staple lines of composition bricks at Garscube and Drumchapel Brickworks for home and foreign markets, where there is a large demand for their products.

BONNYBRIDGE.

Bonnybridge is now an important centre for this class of claywork. Messrs. Stein are among the largest producers of firebricks in particular, and have the latest appliances and the most up-to-date continuous ovens to be seen in any fireclay factory in Britain, if not in the world. There are small fireclay works spread over the country too numerous to mention here.

We can scarcely credit that this enormous industry was totally unknown to the pioneer manufacturers of pottery and glasswares, when constructing their furnaces. In 1763 a glassmaker, John Clerk, introduced the art of using fireclay and converting it into refractory bricks and blocks; they had hitherto all been made in Holland, from which country they were shipped over here in large quantities.

CHAPTER XIV

SCOTTISH 'CLAYS' (TOBACCO PIPES)

"The tinker smokes his old clay pipe
To drown his worldly troubles,
But I with mine do blow big fine
Lustrous, round soapy bubbles."

HISTORY

THE manufacture of tobacco pipes in clay forms an important branch of the art of the potter ; and, by the very nature of the materials employed in their manufacture clay-pipes should have their place in the story of Scottish Pottery. Scotland is now the busy centre of this industry in Britain. The last of the Bristol pipe makers' factories closed at the end of 1922. 'Old clay pipes' might quite well form an interesting addition to the collection of an enthusiast of old Scottish objects.

Especially is this the case as the more popular cigarette habit has largely ousted the clay-pipe customs, and potters, or 'pipe-makers,' making clay pipes may some day pass away, and the art of pipe-making become extinct.

The following doggerel verse, written some two hundred years ago, shows that the potter and his clay are of some importance and interest to the smoker :

"If all the world were sand,
Oh, then what should we lack o'
If, as they say, there were no clay
How should we take tobacco !"

From the earliest time in history man has been known to have made use of a pipe for smoking. We read of pipes being used for such a purpose all over the East, in Arabia, Persia, and China. Indeed, from China came some of our earliest clay-pipes, which famous old Dutch potters copied, and which we see figuring in the portraits of Dutch merchants painted by such old masters as D. Teniers, and other contemporary Dutch artists of the sixteenth and seventeenth centuries.

Imagination again recalls to our memory the stories of the 'Wild West' of our boyhood days. These stories of adventure could not be complete without the savage Indian smoking his 'calumet,' or pipe-of-peace, with the white explorer or hunter.

Fragments of early pipes said to have been made in Scotland have been discovered all over this country, even as far north as the Orkneys. During the Roman occupation pipes were known to have been in use long before Sir Walter Raleigh discovered tobacco.

For what purpose were these pipes then made? It is stated by authorities, that hemp or a similar fibrous plant was smoked in them. Hemp was known as a smoking mixture in the East. The Greeks speak of it as a sedative, and this or a similar substance might have been used by the primitive Scots.

The earliest Scottish pipes were termed 'Celtic' or 'Elfin' pipes, terms still used in the trade. Their form and general appearance resemble very much the tobacco pipe of to-day. They are made of white pipe-clay, the only distinguishing difference being that the bowl of these early pipes is smaller than the bowl of the pipes at present in use, and suggests in consequence that some drug was probably used. Another type was the 'Fairy,' around which superstition wrought its spell among our Highland folk.

The history of the earliest domestic life of Scotland owes something to clay-pipes, as well as to old pottery. Each article of pottery tells its own story. In Haddingtonshire old clay-pipes, very probably made in the

potteries in and around Prestonpans, not far distant, were discovered. In North Berwick, as well as in various other districts, were found numbers of small clay tobacco pipes popularly known as 'old man pipes,' 'Celtic' or 'Elfin' in Scotland, and in Ireland called 'Dane's' pipes. To what period these curious relics belong I am at a loss to determine. The popular names attached to them manifestly point to an era long prior to that of Sir Walter Raleigh and the Maiden Queen, or to the Royal Author's letter entitled 'A Counterblaste to Tobacco,' and the objects along with which they have been discovered would also seem occasionally to lead to similar conclusions, in which case we will be forced to assume that the American 'weed' was only introduced as a superior substitute for older narcotics such as Coltsfoot, sneezewort Yarrow (old man's pepper), which are still smoked by Highland folk for various ailments, and are not unpleasant as well as efficacious.

There is also the well-known and interesting description of a curious old Scottish memorial of the pipe, which leads to the assertion that we must trace the introduction of tobacco in Scotland to a date much nearer the discovery of the New World by Columbus than the era of Raleigh's colonization of Virginia, with which Scotland had latterly such a close and honourable connection.

This memorial is to be found in the grim old Castle of Cawdor at Nairn, associated, in defiance of the actual chronological date, with King Duncan and Macbeth. Like most castles of that period it was enlarged during the sixteenth century. In one of the rooms of this extension is a stone chimney richly carved with armorial bearings, and the grotesque devices common to the style of that period. Among these are a cat playing a fiddle, a mermaid playing a harp, a monkey blowing a horn, and a *fox smoking a pipe*. There can be no mistake about the date of this last extraordinary design, for on the same stone are carved the figures 1510, the year during which the wing of the castle was built.

We must not proceed further without some reference to the pamphlet of that royal pedant James VI. of Scotland. This is an extract from his once famous article written in 1604: 'A Counterblaste to Tobacco.' King James is nothing if not terse in his language, and in description is somewhat cynical. "A custom, loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs, and in the black stinking fumes thereof, nearest resembling the horrible stygian smoke of the pit that is bottomless."

As soon as James discovered, however, that there was quite a considerable revenue to be obtained by taxing the weed which was then rapidly coming into use among the Scots, among the furnishings of the chimney-piece would be 'ane boyst of tubacco,' his anger somewhat cooled, and we hear of him laughingly calling it 'a precious stink.' All these historical accounts point to the fact that clay-pipes must have been made in Scotland from earliest times.

Paterson had good reason for including 'clay pipes made in Edinburgh' in his cargo of merchandise in the Darien Expedition of 1698, with which to barter with the Indians. William Penn, among other articles, gave three hundred clay pipes for the tract of land now known as Pennsylvania. In 1677 one hundred and twenty 'clays' were exchanged for a plot of land in New Jersey, so the pipes at least would not be "left upon a peak in Darien." In the shipping entries of Port-Glasgow of 1795 one hundred and twenty-two gross of 'clays' were dispatched to America.

The 'Company of Tobacco-pipe Makers' in 1664 craved Parliament to give them power to restrain "cooks, bakers, and alehouse keepers from making clay-pipes, so unskillfully that they are brought into disesteem, and also an embargo on the export of raw clay, since by their manufacture of pipes in Holland the Company's trade is much damaged."

Glasgow, during the latter half of the eighteenth century, was an important centre of the pipe-making in-

dustry. Its trade was chiefly abroad, while the Edinburgh factories supplied the smokers at home.

Every inn and tavern up to some thirty years ago kept a rack of clay-pipes with the names of their regular clients written on them. I remember the clay-pipe hawkers, with their peculiarly shaped baskets slung on their backs stacked full of pipes, going round the public-houses in Glasgow every Saturday morning selling their wares, which the publicans in turn gave away during the afternoon to their customers. There can be no doubt that our clay church-wardens and the punch-bowl held an important place in the social life and history of Scotland, and had their full share in creating a pleasant if smoky atmosphere among people of all classes.

Speaking of the customs of our people brings us to one of the most interesting relics of these 'good old days,' the 'card of clay pipes,' sometimes termed 'wake' or 'dredgy' pipes, which were used after funerals, familiarly, but erroneously, called 'dreggy' pipes. This word 'dredgy' was taken from the funeral service itself, and really means the entertainment of the company of guests after the interment was over. At these funerals it was customary to have chanted the Fifth Psalm in Latin, in the sixth verse of which in the old Latin version occurs the petition "Domine dirige nos, etc." The word 'dirige' was repeated throughout the service as an antiphone. When the company were about to return from the interment a party of them were selected to hasten back to the house and get the pipes and wine ready, when all sorrow seems to have been suddenly banished, and wine was circulated as fast as it could go round until there was hardly a sober man left among them. This last service was called the 'dredgy,' really a corruption of the word 'dirige,' that is a service performed to a dead person some time after his death. In some of Burt's letters we read of these peculiar clay-pipes. Dredgies were in quite common use throughout Scotland a hundred years ago. Some days after this dismal scene came other

days of a different kind of mourning, when the bills for the expenses came in from the village inn. One old account on record shows that as much as £13 6s. was spent on pipes and tobacco alone—quite a heavy bill.

About seventy years ago ‘dredgy’ pipes were still in use in country districts.

Even now, in some country places it is customary, especially after the funeral of a coal miner, to have on the table of his old home a plate with a pile of new clay-pipes. The mourners who sit round, will smoke in silence as a token of sympathy and respect for the dead.

There are fashions in the bowls and stems of clay-pipes as in other things. The shape of the bowl may represent a bird’s claw, an acorn, a fish, or the head of some celebrity, either as a likeness or caricature. W. E. Gladstone’s massive head and his grand collar made an excellent model for a pipe bowl.

Carlyle preferred the straight stem and plain but finely proportioned bowl for his ‘clay.’ He got his pipes in Glasgow, and proved rather a difficult and troublesome customer to satisfy, for he was very fussy over the ‘temper,’ length of shank, and capacity of the bowl of his famous pipes.

Any notable event, such as a Coronation or Jubilee, served the purpose of the modeller in producing a fancy pipe to celebrate the occasion.

Longfellow in his *Hiawatha* tells us how

“Gitche Manito, the mighty

.

From the red stone of the quarry
With his hand he broke a fragment,
Moulded it into a pipe-head
Shaped and fashioned it with figures :
From the margin of the river
Took a long reed for a pipe-stem
With its dark green leaves upon it ;
Filled the pipe with bark of willow.”



STONEWARE JUGS.

Caledonian Pottery.

Collection of Author.

Portobello Pottery.

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The Red Indians knew betimes the soothing properties of a smoke from a 'clay.'

The principle of this rude method of pipe-making still obtains, for clay-pipes can only be made by hand.

Andrew Kane of Dundee on 3rd July, 1868, and also J. R. Bird and Charles G. Robertson, both of Glasgow, on 23rd August, 1879, invented and patented clever machinery for the manufacture of clay-pipes, but so far all such attempts have ended in complete failure. It is the old story of the 'potter and his clay,' peculiar difficulties arising when manipulated by mechanical contrivances.

A revival of affection for old 'clays' will return. Old votaries of the clay pipe maintain that on health grounds it is the safest pipe, in that the harmful nicotine is absorbed by the porous clay bowl and stem.

Considerable sentiment has gathered round the 'clay,' especially when the smokers sat around the steaming punch-bowl, and watched with friendly interest their pipes gradually assuming a mellow tint.

"With a glass in ae' haund, and my pipe in the t'other
I drink to my neighbour, and friend.
My cares in a whiff of tobacco I smother
For life we all know, might quickly end."

Old Song.

PROCESS OF MANUFACTURE

Clay pipes can be made of any plastic clay. We have seen that they were made throughout Scotland for centuries, but they were not always made of *white* pipe-clay. They were often produced from local terra-cotta clays, which turned out a red pipe. This clay produced a dense pipe, not so porous as the white clays, and in consequence the 'smoke' was extremely hot.

We know by experience that a soft-fired white 'clay' is sweeter to smoke than any of the modern substitutes such as a briar root.

A 'clay' is an intimate friend of man, and affects his moods. It is well that it is not the 'child' of a cold automatic machine, but the offspring of a human being—the pipe-maker.

Few people realise the vast amount of labour and skill required and involved in making even a clay 'cuttie' pipe. The finest quality of clay comes in small sailing-vessels from Kingsteignton and Newton Abbot, in the South of England. It is cut from the clay pit in cubes of thirty to forty pounds each, and has a greyish colour, which when fired becomes a good white. It is aluminous in nature, as opposed to siliceous as in a stoneware Ball-Clay. It is, therefore, more plastic, more easily pressed up into the patterns of the mould. The pipe stems, also, have the toughness and elasticity of pliant leather, which is an important and desirable condition.

When the blocks or 'Tallies' of this Devonshire clay arrive at the pipeworks, the first operation is to clean it of any dirt adhering to the blocks. It is dried and broken up in small pieces, and placed in large tanks or 'steeps' filled with water to soak and soften. In old pipe factories the clay when dug out of the 'steeps' in a plastic condition was beaten on an iron block by wooden mells, but this process has been superseded by the 'pug-mill' similar to that already described in 'A Visit to a Pottery.' The clay comes out of this mill as a homogeneous mass and is ready for the pipemaker, seated at his long bench.

Small pieces of the clay are first rolled by the hand into a form resembling a tadpole with a long tail. These are placed in rows, and in lots of sixteen, for the moulder counts sixteen to the dozen to allow for loss in the shape of breakages in the further stages of manufacture.

A pipemaker's gross is two hundred pipes!

Each roll is perforated with a long well-oiled knitting-needle. The oil used is generally some kind of whale or fish oil. This is the most interesting and fascinating part of the delicate process of pipemaking. The pipe-maker holds the needle in one hand firmly, and with the



SALT-GLAZED STONEWARE "SAUT-BUCKET."

Portobello.

Royal Scottish Museum, Edinburgh.

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other gently and very swiftly pulls the clay tail over the wire till the thick head of the tadpole shape of clay is reached. The whole is now fitted into an iron mould, with the wire in the stem, and by means of a lever, or 'stopper,' a metal plunger of an oval shape is brought down and forms the bowl of the pipe. The mould is opened, the wire withdrawn, and our pipe is completely formed. On each pipe there is a seam which has been caused by the mould; this is removed by a knife, and a surface polish put on the pipe, sometimes the name of the maker is then impressed on the stem or shank, at one time it was impressed on the heel or 'spur' of the bowl—this is usually done by girls called 'trimmers.' A pipe-maker can become so proficient and swift in this delicate operation that he can produce over a thousand pipes per week !

The clay pipes are now put on racks to thoroughly harden and dry, when they are placed in 'saggers' as in a whiteware pottery. They are then put into small kilns holding 300 gross or so, and are there fired for ten or twelve hours at a heat of 500 or 600° C. After the baked pipes are 'drawn' from the kilns they are ready for the mouth-pieces to be varnished, but the pipes commonly used in Scotland (the 'cuttie'), four and a half inches long, are now ready for use.

The longer 'straws,' as they are technically termed, varying from six to thirty inches in length, are usually tipped with some sealing-wax or shellac, to prevent them sticking to the lips. The old method was to place the stems or shanks between the fire-bars of a stove, and when they were hot rub them with a stick of pipe-wax generally of a vermilion or emerald green colour. This tedious process has been superseded by painting the stems with a solution of wax and methylated spirits which dries and hardens immediately it is applied.

It will from this brief description be gathered that the clay must be very pure and carefully prepared, so as not only to obtain a uniform plasticity for making the stem,

but, what is of more importance to the smoker, to produce a constant porosity in the constitution of the bowl so as to ensure a cool and soothing smoke.

A type of long pipe, rarely used now-a-days, varying in length from sixteen to thirty inches, from its long association with social gatherings of the 'good old days,' has clung to the name of 'churchwarden.'

Gipsies still remain faithful to the old 'clay,' and the tinker gipsy woman doubtless gets more real enjoyment from her stump cutty 'clay nosewarmer' than her more fashionable and up-to-date sister, the 'new woman,' derives from her dainty cork or gold-tipped cigarette in a tortoise-shell holder.

Besides white clay-pipes we also make black clay-pipes for the negroes. The process of making this pipe is the same. To obtain the distinctive black colour, however, coal-dust is placed in the 'sagger' with the clay-pipes, which, during the firing process, absorb the smoke from the coal dust and come out of the kiln a jet-black.

The African negro likes a very large bowl to his pipe, and he also prefers to have as hot a smoke as it is possible to attain. To satisfy his desire the clay-pipes are immersed in brilliantly coloured glazes of flint and lead and some colouring oxide, and fired in a 'glost' kiln. Another style is to wax the blackened pipes in imitation of varnished Irish bogoak. The Irishman likes a thick, heavy pipe, while the Englishman prefers a light thin pipe. Indeed, the variety is endless.

The large pipe factories in Scotland, principally centred in Glasgow, send their products to all parts of the world, and require to cater for some curious idiosyncrasies.

One of the best known and largest of these factories is that of William White & Sons in the Gallowgate of Glasgow. This business is the oldest one of its kind in Britain. It was originally carried on by the Corporation of Tobacco Spinners in Glasgow, who in 1805—the year of Trafalgar—handed over the pipe-making branch of the



PIPE.
Harry (Lord Brougham).

TRAFALGAR MEMENTO.
In Rockingham Glaze Ware.
Bagnal's Pottery.
Collection of Author.

PIPE.
"The Law is a Hass."

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concern to William White, who is really the founder of the present firm. The business from this date steadily increased and developed till it ultimately necessitated the erection of a larger factory. In 1867 the present fine pile of buildings with its imposing frontage, extending from Gibson Street to Bain Square, were erected. It comprises five stories, and is filled throughout with the most modern appliances. There are six kilns, each holding 300 gross, and, as the firing process only lasts some twelve hours, we get an idea of the vast quantity of pipes produced from their 700 odd varieties of patterns. The founder of the firm was succeeded by his son and grandson, and the sound traditions thus preserved are fully upheld at the present time under the energetic proprietor Mr. R. H. Laing, who possesses a practical knowledge of this industry. One of his best achievements is 'White's Absorbent,' which has obtained endless medical testimonials.

Another large old factory situated for many years at 277 Parliamentary Road also dates back over a hundred years, having been established in 1810. The original site became too valuable, and the demand for more up-to-date methods compelled this old company to sell the ground and buildings and remove to more commodious premises in Charles Street, St. Rollox. Duncan McDougall, a fine type of Highlander, was the founder of this business, and, although the present proprietor is Mr. Wylie Rodger, this old firm still retains the name of McDougall & Sons. Mr. Rodger informs me that Carlyle got some of his pipes from his firm; this is also claimed by Messrs. White, who were connected with a pipework as well in Edinburgh which was managed by Thomas White. In the east of Scotland it is still not unusual to hear a customer enter a tobacconist shop and demand a 'Tam White,' meaning a clay-pipe.

Thomas Davidson, Jn. & Co., took over part of Murray's Garngad Hill Pottery and made large quantities of 'clays'; 'Christie's,' still in Calton, is another old

pipe factory, and there are many more too numerous to make adequate mention of here.

Seamen are very partial to 'clays,' and usually wind the stem and bowl neatly with cord to safeguard them. A friend of mine once rounding the Horn heard a sailor curse his luck in breaking his cutty, muttering it would be many months before he was in Glasgow again !

I am obliged to Mr. Laing for the following letter from Carlyle which he sent to a partner of the old publishing firm of Bell & Bradfute in Edinburgh :

[*Copy.*]

" 5 Cheyne Row, Chelsea,
London,

13th April, 1840.

My dear Sir,

I am about to employ you on rather a singular commission ; which, however, I doubt not you will execute with your wonted good-nature.

Close folded within the paper is a card containing a gold half-sovereign. I am in pressing want of Tobacco-Pipes ; this small gold coin is to procure me through your kindness, Tobacco-Pipes from Edinburgh. Down in the Canongate not far from John Knox's House there used to dwell, and labour that eminent Pipe-maker Thomas White. He, very probably is no longer alive ; but his representatives, his manufactory, must still be there, and pipes of the same eminent fabric. The kind of pipes I was wont to get there were his best, and biggest ; 3s. 6d. a gross. You now see clearly what it is that I solicit of you ?

Having well fixed in your mind that 'Thomas White' is the man, and '3s. 6d. per gross' the kind, there is nothing more to be added except the propriety of straitly charging the people to be most careful in the packing, and then to ship them by first steamer for my hurry is considerable. You must understand, I had ordered from Glasgow no fewer than five gross of a still nobler sort of

pipe than White's, but the wretched people having packed them in a deep box (instead of a broad shallow one) and with sawdust (in place of fine hay) the whole concern arrived here in a state of dust, and ruin, some 45 pipes safe in all: this makes me anxious for speed, anxious too that the Whites may pack better as indeed they were usually wont to do.

I write in such haste I hardly know what I have said but it seems to me you will not fail to decipher what I mean, and I know well you will, in your old manner, set about doing it straightaway. As many best pipes as ros. will buy and pack: that is it.

We are pretty well here. I am to lecture in May—a thing that terrifies me somewhat. I ride diligently every day to get into cleaner spirits at least.

We had your friend the Bishop lately, who seemed to be immensely refreshed by the smell of our smoke, by the sight, and sound of our tumult. It is the way with men. To him the roaring Strand is medicine: to me here Minto Craig seems not unlike a kind of Heaven.

God keep you always; my wife joins in kindest Salutations.

Yours very truly
(sgnd) T. CARLYLE."

Carlyle appears to have overcome his prejudice against the Glasgow pipe-makers, and it is interesting for us to peruse the following that I obtained in a cutting from an old *Lippincott Magazine*:

"The late Thomas Carlyle had not a good word for everyone, therefore, when we do find him lapse into eulogy, the worth of the compliment is considerably enhanced. One of the rare instances in which he is known to have praised any place beyond Prussia and Ecclefechan was while speaking of smoking the Sage of Cheyne Row asserted there was but one honest pipe made in Britain, and that by a Glasgow man. Let the capital of the West

take heart. The achievement is not a great one, but in its own small way it is priceless. It is much, in this Age of unrealities to have produced something, even the most brittle, that is not a sham. It is some compensation for the unlimited hogwash to have elaborated even an honest cutty, nor is the distinction small in having extorted a word of panegyric from the mouth of Thomas Carlyle. One may expect that after this the star of Glasgow, long paled before the maledictions of Mr. Ruskin, will proceed to trick its beams, and flame newspangled in the morning sky. There is only one thing awanting—the name of the veracious pipe-maker is not preserved. Had that been rescued from oblivion, he might have gone down to posterity along with Frederick the Great as ‘*not* a liar, and a charlatan, as his century was.’”

The following letter written by a pipe-maker proves that Carlyle also obtained his favourite ‘clays’ from ‘McDougall’s’ Glasgow pipe factory.

“A gentleman who is connected with Messrs. D. McDougall, 70 Charles Street, St. Rollox (Glasgow), writing from Liverpool to a friend in Glasgow this week, who had forwarded a copy of the *Evening Times* of Saturday with the comments on Carlyle, and his weakness for Scotch clay pipes, says :

‘I think the letter is likely enough to be genuine, as there lived in Edinburgh about sixty years ago a man called Thomas White, but whether he was dead or alive in April 1840 I cannot tell, as that was long before I was born, although I have been in the trade over 30 years.

Carlyle was wrong, in kicking up a row about the packing of his pipes in a deep box, instead of a shallow one, as the deep box will carry its contents far safer than a shallow one. It has not been the custom in Glasgow to pack pipes with sawdust, at least during my long connection with the trade. My firm, however, supplied Carlyle with 21 inch pipes for a number of years. We sent on supplies to Cheyne Row, to the Hill, Dumfries,

and to Cannes, and always managed to please the old gentleman, except on one occasion when we ventured to take the liberty with an order he gave us, which caused him to wax not a little wroth at us. The row arose in this way. Mr. Carlyle had left for Cannes, but found afterwards that he had not sufficient 'clays' to serve him for the time he intended remaining there. We got a letter from him to send on a box with *all possible speed*, but as ill-luck would have it, we happened to be out of the 21 inch pipes at the time, and we had nothing in stock longer than 16 inches. We sent on these with an explanatory letter, and charging him 2/6 per gross, being 1/- the gross less than for the 21 inch pipes. We thought it better to do this than have him run short of pipes of any kind. Mr. Carlyle, however, instead of appreciating our thoughtfulness, returned the box of 16-inch pipes carriage paid and unopened, and *would have none of them*, as they were 5 inches too short. He preferred to wait until he got a stock of his favourite pipe made for him. He greatly preferred Scotch made pipes, because they were straight stemmed. English long pipes he would not have at any price, because of the bend in their stem.'"

Referring to the packing of his pipes, which seem to have caused Carlyle so many troubles, there is a good story told by the late Professor Tyndall regarding this:

"The Sage of Chelsea was bound for the Continent, and Tyndall insisted on packing his 'clays.' But with characteristic independence the Sage preferred to look after the safety of his own pets. Shortly afterwards Tyndall received a letter telling of the arrival of the box of pipes in fragments, not one specimen surviving the shock of travel. On a subsequent occasion a similar offer by Tyndall was gladly accepted by Carlyle, who courteously replied per return of post that every individual pipe had arrived safe and sound."

Poets appear to have had a strong liking to these old 'clays,' for Tennyson chose of all the pipes in the world a 'clay-pipe,' which he smoked in his den at the top of the house. He smoked a medium-sized pipe and had a great objection to a heel or spur under the bowl, saying it spoiled the Grecian simplicity of the pipe.

I conclude my subject with the following poem written by Rev. Ralph Erskine, founder of the Erskinites, minister in Dunfermline some two hundred years ago :

"SMOKING SPIRITUALISED."

This Indian weed now wither'd quite,
Though green at noon, cut down at night,
Shows thy decay ;
All flesh is hay.

Thus think, and smoke tobacco.

Was this small plant for thee cut down ?
So was the Plant of great renown ;
Which mercy sends
For noble ends.

Thus think, and smoke tobacco.

The pipe so lily like, and weak
Does thus thy mortal state bespeak.
Thou art e'en such,
Gone with a touch.

Thus think, and smoke tobacco.

In vain the unlighted pipe you blow ;
Your pains in outward means are so,
Till heavenly fire
Your heart inspire.

Thus think, and smoke tobacco.

And when the smoke ascends on high,
Then thou behold'st the vanity
Of worldly stuff
Gone with a puff.

Thus think, and smoke tobacco.

And when the pipe grows foul within,
Think on thy soul defiled with sin ;
For then the fire
It does require.

Thus think, and smoke tobacco.

And seest the ashes cast away,
Then to thyself thou mayest say,
That to the dust
Return thou must.

Thus think, and smoke tobacco.

Pipe-clay when made up in small blocks performs other important functions in our domestic life. At one time one of the chief (mental) duties of our soldiers was pipe-claying their belts and other equipment.

It also adds its quota of brightness to the home in ' the clean hearthstane ' that Burns writes of speaking to us all of a well-kept house. The wonderful designs executed on the kitchen flagstones and byres of farmhouses are reminiscent of some mystic symbols of the past, which may have had some occult meanings, but which unfortunately have never been handed down to us.

Therefore, pipe-clay, whether it be used in making tobacco pipes or in blocks, surely provides me with ample justification in including it among the beneficent works of the Potter.

CHAPTER XV

PUNCH BOWLS

“Man is made of dust,
And so drink he must.”

THIS and similar couplets were often inscribed by pottery painters on punch bowls.

Every town of any size or pretension had its tavern or social club. By the middle of the eighteenth century the Scottish people were beginning to enjoy comparative comfort, prosperity, and not a little conviviality.

Glasgow's extensive trade with Virginia brought her plenty of tobacco, and her trade with the West Indies brought her perhaps more important commodities, sugar and excellent Jamaica rum. Rum was put into the bowls steaming hot, and was consumed as the famous ‘punch’ of old. Therefore, all taverns, and even individuals who aspired to attain any position, had their *Punch Bowl*.

A large proportion of these bowls were made in the finest quality of chinaware. A few were made in silver and glass, but the great bulk of them were made in crockery of some sort.

During the latter half of the eighteenth and the early part of the nineteenth centuries the common people made the tavern their howff for obtaining good and cheap meals as well as drink. When the meal was over the punch bowl was brought in and set in the centre of the table, and there the merry company, not content with a single bowlful, called for bowl after bowl, and the sma' hours

would find them still sitting round conversing and singing songs. Punch was the beverage of conviviality, assisted by a clay pipe. Who shall say what punch has done for Scotland?

For omitting to order dinner in the Globe Inn at Dumfries for his two friends, William Nicol and Allan Masterton, Burns had to give thanks for the meal ultimately provided, which he did in the following lines:

“O, Lord, since we have feasted thus,
Which we so little merit,
Let Meg now take away the flesh
And Jock bring in the spirit.”

All classes joined in sitting round the steaming bowl. After the Highland rebellion of '45 the 'Highland Wine,' as whisky was then called, made its appearance. Its stronger potency replaced rum, which now steadily decreased in popularity. Whisky became the favourite liquor, and mixed with hot water, sugar, etc., was used on all social occasions. A good recipe for toddy was “one bottle of whisky, three lemons, two ounces of loaf sugar, and every drop of hot water you add to it spoils it!”

To ask a man for his recipe at that age was like asking a man to-day what his balance is with his bankers.

We have another account showing the great interest and excitement there was in 'brewing' punch. What did this peculiar term 'brewing' really mean? Probably the concocting of the following old recipe may explain the term:

“The cloves demanded by the punch bowl is a cordial; having fixed the seasoning the time came for deciding the various liquors. Some said sherry, and out of the fourteen friends present, we are told, this was decided on, as it was felt agreeable to the 'ancestral voices,' so sherry it was. With six parts sherry were blended four of water, three of rum, two of whisky, two of green tea (which was then 30/- per lb.), and one of cloves, and the pan was placed on the red-hot coals. The huge china

bowl was placed before the fire to warm, and the guests sat round trembling for the issue."

I remember seeing an old picture in which was depicted a punch bowl breaking in two as the steaming punch liquor was being poured into it. This disaster was due to the host not taking the precaution of warming the bowl previously before a fire.

A favourite inscription for a potter's punch bowl was :

"What handicraft can with our art compare
For pots are made of what we potters are."

The punch bowl of which Burns speaks when "Willie brewed a peck o' maut" is credited with having been made in a Scottish pottery. It is in the British Museum and is a fairly large one, capable of holding three gallons of liquor.

The dimensions of some of the bowls were very large, some measuring eighteen inches in diameter and holding four gallons. A large china punch bowl made in Glasgow about 1790 was displayed in the Glasgow Exhibition of 1894.

Another china bowl, presented to the 'Seven United Trades' of Dumfries in 1806, had this inscription inside the brim, 'Success to the Wooden Walls of Great Britain' and 'Success to the Seven Incorporations of Dumfries.'

Many fine bowls still exist having sailing ships painted inside them, with the name of the ship on a ribbon. It was customary in those bygone days to present a new sailing-ship with a fine bowl for 'good luck.'

In the Palace of History in 1911 there were many bowls on view. One was a fine china bowl used by Alexander Wylie in 1790 while Deacon of the Incorporation of Weavers.

The large bowl I illustrate (Plate LVII.) is a typical example. It is a beautifully made bowl with the Glasgow coat-of-arms painted inside it, and has a capacity of almost four gallons, and is made of delft tin-enamelled ware. It is decorated in a fine cobalt underglaze blue, with a floral ornament inside round a curious adaptation of the Glasgow coat-of-arms. On the outside are

painted landscapes and figures. The ornamental border is Chinese in style and decoration, but the figures are plainly Scottish in character. Probably the artist took his ideas of ornament from a Chinese piece of pottery and adapted it to a Scottish made bowl, for the bowl itself is not Chinese. It is thought it may have been made by Provost Dinwoodie's firm in Delftfield Pottery; considering the prominent position the works held in the city this contention is probably correct, for the pottery was turning out excellent delftware.

If this bowl could only speak what a tale it could unfold, for it once was in the famous Saracen's Head Inn at Glasgow. It was latterly in the possession of John Buchanan, LL.D., a well-known citizen and archæologist who died in 1878, when it was presented to the town by his grandson, W. C. Carrick of Eskbank, on behalf of Dr. Buchanan's family. The Saracen's Head was the chief hostelry in Glasgow in the latter half of the eighteenth century, situated in the Gallowgate, where it had been erected in 1755. It became the howff of many sporting celebrities, such as 'Bob Dragon,' the sporting Duke of Hamilton, Lord Hailes, Broxfield, and Kames. Dr. Samuel Johnson and Boswell put up there on their return from the Hebrides.

The last occasion on which the bowl was used at a convivial function was at the banquet given to Robert Reid, the 'Senex' of the *Glasgow Herald*, on February 23rd, 1860, when he was eighty-seven years of age. On that occasion the bowl was carried in shoulder high by the purveyor, and placed on the table of the chairman—Sheriff Strathern—amid the cheers of the company.

To demonstrate further the importance punch bowls were held in by the general public the following announcement in the *Glasgow Courier* in 1816 is worth quoting:

"James Inglis & Co., Public Salerooms, 75 Hutchison Street, Glasgow, advertise a large Sale of PUNCH BOWLS in metallic lustre Pottery, and Black Earthenware.

24 December 1816."

The large type employed in printing the words 'Punch Bowls' is noteworthy.

I trust this reference will awaken a fresh interest in them in all who are so fortunate as to possess these heir-looms.

Our museums are sadly deficient in such bowls, whose associations, emblems, and decorations help us to visualize much of the social conditions of generations long passed away, memories every Scot wants to treasure.

Is it to be wondered at that the potters put their best skill and finest artists to decorate such bowls?

"Drink some hot toddy, forget your sorrow,
If the thought comes back, drink more to-morrow."
On an old punch bowl.

BELLARMINES

These peculiar jugs (Plate LVI.) are sometimes called 'Grey-Beards' or 'Long-Beards.'

There seems no direct evidence to prove that any of these were made in Scotland before 1671. They were made first that year in England by Dwight of Fulham.

They are narrow-necked jugs of mottled brown glazed stoneware, and are usually ornamented with a Silenus-like mask, from which the jug takes its distinctive title. There is often an emblem or coat-of-arms embossed on the body. But the most interesting examples have a grotesque bearded head representing Cardinal Bellarmine, just under the lip of the jug. The resemblance is hardly human, but on some of the jugs the features are grave and dignified of aspect. At the back of the jug there is a small 'box' handle made by hand from a roll of the same clay that the jug is made of. The jugs were formed on a thrower's wheel, and the designs impressed on the pot while still plastic. Cardinal Bellarmine was born in 1542 and died in 1621. He was a noted



DEMIJOHN FIGURED STONEWARE.
Portobello Ware.



GREYBEARD OR
BELLARMINÉ.
BROWNWARE INKWELLS.

Smith Institute, Stirling.



HAND-MADE WATER
AND GAS PIPE
GLAZED BROWNWARE.

Prestonpans Pottery.

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theologian during the reign of our James VI., with whom he had many discussions on theology. He was an easy mark for the potter to caricature as he was short of stature, of protruding figure, represented by the rotund forms of the jugs.

They were originally made in Holland, but the Scottish potters learned the process of manufacture and successfully imitated them.

It is generally believed they were first made in Prestons. The Scottish potters called them 'Belmarines,' obviously a corruption of the original term.

The jugs were in general use in Scottish taverns, ale-houses, and in the home during the eighteenth century, and the word 'Bellarmine' came to be used as a term for a potation. In an old play there occurs this passage, "Here is the house, let's in, 'tis dark, we'll have a 'Bellarmine,' and then good-night."

If Bellarmine was also a temperance reformer it was rather grim to apply his effigy to the neck of an ale-jug.

Many of these jugs have been discovered all over Scotland, especially in 'the hole o' the wa'.' One was found in such a corner in an old house in Stockwell, Glasgow, in 1823, very likely having lain there for a hundred years.

There were four sizes :

'Gallonier,' the largest, holding over a gallon.

'Pottle-pot,' holding half-a-gallon.

'Pot,' holding a quart.

'Little-pot,' holding one-and-half pints (this size is very rare).

Many have the following initials, but these would be of German origin :

D.D.R. Durstegen dranken (give drink to the thirsty).

H.S. Hungrigen speisen (feed the hungry).

N.K. Nacklen Kleiden (clothe the naked).

“Thou thing,
 Thy belly looks like to some strutting hill,
 O’ershadowed by the rough beard like a wood ;
 Or like a larger jug that some men call
 A *Bellarmino*, but we a conscience.”

Old play ‘THE ORDINARY.’

GAMES

Pottery supplies many needs besides those purely domestic. It provides, among other things, a cheap form of amusement.

What boy, or the matter of that, what parents do not remember happy school-days, with their pockets bulging out with bools (French, *boules*), jarries, or plunkers—the largest sizes of these balls made of clay.

‘Carpet bowls’ was not many years ago a very favourite and fascinating winter game. It was played with six pairs of heavy solid clay balls decorated in bands and lines of brown, pink, blue, green, and various mottled underglaze colours, and a white jack. At one time it was a keenly-contested game in the Border Counties of Scotland, where there were organized ‘Carpet Bowling Clubs.’ I fear the cinema shows have killed this entertainment among many others.

MUSIC

Some years ago flutes were made of white earthenware and prettily decorated. In the hands of an expert the tone was clear and resonant. Their great fault was their fragility. Tap a china bowl, a sweet sound is the result. This has suggested to many potters the idea that church bells might be made of chinaware. But china is fragile, and to make a bell of any size it would require to be thick and strong, thus losing all the resonance of the thinner china bowl. The chinaware bells at Meissen are more ornamental than useful.



DELFT-WARE PUNCH BOWL.

Attributed to Delftfield Pottery, 1750-1770.

The Corporation of Glasgow, People's Palace Museum.

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Violins were also made of china and beautifully decorated, but I never heard one played upon and I have since concluded they were made more as show-pieces than as instruments.

Among old pieces of furniture, round tables about thirty inches in diameter with a china top marked off as a chessboard are still to be found. Many of these tables were made in Verreville. The lunettes around the square centre were often painted very tastefully, depicting local scenery such as 'the Falls of Clyde,' 'Burns Cottage,' 'Edinburgh Castle,' and 'Firth of Clyde at Cloch Lighthouse.'

Clock faces were also made in considerable quantities, and many old grandfather and 'wag at the wa'' clocks have daintily painted wreaths of roses round the china dial.

SCIENCE

There is another and more promising use for pottery, and that is for insulating the electric current from passing to earth.

We see all over the country thousands of these insulators made of pottery, carrying telegraph and telephone lines. The mind reels when we consider the enormous number in service in the great expanse of Continents such as our Dominions over the seas.

THE WILLOW PATTERN STORY

China's Immortal Love Story

No other article whether it be tapestry, furniture, or any other material can compete with a cheap earthenware willow plate in depicting for us, whether young or old, such a charming, and human love story.

Not many who use or treasure a willow pattern dinner service know that the design embodies an old tradition,

It is a curious fable and cannot be ascribed to any one author. The narrative has been a growth to which many generations have contributed their share. I am inclined to think that it imitates the style of La Fontaine the famous writer of fables.

It was first engraved in England by Thomas Minton (the founder of Minton's China Factory) in 1780.

The original idea was Chinese, but I believe there is no knowledge of any old Chinese pattern as we have it now. Although there are no two willow patterns exactly alike, yet all pottery manufacturers have been unanimous in this, that the pattern is always printed in underglaze blue.

The story is said to be as follows :

In the mansion depicted on the right-hand side of the plate dwelt a mandarin, with his only daughter Koongshe. The latter fell in love with Chang, her father's former secretary, who lived in the island home shown at the top of the pattern (left-hand side).

One day the mandarin heard them exchanging vows under the orange tree (in the background), and forbade their union. The lovers, however, eloped, and hid for a time in the gardener's cottage (at the end of the bridge opposite the willow tree), whence they eventually escaped in a boat to Chang's island home.

The mandarin pursued them (we see them crossing the bridge) with a whip, and would have killed them but for the intervention of the gods, who changed the pair into turtle doves (the birds shown in the top of the picture).

The design is called the 'Willow Pattern' not only because it represents a story of love far above mortal love, but also because the lovers' flight occurred "when the willow begins to shed its leaves."

' In King-te-chen, the city of fire '

' Were bowls of clay, and hearts of desire '

' And there an artist's hand could write '

' That East is West in blue-on-white.'

CHAPTER XVI

TRADE PROCESSIONS

To those of a former generation the mention of the various 'trade processions' may bring back pleasant recollections of happy holidays, when keen and friendly rivalry existed as to which factory would turn out the finest display on the great day, and they will look back with fond memories to these old pageants when everyone seemed to be brimming over with good humour, and certainly no one could cavil at their cost, for it was not great.

To produce the models carried in the procession considerable skill and ingenuity were required. Among the insignia peculiar to the 'craft of the potter' small kilns made of fireclay, some twenty-four inches high and ten inches wide, were the most outstanding. During the march of the trades they were filled with dirty oily cotton waste, which when lighted emitted a dense and smelly black smoke, giving the kilns a most realistic appearance of being in operation. Lorries were also requisitioned, the horses all caparisoned with coloured ribbons. These lorries carried a 'thrower' at his wheel making vases, and various other potters also at work. On one occasion a huge teapot, the spout of which alone held over a gallon, was drawn through Glasgow on a vehicle, to the astonishment and amusement of everyone.

The earliest procession that I can remember took place on 8th October, 1883, at the laying of the foundation-stone of our Municipal Buildings in Glasgow. It was a Saturday, and all the town was on holiday bent.

The tobacco-pipe makers, who mustered over 150, with their flute band besides, had the honour of leading off the pottery section. They had three finely decorated lorries, on which were busy pipe-makers engaged in turning out long churchwardens and short Glasgow 'cutty' pipes by the score, to the amazement of the onlookers, to whom the men gave the pipes while still in a soft plastic clay condition, for they had not yet been baked in a kiln. The banner carried by them during this procession was an old Reform flag which they had proudly borne aloft during the great procession of 1832.

Another of these processions took place on 8th September, 1884, to celebrate the passing of the great Franchise Bill. I remember distinctly it was a glorious warm sunny day, and everyone was in exuberant spirits, for it was a general holiday.

In this trades' procession the potters again made a distinctive appearance, nine branches of the trade being represented, namely: Barrowfield, Britannia, Caledonian, Finnieston, Port-Dundas, Springburn, Victoria, and the Kilnmen's Society.

More than five hundred operatives were on parade, and each branch had its trade banner and a numerous collection of ingenious devices of the potter's craft.

Accompanying the contingent were lorries with fine displays of crockery and potters at work, giving a graphic illustration of this ancient and honourable craft.

The operatives in the Govan Pottery belonging to Charles Purves & Co. headed the pottery division. They carried a large banner of the works, and were accompanied by a lorry decorated with flowers on which a potter made jugs and teapots. Emblems of the trade were carried by potters and kilnmen; first, there was a kiln; second, a crate into which the packers said 'We'll pack off The House of Lords'; thirdly, two very large teapots made in brown Rockingham ware, one of which was presented to W. E. Gladstone and the other to John Bright; fourthly, a Greek cinerary urn made in majolica ware

on which was inscribed 'Here lies the ashes of the House of Lords'; and lastly, a monster coffee-pot in white earthenware, also with a motto, 'To give the Lords their coffee.'

Over forty potters represented the Springburn division. The leading banner of the two was in red, white, and blue, with the name of the works, 'Campbellfield Pottery, Springburn.' Among the objects carried were a gigantic printed soup tureen, a basin and ewer, and a huge jam-pot decorated in gold, and covered with a beautiful design representing all kinds of fruit tastefully painted in their 'underglaze' colours. This was deservedly admired by the onlookers. There were also models of kilns and a flint mill. But the most remarkable specimen of all was an exquisitely modelled and painted crown of flowers made in white clay and fired in the kiln, which received vociferous appreciation during the march, both for its design and as a fitting emblem of the crown of victory in the electoral campaigns.

The 'Britannia' workers showed also a remarkably beautiful large scaled model of the House of Lords made in clay, as a political 'stunt,' for it had a donkey standing at the door labelled 'Lord Salisbury.' Another idea was a pottery kiln which had this notice affixed to it, 'We'll fire them up yet!' Another lorry had girls painting brilliantly coloured patterns on fine specimens of ware. Gilbert and Sullivan had just produced the opera 'Patience,' in which a sunflower, a fashionable flower in gardens at that time, figures. The potters were happily able to secure a sufficient number of these huge flowers, so that each member was able to 'sport' one in his white overall, thus giving their show a magnificent appearance! The topical hit was applauded by the crowd. Their final model was a huge inverted kitchen basin with a hole cut out of the brim, over which was inscribed 'This is the cave of Adullam.'

THE 'DELF' HAWKERS

I must conclude this chapter of miscellanies by saying something about the people who bartered Scottish crockery throughout the country, the 'bowl,' or 'mug-man,' whose arrival with his cart of wares was an event at lonely crofts.

A china merchant was a man of substance in the days before communication was so general. I could off-hand mention quite a goodly number who have been Provosts of their town. This prominent position was largely acquired by their extensive dealings not only with travelling hawkers, but also by their wide knowledge of the various places where old rags, scrap metal of all kinds, skins, etc., were principally in request. There was very little money among the country folk, and the 'guid wife' usually replenished her china cupboard by paying for any delf she bought from the hawker in such kind. This trade has to a large extent been killed by motor transport bringing folks even from remote glens to a town to do their shopping.

The following story of one of the best known and largest wholesale china dealers in Scotland is a capital example.

Peter Douglas started a small china shop in High Street, Glasgow, in 1785. His business increased so much that he was compelled to move to more commodious premises in Jail Square, which is contiguous to the north side or right bank of the River Clyde. Some time after this removal he was succeeded by his son William, who carried on the business successfully for many years, and was in course of time succeeded by his sons-in-law David Robertson and Daniel McDougall, senior. The firm's name was now altered to Robertson & McDougall. Meanwhile Daniel McDougall married Grace, a daughter of Douglas. From now on to 1858 the business steadily grew and prospered. It almost entirely depended on the trade of the china hawkers.

Each New-Year the proprietors gave a small treat to their customers, consisting of a glass of whisky and a bun or cake. Subsequently the cake was further enriched by having a certain quota of silver fourpenny pieces included in the baking of the cake, greatly adding to the anticipation of the humble guests.

One year useful presents took the place of the whisky and cake, but this benevolent notion was not appreciated, and the whisky was reverted to at the next Ne'er Day.

The proprietors took a keen personal interest in the welfare of the hawkers. A Private Bank was instituted, and a few of them were induced to lay past a few pence per week. Many, however, did not readily believe that any good could come out of such small economies, and remained thriftless.

For many years a certificate from the firm that, to their knowledge, the holder was too poor to pay his rates was held as sufficient for the exercise of exemption by the authorities, and accordingly the certificate was much sought after and coveted.

Alice Duffy, a successful depositor in Robertson's Bank, having lodged fully £60 in the bank, pressed Robertson for the necessary certificate of poverty. Robertson refused, but so importunate was Alice that at last he made out the following certificate: "Alice Duffy is a very industrious and hard working person who is possessed of ample means to pay the usual poor-rates." Alice could not read any writing, but her faith was unbounded and her air triumphant when she presented her talisman at the fateful official quarter—with what result can be imagined. She had the good sense to see Robertson was right, and thereafter she paid her rates without demur, and continued to swell her balance at the bank.

As evincing the attachment that bound the hawkers to Robertson & McDougall an incident during the 'Bread Riots' may be told here. The mob scoured the streets and harried the shops, leaving everywhere a trail of serious destruction behind it. At a critical

moment some rioters voluntarily detached themselves, hurried up the shutters of the Jail Square premises, and kept watch and guard there till the tornado passed by.

Robertson in his lucid style recounts to us his first visit to the Staffordshire Potteries. There was as yet no railway communication between Scotland and England. He travelled by boat to Liverpool, and thence by coach to Staffordshire. "Here," he says, "my hardships and troubles began—a *milky way* of potteries. I had no guide to help me; no roads, for the few tracks that existed had no names or signposts to find the potworks, dotted over the bleak moorland, that I wanted." Veritably an original and faithful description of the 'Potteries' at that time. However, he found good friends in the Hamiltons, pottery manufacturers there, who may have been fellow Scots and had migrated to Staffordshire to seek their fortune years before.

In 1858 Robertson retired from the buisness, having accumulated a comfortable fortune. The business altered its title to McDougall & Sons, a name still well known throughout Scotland.

Before concluding I must tell how Robertson spent the remainder of his life.

He was born in 1806, and when seven years of age was earning a livelihood as a herd-laddie a few miles from Glasgow. While doing this he showed his bent for natural history. He migrated into Glasgow, became connected, as we have seen, with the pottery trade, and as soon as he could afford it gave up business to pursue his heart's desire.

The shop hours in his days were from early morn till 10 p.m., allowing him no time for study. As he aptly put it, "A true naturalist has no time for money-making." One of his earliest important treatises was one on the 'potato disease,' advocating important preventions for this serious trouble then so rampant in Ireland. He wrote articles on many scientific subjects. Latterly he confined himself entirely to the study of marine biology,

and established the world-renowned marine biological Station at Millport to carry out his remarkable discoveries of the sea and its life. His studies soon made him known all over Europe. He became honoured by many universities and scientific societies, was duly made a Doctor, and recognized as an authority on the natural history of the sea.

I knew him : he was one of the most retiring of men, gentle and simple in his manner. He was a typical self-educated Scot. If he had only received a little more education in his youth he might have written a standard book on the subject he knew so intimately.

He passed away full of honours in 1896, having lived ninety years. His name and memory are still with us, and his friends still speak of him as the 'Cumbrae Naturalist.'

I culled the following extract from a Glasgow journal printed 130 years ago, which forms a fitting final tribute to the 'Hawkers' :

"We wish to uphold this work (Delftfield Pottery) as friendly to the price of labour, beginning with the raw material in the quarry, carrying it by sea and land to the mill for pulverization, from thence to the vats for preparation, to the moulds in the hands of the potter, and in due time from the kiln to the warehouse in a mercantile state. The 'firsts' which have come through the kiln's fiery ordeal unhurt are for the table of the great. The 'seconds' or imperfects for the lower, the most numerous class of mankind. These 'seconds' are bought and sold by an order of people considered by our laws to be out of all order. They come under the description of itinerant merchants and tinkers, who, in the summer season, with their horses and asses loaded with kitchen utensils of every description for the husbandman and labourer, as well as the mechanic, perambulate the country. For these wares they receive in part payment old clothes and rags, which are now carefully kept by the cottager's wife for the purpose of upholding herself

and cupboard in the articles necessary for the shelves, and now the tea table. In this instance we find vanity acting an useful part, in furnishing the papermakers with the raw material for that useful art."

From this extract we may safely infer that the pottery hawkers had greatly improved their behaviour and circumstance from the time of James VI., who regarded them "as very incorrigible, and a stubborn sort of persons that regard no laws."

CHAPTER XVII

NOTABLE SCOTSMEN CONNECTED WITH POTTERY

MANY Scotsmen travelled south and crossed the Border, becoming there closely identified and interested in the manufacture of pottery ware.

The careers of some of these men are of especial interest in a book such as this, from their friendly connection with that distinguished potter Josiah Wedgwood.

We are indebted to a descendant (Frank H. Wedgwood) of that great man in allowing us to have the perusal of interesting correspondence lying treasured in the Etruria Pottery Museum, and in having his permission to include hitherto unprinted and unpublished documents which make parts in this chapter of fascinating interest.

Josiah Wedgwood, a genius, and one of the great Englishmen of the eighteenth century, was a giant among potters. He possessed a magnetic personality, and was successful in gathering around him the most learned, artistic, and able men of his time, among whom were some distinguished Scotsmen.

From 1750 our country made rapid strides in establishing industries, including the art of pottery manufacture. 'Wedgwood ware' became known all over the world, and there is no doubt Wedgwood did more than any other man to establish the British pottery industry as we now know it. It behoves us, therefore, to pay him this small and passing tribute to his memory.

Wedgwood had a great admiration for Scotland's excellent Educational System. He sent his two sons Josiah and Thomas to the Royal High School in Edinburgh, and while the boys were there attending their classes they lodged with Professor Blacklock of Edinburgh University.

Wedgwood evidently was not oblivious to the fact of pottery being made throughout Scotland, for he makes a note in his diary of 1770 of the following factories :

“ LIST OF POTTERIES IN SCOTLAND.

Preston, and West Preston (Prestonpans) four.

Glasgow, one.

Delph-House do.

Bird's Nest up the Forth.”

This latter place may have been meant for Borrowstonness. It is pleasant to record the cordial and agreeable friendships that existed between Watt, Chisholm, and others, and Wedgwood. Many other Scottish names, such as Donaldson, the flower painter, Stevenson, Graham, Simpson, etc., occur in the various accounts of the chief English china factories during the latter half of the eighteenth century, and it is gratifying to our national pride to learn that they were all competent men in their own particular spheres.

While John, Marquis of Bute, was Prime Minister, he suggested the design of the cup generally still known in the trade as ‘ Bute shape ’ between the years 1761 and 1763. He asked Wedgwood to be the first to manufacture them.

The Earl of Dysart of Fife also advised Wedgwood to lighten the tint of his cream-colour ware, which tint became so successful as to be styled ‘ Dysart ware.’ In 1768 Lord Cathcart, who had been High Commissioner for Scotland, was appointed to be our Ambassador to Russia. He ordered a dinner and dessert service for his own use from Wedgwood. On 24th March, 1768, Wedgwood writes to his partner Bentley, “ I have spent

several hours with Lord Cathcart our Ambassador to Russia, and we are to do great things for each other." Wedgwood executed the order in the most tasteful designs, and, when Cathcart arrived in St. Petersburg, the ware was so greatly admired that the Russian market was thrown open to Wedgwood's ware. Baxter, another Scot, was our Consul in St. Petersburg, and it was mainly through his influence that the nobility sent orders to Wedgwood, and eventually he induced Empress Catherine II. to purchase the magnificent services that were turned out of Etruria Pottery for her palaces.

If many English potters came to help us in Scotland we can fairly claim to have repaid some of that valuable tuition and assistance through the services of the following brilliant Scotsmen :

JAMES WATT

The acquaintance of Watt with Wedgwood is one of these peculiar turns in the wheel of fortune that appears to shape men's lives in some mysterious manner. Scotsmen are usually credited with being clannish, yet here we are presented with two men of distinctive nationality, and of entirely different upbringing, drawn together in later years by the closest bonds of friendship. Both had, however, something in common in possessing philosophic minds, gentle natures, and a modest bearing, largely the outcome of the physical sufferings they were compelled to endure. Yet both were endowed with indomitable courage and perseverance in overcoming the many failures that came their way.

It is, therefore, not to be wondered at, that once they met, and became acquainted with each other, their inventive minds and quick insight into the essential details of the problems they were discussing would be the means of discovering in each other that mutual support and encouragement that obtained their ultimate remarkable success in life.

The meeting of Watt and Wedgwood came about largely through Dr. Small, a Scottish physician, who had with many of his fellow-countrymen been compelled to emigrate to America to seek his fortune. Unfortunately the strain was too great for him, and he had to return to England. While he was in America he had made the acquaintance of Franklin. On Small's return he found Franklin in London, and obtained from him an introduction to Boulton, the great engineer in Birmingham.

Small, an able physician, was soon not only in possession of a large practice, but, what is of more importance to our story, a host of clever and interesting friends. Among these latter were Keir, Dr. Garbett, Josiah Wedgwood, and Dr. Darwin, grandfather of Charles R. Darwin (*Origin of Species* fame), who, it may be interesting to state, was a grandson also of Wedgwood.

About this time Watt happened to be visiting London on business over the construction of the Forth and Clyde Canal. He wanted to see Garbett, who lived in Birmingham, and who was at one time a partner with his Bo'ness Pottery friend and partner Dr. Roebuck. In this manner Watt got to know Dr. Small. Boulton was, unfortunately, absent from the works, but Small took it upon himself to show Watt round the Soho Foundry. Watt quickly realized, as he passed through the large workshops, that here was the very place wherein he might erect his steam-engine, with which he had been making costly experiments in order to obtain the requisite parts. From Birmingham Watt travelled to Lichfield, and there stayed with Dr. Erasmus Darwin, who was Wedgwood's physician and intimate friend. He there divulged, under a strict promise of secrecy, his great invention of the separate steam condenser.

In August of the succeeding year, that is in 1768, Watt was again in Birmingham, but unfortunately Wedgwood, who had been suffering great pain from one of his

legs, had been forced to have it amputated, in consequence of which he was unable to meet Watt.

Meanwhile Darwin had become a strong believer in Watt's steam-engine, which he had roughly described to Wedgwood. Darwin, himself a scientist, was in the middle of inventing a novel and powerful windmill for Wedgwood, who was then erecting a flint mill, and was in urgent need of power to drive it. In his fine generosity of mind, and with remarkable prevision, he wrote the following letter in 1769 :

“ To Josiah Wedgwood

Etruria

I should long ago have wrote to you, but I wanted to learn in what forwardness Mr. Watt's Fire-Engine was in. He has taken a partner Dr. Roebuck, and I can make no conjecture how soon you may be accommodated by him with a power so much more convenient than that of Wind. I will make packing boxes, and send you my models, that you may consult the Ingenious. I am of opinion it will be a powerful, and a convenient Windmill, but I would recommend Steam to you if you can wait awhile, as it will on many accounts be preferable I believe for all purposes.

(sgnd) ERASMUS DARWIN.”

There is another letter from Darwin dated 9th December, 1770, in further reply to Wedgwood, who was showing considerable impatience with Watt's delay in successfully constructing an engine for him.

“ Mr. Watt's Fire-Engine, I believe, goes on, but I don't know at what rate.”

A year after this Watt and Wedgwood met, and the friendship then formed lasted till Wedgwood himself passed away.

No records have been preserved of the important conversations these two men had. Sometimes they had

reference to the actual working of the pottery at Etruria, for Watt gave Edgeworth, Wedgwood's flint-miller, practical advice and assistance in erecting the necessary machinery for the mill. James Watt installed here one of his earliest 'Sun and Planet' steam-engines of 10 H.P. in 1802, and so excellent was the design and workmanship that it was driving the mill successfully till a few years ago.¹

An engine had been ordered from Watt in 1792, but owing to the Revolution in France, Wedgwood lost a large sum of money for goods delivered, but never paid for, and this first engine was never delivered. Wedgwood ultimately paid James Watt the sum of £2165 13s. 7½d. for the 1802 engine and the flint-mill plant.

Watt's early association with Delftfield Pottery, and latterly with his partner Dr. Roebuck in Bo'ness, enabled him to be fairly conversant with practical work in a pottery, as the following evidence in one of Wedgwood's letters proves. It is written in Wedgwood's handwriting, and is dated 1779-80, in his *Common-Place Book*:

"Porcelain clay is said to contain little phlogiston, and to part with what it has in burning from whence arises its whiteness. To distinguish, therefore, between *pipe clay* and *porcelain clay*, or Kaolin, Mr. Watt, the ingenious inventor of the late improvements in the steam-engine, and *who was some years a potter in Scotland*, recommends to put a soft lump of the clay into a coal fire and give it a blast with a pair of bellows. If it is *pipe-clay* it will acquire a black, or bluish colour, or in other words be highly phlogisticated. If it is Kaolin, or porcelain clay it will come out of the fire perfectly white.

¹ By many admirers James Watt is credited with being the inventor of the turning lathe on which Wedgwood produced his exquisite 'engine-turned' vases. He may have contributed essential improvements, but in the Common-place Book of Etruria we have an account of the idea in Chisholm's handwriting dated 1763, almost eight years before Wedgwood met Watt. Wedgwood states he first received the idea from a Swiss watchmaker.



AN ORIGINAL PLASTER CAST.

By James Tassie, from Pilcher's mould of the " Barberini "
or " Portland " Vase.

The Corporation of Glasgow, Kelvingrove Museum.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

This is meant as a hasty proof only where there is no opportunity of making a better.

“ I am not satisfied at present with this proof, having had many instances in my experiments of porcelain clay coming out of the fire (a coal fire) highly phologisticated but I purpose to make some further trials.

JOSIAH WEDGWOOD.”

Some more trials of clay were made by Watt, who forwarded them to Wedgwood, who was ever anxious to discover any clays that would improve the quality of his wares. Some pieces of ware marked with the initials ‘W & B,’ which are generally assumed to stand for ‘Wedgwood & Bentley,’ have by some been said to stand for ‘Watt & Boulton.’ Boulton up to the time of his meeting with Watt had, in many ways, been jealous of Wedgwood’s prosperity, but from the correspondence now before us, we must dismiss such a contention as being not in accord with Watt’s fine character, nor with his close friendship with Wedgwood, and the same may be said of Boulton. I am convinced that Watt confined his attention, so far as pottery work is concerned, to examining various qualities of clay, for on page 35 of the *Etruria Pottery Common-Place Book* we have the following remarks, written partly by Wedgwood and partly by his chemist, Alexander Chisholm :

“ Specimens of Scotch clay, etc., given me by Watt of Birmingham.

No. 1. A coloured clay which should be put into acid before it is used to dissolve some of the colouring matter. He says it will burn white.

No. 2. This should be put into acid to clear off the coloured matter which adheres to the outside only. It is in a seam of the earth of six feet thick, and will make porcelain without any addition.

No. 3. Steates—no quantity—it lies in such thin seams in the fissures of a rock.

No. 4. Petuntse, Felspar, or Granite spar. Burns to the utmost whiteness, and has all the properties of a china stone. Mr. Watt can procure enough of this, if it is made worth while."

Another small note refers to a sample of felspar Watt had given Wedgwood, numbered '81 trial.' "With 81 from Scotland given to me by Mr. Watt."

Josiah Wedgwood passed away on 3rd January, 1795. Watt survived him and lived to the ripe age of eighty-three, dying in 1819. Josiah Wedgwood, Jr., son of the great Josiah, was a pall-bearer at Watt's funeral, and the following letter written by Wedgwood to Watt's son is sufficient evidence of the affection in which Watt was held by Josiah Wedgwood and his family :

" 19th August 1819.

Dear Watt,

I did not attempt to see you when I attended the funeral of that great and good man your father, because I thought the occasion ill-suited to the intrusion. You will not doubt but that I was duly sensible of the kindness of Mrs. Watt and yourself in giving me leave to take that opportunity of testifying my respect for your father, and indeed if the having been impressed with the highest admiration, and an affectionate reverence for him, could have given me any distinction amongst so many who had the same feelings, and was not altogether unworthy of the honour of being a bearer.

I feel sincere regret that I did not oftener seek admission to his society, and particularly that I did not give my eldest son the advantage of having personally known a man who would have left impressions of so great value on the mind of a young man. I know of nothing to compare with the simplicity of a truly great mind, and that your father possessed in the highest degree. Your loss is great, but it was not premature, and you have enjoyed the blessing of possessing such a

parent for a very unusual period. You have had the happiness of appreciating his merits, and of living with him in an affectionate union, which will be a source of pleasing recollections through life, and I heartily wish that the bitterness of your grief may soon give place to gentler emotions. I should wish to offer my most respectful condolence to Mrs. Watt if you find a proper opportunity of mentioning me to her.

I am, etc.,

JOSIAH WEDGWOOD."

In further reference to Watt's death we have the charming letter written by Boulton, Watt's partner, to Josiah Wedgwood on 27th August, 1815, telling him of the high admiration Watt had always expressed for the Wedgwoods. We also see in Watt's letter of introduction to Henning how eager Watt was to assist Wedgwood in any possible manner within his power.

JAMES TASSIE

This remarkable genius was born in the old burgh of Pollokshaws, near Glasgow, in 1735. His grandparents were Protestant refugees from Italy. They settled in Pollokshaws and started a 'shammy' (chamois-skin) mill—the first of the kind in Scotland—on the banks of the Cart near the Shaw Bridge, on a site still called by old people the Skin-Mill Yard.

He was the fourth child among a family of twelve, and was the eldest son of William Tassie and Margaret McGhie, his wife. The following entry of his birth is registered in the Records of the Parish of Eastwood:

"James Tassie son lawfull to William Tassie and Marg^t McGhie in Pollok-Shawes was born on the 15th day of July 1735, and baptised the 20th of the same instant by M^r Robert Woodrow, minister in Eastwood 'who on 20th February of that year had been ordained to succeed his illustrious father the ecclesiastical historian,'"

In the Poll-tax Rolls for the 'Eastwood Parochine' in the year 1696 we read, "James Tassie, skinner, is assessed 12/- for trade, and poll tax." This was the grandfather of James Tassie. The latter started work as a stone-mason, and the family tombstone is one of his earliest works. It is inscribed "Resurgam." "This is the Burying Place of William Tassie and his Wife, and their children 1759." The three letters which appear to be J. T. F. probably stand for James Tassie Fecit. From his boyhood days he was eager to improve his knowledge by educating himself by every means within his power. One Fair Holiday he chanced to spend his day off in the Glasgow Green. There he saw the paintings of the brothers Foulis. This at once inspired him with the ambition to be an artist. While earning his daily bread as a stone-mason he attended the evening art classes of the Foulis'. While there, he devoted himself especially to studying the classical works of the Greeks and Romans. Books of engravings were especially of engrossing interest to the lad. The Foulis brothers were old friends of the Tassies. John Tassie, a relative of James, was Deacon of the Barbers 1740-41, and from 1750-1751, while Robert Foulis had also been a barber before becoming a printer. The name Tassie appears frequently among old Glasgow records.

Having completed his training, and while looking for some outlet of his knowledge, he became acquainted with Dr. Quin, Professor of Physics in the University of Dublin. Dr. Quin was a distinguished chemist, and had made many improvements in producing vitrified pastes, with which he obtained such exact impressions of Intaglios as to deceive even the owners of the fine originals. Tassie went to Quin in 1763, with whom he soon became an intimate friend. Quin was greatly attracted to Tassie by his remarkable genius as a modeller, and imparted to him valuable instruction in his hitherto secret process.

After spending a few useful years in Dublin, Quin

advised Tassie to go to London, where there would be a wider and more profitable scope for his undoubted artistic ability, which advice Tassie wisely acted upon in 1766, and remained in London till he died.

On his arrival in London he presented specimens of his work to the Society for the Encouragement of Arts, who rewarded him with a bounty in 1766 for the assistance and appreciation he deserved in his unique craftsmanship.

At first he had an uphill struggle, but the skill he possessed in drawing and modelling medallion portraits in wax, and afterwards producing them in his hard paste, soon became known, and it was not long before he was enjoying the patronage of a large and fashionable clientèle.

The process was kept a secret during his lifetime, but the following is a rough description of the method he and his nephew adopted in obtaining a portrait medallion :

“ When the medallion was modelled from life in wax, a mould was taken from it in plaster of Paris. From it a second mould, but in relief, was taken, and this in turn became the mould for impressing the matrix for permanent use, and in intaglio formed the glassy paste.”

There is no doubt Tassie used a glassy hard paste for his final moulds, and for the impressions. This paste was composed of finely pulverised glass and powdered pigments annealed together by placing them in a reverberatory furnace. It was fused at a comparatively low temperature, as it contained a large percentage of lead, potash, and similar fluxes. This, with oxide of arsenic added, gave the glass mixture a white opaque appearance similar to porcelain, or, if tinted with oxide of iron, an old ivory yellow appearance. His method of portraying a client from the ‘ life ’ was the following :

“ He takes three sittings. The two first for half an hour. He can do two in one day if he has some hours betwixt to work at by himself. It is the same to him whether he goes out to you, or you to him. Daily the

hours from 12 to 4 are occupied in attending his shop in Leicester Square. During the sitting you may be occupied at almost what you will, eating, writing, etc., as he only needs a few minutes sitting at particular parts."

Tassie by his industry, and by studying the various publications of the time, and by the most unwearying patience, obtained in the end access to many noble houses in this country, and to many foreign collections as well. There he examined specimens of cameos and jewels which artists had not, so far, even obtained admission to see. In this manner he increased his already considerable collection of impressions of ancient and modern gems to the remarkable number of over 15,000. It became the greatest collection of its kind, and was so well known as to be appreciated by artists, antiquaries, scholars, men of taste, and even philosophers of that period.

The fashionable society folk in London adopted his paste intaglios, wearing them as settings in rings, bracelets, and many similar ornaments, which brought him not only fame as one of the most fashionable jewellers in town, but fortune as well.

In this respect he became known to Josiah Wedgwood, who formed a high opinion of his work, and wrote to a friend describing him as "an honourable artist, and a credit to emulate." Many transactions took place between the two men. We have one dated November, 1769:

"Messrs. Wedgwood & Bentley, 11 November 1769.

Bill.

	sh
To 70 Impressions in Sulphur at 2 ^d . a piece -	11 - 8
„ Two enamel impressions - - -	2 -
	<hr/>
	13 - 8
Box - - -	- 4
	<hr/>
Received the contents	14 - - ¹
Ja Tassie "	

¹ Meteyard's *Wedgwood*, vol. ii. p. 92.

At the Royal Academy Exhibitions there were displayed for many years many fine examples of Tassie's work. Among his exhibits in 1778 were two cameos given annually as prizes in the University of Glasgow by Mr. Anderson for the best Physical Essay, and the best specimen of Elocution.

With all his peculiarities of temper he was considered in his day "one of the ablest artists born in Scotland during the eighteenth century."

He issued two catalogues, one a small edition in 1775, and another, a larger edition, in quarto volumes in 1791. This last which is full of fine engravings and is a work of art, was edited by his friend Raspe in London, and was printed and published by John Murray, London, in English and French. To potters his name will ever be associated with his casts of the 'Barberini' or 'Portland Vase,' when it came to England. Tassie made the first copies in plaster of Paris, afterwards destroying the mould. These are now extremely rare, and have become of great value. It was from Tassie's cast of the masterpiece that Wedgwood made his marvellous copies of this most beautiful vase—the original of which is now in the Gem room of the British Museum. We are fortunate in having one copy (Plate LVIII.) to be seen in the Kelvingrove Museum, Glasgow. The Royal Scottish Museum in Edinburgh has a splendid collection of James Tassie's work.

Tassie died on 1st June, 1799, and was buried in Southwark, London.

His nephew William Tassie succeeded him, and he kept his Scottish connection alive through having agents in Edinburgh and Glasgow. Among his pupils were the artists Henry Laing of Strathmiglo, Fife, and John Henning of Paisley.

William also did work for Wedgwood, but he was never considered so fine an artist as his uncle. An anecdote is told of his resourcefulness. On being commanded to make a small medallion portrait of George IV., he had

forthwith hastened to the Palace, and while waiting in the anteroom he discovered, to his dismay, he had left his favourite modelling tool at home. Not to be daunted he took out a small pocket comb he carried, and broke off one of the teeth, and with this improvised tool he accomplished the modelling of the medallion.

The Tassie family are now extinct in Pollokshaws. By the death of James Tassie, agent of the Clydesdale Bank there, and who was for a few years Provost of the old burgh, an old and honourable name has disappeared.

Tassie Street commemorates the connection of the family with the town, and is in keeping with the great Tassie's modesty. "He seemed unconscious of merit and fame, and his private character was marked by the most amiable simplicity."

It is supposed that some of the medallions made in the Millroad Pottery, Glasgow, were modelled by the Tassies.

ALEXANDER CHISHOLM

After the death of Wedgwood's partner Bentley, Alexander Chisholm became the intimate companion of the great potter for the rest of his life.

There is very little information relative to Chisholm's youth. That he came from the Highlands in Scotland, and was a student in one of the colleges in Oxford, from which he was recommended by one of the Professors to Wedgwood, is so far the only precise knowledge of him that is available.

Wedgwood engaged him to be his works' chemist and to assist him in carrying out his experiments, and he also acted as tutor to Wedgwood's children.

He was a man of high character, possessing a fine sense of duty, and proved to be not only a clever chemist but an able administrator, as he became in course of time secretary for the whole concern, and confidential adviser to Wedgwood in all his varied enterprises.

Wedgwood, in one of his diaries, informs us that he

was often wont to retire to Chisholm's laboratory, and there relieve his mind of his many worries. It is, therefore, not surprising to find many of the most important experiments Wedgwood made are described in detail by Chisholm.

Josiah Wedgwood speaks feelingly many times of his sterling loyal qualities, and of the close friendship that existed between them, and how he had filled the blank caused by the death of his esteemed partner Bentley in consoling and encouraging him in all his many disappointments.

He wrote a fine and appreciative monody in 1795 on the great loss our nation suffered when Wedgwood at last died. The following extract I took from the poem fully bears out the charm of such a man as Chisholm :

“ Such a patriot from whose gate each day
A crowd of healthy workmen make their way
Whose rare products foreign Courts demand
And while they praise enrich his native land !
View his Etruria, late a barren waste ;—
The pine, the beech, their ample branches spread
And the tall poplar rears his pointed head.
The broad canal here winds its wat'ry way
Through the long vale, with nature's beauty gay,
How oft beside the gentle shores he roved—
Saw with calm joy the rural scenes he loved
And felt that none but souls like his can know,
The bliss sublime of doing good below ;—”

After the death of his benefactor he continued with the son, Josiah Wedgwood the second, and entrusted him to carry out his will :

“ Etruria July 24 1804.

I have this day received the directions of Mr. Alexander Chisholm to dispose of his property after his death as follows :—

To William Chisholm, now, or late of Portugal Street London—Ten pounds.

To Ann Keeling of Balmer St London £10.

To George Jones of Etruria the residue of his property.

JOSIAH WEDGWOOD."

"August 27 1804

Mr. Chisholm has this day annulled the bequest of ten pounds to William Chisholm.

J. W."

He died in November 26th, 1805, at the ripe age of eighty-two. The Wedgwoods erected a tombstone to his memory in the churchyard of Stoke-on-Trent where he lies buried. The following inscription can be read on the stone. "His gentle and simple character gained the love of those with whom he lived, whilst his integrity, learning, and science obtained their respect and admiration.

JOHN HENNING

This artist, born in Paisley on 2nd May, 1771, was the son of a carpenter, and in whatever spare time he could get from work in his father's workshop he employed in teaching himself the art of modelling in wax. In 1799 he left his native town to work in Glasgow. From there, three years later, he migrated to Edinburgh, where he made the valuable friendship of John Graham the painter, who took a deep interest in the lad's genius.

By 1811 he had found his way to London and became an assistant with the brothers Tassie, and it is from this date his work becomes of some interest to potters and collectors.

His style was very similar to that of the Tassies, for he delighted in making miniatures, and was soon in touch with Josiah Wedgwood the second. Josiah Byerley, a relative of the Wedgwoods, who was then in charge of the London office and showrooms, writes to the works regarding him :

To Josiah Wedgwood
Etruria.

"13 September 1813.

Sir,

I enclose a letter from John Henning a very ingenious modeller—He brought a letter here from James Watt of Soho, when he first came to town in 1811. He will take a good many casts of the Princess Charlotte from you, and will send a cast in plaister from his model to make the moulding by, and will even not object to your selling them here yourself. His bust is 10 in. high, and seems to be well modelled.

I am, etc.,

JOSIAH BYERLEY."

Henning made quite a number of models eventually for Wedgwood who admired and appreciated his artistic skill.

Among the numerous interesting cameos he executed for the Wedgwoods were portraits of Sir Walter Scott, James Watt, Rev. Dr. Allison, Henry Brougham, Dugald Stewart, Wellington, etc.

He made busts of Mrs. Siddons and Princess Charlotte. Unfortunately Wedgwood's 'body' did not allow these to come successfully through the fire test of the kiln, and Henning latterly confined himself to cameo plaques.

His minute drawings of the Elgin marbles are his best known works.

The illustration, The Last Supper, executed between the years 1820-25, is a good example of his style of workmanship, and shows the influence of Tassie's instruction.

By the year 1846 his artistic ability was so generally recognized that Paisley conferred the Freedom of the town on its famous son.

Redgrave in his *Dictionary of Artists* says, "his works are in plaster miniatures, modelled with great skill and minute accuracy."

He died on the 8th April, 1857, in London, where he lies buried.

W. MURDOCH

Murdoch was an Ayrshire blacksmith born in Lugar. He was the inventor of gas as an illuminant. Boulton and Watt were the greatest engineering firm of that time, and Murdoch found his way to Birmingham and latterly became chief assistant to Watt in the manufacture of the steam engine, and thus became known to the Wedgwoods at Etruria. I append a short letter proving this connection, and showing the friendly relationship that existed :

"Soho Foundry 26th January 1815.

Dear Sir,

On my return from London a few days ago I found your esteemed present of china for which I beg you will receive my thanks. The articles were all perfectly safe with the exception of the teapot which had been unfortunately broken in the carriage, owing I rather think to its having been packed too near the side of the box.

Should you at any time be in want of my services, I beg you will command them.

I remain, Dear Sir,

Your obliged and humble servant,

W. MURDOCH."

SIR GEORGE D. MACKENZIE

Sir George D. Mackenzie of Coul, Dingwall, was a great friend of the Wedgwoods, and was constantly writing them about clays and cogent matters relative to the success of their pottery. There are many of his letters still preserved in the Etruria Pottery Museum of which I here give some interesting extracts :

"18th Oct 1814.

"That there has been discovered in the North of Scotland near Inverness a quantity of siliceous earth in a state of division as fine as the finest chemical precipitate,

and so pure as to be alloyed only with an exceeding minute portion of Alumina which is no disadvantage in its use for pottery."

In another letter dated from Edinburgh on 1st December, 1814, Sir George tells Wedgwood of a fine white silex left on a moor after the peat had burnt itself out, after being on fire. Also, he tells Wedgwood of large quantities of felspar in some of the granites of Ross-shire. "Would not that article be of use. Some of the powder sent is not quite clean being ill-burned. The impurity is, however, only a little soot—the clean is by itself."

Sir George Mackenzie, in paying a small account to the Wedgwood Pottery, writes :

"Coul, Dingwall, 5 November 1817.

I have sketched on the other side a heath plant which I think will look very pretty represented on their ware, if colour is different shades of green."

This suggestion was adopted, and the Wedgwoods embodied it in their Book as Pattern No. 439.

From 1813 to 1816 the Wedgwoods at Etruria received many letters from a Joseph Fox, Argyle Street, Glasgow, who was making experiments in the manufacture of artificial teeth made of porcelain. It was Fox who discovered the portraits of Josiah Wedgwood and his wife painted by Stubbs, in a second-hand shop in Argyle Street, Glasgow, and wrote the Etruria people asking if they were aware of this, and asking for instructions. Needless to say Fox never received a reply, for Josiah Wedgwood the younger had most reluctantly been compelled to dispose of his parents' portraits on account of financial stringency due to the great general industrial depression then prevailing throughout our country.

CHAPTER XVIII

ROMANCE IN POTTERY

“China’s passion of his soul,
A cup, a plate, a dish, a bowl,
Can kindle wishes in his breast
Inflame with joy or break his rest.”

THE above lines, written by a friend of Horace Walpole after visiting this great statesman’s wonderful collection of china in his home at Strawberry Hill, London, will be readily appreciated and enjoyed by those who have themselves been carried away by such passion.

Collecting china is a most fascinating hobby, and one which has the advantage of commending itself to rich and poor alike. We cannot all aspire to priceless specimens of the ‘famille rose’ or ‘verte,’ but what housewife has not laid past in her corner cupboard some quaint old-world china, or if in still humbler circumstances, has not adorned her kitchen dresser with crockery and china dogs, remnants of bygone days, each one dear to its owner, not so much from its intrinsic value as for the pleasant memories it recalls?

Herein lies one of the chief charms of collecting pottery. Moreover, it does not even require personal knowledge of one’s possessions to arouse these sentiments.

For example, on looking over the contents of a china press, we will often stumble on some old piece, such as the well-known omnibus (for all) teapot, used by our

grandmothers a hundred years ago, and usually surrounded by quaint cups and saucers of an intricate gold design, and at once these reconstruct in our minds a picture of the 'set-down' tea-parties of that period. We see the glittering china carefully laid out on the polished mahogany table, over which a prim old lady is presiding; we see the silver teaspoons, each one numbered and brightly shining; we see—but we could go on for ever adding to this picture. A tea-party was a serious performance in those days, and it was with infinite care that the precious china was laid out for the admiration of the guests, and as soon as the last friend had departed was, with equally delicate handling, laid past in the china cupboard. What lady now takes such personal care of her china?

The 'omnibus' teapot was often made to hold twelve, if not more, cups of tea; so the size of the tea-parties may be imagined. These elaborate tea-sets are worth examining. They have become the aristocrats of the 'drawing-room collection.' The teapots were lavishly ornamented with gold to match the tea ware. The quality of the gold is seen to most advantage on the larger pieces, especially on the spouts and handles of the teapots. These tea-sets cost sometimes as much as thirty guineas, and yet they were often in the possession of people of small means—the explanation being that it was their one extravagance. To possess such a tea-set was the secret ambition of every woman. All savings, therefore, went to the investment.

While visiting a friend recently in search of some old Scottish pottery, I noticed on the mantelpiece an ordinary hand painted bowl of the kind that is generally to be found in the kitchens of old farmhouses. The furniture and everything in the house bespoke good taste, and I was at a loss to account for such a commonplace piece of pottery occupying so prominent a position. At last my curiosity got the better of me, and watching my opportunity I asked if the bowl were valuable. "That bowl,"

explained my friend, "is our most precious heirloom. Two generations of our family have been christened from it."

No doubt there are many such bowls to be found throughout Scotland. Treasure them !

I have been particular so far as I could, to give dates. It is pitiable to hear collectors speak of their china ' gods ' (of British origin) as having been in the family for two hundred years or more, when china was not made at that date in our country. One hundred-and-fifty years is about the oldest of most of our wares.

There are, of course, various points of view from which china may be collected, and romance or sentiment does not enter into all of them.

There is, for example, the enthusiast who will dilate by the hour, day, or week, how he picked up a ' gem ' from a street-barrow ; or again, how he was ' carried away ' at an auction sale, and paid a fabulous price for a comparatively worthless piece. For such people the manner of acquiring the object would appear to be of more importance than the piece itself. These can readily develop into ' pottery bores ' if they are not careful to select their audience.

Such enthusiasts claim to be connoisseurs and come to hasty conclusions, forgetting often that a factory mark does not always prove the date of the article, as many old pattern marks are still being produced. A friend of mine, a connoisseur of old china, affirmed that he could distinguish between old and new glaze because the feet of the article would be worn, or the surface scratched with constant washing and service. But, suppose the article had reposed on the kitchen mantelpiece all its life ! the glaze would still be perfect. Potters can distinguish by ' stilt ' or other ' pin ' marks how the pieces of ware were ' placed ' in a glaze sagger, whether, for example, a plate has been ' dottled ' with ' thimbles ' or reared on ' lengths ' by ' spurs ' or ' thimbles '—mechanically shaped appliances of which the date is fairly well-known to those of



'POLKA' JUG.

Alloy copper or bronze lusted brownware with band of relief in polychrome flowers, *circa* 1810.

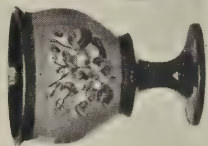
Smith Institute, Stirling.



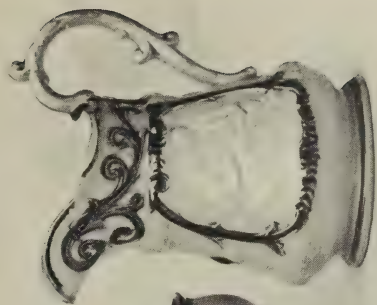
CREAM JUG.



SUGAR.



CUP.



JUG.

$\frac{1}{g}$ Cobalt blue and lustre decorations, Portobello ware.

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us who have spent our lives among pots and had to make our livelihood thereby.

Such professional knowledge, however, does not prevent us taking a deep interest in collecting china, and these observations are made to avoid wrong opinions being expressed by the uninitiated enthusiast.

To a student or potter a collection of china exemplifies man's creative skill in the highest degree, for he can trace the marks of the 'potter's thumb,' the artist's brush, and appreciate every step in its evolution. For him sentimental value does not rank so high as the personality or character with which the craftsman has endowed his masterpiece.

If we look carefully at a case of superb china we cannot help feeling the fascination of the skill and art displayed, and we learn to understand that behind all this excellence lie the disappointments and despairs that must ever be in all creative art.

Unfortunately, a collection of china cannot be put away in 'sma' buik.' It requires space, and in nearly every case display is overdone.

I have regarded the loaded kitchen-shelves and mantel-pieces of our farmhouses, and have longed for a broom with which to clear them of half their contents. I was once foolish enough to voice my thoughts, and was quickly taken to task by my kindly hostess. She informed me that each piece had a particular association for her. They were her constant companions, reminding her of many old friends, leaving dear memories, even if expressed in such inanimate objects as china dogs.

Whilst on this topic it is interesting to note that the china dog and cat ("the harmless necessary cat," says Shakespeare), a pair of which are to be seen in nearly every Scottish home, date from very ancient times. Such household animals were also made by the Egyptian potters. The great tomb of Tutankhamen did not disdain the company of such effigies—indeed the cat was held in high esteem by ancient Egyptians as symbolizing the

goddess Isis. Dogs and birds were specialities of the Persian potter, beautifully decorated in their marvellous lustrous colours many thousands of years ago. The Chinese potter made his dog 'Fo' in the most exquisite porcelain. The dog was one of our earliest kitchen ornaments, and it is natural that his faithfulness as the first friend of man should be so honoured and remembered. 'Our' ornamental dog has brown curly ears like a King Charles spaniel; it is believed to have originated with the Moorish potters while they were in Spain, from which country the pattern of our china dogs came. But I fear its actual origin is 'wropt' in mystery; or are the pottery cats and dogs meant to represent the spirits of the household? "The dog is the friend of man," we are often told. Is the "cat the friend of woman?"

The story of the Stuarts never lacks the elements of romance, always tinged with tragedy. Among the effects of Mary Queen of Scots in 1562 was "ane figure of ane doig" in pottery ware, which might quite likely have come from Spain, with which country Scotland had much business at that time. Also a merchant, John Bonyman, dying in 1631, included in his will, "thrie lame babies, and thrie lame dogies." These were not cripples, but 'loam' or earthenware 'dabbities,' toy figures or dogs.

Akin to these animals is the china lion; his origin many say dates from the rejoicings at our victories over Napoleon more than a century ago.

Another side to romance in pottery, and one which we can appreciate more after reading about 'clays,' is the nature of the two essential materials used by a potter—coal and clay.

Could anything appear more wildly improbable than that out of these two apparently dirty materials should emanate, not only coarse pottery, but also the most delicate and decorative pieces of chinaware, such as we see in our national museums?

The late Lord Kelvin once visited my pottery at St. Rollox. After passing through the potters' shops and

examining the various processes, he exclaimed with boyish enthusiasm that he was now better able to understand Omar Khayyam's reference to the 'temper' in clay, which he now realized was able to look after itself, and had little or no consideration for the potter, who on his part had to match his skill against this 'temper' by inducing the clay to retain the form he desired it to take. It is futile to use untutored compulsion, even in the simple process of 'sticking-on' a handle, for it will simply 'spring off' the article when it becomes dry.

Lord Kelvin believed that everything contained a species of life—no matter how inorganic it might appear.

Clay appealed strongly to him as exemplifying this outstanding contention of his theory, from its peculiar plastic property. Clay has also the distinguishing feature over other earths, of retaining its form once made and dried, and that as it becomes baked in the kiln it grows harder, whereas a jar made of common earth-mud crumbles to dust again.

L'ENVOI

I FIND it impossible to bring my book to a close without paying some small tribute to the memory of those potters, kilnmen and other pottery workers who joined up during the Great War, not the least of these being the officers and men of the 5th Battalion North Staffs. Regiment, better known as the 'Potters' Battalion,' in which Scotsmen served.

The potters have been ever ready to come to their country's aid when occasion presented itself.

When Napoleon threatened to invade Britain, Colonel Geddes of Verreville raised in 1803 a battalion composed of pottery and glassworkers. Also, in Staffordshire, Captain John Wedgwood in 1803 raised the Etruria Company of Volunteers.

Major Cecil Wedgwood, D.S.O., first Mayor of the Federated Borough of Stoke-on-Trent, on the outbreak of the Great War, organised recruiting throughout North Staffordshire, himself (though over fifty years of age) joining up with many of his workmen at Etruria. Later going out to France as second in command of the 8th Battalion North Staffs. Regiment, he was killed on July 3, 1916, with many of his comrades in desperate fighting around Albert.

Nor was patriotic effort the privilege of one section of the community. Mr. Samuel Clowes, the genial and able secretary for the potters, was untiring in his efforts to rouse a patriotic feeling among us all, and by recruiting campaigns served his country nobly at a time when help was badly needed.

Long before the 8th North Staffs (a Kitchener battalion) was ready to take the field, the 1st/5th Battalion North Staffs. Regiment went to France in February 1915, where in October of that year it received its baptism of fire in the Battle of Neuve Chapelle. The Battle of Loos followed shortly after on October 13th. This date will ever be remembered as a black day in the annals of the pottery trade, for on that day the Battalion was decimated. Nineteen officers, including the commanding officer (Colonel Knight), and many men fell on the field. Among the officers was my brother, the late Captain James Hamilton Fleming, who was killed at the Hohenzollern Redoubt. He had been appointed adjutant on the declaration of war, and was himself a pottery manufacturer, having had his early training in Britannia Pottery, Glasgow.

Modern industrial conditions have tended to separate the employer from the operative. It cannot but be observed how each is perforce out of the old personal touch with the other such as we have seen in many of the old potteries herein described. The war created a feeling of loyalty and friendliness between employer and operative, and a spirit of compromise in adjusting the difficulties that had to be overcome.

Wise men observing this attitude seized this favourable opportunity of bringing it to a practical issue. Through the friendly interest of Arnold Rowntree, Henry Clay, Mr. Wethered, K.C., and others, the idea of a National Industrial Council of Pottery under the Whitley Scheme was promulgated. The scheme rapidly developed with the most gratifying results. The pottery trade now holds the place of honour of being the pioneer trade to adopt these wise councils. Scotland has taken a deep interest and share in this National Council since its inception.

May it be firmly established and flourish, and be a living Memorial to the Glorious Dead !

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