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THE MANUFACTURE AND UTILISATION OF
ARCHITECTURAL TERRACOTTA AND FAIENCE

2 Volumes (Volume 11)

BY

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CHAPTER SIX

LATE-VICTORIAN ARCHITECTURAL USE: THE PRACTICAL AND AESTHETIC ATTRIBUTES OF TERRACOTTA.

The culmination of the terracotta revival followed soon after the completion of the Natural History Museum, which was opened in 1881. In the last two decades of the century, a disparate but identifiable group of architects attempted to exploit the properties of the material using motifs drawn from a variety of styles. Their work is characterised by being the outcome of an aim to develop, from an historical basis, an architecture practically and aesthetically suited to the Victorian age. Within this ideal, the best of the designs gave strong expression to the values and issues that had promoted the revival of decorative architectural ceramics.

The chronology of the use of terracotta in these years is worth charting in detail because the exhibiting of designs and the completion of each of the major buildings were followed with avid interest. A high-point was reached in 1886, when the designs for the Assize Courts in Birmingham and a whole series of terracotta buildings in Mayfair and Chelsea were published in the journals and displayed at the Royal Academy. A decade later, dissolutionment at the way in which terracotta had often been used, and changing architectural tastes, had already started to erode the status afforded to the material and some of the ideals that it represented.

The perceived advantages of using terracotta were widely presented in both lectures and in the journals. It is necessary to consider how far these attributes actually corresponded with those uppermost in the minds of the architects and clients who agreed to specify the material. It may be that durability, economy and the search for a new architectural style were presented as justifications for the choice of a building material that in practice enabled architects to delegate much of the responsibility for detailed design and gave considerable scope for personal originality of expression.

Although there were architects in most parts of the country who used terracotta and these practices tended to concentrate on particular building types and the use of different styles, it is useful to establish the common features. The characteristics of those architects who enthused over terracotta and the way in which they used the material does much to explain why other and most of the highly prestigious names of the period were equally strong in their aversion to architectural ceramics. Prejudices for and against terracotta ran down through the building trades. Contractors, bricklayers, plasterers and stonemasons adopted stances according to whether they stood to gain or lose commercially and in response to the organisational complexities involved in terms of contractual procedure and fixing.

As with many developments in the Victorian arts, the motivation behind the widespread adoption of terracotta was as much a reaction against the work of the previous generation

as a search for new paths in architectural expression. Collcutt, Edis and Ernest George were born a generation later than Pugin, Scott and Butterfield and sought a more open-minded interpretation of the various stylistic revivals. They could also observe how the soot-laden atmosphere in cities and towns was disfiguring brick and stone surfaces built by the early Victorians, as much as Georgian stucco.

The Practical Attributes of Terracotta

In 1881, a writer admitted that 'all our stone buildings have been more or less failures'.⁽¹⁾ Many public buildings had suffered from being built with cheap, inferior stone and even the Yorkshire limestone used on Barry and Pugin's Palace of Westminster was crumbling. Where stone was sufficiently resistant to the atmosphere, its colour and detail was still being lost under layers of soot. In debates published in the architectural journals, and typically titled 'terracotta versus stone', ashlar from Portland, Ketton or Darley Dale still carried a high level of prestige but architectural ceramics were recommended as being washable and more durable.⁽²⁾

Most of the leading late Victorian architects were not to be converted to the use of terracotta. Those

(1) Building News, 40, 1881, p. 253.

(2) An early example of this debate is in Builder, 37, 1879, p. 462.

undertaking prestigious commissions had the advantage of being able to specify the best building stones. They would also have been cautious in entrusting the execution of their designs to workers in a section of the heavy clay industry; ordinary brickmakers had gained an appalling reputation for their lack of integrity and standards.⁽¹⁾ By the 1880s, the techniques used by small works that were attempting to make terracotta with unsuitable clays or without adequate investment in plant, such as the mixing in of oxides, the underfiring of goods or their coating with slips, were becoming disastrously apparent. Spalling was occurring on some of the blocks used in early schemes, including those lining the quadrangle of the Victoria and Albert Museum. One consequence of these early failures was that architects came to insist that only the firms with the strongest reputations, such as Gibbs and Canning, Doulton, Burmantofts or J. C. Edwards, should be appointed as suppliers for their commissions.

Despite widespread discussions concerning malpractices in the manufacture of terracotta, architects notably failed to establish a standard for its material quality and its maintenance on buildings. Material made from unsuitable clays continued to be accepted even though it was known that the best coal-measure clays, when fired to a slightly vitrified surface and correctly filled and fixed, were virtually indestructable. Similarly, walls of terracotta could be kept

(1) E. Dobson (ed. F. Celoria), *A rudimentary treatise on the manufacture of bricks and tiles*, 1850, (George Street Press, Stafford 1971), Vol. 1, p. 58.

clean but few architects or clients seem to have given attention to the relevant requirements in the terms of design and maintenance. Frontages had to be kept clear of heavily projecting cornices or strings to allow rain-water to wash the surface and periodic hosing down would prevent any accumulation of dirt.⁽¹⁾ In practice, most buildings were left to become discoloured with streaks of soot, so that the material became criticised for weathering unattractively.

The whole relationship between cleanliness, health and building design seems to have been governed more by good intentions than by any real understanding. It was a clean and healthy image, rather than a proven durability and brightness after years of exposure to an urban atmosphere, that promoted the adoption of terracotta for institutional buildings such as hospitals and board schools.

At a time when most buildings were being constructed with solid walls, hollow terracotta blocks were presented as a cure for damp, initially by manufacturerers such as James Pulham and then by architects. For his country house, Yattendon Court, Alfred Waterhouse used cavity construction; the inner and outer walls of brick and terracotta were held in place with Jennings' patent terracotta wall ties.⁽²⁾

(1) D. Olsen, *The growth of Victorian London* (Penguin, Harmondsworth 1979), p. 81. Olsen concisely places terracotta in the context of the Victorian rebuilding of London.

(2) *Building News*, 40, 1881, p.8.

The tower over the front entrance of Yattendon Court housed a water tank for use in case of fire. The increasing attention given to the protection of buildings against fire served to promote the use of terracotta, particularly as a cladding to structural ironwork. R. W. Edis, one of the strongest advocates of terracotta, first referred to its value for fireproof construction after observing how the fires started at the time of the Commune swept through the stone and plasterwork buildings of Paris.⁽¹⁾ Nearer to the end of the century, photographs taken in Buffalo, Baltimore and San Francisco after a series of catastrophic fires, showed terracotta buildings still standing amidst the rubble and twisted ironwork of those faced in stone.⁽²⁾

Terracotta had first been used as a fireproof material in the early 1860s when fireclay slabs and patent blocks were used to clad girders and columns in offices and warehouses. By the eighties, there were at least four systems in use for forming fireproof ceilings and floors. As an improvement to the laying of solid wood or the casting of concrete, the French had introduced a system of flat bricks carried on bearers, and the Americans introduced arches made of interlocking terracotta blocks.⁽³⁾

(1) British Clayworker, 13, 1904, pp. xii-iii (p. xii).

(2) British Clayworker, 11, 1902, p. x.

(3) Builder, 52, 1887, pp. 703-6. The widespread publicity given to complex systems of fireproof flooring is probably not reflected in the extent of their use.

The American approach was taken up in Doulton and Peto's patent for fireproof blocks. It was based on a series of voussoirs extruded in hollow form. These were interlocked with a central keystone and wrapped round the iron joists at each end. Grooves in the lower face provided keys for plaster and wooden floors could be laid over the blocks. They were used in the London Pavilion Music Hall in Piccadilly but do not appear to have been adopted widely. The need to have the joists running at a spacing of only 3 feet 6 inches would have made Doulton and Peto's floors too expensive and too inflexible for complex plans.⁽¹⁾

Blanchard offered a competing system in the form of patent chambered blocks, slabs and tiles. Demonstrations of their effectiveness at the works took on a circus-like character, with visitors standing on a roof made of the patent terracotta while straw, wood and tar were burnt underneath. As a finale, Blanchard's workmen jumped up and down on the surviving structure to demonstrate its unimpaired strength.⁽²⁾

By the end of the century it had become accepted that concrete was the most economical material for making fireproof floors; terracotta and faience were still considered ideal where an ornamental cladding was required for iron stanchions. Waterhouse used specially shaped blocks of terracotta to protect the 'H' section columns in the ground floor galleries running

(1) Builder, 54, 1888, pp. 117-8.

(2) Builder, 62, 1892, p. 18.

behind the front of the Natural History Museum, and casings of faience were adopted for the interiors of most of his subsequent commercial buildings.

Except when cladding internal features such as columns, terracotta was usually used structurally and bonded in with brickwork. Concern as to its strength led to series of tests; these gave inconsistent results but demonstrated the importance of hollow blocks being given a suitable filling. In solid form, terracotta proved to be anything from a third stronger to a quarter weaker than Portland stone.⁽¹⁾ Tests by Charles Barry showed unfilled hollow blocks to be less than half as strong. However it became generally accepted that if given a strongly-set filling they were at least the equal of limestone and sandstone in terms of practical strength.⁽²⁾ Similarly, empty hollow blocks were less than half the weight of the lightest building stones, but the final weight depended on whether coke breeze, or stone and brick fragments set in cement, were used to fill the chambers.⁽³⁾

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- (1) Rivingtons, Notes on building construction (Rivingtons, London 1879), Part 3, p. 126.
- (2) C. Barry (Junior), "Some descriptive memoranda on the works executed in terracotta at New Alney's College, Dulwich". Trans. RIBA, 18, 1867-8, pp. 259-279.(p. 270) To try and achieve more uniform results a French government commission approved a series of official methods for testing terracotta.
- (3) British Clayworker, 20, 1911, pp. xxxvii-iii.

A major reason why terracotta could be taken up so widely in the 1880s was that manufacturers and architects had managed to resolve the earlier confusion as to the most satisfactory form of the blocks and the method of their fixing. Scott, Redgrave and others had been emphatic that terracotta should be regarded and used as the highest development of brick rather than as an equivalent of stone.⁽¹⁾ However the architects who made extensive use of the material usually thought more in terms of an alternative to stone ashlar or dressings. By almost directly substituting terracotta for stone rather than introducing an additional category of materials, the established system of schedules and bills of quantities and the allocation of tasks among the building trades only needed slight modification. Stylistic development in the last quarter of the nineteenth century also tended to encourage the association of terracotta with stone rather than with brick, as the Renaissance architecture of northern Europe, rather than Italy, became the more strongly emulated.

James Doulton simply adapted the argument that terracotta should be seen as a form of brick into a proposition that its use was most appropriate with brick.⁽²⁾ When forming cornices, strings, quoins and window surrounds in a brick wall surface, it was both practical and economical to use rectang-

(1) G. G. Scott, Remarks on secular and domestic architecture (J. Murray, London 1858), p. 106.

(2) Builder, 50, 1886, pp. 537-40 (p. 537).

ular blocks, coursing in with three or four layers of brickwork.

There was a corresponding improvement in the quality of manufacture. When terracotta was directly substituted for stone in a series of buildings, as a result of the masons' strike of 1877, many of the pieces used were either underfired or severely warped.⁽¹⁾ Only six years later, the large blocks made for the City and Guilds of London Institute were admired for their accuracy of line.⁽²⁾ A manual of building materials published in 1879 stated that sizes of up to four cubic feet were acceptable and a works manager suggested that dimensions of one foot by sixteen inches square were quite practicable. In the twentieth century the less plastic fireclays used for making grey terracotta and faience enabled blocks to be even larger. Hathern never suggested any limit, only warning clients of the time that could be required for drying large blocks.⁽⁴⁾ Some of the sections supplied for the plinth and cornice of Ferrybridge Power Station measured about five feet deep.

The manufacture of such blocks depended on them being made in hollow form. The transition occurred in the 1870s when both solid and hollow forms were frequently incorporated in a single contract. The facing of the Natural History Museum

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- (1) W. A. McIntyre, *Investigations into the durability of architectural terracotta and faience* (HMSO, London 1929), p. 2.
- (2) *Building News*, 45, 1883, p. 271.
- (3) *Rivingtons* (1879), op.cit., p. 125, *British Clayworker*, 3, 1894, p. xxv.
- (4) Hathern, *Modern practice in architectural terracotta*, undated, p. 2.

was made up of thin solid slabs alternating with hollow blocks that coursed into the brickwork. The complex moulded reveals of the round window arches were made up of a series of solid pieces while the columns were hollow and socketed together.⁽¹⁾

In the eighties, a general standardisation was achieved, with chambered rectangular blocks being used wherever possible and 'U' shaped or irregularly shaped blocks forming smaller or ornamental sections. The precise form was often influenced by the need to allow the blocks to wrap round steel joists or to be reinforced with concrete. With the exception of the special mouldings, interior faience was usually laid in alternate courses of four and a half inches and of nine inches depth.

One of the most unsatisfactory aspects of the early architectural schemes executed in terracotta was the inconsistency over the way in which the blocks were filled. Cement, brick-bats and flints were all used on the Victoria and Albert Museum.⁽²⁾ The most widespread cause of failure in mid-Victorian projects was traced to the use of Portland as opposed to Roman cement for setting the filling; the particles of free lime in Portland cement tended to expand on drying so causing the blocks to shatter.⁽³⁾ A standard emerged of using stone or broken blocks set in the same weak cement that was used for grouting and bonding in the pieces. However, the precise nature of the filling always

(1) Butterfield and A. W. Blomfield also used hollow terracotta columns.

(2) W. A. McIntyre (1929), *op.cit.*, p. 23.

(3) C. Barry (1867-8), *op.cit.*, p. 23.

depended on what waste materials were to hand, on or near to the building site, and the standards of the workmen responsible for fixing.

While an increasingly uniformity was achieved in the form and filling of terracotta blocks, the types of jointing employed tended to become more varied, reflecting in part the influence of the draughtsman at differing firms. A variety of rebate, joggle, butt and lip joints were used to ensure that window lintels and transoms, and other architectural features, were securely fixed. By giving the blocks panelled ends more cement could be held in the joints while if the sides were tapered back in a slight wedge, each of the pieces could easily be trimmed to form a precise fit.⁽¹⁾

Another area of confusion concerning the use of terracotta was the question as to the trade which should have the responsibility for fixing. This came to a head and was partly resolved through a prolonged labour dispute in London that ran from 1876 into the following year. During the construction of Doulton's new studios along the Albert Embankment, two plasterers were taken on to assist with the fixing of the terracotta. The bricklayers working on the building protested and went on strike, claiming that this was their work. In fact it was plasterers who had fixed the majority of the early schemes including the Horticultural Gardens and the Victoria and Albert Museum in South Kensington.⁽²⁾ More recently, bricklayers had

(1) Draughtsmen devised particular forms of jointing that became characteristic of the material produced by their company.

(2) Builder, 35, 1877, p. 69.

carried out the work on the Natural History Museum and on the Prudential Offices in Holborn.⁽¹⁾ It was to be bricklayers or specialists employed by the manufacturers or major building contractors who were to fix the majority of later schemes.

Stonemasons also claimed to have the requisite skills for fixing terracotta, but this trade was most vociferous in opposing the use of this competing material at all. They sent a deputation to protest to the Mayor of Birmingham when it was announced that terracotta was to be used on the Assize Courts. This was promptly followed by a visit from members of the Operative Bricklayers' Societies, reassuring the Council of the astuteness of its choice of material.⁽²⁾

Generally builders and the building trades appear to have shown little enthusiasm for architectural ceramics. This is understandable considering the extra complications involved and the unreliability of material supply. One architect considered that it was the delay caused by the need to replace blocks broken in transit or on site, and the consequent disruption to the execution of building contracts, that did most to make the material unpopular. Writing in 1895, he considered that the largest manufacturers had done

(1) Builder, 34, 1876, p. 1009. The reports and letters concerning the strike present considerable light on the status of terracotta in the seventies. The manager of Gibbs and Canning, Joseph Timms, supported the use of bricklayers for fixing. Building News, 42, 1882, p. 66-9.

(2) Builder, 51, 1886, p. 649.

their utmost to overcome this and the other difficulties associated with the use of the material.⁽¹⁾

The factor that was widely presented as being most categorically to the advantage of terracotta, cost, appears on evidence to have been variable and even marginal in its influence. Henry Cole, Gilbert Redgrave and Charles Barry had all made arbitrary claims as to its economy. Barry considered that terracotta cost a little less than soft stones and about 35-40% less than Portland stone.⁽²⁾

It was accepted, by the 1880s, that such savings depended on the design of the building involving both decorative work and a reasonable amount of repetition. Given these conditions, up to a third could be saved over the cost of stone. Of the manufacturers, James Doulton, accepted that terracotta would not have a strong advantage in districts where local stone was abundant.⁽³⁾ Joseph Timms, of Gibbs and Canning, did not even seek any financial comparison with Bath stone which he considered too soft for use in towns. But he saw a strong advantage for his

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- (1) British Clayworker, 4, 1895, Supplement p.v.
- (2) C. Barry (1867-8), op.cit., p. 268. The general relationship between the cost of terracotta and other materials and its effect on marketing is considered in Chapter 5.
- (3) Builder, 50, 1886, pp. 537-40, (p. 539).

product for use on large buildings where details were repeated through sets of windows and which had continuous runs of strings and cornices. Timms also accepted that the comparative distances from the quarries and clayworks also had a strong effect on the balance of costs.⁽¹⁾

These comments would obviously have been influenced by professional interests. It is valuable to refer to the few published lists of tenders, where terracotta was among the alternative materials for which prices were submitted by builders. Of the nine tenders submitted in 1885 for a Baptist Chapel in north London, all, except the highest were slightly cheaper if Bath stone was used rather than terracotta. The lowest tender was £4,374 in terracotta and £4,351 in Bath stone.⁽²⁾ (Fig. 6.1). However terracotta undercut Portland stone by between £300 to £400, in 1890, for a school in the suburb of Barnsbury. In this case a third option was also put out to tender, using cement as the basis for construction, presumably still with terracotta dressings. This combination was in fact chosen. The lowest tenders were £16,805 in terracotta, £17,143 if built in cement and £17,108 if the dressing were in Portland stone in lieu of terracotta.⁽³⁾ (Fig. 6.2).

(1) Building News, 42, 1882, p. 66-9 (p. 69).

(2) Baptist Chapel. Ferme Park Road, London, designed by J. Wallace Chapman. Builder, 48, 1885, p. 363.

(3) School and schoolkeeper's house, Barnsbury, designed by T. J. Bailey, Builder, 59, 1890, p. 375.

Fig. 6.1. Tenders for the erection of a Baptist Chapel,
Ferme Park Road, London, by J. Wallace Chapman,
1885.

Source: Builder, 48, 1885, p. 363.

	In Terracotta	In Bath Stone
Nightingale	£5,189 0 0	£5,189 0 0
Lewis	5,030 0 0	5,000 0 0
Dove Bros.	4,715 0 0	4,675 0 0
Falkner	4,697 0 0	4,653 0 0
Tarrant & Sons	4,597 0 0	4,552 0 0
Nye	4,523 0 0	4,500 0 0
Staines & Sons	4,484 0 0	4,464 0 0
Wm. Oldrey	4,466 0 0	4,416 0 0
Taylor & Grist	4,374 0 0	4,351 0 0

Fig. 6.2. Tenders for the erection of a school and schoolkeeper's
house, Barnsbury, by T. J. Bailey, 1890.

Source: Builder, 59, 1890, p. 375.

		If built in cement	If dressing, &c in Portland stone in lieu of terracotta
B.E. Nightingale	£18,622	£18,818	£18,918
Peto Bros.	17,701	18,401	18,011
Atherton & Latta	17,626	17,996	18,046
Dove Bros.	17,607	17,606	17,985
Chas. Cox.	17,373	17,711	17,744
Ino. Mowlem & Co.	17,329	17,511	17,596
Killby & Gayford	16,857	17,516	17,156
E. Lawrance & Sons.	16,805	17,143*	17,108

* Recommended by the Works Committee for acceptance.

By the 1890s artificial stone or concrete had emerged as the cheapest if not a particularly desirable material. For Clerkenwell Public Library, concrete was up to £1,000 cheaper than terracotta in the various tenders, but it was decided to accept the additional expense of using the ceramic material. The lowest tender was £6,141 with Red Albion concrete, and £6,554 with terracotta.⁽¹⁾ (Fig. 6.3). Seven years later, in 1896, the tenders for the Cottesmore Schools, Brighton, list terracotta as an additional expense, presumably as an alternative to stone. Over seven tenders, one makes no extra charge but the others range up to £200 more. The lowest tender was £8,354 with £30 extra being charged for terracotta.⁽²⁾ (Fig. 6.4). In the nineties there appears to have been little financial benefit in substituting terracotta for any type of stone.

If pricing could work both for and against terracotta the material suffered one absolute disadvantage; this was the time needed for manufacture. With two months typically being the minimum time between the supplying of architectural drawings and the first deliveries of terracotta, a building had to be designed and put out to contract well before construction was to commence. Similarly the design of the terracotta had to be established at the outset rather than as a final consideration.

The lateness of the supplies for the National History

(1) Clerkenwell Public Library, designed by Messrs. Karslake and Mortimer Builder, 57, 1889, p. 432.

(2) Cottesmore Schools, Brighton, designed by Messrs Brown and Barrow, Builder, 70, 1896, p. 371.

Fig. 6.3. Tenders for the erection of Clerkenwell Public Library, by Messrs. Karslake and Mortimer, 1889.

Source: Builder, 57, 1889, p. 432.

	With Red Albion Concrete	With Terracotta
Titmas	£7,073 12 0	£7,571 12 0
Dove Bros	7,060 0 0	7,460 0 0
Bywaters	6,634 0 0	7,334 0 0
Williams & Sons	6,856 0 0	7,332 0 0
Gentry	-	7,099 0 0
Wall	-	6,980 0 0
Simpson	6,457 0 0	6,960 0 0
Kellaway	6,053 0 0	6,653 0 0
McCormick & Sons	6,141 0 0	6,554 0 0*

* Accepted.

Fig. 6.4 Tenders for the erection of Cottesmore Schools, Brighton, by Messrs. Brown and Barrow, 1896.

Source: Builder, 70, 1896, p. 371.

		Extra for Terracotta
W. Taylor	£9,600	£200
Potter Bros.	9,570	130
V. P. Fruman	9,124	-
Foster & Dicksee	9,122	70
Longley & Co.	8,749	75
Ashby Bros.	8,600	30
F. Gough & Co.	8,354	30

Museum, which was a contributory factor to the bankruptcy of the building contractors, confirmed many of the worst fears of the critics of terracotta. More positively, it served to promote considerable discussion over contractual procedures that might avoid excessive delays and ensure that manufacturers were tied to specific delivery dates.⁽¹⁾

While small builders were unlikely to be able to produce comprehensive detail drawings and to employ surveyors and clerks of works, this would be standard practice with large building contractors and architectural practices. It is valuable to have the records permitting an examination of what was defined and what was delegated to builders and manufacturers, in the case of the contract drawings and quantities for Bolton Station, designed by the Lancashire and Yorkshire Railway in 1899. A series of sketch sheets were produced by the railway company's architect to show the character of the terracotta. It was specified how the blocks should be filled with broken brick or stone and be held together with slate dowels. The length of each type of moulding was listed by the linear foot and its section drawn to scale. The building contractor was made responsible for ensuring that none of the blocks were chipped.

The architects of the Railway Company restricted the choice of manufacturers that could be chosen by the building contractor, by stating that the brick and terracotta should be obtained from a single firm, which had to be one located in either Ruabon or Accrington. The name of the firm had to be submitted to the Company's architect for approval.

(1) The architectural press received several acerbic letters on this subject, one anonymous example being in Building News, 48, 1885, p. 428.

The architect also reserved the right to inspect the models for any moulded or ornamental work.⁽¹⁾

A simple contractual arrangement was acceptable for small buildings; the builder would deal directly with the manufacturer, the architect simply being given samples as various firms tendered. With major schemes the architect insisted on choosing the manufacturer, whether because of a preference for a particular firm's material or an established working relationship with a group of draughtsmen. If the architect made the decision, it was urged that he should bind the manufacturer to a time for the completion of deliveries. The firm would then be made party to the principal contract, signing to accept all responsibility for its own work.⁽²⁾

The architects most committed to the use of terracotta preferred to work up the details of their design with a particular manufacturer, in advance of the general building contract being let. It enabled the specifications to be far more complete when they were sent out to builders for tender, and reduced the lag to the commencement of construction. According to James Holroyd of Burmantofts, writing in 1884, it had become the general rule for the architect to make the terracotta the subject of a special estimate ahead of the general work.⁽³⁾ This also enabled the architect

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- (1) Rail 343/553. Tender for works at Bolton including a new goods and passenger station, 1899 (Held at P.R.O. Kew)
- (2) The arrangement adopted by the Science and Art Department in South Kensington was that a time was agreed upon for the manufacturer to execute the work. If exceeded, a reduction of a certain percentage per week was made from the estimate. Building News, 48, 1885, p. 307-9 (307).
- (3) Building News, 47, 1884, p. 965. One of the most valuable reports on contracting procedures for terracotta is in Builder, 56, 1889, p. 201-2.

to ensure that the choice of manufacturer was to his liking. It had the less beneficial effect of distorting if not destroying the supposed system of competitive tendering between manufacturers and, in the twentieth century, the system of price regulation imposed by the Terra Cotta Association.

The management of the terracotta industry blamed many of the problems that occurred with the execution of major contracts on builders, architects and especially the architects' clerks of works. They were criticised either for being ignorant of the practicalities of clay working or for making trouble by questioning every detail of the specifications and the detailed designs.⁽¹⁾

Terracotta and faience schemes were most likely to be completed satisfactorily if comprehensive drawings and bills of quantities were supplied to the manufacturer. A court case in 1911, concerning the supply of faience for the Alexandra Music Hall in Pontefract, was the outcome of the developers working without quantity surveyors or a clerk of works, and acting, to some extent, as their own architects. The contract was verbal rather than written. The dispute arose over how many defective blocks needed to be replaced on the building and went to court because there was no architect to resolve the matter. The judge determined in favour of the manufacturer, Alfred Whitehead of Leeds.⁽²⁾

(1) British Clayworker, 14, 1905, p. 2.

(2) British Clayworker, 20, 1911, p. 19.

It was relatively simple for a building contractor well acquainted with terracotta to produce an estimate for the work with the quantities supplied, once he had gained quotations from a series of manufacturers, or at least the one known to be favoured by the architects. Estimating was rather more complex for schemes of interior faience, both for the builder and for the manufacturer. Special allowances had to be made in many circumstances, such as for corner beading, for the complexities of groined ceilings and for the waste of material where dados ran up the side of staircases.⁽¹⁾

Terracotta and Colour

It was surprising that the question of the colour of terracotta received comparatively little attention in the late nineteenth century, considering that the material was usually adopted with the intention of producing a brighter street architecture. Once it had been accepted that greys were both ineffectual and in their imitation of stone dishonest, little guidance was offered as to the most worthwhile colours. Architects were largely left to make their own choice. However they were usually constrained by the taste of the client, the range of materials offered by the local or cheapest suppliers, and the dictates of a loose code of appropriateness related to both geographical location and the function of the building.

(1) Brick and Pottery Trades Journal, 3, 1901, p. 17.

The Natural History Museum and Waterhouse's other commissions built during the ten years between 1875 and 1885 helped to define the basic choice of colours as being between a bright yellowy-buff and a range of reds. The buff material used on the Museum presented the natural surface of a well burnt fireclay and could hardly be mistaken for stone. However the mild polychromy introduced by the blue banding across the facade was considered less successful; the colour had been achieved 'artificially' by coating the blocks with a surface slip dyed with cobalt, and the combination of clay bodies had proved difficult to fire satisfactorily. (1)

The City and Guilds of London Institute, opened in South Kensington in 1884, was by no means the first building on which Waterhouse used red terracotta, but it was the first to bring critical approval to the 'red tint now so much in favour'. (2) Gibbs and Canning were complimented on the quality of the dark red dressings. Reds had the historical justification of being the colour of Greek pottery, and Italian Renaissance and Tudor architectural terracotta. Deep, even tones became the most favoured as mottled and soft reds became associated with common brickwork and the easily eroded brick 'rubbers' used on 'Queen Anne' houses.

It was the red terracotta made with the Ruabon marls that gained an unrivalled reputation for maintaining a bright

(1) Building News, 37, 1879, p. 729-30 (p. 730).

(2) Building News, 38, 1880, pp. 30-1, (p. 30).

colour, even with the surface being slightly vitrified. Matched with pressed bricks made from the same clay, a warm and indestructable appearance could be achieved which obviously appealed strongly to commercial architects, such as Waterhouse, Martin and Chamberlain, and Chorley and Connon. In addition to the Prudential Offices where it became part of a virtual house-style, the combination of red brick and red terracotta was used widely for series of board schools, libraries and churches built in the suburbs of towns and cities.

The first doubts to be expressed over such red colours were practical rather than aesthetic. Some small manufacturers were achieving the desired effect by dipping blocks in a red slip, which tended to peel away on being exposed to the weather. The major firms followed the belief that the colour should be determined by the natural properties of clays rather than by making up special bodies or by specially adjusting the burning conditions.⁽¹⁾

E. M. Barry thought that red terracotta was too dull for major streets.⁽²⁾ Buff colours were brighter, more reliable in manufacture and generally offered at a lower price. During the 1880s buffs were made in tones strongly distinguishable from sandstone. The choice available was widened with the introduction of pinks, most frequently appearing in Doulton's work in London, and brownish-yellow colours, most common in buildings in Leeds and Manchester

(1) Building News, 37, 1879, pp. 729-30 (p. 730).

(2) Builder, 38, 1880, pp. 243-5, (p. 244).

supplied by Burmantofts.

Contemporary with the desire for brighter colours was an acceptance of a more even effect across the wall surfaces. The variations in colour produced by firing with coal were initially appreciated as an expression of the natural qualities of the material, but by the 1880s were regarded as a sign of inconsistency in manufacture and a lack of durability.⁽¹⁾

Ornament and Style

Whatever the practical attributes ascribed to terracotta, it was the potential for decoration that dominated all discussions over its use and that made the material seem so valuable within the highly confused architectural climate of the last quarter of the nineteenth century. Had it not been for eclecticism, the flexible combining of elements from different styles, it is improbable that architectural use of terracotta would have developed on such an extensive scale.

A reaction to the doctrinaire historicism that had motivated the mid-Victorian battle of the styles had already brought a widespread popularity to the 'Queen Anne'. This style made loose use of forms derived from the late seventeenth and early eighteenth century architecture of England and the Low Countries. It was essentially domestic

(1) The buff terracotta on the Science Schools in South Kensington was criticised for being too patchy in colour, in a letter from the manufacturer, John Pulham. *Building News*, 38, 1880, p. 30-1 (p. 30).

in character and proved difficult to apply to tall buildings in the centre of towns or cities. However, by developing the forms of 'Queen Anne' on a larger scale, introducing elements from the classical orders and from other styles, architects found they could achieve facades for public buildings that were equally novel and enjoyable.⁽¹⁾

There was a comparably tolerant strand of the Gothic Revival that also led towards late Victorian eclecticism. While Italianate forms had been adopted freely for commercial architecture in the 1850s and sixties, several architects concentrating on ecclesiastical work, such as Butterfield and Street, had usually managed to introduce a 'roguish' individuality into their designs. In part these men were pursuing a belief that such originality was necessary to mark their work as being Victorian rather than purely imitative in character. It was the same motivation that encouraged the Goths of a younger generation to combine the mediaeval architecture of different countries, which they would have studied during their apprenticeships and travels, and to work the forms in a new type of material.

The transitional nature of the styles that were used most widely, typically being on the border between the late

(1) The way in which 'Queen Anne' architecture held back from using all but the smallest details of terracotta can be seen in M. Girouard, *Sweetness and light* (Oxford 1977).

Gothic or early Renaissance, was regarded as an attribute, in that it offered wide potential for development. Hence, it was believed, the styles could form the starting point for a truly Victorian architecture. A comparable argument was applied to terracotta by Ingress Bell. He argued that because the material had only been used on a small scale through history, in comparison with brick and stone, there was considerable scope for originality in design, especially with modern methods of manufacture.⁽¹⁾

The fundamental difference between sculptural modelling and pressing in clay, from the process of carving stone, was also seen as a justification and a potential path towards new forms of decorative detailing. Due to the ease with which clay could be worked, terracotta became regarded as an ornamental material and one which allowed a new freedom in design.⁽²⁾ Consequently it held a strong attraction to architects attempting to maximise the decorative richness of their designs. New types of pattern, with formalised or purely geometric designs, were felt to be appropriate for terracotta because of the degree of repetition necessary in most schemes.⁽³⁾ Owen Jones'

(1) Building News, 46, 1884, p. 580.

(2) This article considered that terracotta should always be worked directly by hand rather than repeatedly pressed from plaster moulds. Builder, 39, 1880, pp. 231-5 (p. 232).

(3) Builder, 36, 1878, pp. 925-6 (p. 925). H. H. Statham, writing several papers on ornament, accepted the practice of modifying natural forms for architectural ornaments and that forms were best repeated in a regular succession. Builder, 40, 1881, p. 383.

'Grammar of ornament' was one of several source books, and draughtsmen and modellers at some factories had already been using such designs for the decoration of bricks or tiles.⁽¹⁾ While it was difficult to achieve high relief decoration in terracotta, it could be formed into complex curved profiles or sections far more easily than was possible with stone. By the end of the 1880s, the exploitation of the plastic nature of terracotta in its unburnt state had almost created a discernable 'terracotta style', characterised by the use of smooth curving forms.

Such a sympathy with the qualities of plastic clay was exemplified in Sykes' modelling for the quadrangle of the Victoria and Albert Museum. The art schools had established a successful association between terracotta and architectural sculpture, which was maintained in their teaching curricula until the end of the century. This link will be seen to have promoted the application of the new sculptural ideals of Gilbert and Frampton to architectural decoration.⁽²⁾

There was a growing belief that decoration should be relevant to the purpose of the building and be comprehensible to the general public. Belcher commented that Renaissance inspired sculpture had the potential 'to give

(1) Owen Jones, Grammar of ornament (Day, London 1856).

(2) The relationship between the new sculpture movement and the revival of terracotta is considered in Chapter 8.

expression to the purpose and object of the building'.⁽¹⁾
He recommended that friezes and panels, pediments and entrance doorways should be worked for 'the expression of allegorical ideas and in the commemoration of noble deeds'. Whatever the architectural form or style, from the ubiquitous panels representing 'Science and Art' to pictorial reliefs and the use of symbolic imagery at the end of the century, terracotta gained a close association with such narrative decoration. Worked by decorative artists rather than stone carvers, it was believed that the designs would be less hidebound by traditional historicism and workmanship.

The almost limitless demand for rich, lively and narrative ornament came to represent a threat to the creditability of terracotta as an architectural material. The inevitable danger was, with the decoration being made so easily and so cheaply, that buildings would become overloaded with mass-produced ornament. There was little questioning of the principle that public buildings required ornament to give them the required 'dignity and impressiveness', but concern was expressed at the coarseness of much of the detail and the overpowering end results. There was also the fear that the artistic value of sculptural panels would be lost if they were not kept distinct from the mass of moulded decoration. Most architects insisted that the pressings for sculptural work be subsequently worked up by hand.⁽²⁾

(1) Builder, 61, 1891, pp. 420-3 (p. 423). Belcher himself incorporated sculpture in Baroque designs that were far too grandiose to make any use of terracotta.

(2) Builder, 36, 1878, p. 925-6 (p. 926).

More generally terracotta became blamed for breaking the traditional relationship between the architect and craftsmen in creating the decorative details of a building. With terracotta the design had to be finalised before manufacture could commence. Many commercial architects appear to have been glad to delegate the responsibility for decorative details to the draughtsmen at a works, whether because of personal pressure of work or lack of proficiency at ornamental design. However this was a practice that inevitably alienated the elite of artist-architects. They virtually defined architectural design as being a progression from plan, to form, to detailing and insisted on retaining full responsibility for all three stages.

What is most apparent concerning the revival of terracotta in the late Victorian period is that it became widely but very critically judged for its value in architectural design. It is also clear that the practical attributes of the material were no more than marginally stronger than they had been at the middle of the century, when it had failed to gain acceptance. It was only the capability to resist the effects of atmospheric pollution that can be seen to have been of very considerable influence, and that primarily because of the widespread dissatisfaction with building stones rather than the proven durability of terracotta. Few provincial architects would have been aware of the quality of Coade stone but many would have been anxious to find an alternative to the use of inferior natural stone.

It was the design potential of terracotta, seen in the context of contemporary architectural movements, that brought it into such wide favour. The main issue for which it was on test was whether it would promote a new form of architecture through the natural expression of the material or merely be used by architects who had little natural creativity to achieve some distinctiveness and modernity in their work, if only through the strident colour and hardness of the material.

It is probable that both forces were subconsciously at work with the majority of architects who used terracotta. Most terracotta architecture remained closely related to the stylistic movements of the period, as worked in the more traditional materials of brick and stone. Though the 'battle of the styles' evolved into a rather more flexible contrasting and occasionally a fusion of Gothic and Renaissance styles it is remarkable how far it remained a significant divide between the work of different architects. This resulted partly from the affinities of the practice where the architect was trained, whether he concentrated on ecclesiastical or secular commissions, and the part of the country in which he worked.

Terracotta needed to override this division between the Gothic and Renaissance. It was certainly used within both but its use varied significantly, though not absolutely, according to the style of the building. The most obvious elements of this typology were that the free Gothic, dominated by Waterhouse's work, was usually realised in red terracotta

in small blocks of simply moulded form, while the eclectic variations on the Renaissance saw the greatest use of buff material, usually in larger pieces and with more complex modelling. The latter approach was worked with varying quality from the inventiveness of Collcutt and George to the heavier designs of provincial architects.

Since manufacturers on the different clay reserves were best able to produce red or buff terracotta and since the supply and use of the material took on a regional bias, it is possible to discern a pattern of style and colour for terracotta buildings across the country. Through examining this typology of usage through the 1880s and nineties, it is possible to consider whether a new direction for architecture was being laid down or if the contemporary use of period styles was simply being reworked in a different material with a contrived originality rather than any real artistic purpose.

CHAPTER SEVEN

THE FREE GOTHIC STYLE OF ALFRED WATERHOUSE AND ARCHITECTS IN BIRMINGHAM AND THE NORTH WEST OF ENGLAND

The use of the Gothic style for commercial buildings became increasingly restricted in the 1870s; in the eighties and nineties a large proportion of the most significant examples were built in terracotta rather than in brick and stone. This followed from the extensive practices and the example of Alfred Waterhouse and Martin and Chamberlain. They presented a sophisticated but increasingly unarchaeological approach to the use of pointed windows, arches and vaulting and to the predominance of verticality in composition, that enabled the style to express, rather than conflict with, the practicalities of late-Victorian public and commercial building.

It is important to examine how this approach to the Gothic style came to relate so closely to the properties of terracotta and to judge whether the other architects who took up this combination of style and material succeeded in matching the qualities attained in the Prudential offices or in the Birmingham Board schools. Given the total rejection of terracotta for ecclesiastical work at the middle of the century, it is necessary to consider on what terms the material became used for churches, particularly those designed by a group of architects in Cheshire and Lancashire.

Alfred Waterhouse

The revival of terracotta was dominated by Waterhouse long after the completion of the Natural History Museum. As probably the most professionally respected architect of the period and for three years the President of the RIBA it was inevitable that he should present an example. Since his use of architectural ceramics consistently combined a practical efficiency with picturesque design, architects sympathetic to the Gothic and to terracotta were willing to emulate his approach and personal style.

Waterhouse regarded terracotta as 'a material of the future' because of its economy and durability.⁽¹⁾ He also found its properties sympathetic to his architectural philosophy of adapting historical, and in particular Gothic, traditions to the modern age of large commercial buildings and mechanised production. He was able to accept unequivocally the tendency towards repetition that followed from the use of moulded rather than carved materials. His use of terracotta was almost mechanistic, in that it arose directly out of the way in which his complex ground plans were translated into the form of cross-wings, gables and ventilation and water towers.

(1) Builder, 36, 1878, pp. 905-7. Waterhouse did not use terracotta or the Gothic style exclusively. Stone and plain brick predominate in his work in Cambridge. A terracotta Parrot House at Eaton Hall (1881) is in the form of a classical rotunda.

By 1880 Waterhouse appears to have devised a range of solutions for designing large public or commercial buildings, the choice being largely determined by the site and the required accommodation. Generally if the building was free-standing, a symmetrical plan would be adopted with a central entrance archway being placed under a tower, which was topped by a steeply pitched roof or spire. To either side of the entrance, ranges made up of a grid of large windows would run out parallel to the road line and terminate in slightly protruding bays, which were themselves surmounted by another steeply pitched roof or by gables. The main ranges would have either gables or dormers, or possibly both, set into the roof line and the ridge would be straddled by massive chimney stacks. On street corner sites, the form would frequently be wrapped round into a 'U' shaped plan with a central courtyard. The entrance and tower would be set in the corner although occasionally they were placed along the main street elevation. In either case they constituted the main focus of the design with emphasis also being given to the principal storey and the roofline.

If Waterhouse had found a systematised approach to architectural composition, terracotta certainly proved to be the ideal material for its execution. It could easily be made in a strict hierarchy of sizes and of decorative richness, with a sufficient degree of repetition to achieve the possible economies in production. It was desirable to have groups of windows of the same design but unnecessary to extend such repetition across the whole facade. A mould could only be used up to about fifty times so different

designs rather than duplicates might as well be used to make up the hundreds of blocks for window sills or string courses that would be required for a large building.

Waterhouse took this approach of having possibly half-a-dozen different types of window, three profiles of string course and two designs of dormers and developed it into a system of relating decorative detailing to the overall form of a building. More ornate forms and larger mouldings were used in the most important parts of the composition, such as the entrance doorway or the windows of the main hall. Within Waterhouse's Gothic style, terracotta came more to be used to articulate bold vertical forms, polygonal staircase towers, large oriels and massive chimney stacks than to decorate otherwise flat surfaces. Rather than using terracotta to indulge in excessive ornamentation, the material became closely integrated into the form and structure of the building.

The Natural History Museum was a lavishly decorated public building that reflected the terms of the commission as much Waterhouse's taste. The starting point for the development of his approach to the architectural use of terracotta is perhaps better seen in the Municipal Buildings in Reading, completed at the end of 1877. They were given a facade faced in grey brick with red brick dressings. Terracotta was used for small decorative panels and to form a small pierced arcade above the cornice. Polygonal buttresses ran up the wall to terminate in pointed finials.⁽¹⁾

(1) Building, 35, 1877, pp. 109, 111.

The manner in which Waterhouse developed this type of composition in his succeeding designs partly depended on whether their purpose was commercial, public or private. Two buildings completed in 1878, a Law Court and the Prudential Offices, illustrate this contrast. The Law Court in Lincoln's Inn largely accommodated barristers' chambers. They were lit by small windows with segmental heads. Decorative window panels were used to enliven the otherwise plain brick walls. In contrast to Waterhouse's usual dependence on one of the major terracotta manufacturers the relatively simple dressings came from three firms.⁽¹⁾

Meanwhile for the first stage of the Holborn offices of the Prudential Assurance Company, terracotta was used to create a far more vigorous and original facade. Apart from the second floor oriel, the frontage was virtually straight, a feature that became a hallmark of subsequent designs for this client. However, the windows were deeply recessed in moulded surrounds. To light and express the position of the banking hall, large Venetian style windows were arranged in an arcade round the front and side elevations. The faces of the arches were decorated with a zig-zag pattern. Up to the first string course the entire wall surface was faced with terracotta; above the material was used for window surrounds, and for decorative panels made up of a lattice pattern. These panels were used to focus attention on

(1) The three manufacturers involved were Gibbs and Canning, the Architectural Terracotta Company and the Watcombe Terracotta Company. Builder, 36, 1878, pp. 696, 699. Demolished.

important parts of the design, such as the large surrounding arch to the group of three lancet windows on the third floor, and the face of the dormers. The slightly projecting cornice was surmounted by an open balustrade, which formed a decorative division between the wall and roof surfaces. (1)

The facade of the Prudential Office was given traditional Gothic details such as stiff-leaf capitals and foliated finials. For a more modest commission in the West End of London, completed two years later, the decoration was entirely based upon the repetition of stylised low-relief patterns. No.1 Old Bond Street was built as a shop with an art gallery above, on a small corner site; its design exemplifies Waterhouse's ability to draw on Gothic and Renaissance traditions to create an almost astylar composition. Above a ground floor which was faced in granite, wide window mouldings, a deep cornice and panels made up of a repeated stylised flower pattern, were all executed in terracotta. A large angle gable set over the corner entrance formed a focus for the design. The buff terracotta supplied by Gibbs and Canning was contrasted with small areas of red brickwork. (2) (Fig.7.1).

(1) Gibbs and Canning supplied the terracotta which was probably buff in colour. Builder, 36, 1878, pp. 1175, 7. This front was re-faced in red terracotta in 1932.

(2) Builder, 40, 1881, pp.124,8.



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Fig. 7.1. No. 1 Old Bond Street, London, by A. Waterhouse, 1880 (Gibbs and Canning).

The same colour combination was used for the architect's own home, Yattendon Court, designed in 1878, and build 1880-1. Designed as a country house, the plan and form were totally asymmetrical with three short cross wings, and a tower located above the main entrance at one end. The wall surfaces were decorated with a simple trellis pattern.⁽¹⁾

Panels of comparable design were incorporated in Hove Town Hall, completed in the same year, 1881. But reflecting its municipal purpose and urban location, the plan was symmetrical with a central entrance. The mullioned and transomed windows were given cusped tracery in their upper lights. Possibly for the first time, Waterhouse adopted the colour combination that was to become his speciality, red brick and red terracotta. The bricks were supplied from Farnham and the terracotta from Ruabon.⁽²⁾

The interest in terracotta generated by the Natural History Museum brought more attention to two institutional buildings built in west London during the early eighties: the premises for the City and Guilds, and St. Paul's School. The most closely related in terms of both geographical location and design was the Central Institution of the City and Guilds of London Institute, built between 1881-4. Sited between the buff terracotta of both the Natural History Museum and the Albert Hall, its completely red colour nevertheless provoked approving comment. Waterhouse re-used his

(1) Building News, 40, 1881, p.8.

(2) Builder, 40, 1881, pp.508, 517. Demolished.

characteristic symmetrical plan; the original design contained several of the forms found in the design for the Natural History Museum, such as round-arched 'Rundbogenstil' windows and a frieze of blank arches running under the cornice.⁽¹⁾

Revisions to the design made the windows more 'Queen Anne' and the gables more Dutch in style. Just as with the Natural History Museum, the changes that proved most inconvenient to the building contractors were those concerning the terracotta decoration. It had been originally intended to arrange the arms of the Livery Companies on the exterior. After modelling had been started by James Gamble,⁽²⁾ it was first decided to portray a different group of companies and then to substitute the arms of the principal manufacturing towns. (Fig.7.2). Only six months before the building was to be opened, deliberations were continuing as to which arms should occupy the various spaces. Apart from the confusion over the panels, the supply of terracotta from Gibbs and Canning ran very smoothly.⁽³⁾

The construction of St. Paul's School in Hammersmith overlapped with that of the City and Guilds building. Gibbs

(1) Printed elevation of design, c.1880. Held by CGLI.

(2) Builder, 46, 1884, p. 39.

(3) The foundation stone was laid 12 July 1881 and the building opened 25 June 1884. The additional work for the city arms as opposed to those of the livery companies cost £472. Letter from Alfred Waterhouse to Chairman of CGLI, 28 March 1883. In marked contrast to the Natural History Museum, building work was only held up on one occasion for want of supplies of terracotta. Letter from Alfred Waterhouse to John Watney, 10 November 1883. Correspondence held by CGLI.



Fig. 7.2. Drawing showing proposed changes to the arrangement of the arms of the Livery Companies, Central Institution of the City and Guilds of London Institute, South Kensington, London, by A. Waterhouse, 1881-4 (Gibbs and Canning).

and Canning again supplied the red terracotta which formed the dressings to mottled red brickwork. However, the style was more harshly Gothic. It was complicated by the variety of shapes of window-head, and the slightly off-centre placing of both the entrance block and the staircase towers in relation to the end wings.⁽¹⁾ The High Master's house, which is the only part of the school to survive, was made totally asymmetrical in form and given only sparse terracotta dressings.

Possibly because of their location in central London, neither of Waterhouse's two major commissions of the mid-eighties was given a facade incorporating terracotta. For his unexecuted design for the War and Admiralty Offices he proposed to use Portland stone, in deference to the architecture of Whitehall, though not without taking the opportunity of pointing out the advantages of terracotta.⁽²⁾

He also used stone for the National Liberal Club in Whitehall Place. On a sharply angled site, a massive tower was made the focus of the composition. In the revised design, dated November 1884, the introduction of Wrenish forms resulted in the style becoming more Renaissance than Gothic in character.⁽³⁾

Amidst all this variety of materials and styles, the underlying path of development in Waterhouse's architecture became magnificently clear in the Victoria building

(1) Builder, 43, 1882, pp. 283, 5.

(2) Builder, 47, 1884, pp. 724, 730-1.

(3) Builder, 48, 1885, pp. 652, 667.

constructed for the University of Liverpool, between 1887 and 1892. The corner site at the top of Brownlow Hill encouraged the working of his free Gothic style to the strongest possible picturesque effect. The architectural ceramics on the exterior and in the entrance hall and the main staircase were designed to contribute to the expression of the purpose and layout of the building.⁽¹⁾ (Fig.9.3).

The tower and spire over the entrance arch were made into the focus of the design with ranges extending to either side, that to the right curving round into Ashton Street. The various groups of windows were made to reflect in their size and ornateness whether they were lighting rooms with academic, administrative or merely utility uses. The design of the windows was also altered between the storeys. Most of those on the ground floor were given square heads, those on the most important first floor were either arcaded or cusped, while single round arched windows were used on the upper floors. The tall lancet windows were arranged to step up in tiers, following the line of the hall staircase. Triangular gables and dormers were lined above the arcaded cornice line.

Applied decoration was still not totally excluded. Floral diaper patterns were set in the wall under the staircase windows. Plaques showed the date of the building and portrayed the Liver Bird and Queen Victoria. However, the

(1) Builder, 56, 1889, p. 412. The use of architectural ceramics in the interior is described in Chapter 9.

red terracotta dressings were designed primarily to help articulate the overall arrangement of the building. The use of terracotta and of matching red bricks was concentrated in the walls of the entrance tower, the adjacent staircase and the gables and dormers, to contrast with the greys of the common bricks and the roofing slates. The wings and inner courtyard were kept much plainer. Even the richness of the window tracery and the width and complexity of the mouldings in the string courses and buttresses were designed to contribute to this hierarchy of architectural expression.

This was an approach to architectural design that expressed form and function in an abstract but entirely intelligible way. Derived partly from what was called the 'hierarchy of decorum' in the doctrine of classicism it had been used by other architects to distinguish the portions of irregular country house and villa plans. Worked by Waterhouse with simple terracotta mouldings and related materials it gave an air of controlled logic to complex and picturesque compositions.

The graduation in superiority from rough brick to pressed and moulded brick and thence to terracotta that had first been introduced by the architects of high Victorian Gothic was sufficiently fine to enable the most subtle emphasis of entrances, main windows, towers, gables and skyline. It also made for an extremely efficient use of terracotta. The designs of window surround, string course or other details were repeated sufficiently, within each stage

of the hierarchy, to achieve real economies in production but without imposing a stultifying monotony across the building.

To the left of the Victoria building of the University of Liverpool, the Walker School of Engineering was built in 1887-9 in a quieter and rather more Renaissance character. On the north side of this group and facing Pembroke Place, Waterhouse gave the Royal Infirmary, which was commenced in the same year, a frontage of grey brickwork with light dressings of red terracotta. He did not use any applied or period decoration. J. C. Edwards manufactured the material for the Infirmary and the School of Engineering, while another Ruabon firm, Clark and Rea, were the suppliers for the Victoria building.

Dating from the same period, its design being presented in 1888, the Hotel Metropole at Brighton formed a massive symmetrical block with four bays of projecting gables. The soft red terracotta may have been made by the same firm which supplied the matching facing bricks, F. P. Bastin of Rowland's Castle.⁽¹⁾ The weight of Renaissance detailing was designed to diminish to either side of the central entrance.

Waterhouse undertook three ecclesiastical commissions during the eighties, of which two were built in brick and terracotta. The Congregational Church on the corner of Lyndhurst Road, Hampstead (1883-4) was designed with a central

(1) British Clayworker, 4, 1896, p. xxix.

plan, according to the current vogue among non-conformists. Orangey-red terracotta supplied by J. C. Edwards was used to outline the round arched doorways and windows, and the massive gables which were made the dominant feature of the design. Further attention was drawn to the top of the gables by panels of diagonal latticework and large finials in the form of crosses. The overall effect was restrained, almost devoid of historical references, but immensely striking.⁽¹⁾

Such restraint was less applicable to the other church, the King's Weigh House Chapel, built from 1889 on the edge of Mayfair. Red brick and buff terracotta were used, in accordance with their specification by the Duke of Westminster for the commercial rebuildings of the 1880s on his estate. Waterhouse chose to revert to his Romanesque style, contrasting completely with the Renaissance detailing of the newly built shops and apartments. The use of terracotta on the church was concentrated on the tripartite elevation to Duke Street. The corner portion was arranged to run up into a tower, which terminated in a squat spire completely made of terracotta. Detached shafts distinguished the fenestration on the main front from the windows to the basement and to the upper oval storey of the

(1) The church was described as being faced in Luton bricks and terracotta. Builder, 46, 1884, p. 525.

auditorium, which were given plainer moulded surrounds.⁽¹⁾
(Fig.7.3).

Burmantofts supplied the terracotta, and the faience used inside. Waterhouse was by now totally relying on terracotta made from coal-measure clays. He chose his supplier largely according to the colours that their fireclays or marls naturally produced; that usually meant the Burmantofts branch of Leeds Fireclay if a buff material was required, and J. C. Edwards if a red colour was being used.

Waterhouse's practice, which from 1891 included his son Paul as a partner, became increasingly preoccupied with commissions for large offices. They appear to have designed all the provincial branches built by the Prudential Assurance Company in the nineteenth century; the effect of this succession of orders was to promote a consistency in the use of materials, in the choice of style and in the disposition of plans and elevations. However, such standardisation and the concept of the house-style was always balanced by Waterhouse's sensitivity to each site and his desire to introduce some individuality into each design.

The favourable response to the original office at Holborn enhanced the credibility and prestige of terracotta in relation to commercial architecture. As branches were

(1) The records for the chapel show analogies with other of Waterhouse's commissions, especially with the Natural History Museum. His brief allowed a cost of £16,000 but the lowest tender came in at £27,815. After alterations, including a reduction in the proportion of terracotta, the figure came down to £24,815. The minutes of the Building Committee record a series of delays in the supply of terracotta. F. H. W. Sheppard (ed.) *Survey of London*, Vol.40 (Athlone Press, London 1975), p. 88.



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Fig. 7.3. King's Weigh House Chapel, Duke Street, London, by A. Waterhouse, 1889-91 (Burmantofts).

opened throughout the country to handle the expanding business of the Prudential, terracotta became associated with commercial success, but a benevolent one in that the purpose of the Assurance Company was the protection of the interests of the general population. Each branch needed to accommodate a large hall to handle payments, and a group of ancillary offices. It became appreciated that by letting out shop units on the ground floor, possibly a restaurant in the basement and offices and flats above, it was possible to finance the construction of an imposing building in the centre of any large town.

The continuity in the design of the Prudential offices was almost unique in its thoroughness, precursing the corporate image of chains of shops or cinemas in the twentieth century. Apart from a few exceptions where buff terracotta or stone were used, a strident overall red colour was achieved through the matching of red terracotta with red pressed bricks; more orange or purple than red Mansfield stone the combination appears assertive, efficient and utterly permanent.

These bright red facades accorded with Waterhouse's taste in building materials which evolved from a contrast of red brick and light stone, to a mixture of red and dark brick with stone or buff terracotta, and to finally a dependence on one colour. He stated that colour contrasts killed form,⁽¹⁾ believing they served only to confuse the combination of

(1) S. A. Smith, "Alfred Waterhouse". In J. Fawcett (ed.), *Seven Victorian architects*, (Thames and Hudson, London 1976), p 104.

picturesqueness, verticality and ordered efficiency that he sought in his designs. He was obviously precise in his choice of colours, recommending that architects should always inspect samples of the blocks and tiles in juxtaposition, as effects presented in colour-washed drawings could become too strong in reality.⁽¹⁾ However, he accepted the variations in colour that resulted from the inconsistency of firing conditions in the kiln. For example, one section of walling underneath the main arch of the Furnival's Inn building at the Holborn head office of the Prudential is nearer buff than red in colour.

J. C. Edwards supplied at least eight of the Prudential buildings where red terracotta and bricks were carefully matched. Another Ruabon firm, Clark and Rea, claimed to have supplied several other branches. Burman-tofts were responsible for most of the buff terracotta and virtually all of the interior faience.⁽²⁾

The architectural press showed little appreciation for the bright red 'Prudential style' and assumed that it was

(1) Brick, Tile and Potteries Journal, 6, 1891, p 233.

(2) The chronology of designs for the provincial offices designed by Alfred Waterhouse with suppliers where known is: Liverpool, 1885, J. C. Edwards; Portsmouth, 1886; Manchester, 1886, J. C. Edwards; Glasgow, 1888; Bolton, 1889; Leeds, 1890; Cardiff, 1891, J. C. Edwards; Newcastle-upon-Tyne, 1891; Leicester, 1892; Bradford, 1893, J. C. Edwards; Nottingham, 1893; Sheffield, 1895, J. C. Edwards; Dundee, 1895, brick and stone; Edinburgh, 1895, stone; Huddersfield, 1898; Oldham, 1898; Bristol, 1899, J. C. Edwards; Plymouth, 1899; Hull, 1901, J. C. Edwards. Birmingham was demolished without record. Company catalogues and S. A. Smith, Alfred Waterhouse (Ph.D. thesis, Courtauld Institute, London 1970).

the Company who wished 'that their offices in every town should bear an unmistakeable family likeness'.⁽¹⁾ The use of brick and terracotta in a town traditionally built with stone such as Bradford, and of red brick, although with stone dressings, in Dundee, was thought to show an insensitivity to local traditions.

However, the design of these two branches still received praise, the Bradford office dating to 1893 being described as 'elegantly designed' and the Dundee office of 1895 as 'quiet and pleasing'.⁽²⁾ The lack of heavily projecting columns, pediments and cornices in Waterhouse's Prudential offices produced far more restrained and sophisticated compositions than were to be found in the commercial architecture of other practices.

The first Prudential office to be built in the provinces was that commenced in Liverpool in 1885. The facade was subdivided by a grid of vertical and horizontal terracotta mouldings. This formed the basis for the ordering of a simple hierarchy of windows, and hence the repetition of terracotta forms. Within each bay, one wide arched window lit the main hall on the ground floor, two segmental windows the offices on the first, and three smaller square or round headed lights the upper floors. Above the cornice, Waterhouse's characteristic triangular gables were arranged to be flush with the main walls. With the office being on a corner site, the main doorway was set at the angle with an

(1) Builder, 74, 1898, pp. 169-78 (p 171).

(2) Builder, 75, 1898, pp. 139-46 (p 143).

oriel above, stepping out in tiers of corbels. The Builder described the Liverpool branch as being in 'plain solid Gothic'.⁽¹⁾

Comparable Gothic forms, though enlivened by the incorporation of clustered tourelles were used in the larger and symmetrical building at Portsmouth, dating to 1886. A much smaller branch at Bolton (1889) was given plain windows with only slightly pointed heads and low relief quatrefoil decoration in the upper floors. Huddersfield (1898) was of a comparable scale. An early sketch design had an irregular and almost domestic air with the ground floor windows breaking through the line of the string course. A more regular and monumental arrangement was adopted in the final design.⁽²⁾

At Leeds (1890) the style was nearer to the 'Queen Anne', but high relief decoration was largely avoided. Waterhouse's individuality was strongly apparent in the massive curving corbels that supported the balcony, and in the tower set at one end of an otherwise symmetrical facade. The dressings were in buff terracotta, probably of local manufacture.⁽³⁾ A Renaissance character was also apparent in the branch at Sheffield (1895) with its transomed and mullioned windows. With the facade wrapping round a wide corner of Pinstone Street, the pedimented gables were set at a slight angle to each other, to create a curved facade.

(1) Builder, 50, 1886, p.703. Paul Waterhouse extended the Dale Street frontage with a two storey tower.

(2) Drawings held by the Prudential Assurance Company at Holborn. They include colour-washed elevations and full-size shrinkage scale drawings of terracotta details. The collection was introduced to me by Colin Cunningham.

(3) The gables and tower have been demolished.

Given a suitable combination of plan, composition, forms and details, a Prudential office faced in red brick and terracotta could become an immensely dramatic building. Bristol (1899) was one of the last branches that Alfred, rather than his son, Paul, designed. It tightly filled a small site with three street frontages, the two corners being marked by Loire style turrets. Pilasters were arranged to run straight upwards, past geometric panels set between the first and second floors, to be absorbed into the deep cornice or to reach into groups of gables, topped by pediments. The overriding verticality of the composition was terminated in a hexagonal pyramidal roof, itself surmounted by a single, massive, ribbed stack containing sixteen chimneys.

The major extension to the front at Holborn, approved in 1897 and completed in 1901, constituted the culmination of the 'Prudential style'. The earlier additions in Greville Street (1884) and Brooke Street (1885) were only given simple terracotta dressings. It was through the purchase of land for an additional frontage to Holborn that the Company was able to produce the architectural showpiece that it desired. As with some of the provincial branches, it seems that Waterhouse's intentions had to be revised, possibly under pressure from his client, towards the characteristic image that had already been established for the Prudential. A model for what was termed the Furnival's Inn building shows a predominance of buff rather than red terracotta, presumably to match better with the original block. However, red terracotta, supplied by J. C. Edwards, was used and it was only when the 1878 work by Gibbs and Canning was refaced in the 1930s by

Hathern's material that a uniformity of colour was achieved. (Fig. 7.4) The model indicates large square headed and transomed and mullioned windows that seem somewhat incongruous, and for the turn of the century, utterly behind the times. (1)

It was decided to revert to a Gothic design with the traditional elements of deep, complex mouldings, nook-shafts and blind-arcading. To the unknowing, the completed building would appear to be the architectural prototype rather than the culmination of a period of designing branch offices for the Prudential Company. A polished granite base was used, reaching up to the arches of the ground floor windows. The arms of the cities in which the Prudential were represented were arranged in a frieze under the first floor windows. The shields were held by putti, crouching in a variety of natural poses. Having been earlier almost a symbol of mid-Victorian artistic terracotta, Waterhouse's cherubs just look rather old and overfed. (Fig. 7.5) His sketches of them have none of the tautness and vivacity of Syke's designs for the Victoria and Albert Museum executed in the 1860s. (2)

The upper storeys were dominated by a series of grids, though interest was given by the projection of bays and gables. The windows, even where square headed, were given arched surrounds. The archway section was extended above the

(1) The model is displayed in the Company Museum at Holborn.

(2) Prudential Assurance Company drawings.



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Fig. 7.4. Prudential Assurance Head Office, Holborn, London, by A. Waterhouse. Original 1878 block rebuilt in 1930s on left (Hathern) and Furnival's Inn building including tower on right, 1897-1901 (J. C. Edwards).



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Fig. 7.5. Frieze of cherubs and window bay, Furnival Inn's building, by A. Waterhouse, 1897-1901 (J. C. Edwards).

cornice line into the largest and most Germanic of all the Prudential towers. It was stepped out into a battlemented balcony with pinnacles and a steep roof topped by a slender spire, with gables at the sides.

In contrast to the traditional design of this frontage, the courtyard behind was given a complex but more mechanistic pattern of windows, set in moulded surrounds, and combined with blank arcading. There are no decorative details and the disposition is almost entirely arranged according to the lighting requirements of the rooms and the form of the supporting steelwork.⁽¹⁾

The Furnival's Inn building certainly presented a dramatic front to the range of offices at Holborn, but it may suggest that Alfred Waterhouse had lost his sense of direction, away from stylistic decoration towards an increasingly sparse but still effective use of terracotta. However, it is more likely that it represents either the predilections of the Prudential or the increasing involvement of his son in the practice.

Some answers are suggested by a comparison with two other late commissions designed by Waterhouse. The University College Hospital in London was commenced in 1896 and given a bold cross plan. Possibly due to financial restrictions, there were large areas of bare brick walling and the decoration was restricted to some pilasters and decorative panelling.⁽²⁾ The same emphasis on plain brickwork can be

(1) The interior of the Furnival's Inn building is considered in Chapter 9.

(2) Builder, 71, 1896, p.380.

seen in the Refuge Assurance buildings in Manchester. The first, corner section, commenced in 1891, was also given Renaissance detailing which was made rather Spanish in flavour. But the forms, such as the crockets or the castle symbol, were as confidently detailed as any of Alfred Waterhouse's work, with rounded and flat surfaces and strongly chamfered edges. (Fig.7.6). A major extension with an enormous Baroque tower was completed in 1912. Designed by Paul Waterhouse, the details were modelled in high relief and could have been designed by any Edwardian commercial architect. The son never inherited the ability or the desire to handle running mouldings and other forms of terracotta with such a direct effectiveness, in relation to the overall composition of large public buildings, as achieved by his father.

Many of the Prudential branches were built when the use of terracotta had already been accepted by numerous clients and members of the architectural profession. Nevertheless the buildings designed by Alfred Waterhouse provided a continuing inspiration to other architects, partly because of their scale but also through their confident combination of modernity and stylistic decoration. Most of his major designs were exhibited at the Royal Academy in the form of picturesque watercolour perspectives. More specifically, his frequent appointments as an adjudicator of architectural competitions coincided on several occasions with public buildings being built in terracotta and in an essentially eclectic style.



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Fig. 7.6. Refuge Assurance building, Oxford Road, Manchester, by A. Waterhouse, 1891 (Doulton).

Birmingham and the Use of Terracotta within a Free Gothic Style

In the summer of 1886 when he was working on the Victoria building and the Royal Infirmary in Liverpool, as well as several branches for the Prudential, Waterhouse judged the competition for the new Assize Courts in Birmingham. He chose an entry that had been titled 'Terracotta'. Aston Webb and Ingress Bell were the successful architects and their design gained a level of publicity which almost approached that given to the Natural History Museum. It was the first major public building to have a frontage faced entirely with red terracotta, to the exclusion of brickwork, and with the material worked into a rich composition owing as much to the Renaissance as to the Gothic style.

The Builder was impressed but rather confused by the design: 'Its general effect is certainly Gothic, yet there is a great deal of detail in it which is not Gothic at all'. The character of the 'picturesque gateway' was described as a mingling of Romanesque with classical feelings.⁽¹⁾ The basis of the design was a complex frontage with a projecting single storey block and large wings set behind two octagonal towers; within this framework the architectural forms were moulded into the most intricate decoration possible. (Fig.7.7).

Webb and Bell drew inspiration from the early Tudor style of Hampton Court and sixteenth century Flemish archi-

(1) Builder, 51, 1886, p.151-3.



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Fig. 7.7. Assize Courts, Corporation Street, Birmingham, by A. Webb and I. Bell, 1887-91 (J. C. Edwards).

tecture, which supplied a sufficient stock of motifs such as egg and dart and cable mouldings, scrolls and even dolphins, to be used for decorating cornices, turrets or arcades. The segmentally headed windows to the great hall were given curving tracery that surrounded oval and other intricately shaped lights. The decoration was designed not so much as part of the structure of the facade, but to flow out of it in curves breaking away from the line of the wall. The actual form of most of the decoration was also curved, contrasting with the highly angular outline of the building. These forms became one of the characteristic features of terracotta decoration; they accorded with the plastic nature of the raw material and the concept of decoration growing naturally out of the structure of a building. Such curving sections could easily be moulded in terracotta but would have been difficult and expensive to carve in stone. The sculptural detailing was modelled by William Aumonier and his workmen. They were a London firm of decorative artists and modellers. Although they worked independently of any particular architect or terracotta firm they collaborated on several schemes with Gibbs and Canning. Subsequently in the Bishopgate Institute, built from 1894, Aumonier modelled and Gibbs and Canning manufactured terracotta in a free style of almost Art Nouveau curvaceousness.

Webb and Bell's design left spaces for sculptural work which was designed and modelled by independent artists, though the small size and high positions of the figures kept them subservient to the purely architectural decoration.

Aumonier was responsible for the figures representing Art and the Crafts, placed in two of the gabled wings. W. S. Frith undertook the figure of Justice on the central gable and the putti supporting the cornices. He also modelled the figures of Truth, Patience and Plenty in the spandrels of the porch, to designs by Walter Crane. Harry Bates, like Frith a sculptor from London, designed and modelled the figure of Queen Victoria in the entrance gable. She was strongly overshadowed by an ornate canopy with a moulded coping that curved up to form a finial. (Fig.7.8). The Assize Courts were the product of a uniquely complex collaboration between architects and decorative artists. The fact that there was a strong consistency in their sculptural style showed how far the new ideas of modesty in scale and natural expression, bound up in the new sculpture movement, had diffused by the eighties.⁽¹⁾

The deep red terracotta on the exterior was supplied by J. C. Edwards, but a more local firm, Gibbs and Canning of Tamworth, gained the contract for the buff lining to the interior. The great hall was lined up to the roof with terracotta, but the finest details were on a pair of archways facing each other, with the Royal Coat of Arms being flanked by a lion and unicorn and putti supporting empty niches.

(1) Aumonier went to great lengths to judge the effect of his work in situ. The figures were modelled at Ruabon, on a gallery erected above the claypit at J. C. Edwards' works so that he could study the appearance from a position 60 to 70 feet below, at the equivalent of street level. Builder, 57, 1889, p.442.



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Fig. 7.8. Statue of Queen Victoria, by H. Bates, over the entrance of the Assize Courts, 1887-91 (J. C. Edwards).

The main corridors and courts were also lined partly with terracotta, worked into panels, arcades and vaulting. The Magistrates' Library and Retiring Room were given large Renaissance style fireplaces in terracotta, with niches containing de Morgan and Delftware pottery.⁽¹⁾

In the Assize Courts, the terracotta decoration virtually took on a life of its own, certainly beyond what the Victorians could justify as a direct expression of the architectural form. Though well received, widely emulated and, in Birmingham almost directly copied, critics were apprehensive. The Builder commented on the 'waxy-looking texture' and the 'hard and cast-iron effect on the ornament', and were suspicious that 'the plastic character has betrayed the architects into a somewhat too exuberant form of ornamentation in some places'.⁽²⁾

There was some local animosity against the Assize Courts, because they had been designed by a London firm of architects. However, the most successful of the Birmingham practices, Martin and Chamberlain, had already been using terracotta throughout the city from the 1870s. Their use of the material is unique in presenting a direct progression from the mixed polychromy of high Victorian Gothic to a uniformity of red brick and terracotta. Their style progressed from an Italian to a freer, and possibly Waterhouse inspired, interpretation of the Gothic style.

(1) The Curator of the Assize Courts, J. Anderson, provided access and guidance to the interior. For information on this and other terracotta buildings in Birmingham I am indebted to Alan Crawford, particularly for his notes, 'Tiles and terracotta in Birmingham', compiled in 1975.

(2) Builder, 59, 1890, pp 338-9.

While William Martin's capabilities lay largely in planning and construction, John Henry Chamberlain followed more the path of an artist-architect. He gained an art education at Leicester and then took articles with Joseph Goddard, who tended to combine the use of brick and the Gothic style in both public buildings and churches. A close disciple of Ruskin, Chamberlain visited Italy and started designing in a Lombardic Gothic style on setting up practice in Birmingham.⁽¹⁾

Chamberlain used terracotta and mosaic in the Edmund Street facade of Birmingham Reference Library, dating to 1879. However, the final culmination of his interest in architectural ceramics was the School of Art, in Margaret Street, the foundation stone of which was laid just after his death in 1883. It also forms a late example of the juxtaposition of several contrasting materials, as recommended in the writings of Ruskin. The bulk of the dressings are in stone, partially inset with encaustic tiles. Terracotta was used in the eaves' cornice, moulded into naturalistic foliage, and for a large rose window. The latter was set in one of the three gables and made up of a lattice overgrown by lilies. This curving pattern, highly expressive of the properties of plastic clay, was modelled by S. Barfield of Leicester. (Fig.7.9). For the extension to the School of Art dating to 1893, putti were moulded into a decorative frieze.

(1) J. T. Bunce, Newspaper cuttings relating to Birmingham, obituaries, 1871-98, J. H. Chamberlain.





Fig. 7.9. Rose window of a lattice overgrown by lilies, modelled by S. Barfield, on the facade of the School of Art, Margaret Street, Birmingham, by Martin and Chamberlain, 1881-5.

The progression in the work of Martin and Chamberlain to a more directly architectural use of terracotta can be seen in the work undertaken for the Birmingham School Board. The practice was involved in the design of forty one Board schools between 1873 and 1898.⁽¹⁾ The schools needed to stand out from the meanness of the housing by which they were surrounded; in being progressive and economical in design, they would help to convey the message of educational enlightenment. Their style was consistently Gothic but became more refined in later designs. Initially stone and tiling were used to contribute to the exterior decoration, which could include naturalistic carving, as in Oozells Street Schools of 1878. Seven years later, in Stratford Road School, the plant and flower patterns were restricted to a series of terracotta panels.⁽²⁾ While the detailing became more inventive and even witty, terracotta was largely used to form moulded dressings for the main doorways, windows, gables and the ventilation tower. Matched with mottled and then bright red brickwork, the terracotta blocks for several of the schools were supplied by Clark and Rea, of Ruabon.

Martin and Chamberlain also designed most of the hospitals, free libraries and public baths provided by the City of Birmingham in the last quarter of the century. Where

(1) R. Dixon and S. Muthesius, *Victorian architecture* (Thames and Hudson, London 1978), p 239. Martin worked as Martin and Chamberlain after the latter's death.

(2) Victorian Society (West Midlands Group), 'The best buildings in the neighbourhood?' Martin and Chamberlain and the Birmingham Board schools, May 1968.

more money was available than for the Board schools, terracotta was used to form complex window tracery, running mouldings in the form of blank arcading, panels of lattice-work, and sculptural detailing.

Spring Hill Library, though a small building, exemplifies how the same form and style as developed by Waterhouse could be given rich decoration. The Library was arranged on an 'L' shaped plan with the entrance tower set in the corner. The disposition of each gable, rather than a regular grid, determined the breakdown of each facade and considerable variety was introduced in the arrangement and form of the fenestration. Mouldings were made continually to break, curve, join and intersect. The entrance archway was surmounted by an ogee arch containing the arms of the city and the date of 1891, while an outer, triangular surround ran up from winged beasts perched on corbels to a crocket and finial. The tower-spire was surrounded by two stages of pinnacles and pierced by diminutive openings. The image is one of slightly grotesque fantasy, as if to reflect the knowledge and imagination awaiting the reader inside. Clark and Rea supplied the red terracotta.

This free Gothic use of terracotta achieved a true originality in the Bell, Edison Company building built on the corner of Newhall Street, to designs by Frederick Martin and dating from 1896. The frontages were formed of three storey high arcades. These were divided by large brick piers topped by clusters of pinnacles, comparable to those on the Spring Hill Library. All the windows and the round arched entrance were set within this arcade, with the corner being

emphasised by a projecting two storey bay. The blocks of terracotta, some hollow and some thinner and solid, were made by J. C. Edwards to the same purpley-red colour as the facing bricks. Together they created a graduation in decorative effect, ranging from the simple moulded sections on the arches, to a stylised flower-bud pattern incised in the blocks at the top of the piers, and to swirling acanthus leaves in the spandrels above the arches and the top of the gables. Leopard-like animals projected as keystones to the arches or wrapped themselves over the balustrades. (Fig.7.10).

With a low ridge and furrow structure forming the roof, the skyline was dominated by the terracotta pinnacles. This was a functionally justifiable form of expression because it was from them that the telephone wires radiated to the commercial buildings in the surrounding streets. This telephone exchange shows just how far Martin and Chamberlain progressed in creating a new architectural style in red brick and terracotta. The overall form and detailing owed little to historical precedent, while the way in which the terracotta was moulded, incised, undercut and sculpted gave full expression to its artistic potential.

A series of red terracotta and free Gothic buildings are situated at and near the north end of Corporation Street, forming a group close to the Assize Courts. The competition to choose the design for the General Hospital was judged by Alfred Waterhouse. The winning architect, William Henman, had already proved to be an advocate of terracotta largely through his concern with hygiene. He came to specialise in hospitals, having designed Board schools in the North East,



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Fig. 7.10 Entrance gable, Bell, Edison Company building, Newhall Street, Birmingham, by E. Martin, 1896 (J.C. Edwards).

the Midlands and South Wales.⁽¹⁾

The General Hospital, erected 1894-7, was symmetrical round a large forecourt. The forms of elliptical and round arches, projecting cornices, and pilasters linked by arcaded balustrades, could have been drawn from Webb and Bell's work on the Assize Courts immediately opposite. They were repeated unfalteringly from the gateway to the entrance portico, the balconies and the main towers. The entrance to the administrative block was decorated with large female figures representing the practices of Medicine, Surgery and Philanthropy. The patients passed by figures symbolising the more abstract concepts of Air, Purity and Light. (Fig.7.11).

It was the detailing of the blocks that was made most strikingly original. Much of the decoration was designed in the form of curving and interlacing motifs and the columns were grooved with diagonal lines. This provided a loose Romanesque or Celtic identity but also served to obscure any irregularity in the form of the blocks. (Fig.7.12). Problems with warpage may have arisen as a result of Henman's decision to use a dark red terracotta made by Doulton at Rowley Regis. The firing conditions for this plum-coloured

(1) Henman came to Birmingham in 1879. There may have been some personal or professional link with Waterhouse since, by the time of the completion of the General Hospital, Henman had taken into partnership Thomas Cooper who had 'held a leading position' in Waterhouse's office. *British Clayworker*, 10, 1901, p.lxvi.
Obituary, *Birmingham Post*, 14 March 1917.



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Fig. 7.11. Forecourt and entrances with sculpture by J. W. Rollins, General Hospital, Steelhouse Lane, Birmingham, by W. Henman, 1894-7 (Doulton).



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Fig. 7.12. Turrets and gable, General Hospital, by W. Henman, 1894-7. (Doulton).

and slightly vitrified material were reported as being particularly critical.⁽¹⁾

Such eccentricities and any obvious historical references were avoided in Ewan and James Harper's design for the Methodist Hall, built 1899-1903.⁽²⁾ They chose a complete facing of terracotta and the use of arcades of elliptically headed windows, probably to complement the Assize Court on the other side of Corporation Street. But the composition was more simple. A tall tower with a spire over the entrance divided the seven bays of large traceried windows that lit the great hall from the smaller-windowed offices to the north, where the wall curved round the street corner. The tracery with its tear-drop shaped lights, the Art Nouveau style decoration round the doorway and the run of small columns, shell motifs and arcades forming the cornice were all modelled with a successful combination of rounded forms and very crisply defined edges and intersections.⁽³⁾

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- (1) When Henman won the competition, Doulton wrote offering him congratulations and to ask for the opportunity to give an estimate for the terracotta. They emphasised the capabilities of their local factory at Rowley Regis. Doulton to W. Henman, 9 March 1892. A copy of this letter was supplied by John Tovey.
- (2) Ewan Harper was architect to a large number of Wesleyan Trusts. Obituary, Birmingham Weekly Post, 7 February 1920.
- (3) The source of this fine modelling is not clear. Gibbs and Canning are credited with supplying the terracotta, by Alan Crawford (1975) op.cit., p 5. However, there are contract drawings for windows, the cornice and tower in the archive of Ketley Brick Works, Brierley Hill. Ref 771/3/7, Staffs. R.O.

The Methodist Hall was the last major building within the tradition of the free Gothic use of red terracotta, largely developed by Waterhouse, and Martin and Chamberlain. Waterhouse retired from his practice around 1901 and Martin died in 1899. However, in the last quarter of the nineteenth century, a number of provincial architects were using this combination of style and material. Predictably, because of the proximity of the Ruabon industry, the most extensive and most inspired work was concentrated in Lancashire and Cheshire.

Lancashire, Cheshire and the Welsh Borders

The Liverpool architect, C. O. Ellison, designed two hospitals in close succession, and used terracotta for the second, possibly through inspiration from Waterhouse's work. The Eye and Ear Infirmary at Liverpool, dating to 1878, was essentially 'Old English' in style and faced in stone, apart from the timber-framed gables.⁽¹⁾ At the Eye and Ear Hospital in Shrewsbury, commenced in the following year, the design still owed much to the 'Old English', with its irregular wall surfaces, square-headed windows and broken roof-line, but it was described as 'Modern Gothic'.⁽²⁾ J. C. Edwards supplied the red brick and terracotta, just after they had completed the contract for Waterhouse's Prudential office in Holborn. Ellison's use of terracotta was far less ordered than if designed by Waterhouse; terracotta rather than brick is used for some of the mouldings, bands

(1) Builder, 36, 1878, pp.1040, 3.

(2) Builder, 37, 1879, p.1050.

of repeated decoration and large flying buttresses to the gables. There is sculptural decoration representational of the purpose of the building; a figure panel illustrates Christ giving sight to the blind while the griffins set on either side of the entrance have beady eyes and pointed, listening ears. Inside there are three tile panels of figures symbolising Faith, Hope and Charity.⁽¹⁾

The architects who made a distinctive and an unusually sensitive use of terracotta in the north west of England were linked by apprenticeships or partnerships. Their designs were typically 'Old English' for secular buildings or Gothic for churches. The use of terracotta by the Chester architect, John Douglas, was particularly restrained. He had been articled to E. G. Paley in the middle or late 1840s, at the time when Paley was in partnership with Edmund Sharpe, the architect who pioneered the Victorian use of terracotta as a building material. Most of Douglas' commissions were for churches, country houses and cottages, and their rural location made brick more appropriate than heavily moulded terracotta. Brick polychromy was incorporated in his early work, dating to the 1860s. As his designs became more Germanic in style so round or ogee headed windows, and wall panels were made up of small, usually solid blocks of terracotta. In Chester, the material was used for corbels and other details on the imposing terrace in Grosvenor Park Road that he designed and which was built between 1879 and 1880.⁽²⁾

(1) Designed by C. H. Temple and made by Maw.

(2) E. H. Hubbard, The work of John Douglas (M.A. thesis, University of Manchester 1974).

In the 1890s his work became more influenced by the late Victorian interest in the English vernacular. Some of the details on the cottages built for the Eaton estate, at Eccleston, appear to be standardised designs. Chimney stacks were made up of purpose-made bricks supplied by J. C. Edwards. Several of Douglas' designs, produced when he was in partnership with Fordham, were published as being available on order. The British Architect gave them qualified approval: 'for those who want ready-made things of the kind these excellent designs will be invaluable'.⁽¹⁾

The hardness and redness of terracotta could be moderated by its combination with a variety of other materials. One of Douglas' pupils, E. A. Ould combined it with decorative brickwork, tile-hanging, and half-timbering. In Queen's Road School, Chester, dating to 1882-3, such a combination was used to highly pictureque effect. The panels of lattice and foliage decoration, the cusped window tracery and the cornice mouldings were all made up of small orange blocks supplied by H. R. Bower of Ruabon.⁽²⁾

In partnership with G. E. Grayson, Ould undertook an extensive amount of domestic work. In 1887 they juxtaposed the Cheshire tradition of half-timbering and the more modern combination of Ruabon brick and terracotta for Wightwick Manor on the edge of Wolverhampton. The windows to the garden front were given round moulded heads and ten panels of Jacobean-looking putti were placed above the kitchen entrance.

(1) British Architect, 43, 1895, p. 94, 6.

(2) Builder, 44, 1883, p. 810, 2.

However, the use of terracotta was not to develop any closer to Shaw and Nesfield's 'Old English' style. For the extension of 1893, richer timber framing on a stone plinth was used to provide an effect more authentically historic than Victorian in flavour.⁽¹⁾

Such concern with historical authenticity was not necessary in Lord Leverhulme's Port Sunlight. A group of terraces designed by Grayson and Ould and built in about 1896 on the corner of Cross Street used bold diaper brick patterns and terracotta for the French chateau style dormers, with their pinnacles being supported by flying buttresses.⁽²⁾

Ould's partner, G. E. Grayson, had used terracotta when working independently in Liverpool. In 1885 he designed two stations for the Mersey Railway.⁽³⁾ White stone and a Renaissance style were adopted for James Street Station in Liverpool, and brick and terracotta for Hamilton Square Station in Birkenhead. Here all the main windows were recessed behind round arches and the top of the eight storey tower was completely 'Rundbogenstil' in style.⁽⁴⁾

(1) Wightwick Manor is described in M. Girouard, *The Victorian country house*, (Yale, New Haven and London, 1979), pp 375-80.

(2) Clark and Rea supplied the terracotta for several buildings designed by Grayson and Ould at Port Sunlight.

(3) *Builder*, 48, 1885, pp.300,2.

(4) The partnership designed other commercial buildings in Liverpool, the offices of the British and Foreign Marine Insurance Company combining terracotta with granite, sandstone and tile panels. *Builder*, 58, 1890, p.434.

E. G. Paley was involved in the design of a series of particularly fine terracotta churches in the north west of England. It is not known whether either Paley as a partner or Douglas as a pupil was involved in the second of Sharpe's 'pot' churches, Holy Trinity, Platt, commenced in 1845,⁽¹⁾ but some continuity of interest in the material is almost certain.

Sharpe left the practice in 1851 and Paley took H. J. Austin into partnership in 1868. Most of Paley and Austin's designs were for churches and stone was always used for the most prestigious commissions. Plain brick and then brick and terracotta, became used in the Lancashire coal and cotton settlements and in the suburbs of the larger towns. Combined with pressed and common bricks, small solid blocks were used for running mouldings in window and blank tracery, for simple decorative details and for lining interiors. Whether or not the initial choice was dictated by economy, Paley and Austin worked the theme of a hierarchy of ceramic materials and simple repeated forms with the utmost sophistication.⁽²⁾

Two churches, St. James', Daisy Hill (1879-81) and St. Cross', Knutsford (1880-1), demonstrate how effective such a controlled use of terracotta could be. The design of window tracery in both churches was transitional between the Decorated and Perpendicular styles. This achieved a suitable

(1) Holy Trinity, Platt, and the preceding St. Stephen's, Lever Bridge, are considered in Chapter 1.

(2) John Fidler assisted with information on the use of terracotta by Paley and Austin.

compromise between decorative richness and an adequate repetition of forms. While the east windows were the most ornate, the west walls were patterned with lattice decoration. Otherwise, apart from blank tracery on the belfry at St. James', and in the tower and over the west door at St. Cross', the walls were faced in plain mottled brick. Some stone was incorporated at St. Cross', for the battlements on the tower and for the arcading inside. Both chancels were given a terracotta piscina and sedilia recessed under ogee arches of simple chamfered profile. All the interior terracotta was darker and smoother than that on the exterior, possibly as a result of its being oiled at the works. J. C. Edwards supplied St. James' and the Knutsford Brick and Tile Company the church in their home town.⁽¹⁾

The provincial architects of Lancashire and Cheshire around the turn of the century were unique for the extent to which they used terracotta on their church commissions. Edmund Kirby was also a pupil of Douglas. He gained several commissions for Roman Catholic churches in Cheshire and frequently used red brick with terracotta mouldings. St. Michael's at Little Leigh (1878-9) contained a terracotta reredos portraying the Last Supper. In St. Hildeburgh's at Hoylake (1897-9) he worked terracotta into totally unhistorical designs, the east window tracery incorporating a moulded cross and having quatrefoils running up the sides.

Alfred Darbyshire designed two churches in Salford using red brick and terracotta, St. Cyprian's (1899) and St. Ignatius' (by Darbyshire and Smith, 1900). R. B. Preston

(1) Builder, 41, 1881, pp 437-8.

was responsible for maintaining the use of red terracotta for churches in Lancashire in the new century, a late example being St. Andrew's, Levenshulme (1908).

Ecclesiastical Architecture in the West Midlands

The West Midlands was the only other part of England where terracotta was used for a large number of churches. Showing respect to the codes of 'fitness' defined by the Gothic Revival its use was more archaeologically correct than for public buildings in the centre of Birmingham. Messrs. Dunn and Hansom undertook several commissions for Roman Catholic churches during the 1870s. In St. Michael and All Saints', West Bromwich, and St. Mary's, Harborne, both dating to 1875, brick and stone were used on the exterior while the inside walls were lined with white bricks and bands of terracotta.⁽¹⁾ Martin and Chamberlain used terracotta for the exterior of the church of St. John the Evangelist, in Sparkhill, dating to 1888. The forms and details were made more conventional than for their schools and libraries.

J. A. Chatwin was the architect who gained the largest number of commissions for the church construction taking place in late Victorian Birmingham. He followed a common interpretation of the 'battle of styles', drawing on Gothic for ecclesiastical commissions and Renaissance for public buildings. Stone was chosen for the largest churches but terracotta seems to have been regarded as being particularly suited to the suburbs. Here there needed to be no

(1) Builder, 33, 1875, pp 938, 849.

pretence that the church was in any way mediaeval. In the Catholic Apostolic Church, Summer Lane (now Greek Orthodox), dating to 1873, the terracotta detailing was fairly routine. However, a quarter of a century later in St. Mary and St. Ambrose Church in Pershore Road, Edgbaston, the dressings became more mannered in design. The tracery was curved whenever possible and, for the other dressings, flat surfaces were juxtaposed with heavily moulded sections.

If Chatwin's use of terracotta in churches appears rather worldly, the major church architects of the mid and late Victorian period were very timid in their use of architectural ceramics. Sir Arthur Blomfield was strongly influenced by the work of Butterfield. He had presented a structural polychromy incorporating terracotta in one of his early works, St. Mary's, Jackfield, Shropshire, commenced in 1863. Subsequently he frequently used the material in a minor role, such as for a dado round the interior of St. Mary's, Portsea. Built 1884-9 the outside walls were faced in flint, with stone dressings.⁽¹⁾

In only one foreign work, where a major factor was the availability of suitable building materials, did Blomfield use terracotta extensively for a church exterior. His design for the Cathedral, Georgetown, Demerara, published in 1881, was in a mixture of Gothic and Romanesque styles. The walls were of Portland cement concrete with dressings of

(1) Builder, 47, 1884, p. 12.

brick and terracotta. The latter was supplied from England.⁽¹⁾

J. P. Seddon was one of the high Victorian architects who most consistently promoted decoration with structural polychromy. In a lecture on this subject to the RIBA he referred to his own modest use of decorative ceramics, commending the value of stoneware.⁽²⁾ At the church of Ayot St. Peter's, the exterior had some coloured decoration and the climax of the interior was the chancel arch made in 'Gris de Flandre' stoneware. Dating to 1875 it was modelled by the sculptor, W. E. Martin at the Fulham Potteries.⁽³⁾ Five years later he used stoneware and mosaic in a pulpit for St. James' in Great Yarmouth.⁽⁴⁾

Non-Conformist Churches and Chapels

Generally, terracotta was used more for non-conformist than Anglican or Roman Catholic churches. Dissenting ministries and their architects were less hidebound by the dictates of the Ecclesiologists and high Victorian Gothic. A strongly Victorian identity was desirable in symbolising a break from the traditions of the established church, and

(1) Builder, 41, 1881, p.585. Blomfield was also the architect of the English Church of St. Alban in Copenhagen, for which a reredos, pulpit and font were produced by Tinworth in terracotta and Doultonware in 1887. P. Atterbury and L. Irvine, The Doulton story (Royal Doulton, Stoke-on-Trent. 1979) p 88.

(2) Builder, 38, 1880, pp.434-6.

(3) Builder, 33, 1875, p.1068.

(4) Builder, 38, 1880, p.467-9.

terracotta helped to give a church or chapel a dramatic presence, even where the site and finances were tightly constrained.⁽¹⁾

The association between an innovative plan, originality in overall composition and non-archaeological terracotta detailing is exemplified in Waterhouse's Congregational Church at Hampstead (1883-4). Polygonal plans, as used by Waterhouse, were of practical value in that they could easily incorporate additional accommodation such as church halls and flats. Similarly terracotta could be worked into a scale of decorative treatment, from the simplicity of the sexton's entrance to the richness of the main Perpendicular style windows or for an accentuation of the main gables or the tower.

Of the dissenting congregations, Congregationalists and the Unitarians were most able to afford imposing architecture. Another Congregational Church in Hampstead, by Spalding and Cross (1894), was given two large gables facing Finchley and Burrard Road, topped by turrets with cupolas. A variety of lower rooflines covered the ancillary accommodation. All the dressings were executed in buff terracotta.⁽²⁾ Rarely used for established churches this colour seems to have been entirely acceptable to the non-conformists.

(1) Financial economies were presumably the reason for the use of terracotta on the Congregational Church, Hanley, by William Sugden and Son. Material supplied by Jabez Thompson formed the tracery of the side windows while stone was used for the street frontage. *Builder*, 45, 1883, pp.12-3, 27.

(2) *Builder*, 67, 1894, p.14.

Few of the major manufacturers are recorded as being non-conformists, but in the locality of the major works, and especially at Ruabon and Tamworth, most of the late Victorian chapels had their gable fronts decorated with terracotta. The material may have been obtained at preferential rates, and there would have been a pride in the use of a locally manufactured material.

The predominance of Perpendicular tracery in church design during the nineties encouraged something of a reversion in the forms of terracotta chosen for churches. Running against the tendency to use large blocks up to the scale of ashlar stone, it became appreciated that small pieces of solid terracotta could make up the lacework of cusped ogees and quatrefoils and the lines of mullions for Perpendicular windows. This was essentially the way in which Paley and Austin had been using Ruabon terracotta since the 1870s and the form in which the small firm, Gunton of Costessey, had supplied dressings for numerous churches and chapels built in East Anglia. It was Doulton who took out a patent for making solid forms of terracotta by extrusion. St. Saviour's, Folkestone, designed by Somers Clarke and L. T. Micklethwaite and built around 1892, was an early example of their use.⁽¹⁾ In this church, the architects could genuinely justify the use of terracotta as an honest material according to the terms of the Gothic revivalists, as superior brick rather than as sham stone. (Fig.7.13).

(1) Builder, 63, 1892, pp.283-4.



Aston University

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Fig. 7.13. Window tracery in solid blocks of terracotta, St. Saviour's, Folkestone, by Somers Clarke and L. T. Micklethwaite, 1892 (Doulton). Source: *Builder*, 63, 1892, pp. 283.

The use of terracotta within the free Gothic of the late nineteenth century was characterised by a sincere and artistic attempt to relate together the attributes of the material and the style. The sophisticated arrangement of simple mouldings comprising small red blocks, that characterised the most successful designs, was an approach that evolved from three different backgrounds. Waterhouse had adopted terracotta partly through a personal aim to achieve a modern and efficient interpretation of the Gothic style but also through the example of Rundbogenstil architecture which was virtually forced on him by the terms of his commission for the Natural History Museum. Martin and Chamberlain took up the use of terracotta from the Italianate polychromy promoted by Ruskin at the middle of the century. Meanwhile, the Cheshire and Lancashire practices, aware of the use of terracotta by Edmund Sharpe in the 1840s, were influenced more by the use of brickwork in German Gothic and English vernacular architecture.

In the 1880s, these architects all moved towards the use of matching red brick and terracotta, that was most likely to be supplied by one of the Ruabon firms. They clearly understood the potential and limitations of Permian marls when moulded and fired and accepted the mechanistic implications of repetition and of the hardness of the material. However, especially when combined with red pressed and grey common bricks, there was a great flexibility in usage that enabled the plan, composition, purpose and status of a building to be expressed in a way that could be appreciated, either consciously or subconsciously, by the public.

That Waterhouse, Douglas, and Paley and Austin only used the terracotta where they considered it appropriate, confirms their sensitivity to the use of materials. Waterhouse's more modest works and Martin and Chamberlain's board schools were certainly not dependent on an archaeological revivalism. However, in the work of all these architects there is evidence of a conflict between the originality that they were achieving and the increasing rationality and standardisation that was logically the outcome of using an industrially manufactured building material. Waterhouse appears to have welcomed the opportunity to turn to a more 'Queen Anne' style and the use of buff terracotta when in any way justifiable. Meanwhile, lesser figures such as Chatwin attempted a personal originality through Art Nouveau stylisation and an increasing mannerism of forms. Martin and Chamberlain can be seen to be more successful in achieving a free 'terracotta style' by exploiting the decorative potential of the material. Like Aston and Webb in their design for the Assize Courts in Birmingham, Martin and Chamberlain were content to use and adapt period styles rather than to try and assert a complete independence of revivalism.

In the terms of the ideology behind the revival of terracotta, there was a failure to break free from the precedent of the Gothic style. As the generation of architects trained within the Gothic Revival passed out of practice, their approach to the use of architectural ceramics was lost amidst a fundamental change in the path of architectural development. After the turn of the century it was plain

brick rather than terracotta that was considered acceptable for church architecture, particularly for the Church of England. The Gothic style had already passed out of favour for public buildings and red terracotta soon became regarded as one of the worst aberrations of Victorian taste.

CHAPTER EIGHT

THE LATE VICTORIAN USE OF TERRACOTTA FOR SCULPTURAL DECORATION, IN RENAISSANCE STYLE BUILDINGS IN LONDON AND THE PROVINCES, AND IN THE FORM OF CATALOGUED ORNAMENT

There is a valid distinction between the free Gothic style and Renaissance eclecticism, in the use of terracotta in the late nineteenth century. Although the division is far from absolute, a difference in approach can be identified both in terms of principle and of visual results. While the Gothic mouldings worked in terracotta by Martin and Chamberlain or by Douglas were designed largely in relation to the overall facade, Renaissance forms were given a stronger decorative value of their own and loosely juxtaposed to create a lively composition. The detailed concern with figure groups, capitals, pilasters and festoons promoted by the example of the Italian Renaissance and the teaching of the Art Schools became most directly applied, at one extreme, in the terracotta sculpture designed by decorative artists and, at the other, in the forms offered from stock in company catalogues.

The architects who used the material within primarily Gothic or Renaissance approaches can easily be identified. The division was in part a reflection of age. The leading exponents of what has become termed the 'bric-a-brac Renaissance' such as Collcutt, George and Edis were born a decade

after Waterhouse, Chamberlain and Douglas.⁽¹⁾ This younger group set up practice when the dominance of the Gothic Revival was weakening, both in terms of a style and in imposing a moralistic approach to historicism. Their major works followed in the path of the first reaction against the high Gothic, termed the 'Queen Anne'; they used the freedom that this style had helped to establish, borrow and adapt a comparable variety of Renaissance motifs in the pursuit of an appealing but nevertheless practical architecture.

In developing a personal repertoire most of the architects restricted themselves to classical forms in one or other of their Renaissance derivations. Pilasters, entablatures and pediments, and decoration in the form of strapwork, cartouches or egg and dart mouldings could be applied to a building frontage with considerable freedom, to create vigorous compositions and to achieve an element of originality.

The looseness with which these forms and motifs could be incorporated into a facade had already been exploited in the extensive market that had developed for stock classical details, ranging from vases to balustrades and columns. It was a logical step for manufacturers to expand the range of forms available so that complete facades could be chosen from catalogues and ordered from stock. Since such a practice has fundamental implications as to who was responsible for the detailed design of terracotta buildings, it is important to try and discern how widely architects and builders ordered

(1) The most apt term 'bric-a-brac' was coined by H. S. Goodhart-Rendel, English architecture since the Regency (Constable, London 1953) p 160. He considered that the use of terracotta resulted in the excessive repetition of forms.

terracotta from stock or at least from catalogued designs.

Another fundamental question arises from the fact that in the last quarter of the nineteenth century the Italian Renaissance was almost entirely supplanted in favour of later and northern European developments of classicism. Terracotta was not to be used in a style to which it was linked by historical precedent. Was an appropriate expression achieved for the material or did its use become for the most part imitative of stone? The Renaissance had also provided a justification for terracotta sculpture and it must be considered how far the material contributed to what was considered as the most prestigious aspect of the art of architecture.⁽¹⁾

Terracotta and Architectural Sculpture

Several of the pioneering works in the architectural use of terracotta, such as the lecture front of the Victoria and Albert Museum, the Natural History Museum and the Wedgwood Institute had exploited the sculptural potential of the material. The incorporation of terracotta sculpture in commercial building remained dependent on the staff and students of the art schools and it was promoted particularly through one firm, Doulton. Henry Doulton supported a series of decorative artists who specialised in working with terracotta, the first being George Tinworth whom he employed from 1867.

(1) It was the stone sculpture of Michaelangelo that became the strongest inspiration to architects.



Fig. 7.11. Forecourt and entrances with sculpture by J. W. Rollins, General Hospital, Steelhouse Lane, Birmingham, by W. Henman, 1894-7 (Doulton).



Fig. 7.12. Turrets and gable, General Hospital, by W. Henman, 1894-7. (Doulton).



Fig. 7.5. Frieze of cherubs and window bay, Furnival Inn's building, by A. Waterhouse, 1897-1901 (J. C. Edwards).

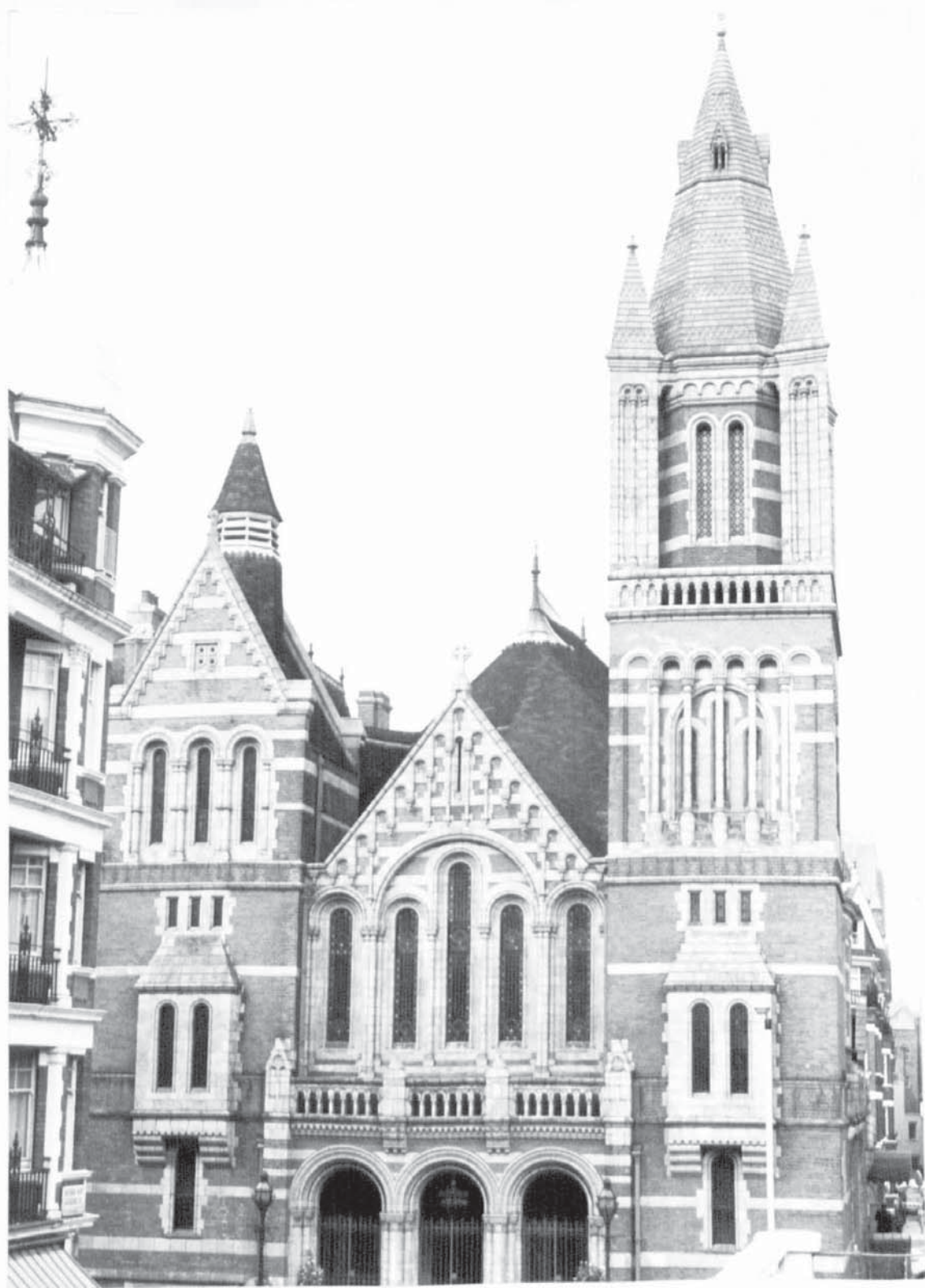


Fig. 7.3. King's Weigh House Chapel, Duke Street, London, by A. Waterhouse, 1889-91 (Burmantofts).



Fig. 7.1. No. 1 Old Bond Street, London, by A. Waterhouse, 1880 (Gibbs and Canning).

In 1878, Lambeth Art School was taken over by the City and Guilds of London Institute and re-named the South London School of Art. Sparkes was appointed Superintendent of Studies, in addition to holding the post of Principal of the National Art Training School at Kensington. He was therefore well placed to attract apprentices and assistants from the art industries. The emphasis at the South London School was on providing a training in essential principles of art, and, reflecting the local predominance of firms making architectural ornament, sculpture was given the greatest attention. The modelling department occupied three of the four studios.⁽¹⁾

Sparkes arranged for a French sculptor, Jules Dalou, to teach the evening classes in clay modelling. Dalou had been teaching sculpture at South Kensington and had gained a reputation for combining bold modelling and realism in his sculpture, which was exhibited at the Royal Academy during the 1870s. Among his students were two sculptors who came to be of particular importance in promoting a free style of modelling in terracotta, W. S. Frith and Harry Bates.⁽²⁾

Frith replaced Dalou as the modelling master in 1879. He believed strongly in the principles that sculpture should both be imaginative and be executed in any material, including

(1) The relationship between these art schools and the CGLI is covered by J. Lang, City and Guilds of London Institute centenary 1878-1978 (CGLI., London 1978), pp 90-1.

(2) The role of architectural terracotta in the new sculpture movement was the subject of a lecture by Susan Beattie in 1979 at the Victoria and Albert Museum, of which she kindly supplied the text.

terracotta. There are unfortunately few major works which can be attributed to him with certainty. On the memorial fountain made for the Glasgow International Exhibition of 1888, he modelled the statue of Queen Victoria and the group symbolising Canada. The figures succeeded in combining intricate detail and a strong sense of individual and national character.⁽¹⁾ Soon after the fountain was completed Frith must have started working on the sculpture on the Victoria Assize Courts in Birmingham. He also executed the figures for the garden of 'Clare Lawn', a house in East Sheen, Surrey, during the nineties, and for a fountain at Christ's Hospital School at Horsham in 1909. The architect for these last two works, and the partner with Ingress Bell for the Assize Courts, was Aston Webb.⁽²⁾

Harry Bates was the other London sculptor who worked on the Assize Courts, modelling the figure of Queen Victoria. After being taught by Dalou he had gone to Paris to study under Rodin. Upon his return his first major commission was for a frieze of four panels, undertaken from 1886. Built into the facade of Messrs. Hill and Sons, a bakery and a shop, the reliefs represent ploughing, sowing, reaping and milling corn. The figures have all the spontaneity and expressiveness of Stevens' and Sykes' sculpture and

(1) John Broad, H. Ellis and F. W. Pomeroy were the other sculptors involved in this fountain, Broad's modelling showing particular intricacy.

(2) Aston Webb also designed a triptych for St. John's Church, Lansdowne Crescent, which was modelled by Emmeline Halse. The style is flowing though rather sentimental. Builder, 59, 1890, p.142.

are surrounded by idyllic rural scenes and a raised inscription. Thomas Verity, himself trained at the South Kensington School, was the architect and J. C. Edwards manufactured the terracotta. (1)

The leading figures in this freer and more expressive style of sculpture, Alfred Gilbert and George Frampton, laid no great emphasis on either terracotta or architectural sculpture. Though he could count Henry Doulton as a friend and a client, Gilbert never undertook any architectural work. However, one of his terracotta sculptures, 'The Enchanted Chair' was repeatedly admired in the architectural journals after being exhibited in 1886, and the inventiveness of Gilbert's compositions would have provided a continuing inspiration to other artists. (2) Similarly, George Frampton's use of terracotta for architectural decoration was restricted to one building, the Constitutional Club, designed by R. W. Edis, another significant work that was commenced in 1886. But as Frampton rose to prominence, becoming a member of the Royal Academy in 1902 and being knighted in 1908, he brought increasing prestige to the new sculpture movement with which terracotta had gained a close association.

Although these examples of collaboration between decorative artists and architects largely occurred in London, terracotta sculpture frequently appeared on the provincial

(1) The link between Verity and J. C. Edwards may be connected with the fact that one of his son's pupils was the chief draughtsman at the works.

(2) Builder, 52, 1887, pp. 9, 34-5. I am indebted to Susan Beattie for information on Gilbert and Frampton.

art schools and museums, built with the support of the Science and Art Department of South Kensington. Some of the earlier examples have already been described;⁽¹⁾ those built during the last quarter of the century seem to be increasingly retrogressive in comparison to the commercial sphere of building in both overall style and the use of sculpture.

Such backwardness may be explained by the fact that the designs were submitted to the Science and Art Department at South Kensington for approval. The Department considered and accepted, in about 1876, a design for the Brighton School of Art, produced by J. G. Gibbins. The Romanesque style windows may have been inspired by the design of the then half-completed Natural History Museum. Terracotta was used for an 'emblematic' panel in each wing and statues on either side of the clock-gable.⁽²⁾

The New Free Library and Museum at Derby owed even more to Waterhouse, with its central tower set over a Gothic entrance arch. The combined purpose of the building was reflected in the panels made by the Coalville Brick and Terracotta Company. A cartoon illustrated Caxton and his printing press, while the frieze contained major figures in the history of fiction, poetry and science. Other panels were given floral patterns to refer to the natural history

(1) In Chapter 2, the most important being the Wedgwood Institute, Burslem.

(2) Builder, 34, 1876, pp.1022, 4.

collections. Built in 1879 the architect was R. K. Freeman.⁽¹⁾ The Museum, Free Library and School of Art built at Stafford two years later, was given rather less ambitious terracotta decorations. The building contractor, Arthur Gee, made some scrolls and medallions at his own works, at Brereton on the edge of Rugeley.⁽²⁾

For the Museum and School of Art at Ipswich (1881), the curator himself was allowed to design panels illustrating fossils from various geological periods.⁽³⁾ Small faience panels were inserted in the Natural History Museum at Torquay (1875)⁽⁴⁾ and the Science and Art Schools in Weston Super Mare (1892).⁽⁵⁾ It was only towards the end of the century in 1897, that an art school building was given terracotta decoration within the spirit of the new sculpture movement. The extension to the School of Art in Manchester incorporated a commemorative panel and angels supporting shields which were modelled by W. J. Neatby. It was Neatby who brought the liaison between architectural ceramics and

(1) Builder, 37, 1879, pp.1260, 2.

(2) Builder, 41, 1881, pp.140, 8.

(3) On other panels there were heads of Newton and Hogarth and symbols of Science and Art. The Architect was H. Weston of London. Builder, 41, 1881, p.169.

(4) Probably made by the Watcombe Pottery Company.

(5) Messrs. Price and Wooler were the architects. Builder, 62, 1892, p.386.

sculpture to a final culmination, while he was head of the architectural department at Doulton. However, his most important work was executed in faience rather than terracotta.(1)

Art schools, libraries and museums provided the majority of examples of the collaboration of architects and artists to produce terracotta sculpture. Architects generally saw little advantage in developing designs with decorative artists. Those in the higher echelons of the profession insisted on designing every detail of the building themselves while the more typical commercial architects using terracotta would have been content to entrust some of that responsibility to the draughtsmen and modellers at the clayworks. Most would have been unwilling to accept the additional expense and delay of involving the unreliable hands of artists in the process of building design.(2)

Mayfair, Kensington and Chelsea

During the 1870s, 'Queen Anne' became established as the most fashionable style for houses in London. Norman Shaw and Stevenson almost exclusively used rubbed and carved brick to provide the relevant decorative details of pediments, pilasters, festoons and sunflowers. Sculptural work was roughed out at ground level and finished in situ. The use of rubbed brick allowed the architect to modify the details

(1) Considered in Chapter 9.

(2) . Susan Beattie emphasised that it was generally the architect's rather than the manufacturer's decision to collaborate with an independent artist.

as finely as if stone-masons were being employed; but it also incurred comparable disadvantages, notably the cost of skilled labour and the delay to construction while the decoration was hand finished. Most seriously, the soft red rubbers made at Fareham in Hampshire were very expensive and insufficiently durable to resist the effects of urban atmospheres.⁽¹⁾

Shaw, Stevenson and Nesfield consistently avoided the alternative of terracotta. However, other architects were less hidebound about using factory-made architectural ornament, and accepted its use as the 'Queen Anne' style became broadened by the inclusion of motifs and forms of composition derived from the Tudors and Stuarts and from the Renaissance of northern Europe. The conscious expression of terracotta within this stylistic range emerged simultaneously in Mayfair and Chelsea, where the Duke of Westminster and Lord Cadogan took a directing interest in the development of their London estates.

In 1863 the Duke of Westminster had inspected Fowke and Sykes' work in the quadrangle of the Victoria and Albert Museum. Soon afterwards, it was probably the Duke who promoted a competition for two blocks in Grosvenor Place, including a London home for himself. Amongst the entries were a house by Robert Kerr and a villa by E. M. Barry, both intended to have terracotta detailing of French Renaissance

(1) In 1879 rubbers were listed as costing 110s. per thousand, twice the cost of best facing bricks. Rivingtons, Notes on building construction (Rivingtons, London 1879), Vol.3, p.105.

design.⁽¹⁾

A decade later, in 1875, the Duke's taste had not wavered when the china and glass merchants, Thomas Goode applied to re-front their shop in South Audley Street. It was suggested that they would have to submit a design using red brick and terracotta.⁽²⁾ The approved and executed frontage was built in brick with carved sunflowers and other decoration; terracotta was used only for the moulded copings on the four gables, two having triangular pediments and scrolls at the sides. This building introduced the architect, Ernest George, whose main work to date had been in a heavy Gothic manner, to the use of these materials and the 'Queen Anne' style.

The first re-building affecting Mount Street occurred in 1880-2. The group at no. 130 Mount Street and 34 Berkeley Square was designed by W. T. Wimperis. He was given instructions by the Duke that red brick and terracotta were to be used, and responded with a quiet 'Queen Anne'

(1) F. H. W. Sheppard (ed.), Survey of London, Vol. 39. (Athlone Press, London 1977), The Grosvenor Estate in Mayfair, part 1, p 140.

(2) F. H. W. Sheppard (ed.), Survey of London, Vol. 40 (Athlone Press, London 1980), The Grosvenor Estate in Mayfair, part 2, pp 296-7.

design dominated by a corner tourelle.⁽¹⁾

Ernest George, then in partnership with Harold Peto, was responsible for the next stage in the development of what can be termed the Mayfair style. For a group of five shops and chambers in Mount Street, it was decided to use an entire facing of buff terracotta. As such, this may be the first building to take up the example of the Natural History Museum. However, the site was divided between two clients, who decided upon different plans and elevations. The shops have comparable wide arched openings, but differ in their upper storeys. Nos. 104-8 were given crockets and a finial over the doorways, and a traceried balustrade, to complement the late French or Flemish Gothic of the large dormer-gables. Pinnacles were supported by thin arches of tracery. In contrast, nos. 109-11 were designed to have more conventional bay windows, topped by balustrades and round headed gable windows. (Fig.8.3).

The terracotta for the 'French Flamboyant' facade to nos. 104-8 was supplied by Doulton and that for the adjacent 'French Renaissance' facade by J. C. Edwards.⁽²⁾ Reflecting the high iron content of their clays the Ruabon material is slightly more orange in colour than Doulton's pale yellow. The differences in the facades were too considerable simply to reflect the responsibility given to the

(1) F. H. W. Sheppard (1980), op.cit., p.329. Clark and Rea supplied the terracotta.

(2) Nos.104-8 and nos.109-11, respectively. The latter was extended in 1891. Builder, 50, 1886, pp.708, 10-11.



Fig. 7.4. Prudential Assurance Head Office, Holborn, London, by A. Waterhouse. Original 1878 block rebuilt in 1930s on left (Hathern) and Furnival's Inn building including tower on right, 1897-1901 (J. C. Edwards).

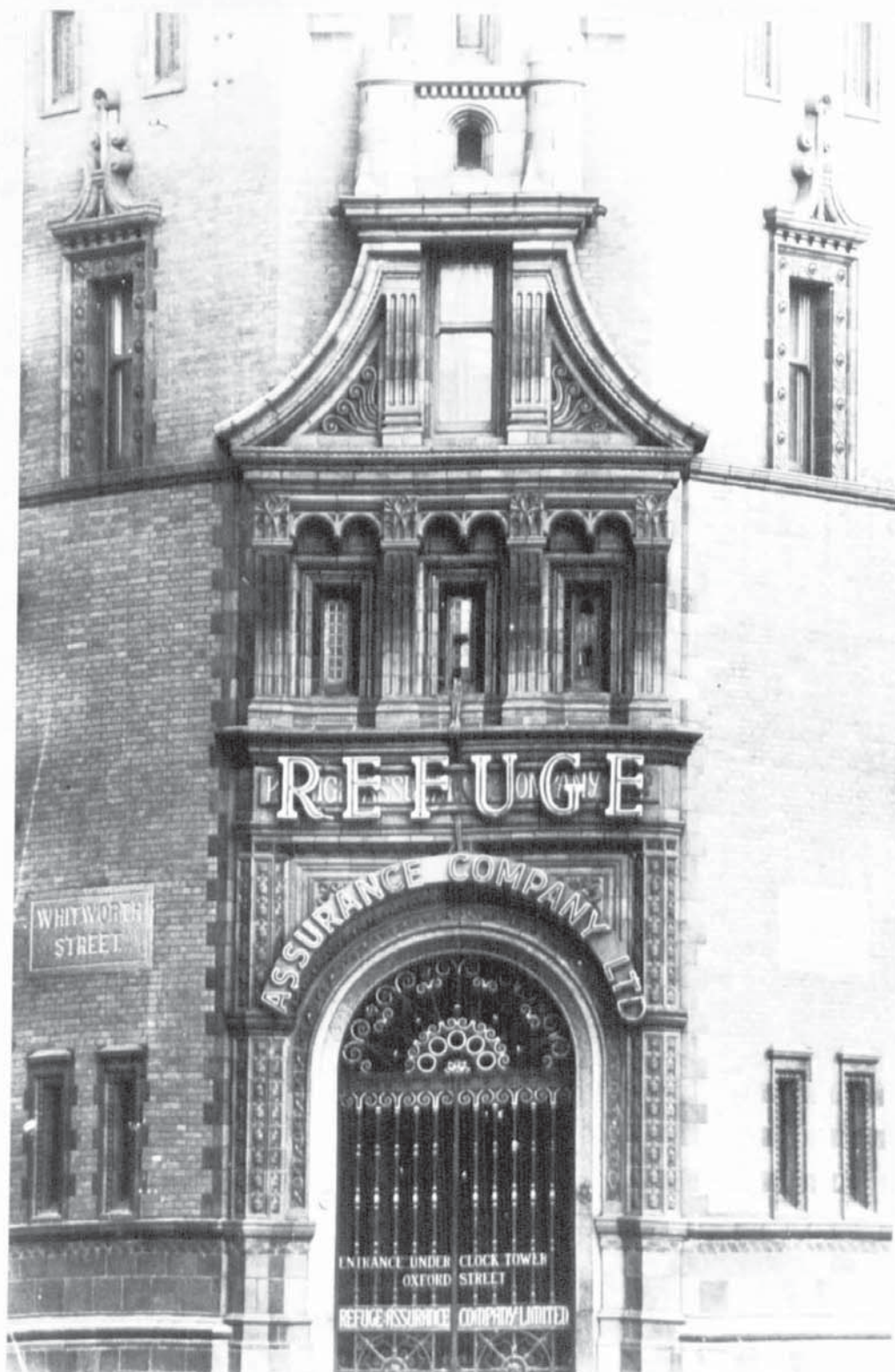


Fig. 7.6. Refuge Assurance building, Oxford Road, Manchester, by A. Waterhouse, 1891 (Doulton).

less described it as being 'overdone and wanting in simplicity'.⁽¹⁾ (Fig.8.4.). The weight of the terracotta detailing and the gaudy colour contrast placed the design on the borderline between the inventively dramatic and the visually offensive. The difference between the crimson red brick and the salmon coloured terracotta was exaggerated by the restless way in which the two material were interposed, particularly where pink stripes cut across the pilasters and window jambs like dashed lines. The pediments in the dormer gables were not just heavily decorated with shields and shells but were also executed in two colours of terracotta. The quantity of decoration and its richness were arranged to increase towards the top of the elevation, the frieze cornice being particularly deep and being worked with dentils, upturned brackets and groups of putti. Bay windows had been adopted by the Victorians to enliven otherwise flat facades and increase the level of light inside; here the combination of polygonal corner turrets, one and two storey bay windows and a three storey bay, all executed in highly decorated terracotta, had the effect of almost completely obscuring the underlying regularity of the building. The side elevations were simply formed of flat brickwork.

This building indicates the level of technical virtuosity achieved by the leading terracotta manufacturers at the middle of the 1880s; it also shows how the material enabled a virtually unknown architect to create an eye-

(1) F. H. W. Sheppard (1980), *ibid.*

catching design. But there was a foreboding in all the decorative richness. Terracotta had become worked like ornamental plasterwork, without due regard to the purpose and form of the building, or the properties of the material.

The four adjacent plots, nos.125-9, were designed as one block in 1885, and built over the next two years. The design, by W. H. Powell, met with the approval of the Duke of Westminster. The yellow brick and the salmony buff terracotta supplied by Doulton formed only a mild colour contrast.⁽¹⁾ (Fig.8.4). Apart from the projecting dormers and central gable, the rhythm of mullioned and transomed windows presented a fairly typical 'Queen Anne' facade. However, the terracotta dressings were designed and modelled with considerable originality, forming broad moulded sections that would curve into brackets or archways, and that would support bays or dormer gables. The corner porch was set under an oriel, supported by a moulded arch curving outwards as well as over the entrance. The office doorway to no.128 Mount Street combined this use of moulded and curving forms with witty detail. Two arches were set asymmetrically, the wider one taking in a narrow hall window. The segmental space between the two arches was filled with a shield, strap-work, two storks, and a cherub whose right foot was made to drop through the break in the pediment above the window. (Fig.8.5).

(1) W. H. Powell used lavish terracotta decoration for 49 Upper Grosvenor Street, a design exhibited at the Royal Academy in 1887. *Builder*, 52, 1887, p. 713.

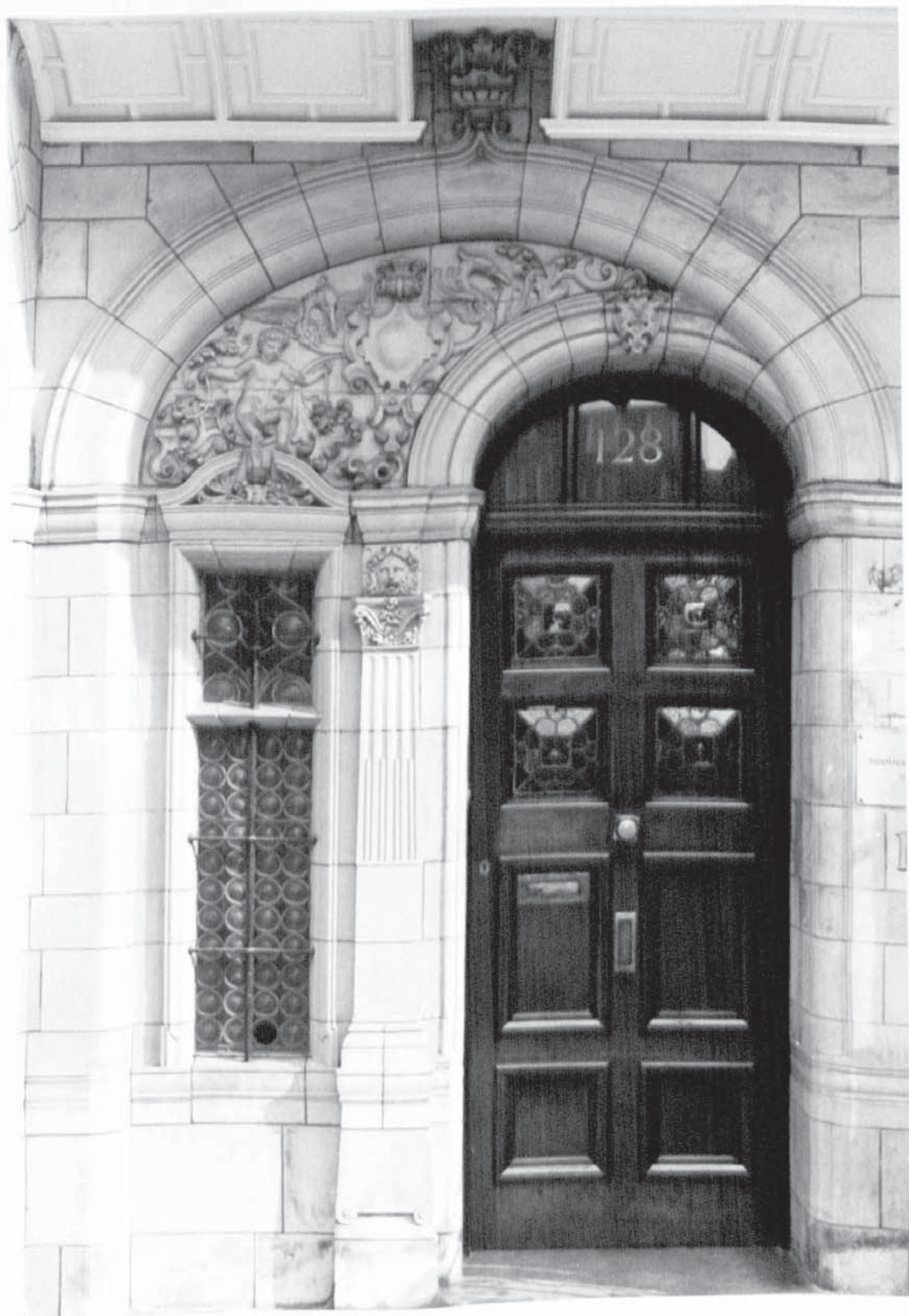


Fig. 8.5. Doorway, no. 128 Mount Street, by W. H. Powell, 1886-8.

Towards the western end of Mount Street, the largest of the blocks of shops and apartments, nos.87-102, was built slightly later, between 1889 and 1895. Having designed the adjacent Vestry Hall, A. J. Bolton was invited to submit a design, with the stipulation that he should follow the style used by George and Peto. There are similarities with nos. 104-111, but the detailing was given a greater intricacy, being modelled in a later Francois Premier style. The buff terracotta dressings were made so wide as to almost exclude the red brickwork from the facades. The decoration was concentrated in the gables with busts being flanked by cornucopias and large strapwork scrolls. Most of the decoration did relate, and contribute to the overall architectural composition. (Fig.8.6). The upper floors were given visible means of support by the surrounds to the entrances. They were designed in the form of pilasters with wide chamfered faces, filled with decorative foliage.

On the north side of Mount Street only one block was to conform with the Duke's enthusiasm for terracotta. Nos. 27-28 and 32-42 South Audley Street are comparable to and slightly predate Bolton's work opposite, being built 1888-9. The architect, Thomas Verity, used material made by J. C. Edwards, following a link established over the terracotta supplied for 40 Buckingham Gate. By the time that the rest of this side of Mount Street was rebuilt, during the 1890s, the Board of the Grosvenor Estate was approving more restrained designs using Portland stone.⁽¹⁾

(1) F. H. W. Sheppard (1980), *op.cit.*, p.324.



Fig. 8.6. Nos. 87-8 Mount Street, by A. J. Bolton, 1889-95.

A more interspersed use of terracotta was made in some of the other streets in the Grosvenor Estate. Two architects who had used the material along Oxford Street were involved. T. Chatfield Clarke designed 64-8 South Audley Street (1891-3)⁽¹⁾ and J. T. Wimperis undertook Duke Street Mansions. Wimperis' design was exhibited at the Royal Academy in 1887, but had none of the richness and vigour of the Mount Street buildings. In partnership, as J. T. Wimperis and Arber, he produced a more original design for John Boulding's premises in Davies Street, built 1889-91. As if to reflect the occupancy of the building by a firm of sanitary engineers and manufacturers the terracotta was given a slightly shiny surface. It covered the frontage in two colours: the red string courses, the cornice and decorative panels were made to project slightly in front of the buff background. The decoration was restricted to the firm's initials, the date of the building, simple rosettes and large shells in the gables.⁽²⁾ (Fig.8.7).

Mount Street was praised in 1892 as forming 'one of the latest demonstrations of the vast strides London street architecture has made towards the picturesque'.⁽³⁾ The only other area that was considered as achieving such an advance

(1) Builder, 64, 1893, p.150.

(2) The material was supplied by Clark and Rea. Building News, 58, 1890, p 923. Simultaneously business premises were being built using terracotta, in Oxford Street. Early examples were by Batterbury and Huxley (Doulton) and Christopher and White (Burmantofts). Builder, 51, 1886, pp.448, 458-9, and Builder, 53, 1887, pp.279, 282.

(3) Sir L. Gomme, London in the reign of Victoria, pp 143-4. Quoted in D. Olsen, The growth of Victorian London (Penguin, Harmondsworth, 1979), p.148.



Fig. 8.7. Dormer gable, Bolding and Sons, Davies Street, London, by J. T. Wimperis and Arber, 1889-91 (Clark and Rea).

was Lord Cadogan's estate in Chelsea. Here the ground landlord again exerted an influence over the architecture by insisting that the designs were submitted for approval. When Cadogan Square was first laid out it was specified that the houses should be faced with red brick and Portland stone.⁽¹⁾

The first use of terracotta with red brick in the West London suburbs, occurred with the apartments and terrace houses built in Kensington Court during the early 1880s. Here, J. J. Stevenson and T. G. Jackson turned to a more freely classical version of the 'Queen Anne'. In no.2 Kensington Court Jackson used Doulton's terracotta; the lively modelling was undertaken by Messrs. Farmer and Brindley.⁽²⁾ The frontage is only three narrow bays in width. It was made up of tall windows separated by polygonal pilasters which were extended up to the Dutch gable and to terminate in small tourelles. A window on the side elevation was given tracery in the form of finely modelled dolphins, one of the most characteristic motifs of early Renaissance style terracotta. (Fig.8.8). In the same period, George and Peto were designing strongly Flemish houses on the western edge of the Cadogan Estate, in Harrington and Collingham Gardens. It was in the latter that complete facings of yellow terracotta were used in a series of designs, characterised by having a grid of large transomed and mullioned windows underneath a gable

(1) Building News, 33, 1877, p. 401.

(2) Builder, 48, 1885, pp. 898, 891.



Fig. 8.8. Side window, 2 Kensington Court, London, by T.G. Jackson, 1883 (Doulton).

that extended across the complete frontage. However, each house gained strongly individual features. No.7 was given rusticated columns, and an enclosed porch, no.11 a stepped gable and a first floor balcony supported on moulded brackets, and no.12 bulging columns and a bay window that only left sufficient room for the doorway, on the ground floor.⁽¹⁾

At the Royal Academy exhibition of 1886, George and Peto exhibited their most richly decorated Flemish style design. The house, for T. A. de la Rue and to be located in Cadogan Square, was portrayed by a sketchy brown-tinted drawing. The illustration emphasised the intricate pattern of light and shade created by the buff terracotta dressings that projected from the red brickwork, which was itself given carved decoration. The composition was highly inventive, with a three storey bay enclosing the entrance being balanced by an adjacent but larger two storey bay with a balcony above. The uppermost two storeys were entirely set within a shaped gable. Several of the windows were designed to incorporate the arched transoms characteristic of the seventeenth century.

The success of the terracotta decoration on de la Rue's house lay in its being less stolid than in Collingham Gardens or Mount Street. The fluting and capitals on the columns and the panels were intricately worked, while the jesters forming

(1) Ernest George and Peto designed Sir Henry Doulton's country house 'Woolpits', Peaslake Road, Ewhurst, Surrey, built from 1885. *British Architect*, 29, 1888, pp.20, 60.

caryatids were animated and light-hearted in their modelling.⁽¹⁾ (Fig.8.9). The design was well received but its exuberant detailing was seen as being rather pointless. The Builder commented that none of the decoration had any meaning or served an architectural function but conceded that 'this is the fashion now, and the authors cater for it better than most of their contemporaries'.⁽²⁾

Even at the moment when interest in terracotta was at its height there was a marked divergence in attitudes as to whether the material should be exploited for the vitality and picturesqueness of which it was so obviously capable or primarily for its practical advantages. Ernest George was obviously preoccupied by its artistic potential; he had a stronger interest in sculpture and painting than in the technical and business side of architecture.⁽³⁾

Two other architects who made extensive use of terracotta within the range of free Renaissance design, R. W. Edis and T. E. Collcutt, exemplify a more utilitarian approach. Colonel Edis adopted this combination of style and material slightly before Collcutt. Edis approved of terracotta because of its fireproof and hygienic qualities; reflecting a declared preference for simplicity, most of his designs were essentially solid in their composition and traditional in their detailing.

(1) Susan Beattie suggests on stylistic grounds that Harry Bates modelled the figures on 52 Cadogan Square.

(2) Builder, 50, 1886, p.847.

(3) In 1887 an exhibition of his watercolours was held and some of his etchings of Venice were published. Builder, 53, 1887, p.903.



Fig. 8.9. Detail of window bay and porch, 52 Cadogan Square, London by E. George and Peto, 1886 (Doulton).

The Constitutional Club in Northumberland Avenue was opened in 1886. Completely faced with buff and reddish brown terracotta, and with decorations modelled by George Frampton, it contributed considerably to the ferment over terracotta in that year.⁽¹⁾ Edis emphasised that most of the problems with terracotta arose from using blocks that were too large. Those facing the Constitutional Club averaged only seven to eight inches in thickness. He also thought that colours should always be natural and derived from local clays. The red used on the ground storey and above, for the window surrounds and the cornice, came from the Pen-y-bont works and the buff terracotta from the Trefynant works at Ruabon, both owned by J. C. Edwards. The most impressive part of the design was the corner tower with an open loggia on the first floor and a turret above. The bold fluted columns, the friezes, garlands and arabesques were modelled by Frampton.⁽²⁾

For his other commissions in London that were executed in terracotta, Edis generally created a facade made up of a grid of pilasters and string courses which surrounded square-headed windows. Decoration was concentrated round the pedimented entrance and in the gables. The Victoria Mansions in Westminster (1882), the Legal and General Life Assurance Society's Offices in Fleet Street (1886), and the Headquarters

(1) A drawing of the Club by T. Raffles Davison was exhibited at the Royal Academy in 1887. Builder, 52, 1887, p. 827.

(2) The decorative terracotta was touched up by a 'staff of special artists'. Brick, Tile and Builders' Gazette, 1, 1886, p. 303.

of the Rifle Volunteer Corps (1888) all follow this arrangement.⁽¹⁾ (Fig.8.10).

A decade later, in 1897, a rather more inspired Renaissance design was used for the Great Central Hotel in Marylebone Road. Edis again collaborated with a sculptor to provide progressive terracotta decoration. John Broad modelled two female figures, representing Light and Day, at Doulton's works, to be set in the spandrels above the main doorway.

Edis stated that there was little purpose in using terracotta in the country, where stone was available at reasonable cost.⁽²⁾ However, he was one of the few architects, along with Waterhouse and George and Peto, to use the material for a country house. The red brick and buff terracotta of Smallwood Manor (1886) look rather incongruous set in the Staffordshire countryside. Edis achieved a far more countrified design for the building accommodating the English section of the Chicago Exhibition held in 1893; the loggia to the half-timbered house was moulded in terracotta with light and flowing decoration. Presumably to save the costs of transshipment, the blocks were made by the North Western

(1) Building News, 42, 1882, p.140; Builder, 50, 1886, pp.778, 792; and Builder, 57, 1889, p.442. For the Legal and General Building J. C. Edwards supplied the red bricks and Burmantofts the yellow terracotta.

(2) British Clayworker, 13, 1904, pp.xii-xiii (xii). One of a useful series of articles, entitled 'Chats with Clayworkers', where architects discussed their attitudes to terracotta.



Fig. 8.10. Entrance doorway, Rifle Volunteer Corps, Duke Street, London, by R. W. Edis, 1888. Source: *Builder*, 57, 1889, p. 442.



Fig. 8.11. Detail of frieze modelled by W. Smith, and window dressings, Palace Theatre, Cambridge Circus, London by T. E. Collcutt, 1890 (Doulton).

Terracotta Company of Chicago.⁽¹⁾

It was T. E. Collcutt who was the only match for Ernest George in working the brick and terracotta Renaissance style in London. Setting up practice in 1873, when the 'Queen Anne' style was being adopted with enthusiasm, he gained a particular concern for architectural colour and the durability of materials. His first use of terracotta appears to have been for a sanitary engineer, George Jennings. Being the developer for a group of houses in Nightingale Lane, Clapham, designed by Collcutt in about 1879, as well as a clayworker, it was natural that Jennings' works near Poole in Dorset supplied the panels of strapwork, masks and cornucipias that were set in the elevation.⁽²⁾ Jennings again made the terracotta for a porch that Collcutt designed in 1886 for a house at East Sheen. It consisted of a wide arch surrounded by panels of arabesque decoration.⁽³⁾

In the same year, 1886, Collcutt designed the first of a series of commercial buildings in London using a pink terracotta supplied by Doulton. No. 181 Oxford Street was followed by no.40 Wigmore Street and the City Bank in Ludgate Hill, both dating to 1890.⁽⁴⁾ All three were closely related

(1) British Clayworker, 3, 1895, p.226.

(2) M. Girouard, Sweetness and Light (Oxford 1977), p.126.

(3) The terracotta was again supplied by Jennings. Builder, 50, 1886, pp.672, 83.

(4) The work of Collcutt and George and Peto can be contrasted in nos.40 and 42-6 Wigmore Street, London. Collcutt used pink terracotta and George and Peto a harsher yellow colour. No.40 is illustrated in Builder, 58, 1890, p.376.

in design, with the main motifs being derived from the Chateaux of the Loire. The bank was probably the most lively and successful composition. Above the wide ground floor arch in grey granite, the terracotta dressings related directly to the variety of windows, the gable and the angle bay. The last was designed in the form of a turret topped by a cupola. While the running mouldings were kept relatively simple, a greater intricacy was given to the sculptured decoration. Both appeared as integral parts of the overall design rather than applied afterthoughts. The beasts on either side of the gable and the other sculptural work were modelled by Walter Smith, and the terracotta made by Doulton.⁽¹⁾

Collcutt collaborated with Smith and Doulton for most of these London buildings. It marked a uniquely close link between an architect, modeller and manufacturer. A teacher at Bradford Technical College, Smith was capable of producing both crisp Renaissance detailing and strongly animated figures. One might expect Collcutt to have delegated much of each design, but the arrangement for the Palace Theatre, of 1890, suggests that he retained control over the minutest details.

The plans of the theatre, located on one side of Cambridge Circus, were determined by a Mr. Holloway who also supervised the construction. Collcutt created the architectural and decorative designs, no doubt being responsible for the sweeping concave facade, flanked by turrets. It was

(1) Builder, 61, 1891, p.148.

reported that he visited Italy to gain inspiration, though the architecture of the Loire appears to have been a stronger influence. Smith then executed the sculptures from Collcutt's designs,⁽¹⁾ which included lithe figures holding the ends of festoons and a variety of birds and grotesques, some to be located above the stage door. The rest of the dressings were entirely plain and the effect was further quietened by the choice of colours, a pale buff terracotta from Doulton and mottled brown brickwork. The Builder commented favourably on the lack of 'columns or pilasters and "classic" gimcracks' in the design.⁽²⁾ (Fig.8.11).

Collcutt retained his enthusiasm for architectural ceramics, and for material supplied by Doulton in particular, into the twentieth century. He used their Carraraware from the late 1890s onwards, adapting his designs to suit glazed and coloured materials.⁽³⁾

Until the last few years of the Victorian period there were surprisingly few other architects responsible for large or interesting buildings in London incorporating terracotta. F. G. Knight took up the free Renaissance style for several buildings in Kensington and Chelsea. A group of shops and apartments on the corner of Sloane Square dating to 1887 used Jennings' terracotta,⁽⁴⁾ while five years later in Queen's

(1) Brick, Tile and Potteries Journal, 6, 1890, p.147.

(2) Builder, 56, 1889, p.389.

(3) See Chapter 9. The Imperial Institute (1887-93) was built in stone but lined with Burmantofts' faience.

(4) Builder, 52, 1887, pp.348, 350-1.

Gate, Knight made a probably unique use of terracotta, to refront a pair of stucco buildings.⁽¹⁾

The London Board Schools made relatively little use of terracotta in comparison with those in the Midlands or Lancashire. The leading architects, J. J. Stevenson and E. R. Robson generally remained guided by 'Queen Anne' precedent. Most of the decoration was in moulded brick but panels containing the date, the initials of the Board or a sunflower were made in terracotta.⁽²⁾ Inside the architects were less bound by historical constraints; for the hall of Blackheath High School, Robson designed a double staircase with balustrading made of terracotta.⁽³⁾

The Free Renaissance in the Provinces

The enthusiasm for terracotta, within the context of Renaissance eclecticism and the new movement in sculpture, developed among a restricted number of architects and sculptors who were just at the stage of gaining strong reputations. They were supported by forward-looking members of the upper and middle classes. Both groups focused on London, and George, Edis and Collcutt executed few houses or commercial

(1) Builder, 62, 1892, pp.122, 124-5.

(2) M. Girouard (1977), op.cit., pp.66-9.

(3) Builder, 38, 1880, pp.417-8, 415.

buildings in other towns or cities.⁽¹⁾ Provincial architects, clients and critics were rarely so progressive in their tastes, thus making it almost impossible for artistic terracotta to make an impact comparable to that achieved in Mayfair or Chelsea.

In Brighton, E. Lainson proved to be a consistent advocate of the use of terracotta within the 'Queen Anne' style, in three buildings dating to around 1881. The Hospital in Dyke Road was the most successful with its asymmetrical plan and large bay windows and oriel.⁽²⁾ Similar though not identical forms were condensed into a corner block for a group of shops, offices and a hotel in King's Road, and into a straight frontage for a shop in Queen's Road. For the last two buildings the terracotta came from the Tamar Terracotta Company, near Plymouth.⁽³⁾

Terracotta first came to be used on large buildings in the north of England at Leeds and at about the middle of the 1880s. The work of an important local firm of architects, Messrs. Chorley and Connon, demonstrates how the artistic ideal that had become associated with terracotta could be distorted into designs characterised mainly by their eccentricity and being overloaded with ornament. Waterhouse's Gothic appears to have been the first source of inspiration, for the design of the Yorkshire Post offices in Albion Street,

(1) The major exception was Collcutt's town hall at Wakefield, built in stone from 1877.

(2) Builder, 41, 1881, pp.112-3, 121.

(3) Builder, 41, 1881, pp.754,8 and pp.632, 638.

commenced in 1886.⁽¹⁾ Two years later it was 'Queen Anne' that was being used for a bank, and manager's house, in Retford, the style being chosen to complement that of the adjacent town hall.⁽²⁾

In 1890 the full range of French Renaissance forms and decoration was worked into the design for the Liberal Club in Albion Street in what appears to be an attempt to rival the scale and opulence of Edis' and Waterhouse's Constitutional and Liberal Clubs in London. Arabesque and rusticated columns, a frieze decorated with festoons, curving gables, broken pediments, were all incorporated into the design but with a remorseless repetition rather than any inventive graduation across the facades.⁽³⁾ Chorley and Cannon achieved a striking design for the Metropole Hotel in King Street (1897-9), by grossly exaggerating the scale of all the forms and details. The bays were supported by brackets made up of around a dozen large blocks of terracotta and extending almost the full height of the ground floor. The door surround and porch were supported by clusters of wide columns, heavily decorated with flutings and arabesques. The inclusion of Baroque cupolas and the complete asymmetry of the composition served to add even more weight to the design. (Fig.8.12).

Chorley and Cannon were consistent in using matching red brick and terracotta. When the Builder credited Wilcock

(1) Builder, 52, 1887, p.282.

(2) Builder, 54, 1888, pp.103, 117.

(3) Builder, 58, 1890, p.396.



Fig. 8.12. Metropole Hotel, King Street, Leeds, by Messrs. Chorley and Cannon, 1897-9 (J. C. Edwards).

and Company of Burmantofts with supplying the material for the Yorkshire Post Offices, J. C. Edwards immediately wrote in correction.⁽¹⁾ In fact, his firm was responsible for the terracotta used in all these buildings, including the Metro-pole Hotel where Leeds Fireclay later held some of their Annual General Meetings. Burmantofts only started making terracotta on a large scale in the 1890s and then mostly in the buff colour that was produced naturally from their fire-clays. Burmantofts did supply simple dressings for some offices designed by W. H. Thorp around 1882, and other Leeds architects such as George Corson also used their material.⁽²⁾ However, it was only with the arcades built around the turn of the century that terracotta made a very significant contribution to the city's street architecture.

Terracotta became widely used in Manchester and on the Lancashire coalfield, but again only from the nineties, when the leading local architects were gaining numerous commissions for schools and other public buildings. The material was generally supplied from Ruabon, Leeds and, in the twentieth century, by the Lancashire firms. St. Bede's College was the initial exception, being built between 1878 and 1884 and using red terracotta from Doulton. The design by Dunn and Hansom was in the manner of a Florentine Palazzo.

(1) Builder, 52, 1887, p. 335.

(2) Corson used stone for his major work, the Municipal Buildings in Claverley Street. An alternative design had been submitted by E. R. Robson with 'Queen Anne' decorations to be executed in terracotta. Builder, 34, 1876, p. 1163.

The Italian style is also apparent in the Chorlton Union Offices dating from 1881. The architects, Messrs. Mangnall and Littlewoods turned to the 'Queen Anne' for their Board Schools in Derby Street, Rochdale of the same year. In both buildings stone was used for the sills and cornices exposed to the weather, and terracotta for the repeated ornament.⁽¹⁾ Four years later Mangnall and Littlewoods used elevations completely faced with terracotta for a large range of shops on the corner of Union Street in Oldham. The rather commonplace details of diapers, wreaths, festoons and vases were supplied by Jabez Thompson of Northwich.⁽²⁾

The practice of Woodhouse and Willoughby became the Lancashire equivalent of Martin and Chamberlain in terms of the numbers of art, technical and board schools that they designed. Their style, however, was in total contrast. The French Renaissance contributed most to their lively composition for the Technical School in Blackburn, built from 1888 with panels portraying the crafts and with the gables surmounted by statues.⁽³⁾ The style of decoration became more Flemish than French in the many commissions that they undertook in the 1890s. Reports show them as working on at least five schools or school offices in 1894. Unlike other architects repeatedly employing terracotta, Woodhouse and Willoughby did not establish a tie with any one manufacturer. Material from Doulton was used for the School Board Offices

(1) Builder, 40, 1881, pp.180, 186 and 41, 1881, pp.266, 272.

(2) Builder, 48, 1885, p.68, 83.

(3) Building News, 54, 1888, p.713.

in Salford, Henry Dennis for the Technical School at Widnes, and more terracotta from Ruabon for schools in Winsford and Stockport.⁽¹⁾ This cannot be explained by manufacturers' reputations for different colours; most of Woodhouse, Willoughby's buildings match red brick and red terracotta. However, when it was decided that tawny terracotta should be used for a hydro and hotel to be erected in Blackpool in 1895, it was specified that the supplier should be either Burman-tofts or Doulton.⁽²⁾

The quantity of building in Lancashire using terracotta reached a peak around 1895, almost a decade later than in London. Furthermore, it was not accompanied by any distinctiveness in expression by the local architects; that only emerged around the turn of the century with the combination of heavy Baroque forms and faintly Art Nouveau detailing. Briggs and Wolstenhome were another Lancashire practice that used terracotta widely. The New Baptist Chapel in their home town, Blackburn, dating from 1895, was essentially Romanesque,⁽³⁾ while the Builder could only describe the Gamble Institute that they designed in St. Helens (1895) as being 'in the Victorian style'.⁽⁴⁾ Spalding and Cross appear to have first used terracotta in 1889 for a group of labourers' dwellings in Ancoats but it was in 1895 that construction commenced of their richly decorated Institute of Science and

(1) Builder, 67, 1894, p 45, p.120 and p 85.

(2) Building News, 68, 1895, p.408.

(3) Building News, 68, 1895, p.583.

(4) Builder, 67, 1894, p.45.

Technology in the centre of Manchester.⁽¹⁾

In the same year and also in Manchester, J. W. Beaumont won the competition for the Whitworth Gallery. His design, to be executed in red terracotta, was chosen by Alfred Waterhouse. The influence of a London architect, employed as an assessor, is also probable in the competition of 1896 for the Central Higher Grade School in Bolton. A frenchified Queen Anne design from R. Knill Freeman was placed first by E. R. Robson.⁽²⁾ The material for these two buildings was supplied by the two leading Ruabon firms; J. C. Edwards and Henry Dennis.

In Birmingham, the striking originality achieved through the free Gothic use of terracotta became contrasted by a series of public buildings drawing inspiration and motifs from the Renaissance. Probably the most successful designs were these by Essex, Nicol and Goodman, and by Newton and Cheatle, dating to the last years of the century,⁽³⁾ however, the principles of the style and of the incorporation of decorative sculpture had been established in the 1880s.

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- (1) Builder, 64, 1893, p 383. Spalding and Cross used a rather more refined 'Queen Anne' style in their design which was selected for Camberwell Green Baths. Builder 59, 1890, p.462.
- (2) Builder, 70, 1896, pp 212-3. R. Knill Freeman used terracotta elsewhere, both in Lancashire and London.
- (3) Considered in Chapter 9.

In 1886 the Corporation Market Buildings were completed in Smithfield to designs by Messrs. Osborn and Reading. Described as being 'Stuart' in style, sculptured figures representing Flora and Pomona filled the spandrels to the main archway. They were the work of John Roddis of Aston.⁽¹⁾ In the early nineties, two Renaissance style buildings, but with plenty of original detailing, were erected at Aston. The Public Baths, built in 1891 to designs by W. Augustus Davies, incorporated reliefs of Neptune set in the pediments.⁽²⁾ Three years later and also in Victoria Road, Mansell and Mansell included two decorative friezes in their design for the Police Courts.⁽³⁾

Terracotta was being taken up widely across the country by the middle of the nineties. When a building, situated outside London, Birmingham, Leeds and Lancashire or Cheshire, showed some distinction, it usually represented one of the architects already discussed working away from his home town. Alternatively, it was the work of an architect who was making his first experiments with architectural ceramics and who was to use the material extensively at about the turn of the century; examples are G. J. Skipper's Grand Hotel in Cromer dating to 1891 and C. Trubshaw's Leicester Midland Station of the following year.⁽⁴⁾

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- (1) Builder, 50, 1886, p 574. In the same year a rather more progressive design for shops and offices in Corporation Street by W. Read was published. The building was to be entirely faced with buff terracotta and incorporated much curving detail. Builder, 51, 1886, p.713.
- (2) Builder, 61, 1891, pp.264-5. Demolished.
- (3) Builder, 67, 1894, p.227. Demolished.
- (4) The work of Skipper and Trubshaw is covered in Chapter 9.

The list of buildings supplied by the manufacturers and the surviving physical evidence suggest a far wider geographical distribution of terracotta than do the reports in the building press. This partly reflects the bias of the Builder and Building News to covering London architects and their commissions, and of the British Architect to the north of England. However, it has to be admitted that the employment of terracotta, outside the areas where its use generated something of a school or a style, did little to exploit the artistic capabilities of the material and often resulted in particularly uninspired and insensitive architecture.

Catalogued Terracotta Ornament

It is with the more modest buildings designed by minor architects or builders that it becomes necessary to consider whether the detailed design of the terracotta was original, or chosen from the stock held by the manufacturers. Renaissance forms such as pilasters, entablatures and balustrades; and the decorative motifs of festoons, strapwork and acanthus scrolls, were arranged to form the majority of such facades. There were even near standard designs of sculptural decoration, of which one of the most widely used was a lion in an upright seated position, with a sweeping ruff. All the versions were closely based on the lion séjant designed by Alfred Stevens in 1852 for the railings of the British Museum. Since the draughting and modelling of decorative details was almost as expensive as all the other stages of terracotta manufacture combined, it might be expected that forms offered in catalogues would have been used wherever possible.

However, such a practice ran completely against the ethics of Victorian architectural design which was seen as a continuum from the development of the ground-plan through to the composition of the facade and of the minutest decorative detail. Speculative building was building rather than architecture largely because ornament was lacking or bought in; in contrast all the major architects gave obsessive attention to the details of their designs. Waterhouse, for example, personally inked in the pencil outlines that had been prepared for the window tracery, water spouts and other forms in his buildings, so giving them a stamp of individuality equivalent to that displayed in the overall style or layout of his commissions.⁽¹⁾ Similarly, he would not have risked his reputation as an inventive designer by re-using detailed forms from one building to the next, even amongst the various branches of the Prudential Company. There were even stronger practical factors dictating against the use of stock designs for large buildings. No firm could afford to make and store sufficient blocks to supply, on demand, the hundreds or even thousands of a particular shape that might be required to make up the strings or window surrounds of a public building. The additional expenses incurred by the client of having shrinkagedrawings and models and moulds made was greatest for complex ornamental features, but it was on these that architects were most anxious to impress their individuality. In the opinions of the industry, the most

(1) A point made by Colin Cunningham having studied Waterhouse's sketches and the drawings in the RIBA collection.

significant influence was that the precise size of brick was so variable across the country that terracotta always had to be scaled to match in with the height of the relevant number of courses.

Company catalogues became one of the major advertising mediums for Victorian manufacturers and those for art products often became designed more for prestige than practical use. The catalogues of ornaments published by Coade and Blashfield had a direct purpose, advertising vases and statues to their upper-class patrons. Of a later generation, the booklets issued by Gibbs and Canning were modest in form but also listed goods for sale from stock. Only simple and essentially superficial architectural details were presented in their publication dating to 1869.⁽¹⁾ Their illustrated price list of 1900 covers fifty pages and a range of products from glazed bricks to pipes; only five pages were devoted to architectural terracotta.⁽²⁾ Similarly Doulton's catalogues illustrated and priced capitals, trusses and other components, none of which attempted to emulate the complexity and artistry of the forms produced to architects' designs.⁽³⁾ (Fig.8.13).

Gibbs and Canning were the largest manufacturer for much of this period and could obviously have held a range of terracotta in stock. In contrast, the relatively small firm of George Jennings produced, in 1874, a catalogue of 140

(1) Gibbs and Canning, Manufacturers of terracotta for architectural and horticultural purposes (1 Jan.1869).

(2) Gibbs and Canning Ltd., Illustrated price list, no.51, (February 1900).

(3) Doulton & Company, Catalogue of terracotta (March 1883).



Illustration removed for copyright restrictions

Fig. 8.13. Terracotta trusses by Doulton. Source: Catalogue, March 1883.

pages, with the majority illustrating terracotta. Though the plates illustrate architectural components with prices, the catalogue was intended more to promote the firm's terracotta in general rather than any specific designs. Most of the illustrations are of forms made for houses built by Jennings himself. Here one does find the same designs of bay and round arched window being re-used in Clapham, Putney and a terrace in Southsea. The same cornice design is repeated in groups of houses and shops in Nightingale Lane and Bedford Lane in Clapham. But the blocks formed large sections of doorways and windows so would have been too inflexible for general use by speculative builders. Although the pieces were numbered and priced, it was the moulds rather than the finished blocks that were kept in stock. The catalogue was not designed to persuade clients to conform to the use of stock designs. String courses were illustrated but were also offered to 'be produced in any variety of design, without extra charge, where 50 feet are required', and similarly for balusters 'where twenty or more of one pattern are required'. Panels made for the group of houses designed by Collcutt were illustrated not because they were for sale but to show their 'very superior character'.⁽¹⁾

Clearly Collcutt was not producing stock designs for Jennings to advertise, but several manufacturers were anxious to imply that major architects were designing for them. Whereas with some decorative materials such links were

(1) The South Western Pottery Catalogue (1874). Though dated, the copy made available by Leslie Hayward must be a revision as Collcutt's houses in Nightingale Lane were only built in 1879.

entirely genuine, as in the case of the tile industry or iron foundries, with terracotta most of the resulting designs appear unlikely to have been made once, let alone held in stock.⁽¹⁾

The windows designed by Maurice B. Adams and illustrated in the Burmantofts catalogue of 1882 were given heavy decoration, mostly in the form of sunflowers.⁽²⁾ (Fig.8.14). They were unpriced and do not appear to have ever been executed. A year later some simpler designs for panels and window-heads were credited to him, when illustrated in the journal for which he was the editor, the Building News. They were referred to as 'being in hand by the Hathern Station Brick Company' and 'adapted for a variety of re-arrangements to meet varied cases'.⁽³⁾ The explanation for these almost hypothetical designs probably lies in the fact that Burmantofts and Hathern were both endeavouring to add architectural terracotta to their range of products in the early eighties. Adams had produced a design for new offices in Burmantofts which is unlikely to have been executed; he also held an obvious predilection for red brickwork and the free Renaissance style during this period, so would have been willing

(1) In the mid-Victorian period major tile firms such as Maw or ironfounders such as the Coalbrookdale Company paid freelance architects or artists, for example G. E. Street or Alfred Stevens, to provide catalogued designs. By the end of the century most were produced by in-house artists.

(2) Wilcock and Company, Burmantofts, Catalogue of terracotta and architectural faience (1882).

(3) Building News, 44, 1883, p 288.



Illustration removed for copyright restrictions

Fig. 8.14. Windows designed by M. B. Adams, Wilcock and Company, Burmantofts. Source: Catalogue of terracotta and architectural faience (1882).

to assist in promoting the revival of terracotta.⁽¹⁾

J. C. Edwards seems to have been most anxious to associate architects with the design and use of stock terracotta. They publicised designs for chimneys produced by Douglas and Fordham⁽²⁾ and also published a book of 'Mr. Edwards' designs submitted in competition'. It comprised the best schemes drawn up by architects to illustrate the architectural capability of terracotta. W. W. Baldwin in his detached villa aimed to 'suggest the variety of effect obtainable by the use of such mouldings and decorative blocks, as might, from their general applicability to various positions be always kept in stock'. Whole facades including even the gutters were made of terracotta. T. Raffles Davidson combined very high relief details with the use of red, buff and blue blocks. Such grandiose and occasionally bizarre conceptions, that were encouraged by the manufacturers, must have produced an increasing aversion to the material amongst the mainstream of the architectural profession.⁽³⁾

The proper catalogues produced by J. C. Edwards towards the end of the century were more practical. An original format appears to have been devised in 1882 and plates added or replaced in subsequent editions, with a new price list being bound to the front. Moulded bricks and

(1) M. B. Adams was responsible for some of the buildings in Bedford Park, the archetypal 'Queen Anne' suburb. He also designed furniture. M. Girouard (1977) op.cit. pp.59, 131, 165-6.

(2) British Architect, 43, 1895, p.94.

(3) Building News, 46, 1884, pp.272-3.

classical keystones became supplemented by panels of sun-flowers and then by various Art Nouveau patterns.⁽¹⁾ One of the neighbouring firms, the Ruabon Brick and Terracotta Company, produced the most lavish catalogue of all. Their aim was to 'design artistic patterns which are applicable to modern construction and modern taste' and to demonstrate how they could be incorporated in a building. (Fig.8.15). Some of the designs, such as those forming gargoyles and eyebrow windows, were brilliantly drawn with sweeping forms and angular edges. The statement that 'all patterns are obtainable to suit various heights of brick courses' suggests that not even models or moulds had been prepared.⁽²⁾

It was the modest catalogues, listing and illustrating decorated bricks and small pieces of terracotta, that were most widely used. Burmantofts, Stanley, Gunton and Candy were some of the firms that presented comparable ranges of decorative and ventilation panels, keystones, copings, balustrading and ornamental chimney pots. James Brown titled his catalogue 'Brick ornament and its application'. Most of the forms were made up of pieces only six or nine inches square, which would have permitted their manufacture in a

(1) J. C. Edwards, Brick, tiles and terracotta, catalogue of patterns (c.1903). An earlier edition has fewer plates and more directly classical or Gothic designs. The designs were praised for not being too naturalistic, otherwise, when repeated, the effect would be too mechanical and appear as a poor substitute for carving. Builder, 51, 1886, p 299.

(2) An architect, Alfred Burr of London, assisted in the preparation of the catalogue. Ruabon Brick and Terracotta Company (c.1890).



Illustration removed for copyright restrictions

Fig. 8.15. Suggested arrangement of terracotta details by Ruabon Brick and Terracotta Company. Source: Catalogue, 1890s.

press with a metal die.⁽¹⁾

It was bricks pressed or extruded by machine with an ornamental face or section that were supplied repeatedly in a restricted number of designs. The metal dies were too expensive to be made for specific orders. The resulting element of standardisation may extend further than the output of one manufacturer. The catalogues of two Lancashire firms illustrate identical designs of ornamental bricks for strings and cornices. It is possible that they were pressing them with machines supplied by the same manufacturer, who could also have supplied the necessary dies.⁽²⁾

There was a strong demarcation in use between decorative bricks and terracotta. Few important architects incorporated bricks moulded in anything but the simplest of profiles. In contrast, terracotta, apart from small details, was not used widely where a builder was responsible for the design. In 1876 it was stated that terracotta had found 'but little favour with the ordinary housebuilder' due to the extra expense that it involved and the uncertainty of delivery.⁽³⁾ For small schemes with limited decorative work, the material seems to have offered little economy over a natural or artificial stone.

(1) George Sherrin, another London architect, drew the illustrations and judging by the statement that he would advise on special designs, was probably responsible for those in the catalogue. James Brown, *Brick ornament and its application* (c.1890).

(2) Accrington Brick and Tile Company and Huncoat Plastic Brick and Terracotta Company (c.1900).

(3) *Builder*, 34, 1876, pp 516-8 (p.517).

The market for stock terracotta designed for use in home construction was essentially a local one. Away from the areas dominated by the major terracotta works the small details used on villas and artisans' terraces were most likely to be supplied in the same contract as for the ordinary bricks, and by a local brickyard. It was largely in the towns near to terracotta firms that stock constructional terracotta was used in domestic architecture. Numerous terraces in Ruabon and Trefynant used the local clay products for every possible detail, and in Ruabon Road, Wrexham there are villas with bays and porches made up of terracotta. Near the site of Gibbs and Cannings works there are terraces in Bamford Street dating to 1877, and semi-detached houses in Glascote Road, Tamworth of 1905, with door and window surrounds in the company's characteristic buff material.

Even in such modest housing, where the dressings are in the form of constructional hollow blocks it is possible that the blocks were specially designed and manufactured. Great Yarmouth has several rows of terraces with dressings of terracotta. The relevant set of drawings at Hathern shows simple jambs, lintels and keystones being specially draughted for approval by the architects.⁽¹⁾ (Fig.8.16).

The market for stock terracotta, small during the peak period around 1890, was declining rapidly by the turn of the century. The habit of the speculative builder of giving modest houses 'a sprinkling of terracotta vases' to

(1) The scope of these drawings is covered in Chapter 10.



Illustration removed for copyright restrictions

Fig. 8.16. Inch scale drawing for terracotta window dressings at Great Yarmouth, prepared by Hathern, undated. Source: Hathernware Ceramics Ltd.

help them sell had already been criticised in 1885.⁽¹⁾ In the next decade manufacturers were finding their stocks of such details a financial liability. After 1895 the value of Hathern's stock never exceeded £471, and consisted for several years of the same mouldings and pier caps and the surplus from major contracts. By the turn of the century even ornamental chimney-pots had dropped out of demand.⁽²⁾

It is valid to conclude that while only restricted use was made of catalogued designs of terracotta, many architects were content to delegate the responsibility for the design of the decorative detailing on their buildings to a manufacturer. Modellers and draughtsmen were well experienced in working up the range of classical forms. Meanwhile the loose juxtaposition of such forms in building facades was positively encouraged by the taste for stylistic eclecticism prevalent in the last two decades of the nineteenth century.

It mattered little to many architects and clients that the design of terracotta in many buildings remained imitative of stonework. They appear to have been satisfied that it looked durable and up to date, with its smooth surface and bright buff or red colour. It has been seen that several architects exploited the strident appearance and decorative potential of terracotta to achieve a dramatic facade in the Renaissance style, their work being exemplified by the premises lining Mount Street in Mayfair and by a

(1) Builder, 48, 1885, p.896.

(2) Hathern, Annual returns, 1895-1910.

series of commercial buildings in Leeds. However, it was the few architects of high artistic ability, who were advocates rather than opponents of terracotta, who achieved more sophisticated results. More than with the Gothic use of red terracotta, there appears to have been particular advantage in working in the Renaissance style with one particular manufacturer. George and Collcutt collaborated with Doulton to produce lively modelling and animated sculptural forms in their commercial and domestic work. As in the work of Waterhouse and Paley and Austin, every moulding and detail was precisely related in its scale and intricacy to its place in the overall composition of the building; unlike most of the Gothic work, it could also achieve an entertaining and witty inventiveness.

Terracotta certainly did not achieve a monopoly over the Renaissance-inspired architecture of the late Victorian period. Similarly the ideals of naturalism expressed in the use of terracotta in architectural sculpture soon emerged in other materials. In fact, terracotta became identified with the less refined and more ephemeral expressions of the Renaissance style. The material soon had to bow to more formal tastes in architectural design; by the late 1980s the interest in the Baroque and French classicism had largely supplanted the ideals of achieving a union of the applied arts and creating a new architecture out of an inspired eclecticism of styles and motifs.

CHAPTER NINE

ARCHITECTURAL COLOUR AND THE DEVELOPMENT OF FAIENCE

The attributes and roles accorded to architectural ceramics in the Edwardian and inter-war periods can largely be explained by considering the reaction to the way that terracotta was used in the nineteenth century and the contemporary development of faience from a lining for interiors into an external facing material. In the context of the broader developments in building design, architectural ceramics took on a different and somewhat reduced significance. When associated with late Victorian eclecticism, every major use of terracotta had been judged by whether the aesthetic and practical qualities ascribed to the material had been fulfilled or wasted. In the twentieth century only the largely untried cause of architectural colour was to rouse comparable levels of interest.

Generally both the industry and its architecture came to be regarded somewhat askance by a large sector of the architectural profession and its critics. They were condemnatory of the work of Waterhouse and Colcutt, could see little of worth in the exuberant facades made for theatres and public houses and dismissed the fronts of chain-stores and cinemas as hardly qualifying as architecture at all. However it will be seen that more commercially orientated architects and organisations came to appreciate the richness of colouring possible with faience, the adaptability of the material to modern styles and its practicality as a facing to steel-framed or concrete construction.

The fact that new groups of manufacturers, situated in different parts of the country, rose to dominate the market led to altered patterns of geographical distribution for the use of architectural ceramics. Because the clay bodies used in the twentieth century became more standardised while the question of colour became more complex and the demand more concentrated on commercial building types, the pattern of links between manufacturers, architects and clients will also be seen to have changed fundamentally, and with marked architectural results.

Terracotta essentially lapsed into insignificance together with the ideals with which it had become so closely identified. The enthusiasm for working original details within picturesque overall compositions was supplanted by a desire for more correct and urbane design. From using non-archaeological detailing and narrative sculpture, there was a reversion to the system of the classical orders or to the precedent of the English vernacular. The growing nationalism from the nineties promoted Wren and Gibbs rather than the early Renaissance of the Low Countries or France, and Portland stone as opposed to terracotta.⁽¹⁾

The building most symbolic of these changing attitudes was the south block for the completion of the Victoria and Albert Museum. In Webb and Bell's competition design, awarded first prize by Alfred Waterhouse in 1891, it had been planned

(1) This move towards the grand and formal in architecture is considered in G. Stamp, 'London 1900'. *Architectural Design*, 5-6, 1978, pp. 305-21 (pp. 306-7).

to present a final culmination in the use of terracotta on the Museum buildings. By the time that funds were found for the project to commence, in 1899, dressings of Portland stone had been substituted.

However contemporary critics were less vociferous in questioning the value of architectural ceramics in principle, than in blaming the problems of warpage and delays in delivery, and the inappropriateness of most design for its falling reputation. There was a consensus that much Victorian terracotta had been mis-used, but T. Locke Worthington considered that the best works by Webb, George and Collcutt were sufficient developments 'to fortell what glories we may expect from it in the future'.⁽¹⁾ However, P.G. Konody was less sympathetic, in a letter titled 'The Bane of modern Birmingham' he described Webb and Bell's Assize Courts as a 'mess of ineffective ornament' and the Municipal Technical School by Essex, Nicol and Goodman as 'an absurd jumble of incompatible styles'.⁽²⁾

Such condemnations had first been heard in a paper given by Leonard Stokes to the RIBA in 1893. He subsequently admitted surprise at the offence that it caused but re-emphasised that mechanical repetition should be avoided and that detail should be restricted to low relief design.⁽³⁾ As late Victorian architecture passed out of favour so did the use of terracotta;

(1) British Clayworker, 3, 1894, pp. xxiii-xxvii (p. xxiii).

(2) Letter originally published in Daily Mail, 3 November 1908. Reprinted British Clayworker, 17, 1908, pp. 260-1.

(3) British Clayworker, 11, 1902, pp. x-xi.

Arts and Crafts architects disliked its hardness of texture while Charles Reilly complained of its 'uneven puffiness of surface and line'.⁽¹⁾ It was not long before red pressed brick and red terracotta were being regarded as the exemplification of Victorian bad taste and insensitivity.

Despite widespread derision of what was referred to as the 'raw meat' era,⁽²⁾ the promotion of colour in architecture was the one continuing cause in which faience was credited with a central role. The disillusionment with red and buff terracotta left glazed surfaces as the main hope for bringing bright colours into architecture. From the 1890s faience could be made sufficiently durable for external use, and with such a wide variety of glazes, that polychromatic patterns could be considered as an alternative means of decoration to moulded relief.

With no northern European precedent to draw on, many of the suggestions were vague and impractical. They are exemplified by the repeated writings and lectures of Halsey Ricardo. Comparing Persian, Italian and Spanish architecture with the drabness of the streets of British towns and cities he advocated the widespread use of glazed bricks, tiles and faience. Coloured in broad masses they would replace the need for traditional stylistic detail. Ricardo's attitudes had evolved through an appreciation of Butterfield's use of structural polychromy, the study of Italian architecture and

(1) C.H. Reilly, Some architectural problems of today (University Press of Liverpool. 1924), p. 75.

(2) Architects' Journal, 72, 1932, pp. 718-722 (p. 722).

the manufacturing of tiles and vases in collaboration with William de Morgan.⁽¹⁾

Ricardo designed some offices and houses using salt-glazed bricks, but the only full realisation of his personal vision was to be the house for Ernest Debenham in Addison Road, North Kensington, built 1905-7. It was faced largely with glazed brick which was a blue-grey colour in the basement and a rich green and then a turquoise blue in the floors above. The arcading and the simplified classical forms that projected outwards were made by Doulton in pink-cream Carraraware.⁽²⁾ It was one of Doulton's workforce, A.E. Pearce, who won the RIBA Colour Competition of 1922, held to promote the use of permanent colour schemes, and which Ricardo helped to assess.⁽³⁾

Beresford Pite supported Ricardo's ideas and suggested that cement or concrete should be faced in coloured faience. However he only used the material himself for interior decoration.⁽⁴⁾ Most of the other contemporary articles on the subject were in the form of prize winning essays from

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- (1) Ricardo appears to have first written on architectural colour in 1896 and in 1902 presented a prize winning lecture to the Society of Arts. *British Clayworker*, 10, 1902, pp. 431-437. He was still repeating the same arguments in the 1920s.
- (2) *Architectural Review*, 21, 1907, pp. 159, 173.
- (3) Other entries are also illustrated in *British Clayworker*, 31, 1922, pp. 92-5.
- (4) *British Clayworker* 29, 1921, p. xlii. In 1908 he gave the London, Edinburgh and Glasgow Assurance Building in Euston Square a lining of Parian ware.

architecture students. It was two professors at Liverpool University, S.D. Adshead and Charles Reilly who independently explained that brightly coloured facades were inappropriate under grey skies and that they had to extend the length of a street or stand on their own if the effect was not to be crude and tawdry.⁽¹⁾ With some notable exceptions polychromatic schemes became restricted to a simple banding of colours, or concentrated in the decoration of entrances, gables and towers.

Faience and Tiles in Victorian Interiors

The widespread use of faience after the turn of the century marked the combining of two traditions of ceramic manufacture and architecture, those of architectural terracotta, and floor and wall interior tiling. The glazed and moulded forms of faience had first been developed as an adjunct to wall tiling, in making up schemes of interior decoration for public buildings. A brief examination of the relevant tileworks and the range of their production in the late Victorian period will explain the forms and colours that they came to make in architectural faience. In the late 1860s, when majolica faience was used in the decoration of the Refreshment Room in the Victoria and Albert Museum, the major tile manufacturers were seeking to extend their production beyond encaustic and tessellated floor tiles.⁽²⁾ Though Minton

(1) British Clayworker, 18, 1910, p. lxxxix and C.H. Reilly (1924) op. cit., p. 73.

(2) A combination of tiles and faience was also used for the Ceramic Gallery and the Ceramic Staircase. The latter was only completed in 1871. See Chapter 2.

Hollins was responsible for most of the work at South Kensington, Maw was probably the first company to make majolica tiles for architectural purposes. Their tiles had been used in a fireplace displayed at the 1862 Exhibition and by the end of the decade Maw was manufacturing an 'enamelled terracotta' fireplace, in blocks which were moulded in high relief from plaster moulds and then hand-glazed. The firm's pattern book shows that columns, bosses and panels were also available.⁽¹⁾ Doulton was making faience by 1873, also predominantly in the form of fireplaces. Ornamental relief tiles became mass-produced in the seventies, using the process for pressing clay dust with metal dies that had been patented by Prosser in 1840. The use of relief tiles and painted tile panels to line wall surfaces created an associated demand for faience, to form the necessary frames, corner mouldings and dados. Firms found it both necessary and prestigious to be able to supply complete interior schemes, which came to incorporate larger moulded cornices, capitals, arches and other architectural elements.⁽²⁾ Though the shapes of the largest of these blocks were comparable to those made in terracotta, it is evident from the design books compiled by Maw and Carter that the origination and usage of faience designs for interiors differed fundamentally from that of unglazed external work.

(1) Maw, A few selections of Maw and Co's designs of geometrical patent masaic, encaustic and plain tiles, pavements, and majolica etc. (undated).

(2) Suggestions for decoration were incorporated in their catalogues, Maw, Tiling by Maw and Company Limited. (Colonial edition) (undated).

There was a major difference between the tile manufacturers and the brick and terracotta firms, in that tile production mainly consisted of catalogued designs which were chosen and arranged into schemes by architects, builders or merchants. As well as holding design books containing the original designs for tiles, the firms built up sketch books for stock designs for faience. From 1887 Maw developed an extensive range of designs for panels, columns and capitals and more mundane plinths, corner sections and keystones. Some were referenced to the London firm of tile decorators, W.B. Simpson who were sent ware in biscuit-fired form for decorating.⁽¹⁾

A later volume contains photographs of modelled work, largely of panels with animal, grotesque and vegetation patterns. Only one is referred to as being held in stock but both Maw and their local rivals Craven Dunnill stored their range of models and moulds, indexed and available for re-use.⁽²⁾ Many of the Renaissance-inspired designs offered by Maw were the work of the chief designer from 1887 to 1907, Charles Henry Temple. He can be seen to have derived many of his designs from books on English, French and Italian Renaissance architecture.⁽³⁾ (Fig 9.1).

(1) Maw, Sketch book of moulds and mouldings, 1887.

(2) Maw, Details of modelled work in faience and tiles, (Undated). A large range of plaster models and moulds from Maw's and Craven Dunnill's works have been saved and are stored in the Jackfield Tile Workshop, part of the Ironbridge Gorge Museum.

(3) Maw, Sketchbooks by C.H. Temple, Vol. 4, c. 1902



Illustration removed for copyright restrictions

Fig. 9.1. Drawing of Jacobean frieze and pilaster in St. John's College, Oxford. Source: Sketchbook by C. Temple, Vol. 4., 1902, Shrewsbury Museums.

Carter of Poole are credited with making glazed tiles for hearths and walls in 1878, but it appears to have been only after the Architectural Pottery was bought in 1895 that they manufactured faience and became able to undertake large schemes of decorative ceramics.⁽¹⁾ Two volumes of designs, entitled 'Standard sections and patterns' suggest that a distinction emerged between large and small forms of faience. Like the relief tiles, small mouldings of faience, whether plain or with loosely Renaissance or Art Nouveau patterns, were pressed with cast-iron dies. They were stock designs, either available on demand or made to order. (Fig 9.2). The larger plaques, portraying classical figures, plants or Poole dolphins, were pressed in plaster moulds. It is mostly likely that these were made initially for a specific contract and then stored in case they could be used for supplementary or totally new orders.⁽²⁾

It was two other manufacturers, Wilcock and Company at Burmantofts, and Doulton who were the first to supply such a combination of stock faience mouldings and specially designed capitals, arches and other architectural forms for large commercial interiors. As with terracotta, the early 1880s mark the major turning point. In 1880, faience made by Burmantofts in a 'great variety of colours', was reviewed by the Builder.⁽³⁾

(1) L. Jewitt, *The ceramic art of Great Britain*, 1633 (P.P.B. Minet, Chicheley, revised new edition 1971), pp. 237-8.

(2) The first volume commences at design number 700 so there was probably a preceding series of drawings. Carter and Company, *Standard sections and patterns*, 2 Vols, c. 1900 - c. 1935

(3) A note of concern was added stating that 'we are bound not to admire the taste displayed in all the specimens sent'. *Builder*, 39, 1880, p. 303.



Illustration removed for copyright restrictions

Fig. 9.2. Festoon and picture frame designs to be made in faience.
Source : Carter, *Standard sections and patterns*, Vol. 2,
c.1910, Pilkington Tiles.

An angle fireplace and mantelpiece of Burmantofts' faience was designed by Maurice B. Adams and illustrated in Edis' 'The decoration and furniture of town houses', published in 1881. The fireplace was composed of large blocks, decorated with festoons and balusters, and topped by a scroll pediment. The wall tiling to either side was arranged into an overall plant pattern with a frieze of festoons and sunflowers. The colour contrasts were subtle, two tones of brown forming the skirting, and green and yellow tiles being used for the dado and frieze above.⁽¹⁾

It was this mixture of intricately patterned relief tiling and strongly moulded faience blocks, glazed with a sophisticated variety of colours, that came to characterise Burmantofts' early major commissions. Tiles and faience found their first commercial application in lining parts of the grandiose restaurants that had become established in London. Here contrived opulence needed to be combined with the durability to withstand the thousand or more diners who could be served at a sitting. In about 1883 Burmantofts supplied the faience for a grill installed in the First Avenue Hotel in Holborn. The grill was designed by F.J. & H. Francis, in a form resembling a Jacobean tomb, with panels, pilaster and cornices which were covered in Renaissance decoration. The main colours were a rich brown and a purple, described as amethyst. Yellow panels formed a background for hand-painted decoration.⁽²⁾ In the same year tiling and faience for the

(1) R.W. Edis, The decoration and furniture of town houses (Kegan Paul, London 1881), p. 56.

(2) Building News, 44, 1883, pp. 836, 845.

Vertibule and passage of the Holborn Restaurant was also manufactured by Burmantofts.⁽¹⁾ The Holborn expanded to have fifteen dining rooms and from 1883 Doulton supplied a grill with detached columns, broken prediments and panels over-loaded with decoration.⁽²⁾

Little restraint was shown in such interiors, it obviously being considered acceptable to incorporate forms more associated with furniture and plasterwork, than with architecture and ceramics. Moorish, Persian and Indian motifs were in vogue and could be easily executed in low relief and abstract patterns. The styles of decoration recommended by Owen Jones received their most lavish use in the Indian Apartments of the Hotel Cecil, executed by Doulton in 1896 to designs by W.P. Rix.⁽³⁾

More controlled arrangements and effects of colour were achieved by Alfred Waterhouse where he used tiles and faience, frequently for the main rooms of buildings with brick and terracotta exteriors. As with the facades, he was anxious to avoid colour contrasts that might be too strident.

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- (1) F. J. and J. Francis had been the original architects of the Holborn Restaurant but the other practice undertaking numerous restaurant commissions, Messrs Archer and Green, undertook these developments in the eighties. Builder, 45, 1883, p. 569. Demolished.
- (2) P. Atterbury and L. Irvine, The Doulton story (Royal Doulton Tableware, Stoke on Trent 1979), p. 92. Demolished.
- (3) P. Atterbury and L. Irvine, (1979) op.cit., pp. 91-2. Demolished.

He declared that his own tastes were for combinations of pearly greys and drabs, red or green, with very small points of delicate turquoise blue.⁽¹⁾

Burmantofts proved best able to produce these pastel-coloured glazes and gained a close association with Waterhouse's work from the middle of the eighties. The first of his commissions that they supplied appears to have been the National Liberal Club, in Whitehall Place, dating from 1884, with ceramic schemes being used to decorate the dining, grill and billiard rooms. Just as Waterhouse's use of terracotta tended to be closely integrated with plain and moulded brickwork so repeated tile patterns formed the basis of his interior schemes. The walls of the billiard room were completely covered with tiles, mostly of a simple geometric pattern and set in moulded borders. The faces of the Corinthian columns were set with a diamond patterning of tiles. The floor-to-ceiling fireplace was largely made up of faience moulded into pilasters, consoles and a cornice supported by an arcade. The forms were given surfaces as smooth and curved as if they were being used for an external elevation. A comparable arrangement was adopted for the columns and window arches in the dining room. The grill room was also arcaded, with an almost plain grill being located on the opposite side of the room to the fireplace.

The colours used reflect both Waterhouse's predilections and the technical restrictions as to suitable glazes. In the grill room, the piers and architraves were coloured

(1) Lecture to RIBA entitled 'Colour in architectural design'. Reported in Brick, Tile and Potteries Journal, 6, 1891, p. 233.

yellow and golden-brown with bases of a sage green. The wall dado was filled with rich brown tiles while, above, plain and decorated ivory-white tiles were separated by bands of three inch pale blue tiles. The grill was made in rich brown faience.⁽¹⁾

Coffee-brown columns were most characteristic of Burmantofts' early schemes for Waterhouse. They predominated in the hall and staircase of the Victoria building at Liverpool (1887-91), (Fig 9.3), and in the Yorkshire College (1877-86, 1894) and William Brown's Bank (1898) in Leeds.⁽²⁾ For the hall columns at Liverpool the glaze was allowed to run down each block to create a banded effect.

By 1890 Burmantofts had supplied enough faience to justify a portfolio illustrating the schemes undertaken. W.M.J. Neatby undertook the layout design, just before he left for Doulton. The tiles were drawn by T. Raffles Davidson and the mouldings by Alfred Waterhouse. There was no attempt to suggest any specific colours, it being considered preferable that architects should colourwash their drawings and supply specimens of the actual colour proposed.⁽³⁾

(1) Painted surfaces, a marble fireplace and floor mosaics enhanced the effect. The exterior of the Liberal Club was faced in stone. *British Architect*, 30-31, 1888, p. 21.

(2) D. Linstrum, *West Yorkshire, architects and architecture* (Lund Humphries, London 1978), p. 22.

(3) Alfred Waterhouse and J. MacVicar Anderson were credited with making the most extensive use of Burmantofts' faience. *Leeds Fireclay, The Burmantofts' folio of faience* (1890).

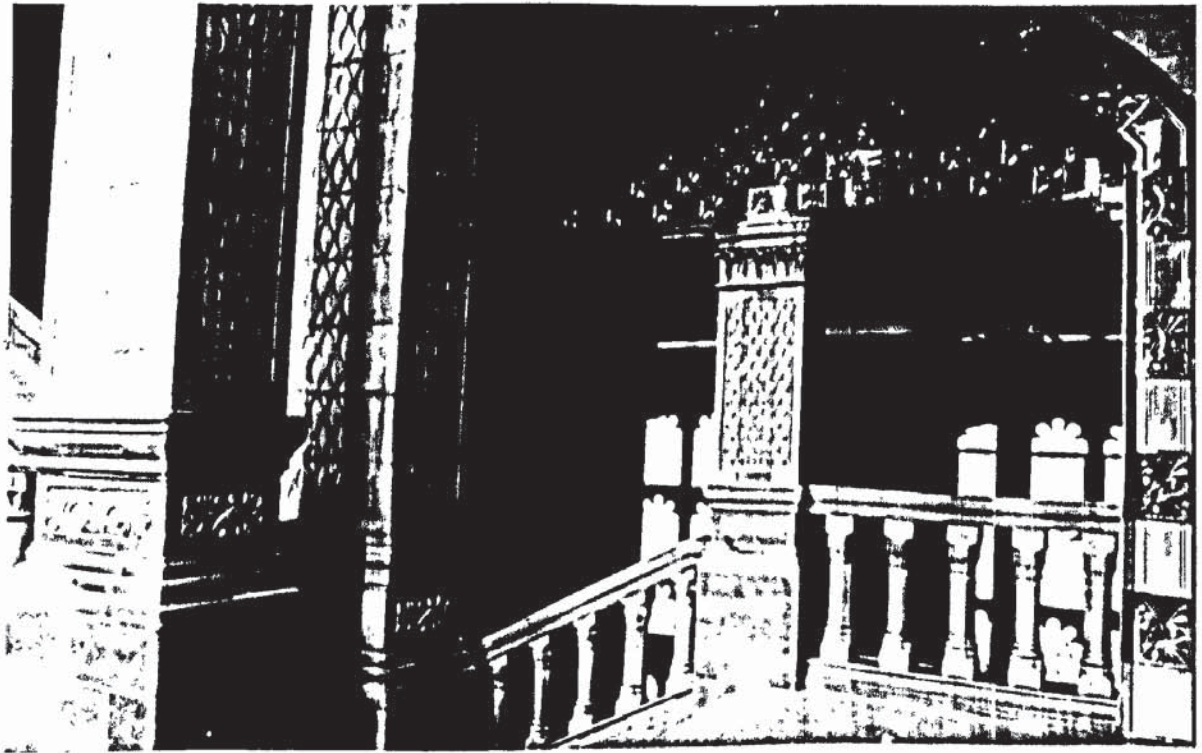


Fig. 9.3. Staircase of the Victoria building, University of Liverpool, by A. Waterhouse, 1887-91 (Burmantofts).



Fig. 9.4. Detail of a faience arch in the entrance hall of the School of Medicine, University of Leeds, by W. H. Thorp, 1894 (Burmantofts).

In the next decade the range of possible colours widened markedly. For the columns inside the King's Weigh House Chapel (1889-91), Waterhouse had been offered a range of alternatives.⁽¹⁾ Blue-green colours were used in the entrance hall of the School of Medicine in Leeds (W.H. Thorp, 1894)⁽²⁾ (Fig 9.4) and the County Council buildings in Durham (H. Barnes and F.E. Coates, 1897-8) (Fig 9.5). The latter scheme also incorporated browns and creams and demonstrated Burmantofts' ability to make large flat panels of faience, up to two feet in length and little more than an inch thick. They were moulded with an arrangement of shells and ribbons and hand-painted with pale glazes.

Such panels are among the most accomplished and visually effective products of the late Victorian revival of architectural ceramics. They were used to differing effect by various architects. In one of several interiors where he used Burmantofts' faience, J. MacVicar Anderson covered the ceiling of the main hall of the Royal Bank of Scotland in Threadneedle Street (1901) with a pattern of Adamesque scrollwork. (Fig 9.6). In the dining room of the Queen's Hotel in Leeds (redecorated in 1890s), C. Trubshaw designed panels about three feet high with intricate rococo patterns, glazed in ivory and gold colours.⁽³⁾

(1) Information from Waterhouse's drawings supplied by Colin Cunningham.

(2) D. Linstrum (1978), *op.cit.*, p. 24.

(3) Leeds Fireclay, Burmantofts' faience, volume of photographs of terracotta and faience schemes and details submitted for architects' approval (1902). The bank in Threadneedle Street was built as the British Linen Bank.



Fig. 9.5. Staircase of County Council buildings, Old Elvet, Durham, by H. Barnes and F. E. Coates, 1897-8 (Burmantofts).



Fig. 9.6. Section of faience ceiling in Royal Bank of Scotland, Threadneedle Street, London, by J. Macvicar Anderson, 1901 (Burmantofts).

The culmination of Waterhouse's use of Burmantofts' faience was in the Holborn head office of the Prudential Company, the material having been used on a more modest scale in most of their branches. At Holborn, several styles were introduced, reflecting the fact that the work was undertaken in several stages, and possibly the architect's increasing unease with traditional stylistic detail. The entrance hall was sub-divided by massive polygonal columns, moulded with a fig-leaf and fruit pattern. The plainer columns in the main offices were given capitals in loosely Moorish or Mayan styles. The main staircase was entirely lined with yellow tiles and faience, which were decorated with stylised flower patterns and grouped into panels. The ceiling to the stairs and the landings were formed of fan vaulting. The tracery was highly sophisticated in its execution, the mouldings and blocks overlapping flat panels, so that once the central boss was fixed the complete structure virtually supported itself.⁽¹⁾

Other architects, such as R.W. Edis and W. Bell, accepted an almost standard arrangement of Burmantofts' tiles and faience for interiors. Above a tile dado and a moulded sill, the main wall surfaces were divided up into a series of tile panels, with a projecting cornice and a frieze above. Pilasters, arches and the beams of the coffered ceilings were made up of blocks of faience. The tiles and their surrounds appear to have been chosen from stock designs advertised by Burmantofts while the larger blocks of faience were made to

(1) Prudential Assurance Company drawings, Holborn.

the designs of the architect, and slightly altered between each commission.⁽¹⁾

Schemes incorporating faience were more likely to consist of arrangements of stock forms if supplied by one of the major decorative tile manufacturers such as Maw or Minton. They had supplied floors, dados and ornamental fireplaces for some of the most prestigious Victorian buildings such as the India Office and Manchester Town Hall,⁽²⁾ but their contracts for complete interior linings only became numerous in the 1890s. Most were for hotels and public houses. Here, the less distinguished architects involved were content to delegate more responsibility to the manufacturers, their representatives or even the tile merchants. If Burmantofts usually worked from sketch designs and colour samples, the draughtsmen at Maw only needed the basic dimensions of the relevant rooms to develop a highly ornamental ceramic interior.

The interior schemes executed by Maw show a remarkable consistency in design, generally being arranged into a series of panels separated by the sill of the dado. Those above the dado were surrounded by a line of darker tiles and a border of tiles forming raised moundings with rosettes at the corners. Apart from where tile-paintings were installed in restaurants and lounges, the variety of arrangements within

(1) Schemes illustrated in Leeds Fireclay(1902), op.cit., unpagged.

(2) The former India Office has tiling by Minton. Hollins in the courtyard (M.D. Wyatt, 1867). Manchester Town Hall (A. Waterhouse, 1868-77) was given tiling by Craven Dunnill.

the panels was also very restricted. The most common was a diaper pattern or an arrangement whereby naturalistic vegetation ran up the wall in an hour-glass outline. The precise characteristics may have reflected the taste of the architect, but would not be made up of tiles of his design. The Exchange Restaurant and the Hay Mills Tavern in Birmingham are by different architects, W. Jenkins and James and Lister Lea, but the tiled interiors are remarkably similar.⁽¹⁾

Maw's local competitor, Craven Dunnill, gave a more three-dimensional character to their schemes, using faience blocks and panels to form pilasters, capitals and arches. The pilasters served to sub-divide the wall surfaces which were decorated in a wide variety of patterns. The Company catalogue numbers four different designs of frieze-cornice decorated with cherubs, peacocks and masks, and others are shown incorporated in various schemes.⁽²⁾

Craven Dunnill offered three different designs of bar-front. Each was made up of several sections, curved out from the base and was richly decorated with griffin's heads, deep ribbing or complex floral shapes. The first two were given brown and green glazes, while the third was hand-glazed in contrasting colours. Examples of each survive in the Mountain Daisy Hotel, Sunderland and the Gunmaker's Arms; and the Red Lion, at Aston and Erdington respectively, both in the northern suburbs of Birmingham.⁽³⁾

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- (1) Maw, Examples of faience and wall tiling (c. 1900).
(2) Craven Dunnill, Album of photographs of completed schemes, (c. 1905).
(3) The bar fronts inside the Gunmaker's Arms and the Red Lion are illustrated in A. Crawford and R. Thorne, Birmingham pubs 1890-1939 (University of Birmingham 1975) ill. 16, 23.

Faience and Building Facades

These schemes were products of the pub building boom that reached a height in Birmingham around the turn of the century. By this period it was possible to manufacture a faience sufficiently durable for use on the exteriors of buildings. The facade supplied by Maw for the Trocadero, and by Craven Dunnill for the Dog and Duck in Aston, combined faience with mosaic lettering. Elsewhere, moulded names or motifs were used to advertise the name of the public houses. (Fig 9.7). Yellows, greens and browns were the most widely used colours.

The development of a frost-proof faience, suitable for building facades, took almost forty years from the displays of glazed ware at the Great Exhibition of 1951. The stoneware body of the pottery shown by Doulton was found to be suitably resistant and was promoted by Henry Doulton in the belief that 'it will be welcomed by all who think the addition of colour advantageous to our buildings'.⁽¹⁾ However, early uses of Doultonware, on the Company's own offices in 1876 (Tarring Son and Wilkinson), and St Paul's House, Leeds (T. Ambler) two years later, showed the limitations that would have prevented its widespread adoption.⁽²⁾ (Fig 9.8). It could not carry fine moulded detail like an earthenware, could only be made in small pieces, and still had a tendency

(1) P. Atterbury and L. Irvine (1979), op.cit. p. 71.

(2) Both buildings used a mixture of materials within a Venetian Gothic style. For illustrations of Doulton's offices: Building News, 31, 1876, p. 468.



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Fig. 9.7. *Star Inn, Openshaw, Manchester, 1890s (Maw). Source: Maw Examples of faience and wall tiling, c.1900.*



Fig. 9.8. *Details of corner entrance, St. Paul's House, St. Paul's Street, Leeds, by T. Ambler, 1878 (Doulton).*

to warp. It's effectiveness depended on being handpainted to give powdery cream, blue and green colours, as in the entrance of the Palsgrove Hotel in Fleet Street (G. Cuthbert 1883), now a branch of Llyod's Bank. (Fig. 9.9).

The highly reflective finish of Doultonware was also considered undesirable. In response, a new earthenware faience, Vitreous Fresco, was introduced in 1885, followed by a matt glazed stoneware called Carraraware. The white crystalline glaze gave the latter an appearance of Carrara marble.⁽¹⁾ When the use of Carraraware was extended from ornamental to architectural work, either ivory glazes were used in emulation of Portland stone or rich polychromatic effects were created with coloured enamels.

The most extravagant polychromatic structure to be built in Britain was the Birkbeck Bank in Chancery Lane, for which the architect was T.E. Knightley.⁽²⁾ His design had been exhibited in 1889; when it was commenced six years later, the heavy Renaissance style was rather out of date, but a vibrant range of colours had become possible in Carraraware. A painter, Sir William Richmond, advised on the choice of glazes.

(1) The complex range of bodies and finishes introduced by Doulton is concisely explained in P. Atterbury and L. Irvine (1979), *op.cit.*, pp. 70-3.

(2) Knightley was the surveyor to the Birkbeck Bank Building Society and was aged seventy-one when construction started. *British Clayworker*, 14, 1905, pp. liii-liv.

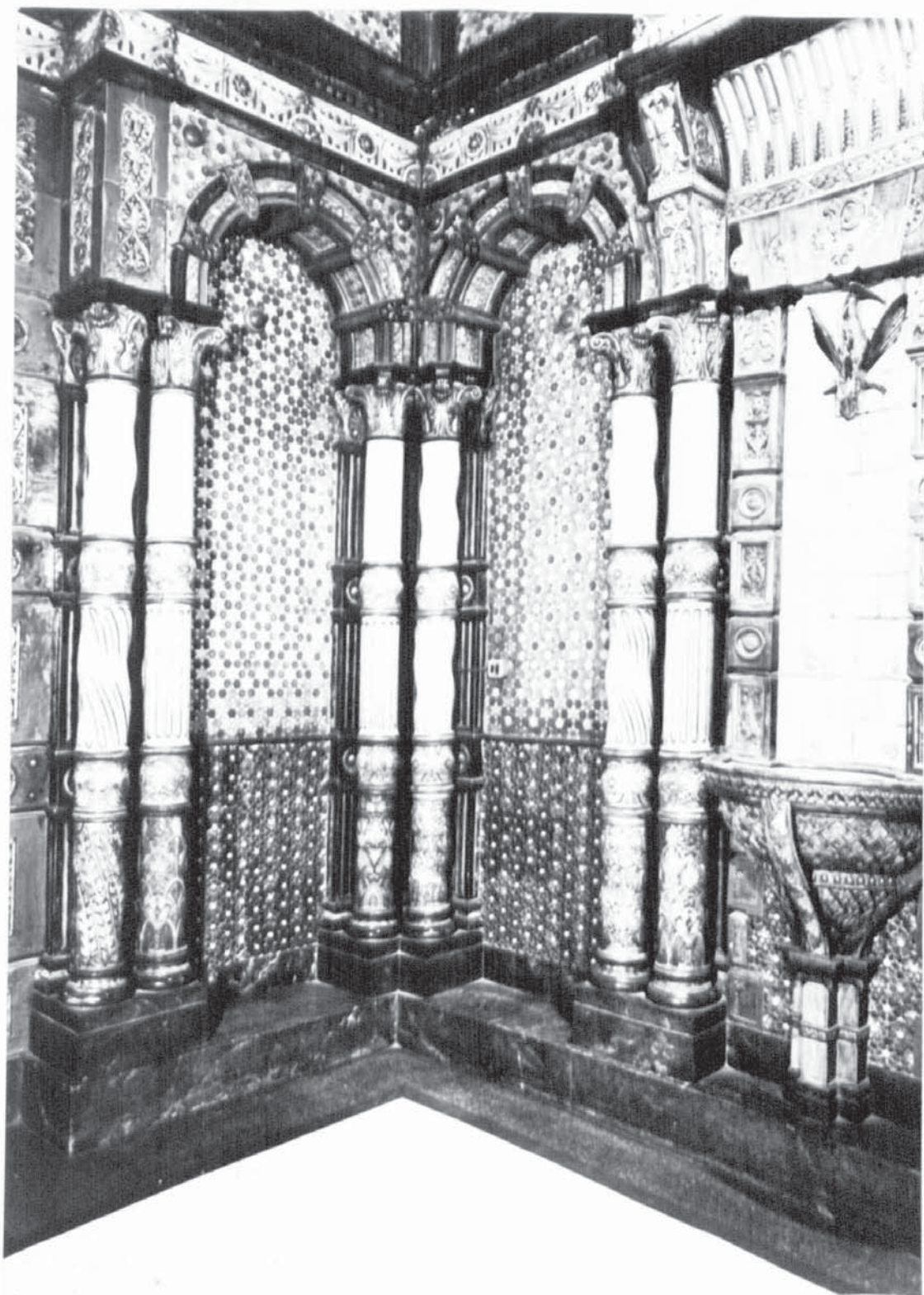


Fig. 9.9. Detail of Doultonware and Silicon ware mosaic, lining the entrance hall of the Palsgrove Hotel, Fleet Street, London, by G. Cuthbert, 1883 (Doulton).

The plinth was brown in its lower stages, pinker higher up, and set with peacock-green panels. The columns were of the same green, but sub-divided by biscuit coloured rings and swags. More restrainedly the upper portion of the building was faced with white glazed brick and pinkish brown dressings. Standing out against this confusion of coloured Renaissance forms were two sculptural groups in white terracotta, of Commerce and Britannia, on either side of the corner entrance. There were also portrait busts on the outside and tile panels in the domed banking hall, representing the trades and industries connected with banking. The embossed tiles lining the dome were divided into segments by ribs of Carraraware.⁽¹⁾

The modeller who produced the stolid sculpture for the Birkbeck Bank was one of Doulton's decorative artists, John Broad. It was the head of the architectural department at Doulton, W.J. Neatby, who produced the detailed designs for three rather more innovative polychromatic buildings which were erected at the turn of the century. From designing tiles at Burmantofts, Neatby came to Lambeth in 1890. He emerged as a brilliant modeller in terracotta, but his use of Carraraware was characterised by low relief or flat decoration and the use of a wide variety of glazed finishes.

In each of the three schemes, Neatby collaborated with an architect who chose architectural ceramics for most of his commissions. G.J. Skipper trained at an art-school; he used terracotta in a slightly Frenchified 'Queen Anne' style for

(1) The Birkbeck Bank is fully described in Architectural Review, 138, 1965, pp. 338-41.

three large hotels in Cromer during the 1890s and in a more Italian Renaissance style for his own office in Norwich, in 1896.⁽¹⁾ The Norfolk firm of Gunton supplied the terracotta for these three buildings, but three years later Skipper turned to Doulton's Carraraware and Parian Ware for the Royal Arcade, also located in Norwich. Arts and Crafts, and more contemporary fashionable forms including wide arches and bulging polygonal columns were given Art Nouveau detailing. (Fig. 9.10). Most of the patterns were created by glazes being poured into raised cloisons formed in the pressing of the blocks. This was a technique typically used for decorating tiles. Inside the arcade the Parian Ware was decorated with friezes of Zodiac symbols, peacocks and foliage.⁽²⁾

The Leicester architect, A. Wakerley, used Hathern's terracotta for at least four commissions and Doulton's Carraraware for several with polychromatic decoration.⁽³⁾ The Turkish Cafe in Leicester, of 1900, was given Moorish style decoration by Neatby, with a multifoil arched doorway and a pediment made up almost entirely of a brightly coloured turkey. (Fig 9.11).

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- (1) His life and work is described in David Jolley, Architect exuberant, George Skipper 1856-1948 (Norwich School of Art 1975), the catalogue of an exhibition.
 - (2) Among the commissions in Norwich that followed the success of the Royal Arcade, Skipper used Doulton's terracotta on three small commercial premises: the Norfolk Daily Standard Offices (1899-1900), Haymarket Chambers (1901-2) and Commercial Chambers in Red Lion Street (1901-3).
 - (3) Hathern, Order books, 7 February 1898 to 3 October 1912.



Fig. 9.10. Entrance of the Royal Arcade, Gentleman's Walk, Norwich, by G. J. Skipper with W. J. Neatby, 1899 (Doulton).



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Fig. 9.11. Contract drawing for Turkey Cafe, Granby Street, Leicester by A. Wakerley with W. J. Neatby, 29 January 1900 (Doulton). Source: Royal Doulton Tableware Ltd.



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Fig. 9.12. Courtyard in the Savoy Hotel, Strand, by C. B. Young and T. E. Colcutt, 1896 (Cliff). Fountain by T. E. Colcutt, (Della Robbia). Source: Builder, 71, 1896, p. 36-7.

It was Essex, Nicol and Goodman, with whom Neatby collaborated for his best known design, the Everard Building in Bristol, dating to 1901. This Birmingham firm had an extensive local practice designing commercial buildings which were given terracotta dressings, usually in a Renaissance style. For the Everard Building, their only design in full polychromy, small arches and short bulging columns were used, to leave a large wall area for a mural representing the history of printing. The general surface was faced in an ivory coloured Carraraware above a blue-green plinth. The name of the firm was set under the first floor windows. A figure representing the Spirit of Literature was placed above, flanked by Gutenberg and Morris pulling their presses. A figure emblematical of Light and Truth was set in a large blank arch in the gable.⁽¹⁾

In contrast with the modern appeal of the rich colours and the Art Nouveau detailing, contemporary interest centred on the fact that the decoration was both architectural and narrative, in the artistic way through which it advertised the purpose of the building.⁽²⁾ Although the Royal Arcade and the Everard Building have become among the most highly appreciated of all Britain's examples of architectural ceramics they roused little contemporary interest in the architectural and artists' journals. They suffered from being in the provinces, designed by provincial architects and from the fact

(1) Neatby's work is described in *Architectural Review*, 165, 1979, pp. 383-4.

(2) *British Clayworker*, 14, 1906, pp. xc-xcv (p xc).

that the English interpretations of Art Nouveau were never taken very seriously.⁽¹⁾

It was the use of ivory Carraraware for the extension and re-facing of the Savoy Hotel, in the Strand and to designs by T.E. Collcutt, that gained far wider attention and exerted a stronger influence in the Edwardian use of architectural ceramics. For the first additions designed, in 1896, terracotta had been supplied by Messrs Cliff and Sons.⁽²⁾ (Fig 9.12). For the more extensive work of 1903-4, forming new frontages to the Strand and Savoy Court, Doulton's Carraraware was used.

Apart from the seated figures under the eaves of the main block, decorative modelling was restricted to some simple panels under the main windows and for the name plaques on the Savoy Buildings. These plaques, in a mustard yellow, and green bands in the chimney stacks constitute the only use of coloured glazes.

The sculptured decoration could not be very detailed or vigorous because of the stoneware body and the glazed surface of Carraraware. A review of the 1904 extension admitted that the modelling demanded 'no exceptional ability or skill since a free and flowing scheme of decoration is best suited for the work'. Egg and dart mouldings were widely used because they came clear of the moulds with little difficulty.⁽³⁾ For

(1) The only contemporary article on Neatby was in: Studio, 29, 1903, pp. 113-7.

(2) Builder, 71, 1896, pp. 34, 36-7.

(3) British Clayworker, 13, 1904, pp. xx-xxi (p. xxi).

the re-facing of the river frontage in 1910 moulded detailing was restricted to the large brackets and some sculptural groups in the cornice.⁽¹⁾

The use of Carraraware on the Savoy Hotel, stripped of most classical detail and, in practical terms, as a cladding to a steel frame, formed an inspiration for numerous commercial buildings in the Edwardian period. Collcutt, in partnership with Stanley Hamp, used a simple facade of Carraraware, but with a green and white striped gable, for Gloucester House in Piccadilly, dating to around 1908. A year earlier the steel frame of Debenham and Freebody's new store in Wigmore Street had been clad with white Carraraware in only a few weeks.⁽²⁾ The architects, Wallace and Gibson, introduced contrasting colours only in the green marble columns and the Spanish roofing tiles.

The competing manufacturers were remarkably slow in introducing their own matt-glazed faience to compete with Carraraware. They only responded when Doulton proved so very successful in gaining large contracts after the turn of the century. Burmantofts introduced their Marmo, Gibbs and Canning a material called Pentelica, and Carter developed their variation called Ceramic Marble, all in about 1909.⁽³⁾

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- (1) British Clayworker, 19, 1910, p. lxxiv. I am grateful to the archivist of the Savoy for providing clarification on the building history of the hotel.
- (2) British Clayworker, 18, 1909, p. xvii.
- (3) J. Hawkins, The Poole potteries (Barrie and Jenkins, London 1980) p. 177. The dates for the companies other than Carter are drawn from the record of orders.

Hathern and Shaw competed with their more brightly glazed faïences, introduced at about the same period.

These materials were adopted by provincial architects, in some instances as an alternative to brick and terracotta. The Sheffield firm of Flockton and Gibbs used Carraraware for the Fleet Street branch of the Sheffield Telegraph in 1901. At the end of the decade, for the newspaper's more imposing head office, Messrs Gibbs, Flockton and Teather chose white Hathernware. Also in Sheffield and dating to about 1910, the White House in Fitzalan Square was clad in a faïence made in Leeds which was probably Burmantofts' Marmo. The almost completely flat facade was given interest by a series of figures portraying the Sheffield trades. They were modelled by the artists Alfred and W.F. Tory in the form of bas-reliefs projecting directly out of the wall surface.⁽¹⁾ While the Tors were the sons of a Sheffield stone-mason, Edward Gibb had been an assistant to Alfred Waterhouse, after being trained at the School of Art in Sheffield.⁽²⁾

Messrs Perkins and Bulmer used Marmo and Carraraware for at least two offices in Leeds, dating to around 1908-9. For the Scottish Union and National Insurance Company in Park Row, heavy rustication and a corner dome contributed to the Baroque style. The sills of the second floor windows were

(1) Newspaper cutting from the Star, 1960. I am grateful to Ruth Harman of Sheffield Record Office for this information.

(2) Who's who in architecture (Architectural Press, London 1923) p. 88.

supported by semi-nude figures set in ornamental carapaces. Finely modelled in the free manner of Alfred Gilbert and the new sculpture movement they were the work of a Leeds firm of architectural modellers who specialised in terracotta sculpture.⁽¹⁾

In general, the adoption of faience had the effect of furthering rather than stemming the decline of sculptural ceramics. The examples in Sheffield and Leeds suggest that this followed less from any inherent limitations in the material, than from an increasing taste for plainer facades and from the loss of collaboration with decorative artists.

It was a lack of support from architects that contributed to the failure of the architectural section of the Della Robbia Pottery in Birkenhead. This part of the pottery had concentrated almost entirely on decorative sculpture. The only significant order beyond the Wirral came from T.E. Collcutt, for a fountain executed to his design, for the courtyard at the Savoy Hotel.⁽²⁾ (Fig 9.12). The Pottery suffered from the lack of financial acumen in the founder, Basil Rathbone and from the obsession of the chief sculptor, Conrad Dressler, with craft ideals of hand-working. Dressler left the Pottery after only three years in 1897.

The Edwardian use of sculptural ceramics centred on Neatby's modelling at Doulton, before he left in 1907 to work as a free-lance designer. His work in terracotta showed

(1) British Clayworker, 18, 1910, p. xc.

(2) Della Robbia Pottery, Birkenhead 1894-1906. (Williamson Art Gallery and Museum, Birkenhead, Undated).

free modelling and a close response to the feeling of avant garde art of the 1890s. The reflective manner of Beardsley's women was apparent in the vacant expressions and close fitting caps on his female heads, while the grotesque emerged in the devils looking down from the gable of numbers 54-5 Cornhill (E. Runtz 1893) and the frieze of beasts in the City Arcades in Birmingham (Newton and Cheatle 1898, 1900). Neatby maintained the association of terracotta sculpture with the conveying of narrative themes, which were related to the name or purpose of the building. The spandrels of the wholesale market in Leicester (W. Brand 1900) were filled with mermaids clutching at fishes and enveloped in swirling hair and water. For Orchard House in London (c. 1900), low relief panels were placed over the doorways, one featuring two peacocks and the other a stylised tree.⁽¹⁾ (Fig 9.13). Also used by Neatby in the coloured glass of the Royal Arcade, this form of a cluster of large leaves breaking out from a spirally wound trunk is generally considered to have been originally devised by George Frampton. He had used it in a wooden mantelpiece, designed with Harrison Townsend, and exhibited in 1896. Townsend may in fact have been progenitor of this tree motif as it is apparent in a more curving shape in the frieze of his facade for the Bishopsgate Institute, dating to 1894. The modeller of the terracotta details for the Institute was W. Aumonier.⁽²⁾ The supplier was Gibbs and Canning who employed

(1) The terracotta details on Orchard House are illustrated in Studio, 29, 1903, pp. 113-7 (pp. 114-5).

(2) The architectural competition for the Bishopsgate Institute was judged by J. MacVicar Anderson who made extensive use of Burmantofts' faience in this period. Building News, 67, 1894, p. 748.



Fig. 9.13. Detail of doorway, Orchard House, Abbey Orchard Street, London, modelled by W. J. Neatby, c. 1900 (Doulton).

Townsend to design a trade stand for the Building Trades Exhibitions. This was given simpler, though comparable low relief decoration⁽¹⁾ The Bishopsgate Institute, with its faintly Romanesque but essentially free style, and intricate low relief decoration, was highly expressive of the potential of architectural ceramics. However the collaboration responsible, between architect, decorative artist and manufacturer had become, by the middle of the 1890s, very rare with any of the firms, with the exception of Doulton.

Neatby was unique in the way that his status as a designer gave him the freedom to work his own decorative style in terracotta and faience. Apart from the continuing use of decorative artists at Doulton, who accepted complete responsibility for the ceramic decoration on a building, a working arrangement usually developed whereby the detailing would be sketched out by the architect. He would then approve or alter the full-size drawings and models made by the draughtsmen and modellers at the works which had won the contract. The arrangement was typically a compromise between the architect completely determining the details, or completely delegating responsibility to the draughtsmen or modellers at the works.

Common in the Victorian period, this arrangement became almost ubiquitous in the twentieth century. As the ideals of the artist - architect gave way to more practical concerns, so the less than distinguished architects who now made the most use of decorative ceramics chose to save themselves the time

(1) Illustrated in *British Clayworker*, 8, 1899, p. xviii.

and difficulties involved in finalising decorative detail. Fewer members of the profession were competent in working the classical language while many large buildings were still being designed by figures outside the RIBA; Frank Matcham's theatres, and A. Mather's and W.E. Trent's cinemas are obvious and successful examples. It was usually combined builders and developers who were responsible for the design of shop-fronts and commercial premises until the establishment of chain-store companies who came to employ their own architects.

Late Victorian eclecticism had demanded inventive detailing, but the Baroque style that came to dominate in Edwardian public and commercial architecture accepted more historic and stereotyped forms. There was a general acceptance of Sir Reginald Blomfield's attitude that originality depended on the use made of accepted forms rather than in the deliberate creation of new ones.⁽¹⁾ However within this framework, the more wayward figures adopting architectural ceramics could not resist using the properties of plastic clay to justify some mannerisms in their detailing. The French Baroque of the eighteenth century supplied the most widely used combination of banded rustication and arrangements of festoons, garlands of fruit, flowers or bayleaves, and shields surrounded by ribbons or acanthus scrolls. If being executed in terracotta or faience, these motifs were likely to be made lusher and more sinuous than could otherwise be justified or afforded, if being worked in stone.

(1) A. Service, *Edwardian architecture* (Thames and Hudson, London 1977), p. 165.

However the influence of the successive stylistic revivals was increasingly blamed for the inappropriate ways in which architectural ceramics had been used in the nineteenth century. The concern that architectural ceramics should not be dependent upon historic styles became progressively stronger. Professor C.H. Reilly curtly stated that terracotta should stop 'apeing the attributes of stone and looking like glue'.⁽¹⁾

Foreign Influences

In the search for an honest and modernistic expression for faience, an issue that ran through the first half of the twentieth century, the design of the material came increasingly under the influence of contemporary practice abroad. This was in marked contrast to the Victorian period when architects had been more interested in historic precedent on the continent. While they had considered that Britain held a pre-eminent position in the revival of terracotta, the brick industry that largely produced the material had remained equally insular in its attitudes.

Despite the frequency with which visits were made to Lombardy, studying Renaissance terracotta, the modern Italian manufacturers received little attention. Boni in Milan was one of the earliest to be established, making both architectural details and finer ornamental ware.⁽²⁾ Generally the uses of

(1) British Clayworker, 36, 1927, pp. 199-201.

(2) V. Ottolini, Introduction, in L. Gruner (ed.), The terracotta architecture of northern Italy (J. Murray, London 1867), pp. 4-5.

terracotta for decorative detailing were too modest and the designs too imitatory of Renaissance forms to offer any inspiration. The firm of Gilardoni simply reproduced the principal types of decorated bricks used in the fourteenth and fifteenth centuries.⁽¹⁾ The use of architectural ceramics attained its greatest originality in Italy at the turn of the century and usually in the locality of the ceramics industry, such as at Bologna and Faenza. (Fig 9.14). Although twelve Italian firms were listed in 1904 as making tiles and faience, it was Spain that was better known for its glazed architectural ceramics. However here production was concentrated on tiles and glazed bricks.⁽²⁾

Terracotta was probably made in most of the countries of northern Europe on some scale. Ornamental work from Switzerland and Denmark gained brief coverage in the British journals around the middle of the nineteenth century.⁽³⁾ Dating to 1880, the Porcelain House⁽⁴⁾ and the new Town Hall in Vienna

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- (1) L. Lefevre, Architectural pottery (Scott, Greenwood and Son, London 1900), p. 373.
 - (2) W.J. Furnival, Leadless decorative tiles, faience and mosaic (W.J. Furnival, Stone 1904), pp. 212-3. The section on the continental industry is most valuable but, as Furnival admits, it may not be entirely representative.
 - (3) A terracotta font made in Switzerland was exhibited at the Great Exhibition. Builder, 9, 1851, p. 164. The fineness of Danish terracotta statuary and reliefs, some still being made to designs by Flaxman, was strongly praised. Art Journal, 8, 1869, p. 322.
 - (4) Builder, 39, 1880, pp. 321-3.



Fig. 9.14. Detail of frieze and window surround in tiles and terracotta, Faenza, Italy, c.1900.

were illustrated because of their extensive use of majolica and terracotta respectively. The material for the Town Hall came from a factory near Carlsbad, on the German Border.⁽¹⁾

It was German terracotta that offered the most admired example, and a degree of competition to the English industry. In 1853 the vases, pedestals and brackets made by Marsh of Charlottensburg were praised for their design and fine modelling.⁽²⁾ Meanwhile German architectural work, at least in Berlin, continued to draw on the Rundbogenstil developed by Hubsch and Von Gärtner in the thirties, and would have become regarded by the late Victorians as somewhat out of date.⁽³⁾ However by the end of the century, swags, garlands and putti comparable to those so widely used in England were being made by Villeroy and Boch.⁽⁴⁾ This firm was the largest manufacturer of terracotta in Germany and it probably rivalled Doulton in the range of its products and number of works. The terracotta factory at Merzig alone employed 1,200 workers.⁽⁵⁾

Charles Fitzroy Doll was particularly impressed by the efficiency of the German industry; he claimed that the statues supplied from Germany for his Apollo Tavern in Tottenham

(1) Builder, 41, 1881, pp. 512, 518-9.

(2) Art Journal, 5, 1853, supplement p. 11.

(3) The influence of the German use of terracotta within the Rundbogenstil is considered in Chapter 2.

(4) Examples illustrated in L. Lefevre (1900), *op.cit.*, p. 371.

(5) W.J. Furnival (1904), *op.cit.*, p. 210.

Court Road cost one tenth of the price of the English quotations.⁽¹⁾ Doll made the rather unpatriotic decision around 1913 of contracting Villeroy and Boch to manufacture some statues for his extension to the Imperial Hotel.⁽²⁾ The eight foot high figures were moulded and fired in one piece. However in reporting a lecture by Colonel Edis in 1905, it had been stated that terracotta was also passing out of use in Germany. Villeroy and Boch came to concentrate on manufacturing a matt-finished faience comparable to Carraraware.⁽³⁾

Although other countries such as Belgium were making faience in the nineteenth century, it was France that offered the main lead in the adaptation of ornamental glazed bodies for architectural decoration. Sèvres porcelain was held in high regard by the Victorians and the factory produced majolica in the form of vases, fountains and decorative panels. This material was used for their enormous classical pavilions at the international exhibitions such as that held in Paris in 1878.⁽⁴⁾ The works of M. Loebnitz and E. Muller combined the

(1) British Clayworker, 15, 1906, pp. ii-iii (p. iii).

(2) The rest of the terracotta was supplied by Doulton and Shaw: British Clayworker, 22, 1913, p. lxii-v.

(3) British Clayworker, 14, 1905, p. 45.

(4) Builder, 36, 1878, p. 620. It was considered that, despite the brilliance of these displays, terracotta was used far less in France than Britain during the nineteenth century due to an abundance of stone and to French tastes being more conservative. L. Lefevre (1900), op.cit., p. 365.

manufacture of faience with stoneware and enamelled bricks respectively.⁽¹⁾ Both firms were located in the suburbs of Paris and their materials were widely used in the French capital around the turn of the century, for friezes, pediments and complete facades, often in Art Nouveau inspired designs. (Fig 9.15).

Faience played an important role in French Art Nouveau architecture, but the materials made little contribution to the development of the Art Deco style, exemplified by the stands at the Paris Exhibition of 1925. It was primarily polished stones, metals and glass that were worked into the wide range of modernistic forms, drawing inspiration from Cubism, Art Nouveau and Egyptian and American Indian art, amongst other sources.⁽²⁾ The adoption of such a diversity of materials and styles was inspired by an underlying aim to produce a truly contemporary approach to design through the unification of art and industry. This philosophy was comparable to that which had pervaded South Kensington some seventy years earlier but ceramics were not to take on the same symbolic significance. The materials and styles of Art Deco were chosen to achieve suitably exotic motifs and finishes, rather than according to any justification by historical precedent; it was feared that a correct historicism would lead directly back to the copyism of the stylistic revivals. The displays at Paris were followed

(1) A visit to Loebnitz's works is described in *British Clayworker*, 11, 1902, pp. 90-2.

(2) B. Hillier, *Art Deco* (Studio Vista Dutton, London, 1968), pp. 14-52.



Fig. 9.15. Dormer windows, Ceramic Hotel, Avenue Wagram, Paris, by J. Lavirotte, 1904.



Fig. 9.16. Detail of sculptural relief in gilded stoneware, modelled by F. Dobson, on Hay's Wharf, Tooley Street, London, by E. Goodhart Rendel, 1932 (Doulton).

by the introduction of Art Deco motifs in ceramic table and decorative ware in Britain. By the late twenties the outlines of ziggurats and Egyptian temples, and wave and zig-zag patterns were being taken up in architectural faience. In the years around 1930 detailing might be hand glazed into the strong colours that had also come into fashion, particularly jade-green, black, orange and gold. The superficial way in which these forms and colours were used in designs and the fact that they appeared mostly on stores, factories or cinemas served to bring architectural ceramics into greater disrepute with contemporary critics.

The path within which Art Deco developed in faience, becoming more rectilinear in form and dominated by edges, curves and outlines rather than decorative modelling, reflected an increasingly influence from the United States. This was possibly the last expression of a close link between the terracotta and faience industry and architecture of the two countries that dated back to about 1870. From supplying skilled labour and material to an emerging industry and market, the British came to admire and emulate aspects of the technology, salesmanship and the range of architectural styles that made the use of faience so widespread and progressive in North America.

For the first major use of terracotta in the United States, the Museum of Fine Arts in Boston built between 1870 and 1876, J. Sturgis and C. Brigham imported terracotta from Blashfield's Stamford works. Terracotta began to be produced in Chicago on a significant scale after the fire of 1871. The

secretary of the Chicago Terracotta Company was James Taylor who had been a foreman at Blashield and worked on the Boston Museum.⁽¹⁾ Major factories also became established in New York, Philadelphia and Sacramento.

The question of the worth of terracotta in comparison with stone was debated as vociferously in America as in Britain,⁽²⁾ and it gained a strikingly positive answer in the work of Louis Sullivan. The practice of Adler and Sullivan used claddings of terracotta for a series of stores, public buildings and early skyscrapers in Chicago and other cities of the Mid-West, during the last decade of the century. Decoration of a feathery vegetable character did nothing to obscure the expression of the skeleton structure, as demonstrated by the lacy curvilinear patterns which were concentrated in the cornice as on the Guaranty Building, Buffalo (1894-5).⁽³⁾ In a later series of banks, more directly Art Nouveau decoration was juxtaposed with large areas of plain brickwork.⁽⁴⁾

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- (1) M.H. Floyd, 'A terracotta cornerstone for Copley Square Museum of Fine Arts, Boston 1870-76, by Sturgis and Brigham' *Journal of Society of Architectural Historians*, 32, 1975, pp. 83-103, (p. 84).
 - (2) A convention of the American Institute of Architects produced a discussion reported as 'stone v. terracotta' which aired the same practical and artistic issues as being considered in Britain. *Builder*, 37, 1879, p. 462.
 - (3) H.R. Hitchcock, *Architecture, nineteenth and twentieth centuries* (Pelican, Harmondsworth, Middx.1977); pp. 346-9.
 - (4) Gayle Winkler of Madison, Wisconsin and Statler Gilfillen of Boston, Massachusetts provided valuable information and guidance concerning American terracotta.

Sullivan's writings and architecture were a logical development of Victorian attitudes to 'fitness' and stylistic decoration. He considered that design should express the fundamentals of modern industry and society, as well as the function of the building.⁽¹⁾ It has been claimed that with the Edwardian resurgence of classicism, Sullivan's approach to ornament had little influence either in America or Europe. The architect in Britain making the most directly comparable use of terracotta, C.H. Townsend, was probably not so much influenced by Sullivan as sharing a debt to another American architect, H.H. Richardson. However the swirling patterns characteristic of Sullivan's work were emulated in the floriate Renaissance detailing adopted by numerous American architects when using terracotta; such capitals, pediments and other forms were illustrated in the British ceramic journals and presented as a demonstration of the rapid advancement of architectural ceramics in the United States.⁽²⁾ If British manufacturers had predominated at the Chicago World Fair of 1893, the city's first International Clay Products Exposition in 1912 demonstrated the ability of the major home producers to mould and fire blocks weighing up to a ton and to achieve a wide range of polychromatic finishes.⁽³⁾

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- (1) The basic theme of Sullivan's use of terracotta on skyscrapers has been described as a 'soaring movement, the dynamic transcendence of space and gravitational thrust'. C.W. Condit, *The Chicago School of architecture* (University of Chicago Press 1964), p. 171.
 - (2) For example, *British Clayworker*, 10, 1901, p. lxix.
 - (3) *British Clayworker*, 21, 1912, p. xvi-xxi. A pediment made up of blocks weighing almost a ton is illustrated in *British Clayworker*, 15, 1906, p. xxix.

The scale of the American use of terracotta and faience and of the continuing dependence on Britain for the necessary skilled labour was exemplified in the Woolworth Building, designed by Cass Gilbert. Completed in 1913 as the tallest building in the World, 52 of the 55 storeys were clad in a matt cream faience made at the Perth Amboy Works of the Atlantic Terracotta Company. The superintendent and his assistant, the head of the construction and draughting departments and twenty-one of the draughtsmen at the works were migrants from England.⁽¹⁾

In 1923 it was claimed that the output of the Atlantic Company was greater than that of all the British firms combined, and that there were another thirty manufacturers of faience in the United States.⁽²⁾ They had largely taken over the Canadian market which before the First World War had produced considerable business for Doulton and Gibbs and Canning. The American industry was gaining admiration from Britain for its high level of investment and its willingness to collaborate over advertising.

At the new works of the North Western Terracotta Company at Amboig New Jersey, plaster moulds were cut by shaping machines and the blocks were burnt in an oil-fired tunnel kiln.⁽³⁾ The National Terra Cotta Society provided an

(1) British Clayworker, 21, 1912, p. xlviv.

(2) British Clayworker, 32, 1923, pp. x-xi (p. x).

(3) British Clayworker, 20, 1921, p. xliii.

object lesson in terms of publicity; advertisements were produced covering the most important building types. Using the slogan 'Permanent, Beautiful, Profitable' they were addressed more towards the potential client than the architectural profession. It was claimed in the 1920s, that catalogued design was coming into increasing use for shop-fronts, bank branches and other small buildings.⁽¹⁾

The Terra Cotta Society published brochures on types of public building, a reference work for architects and engineers and a booklet for the public and potential clients, as well as organising advertising campaigns. Just after the First World War, the Society was spending £20,000 a year on advertising.⁽²⁾ Christopher Hussey recommended the use of terracotta and faience on American skyscrapers as demonstrating how architects could dispense 'with period decorations in favour of "functional" forms expressive of the structure'.⁽³⁾ Frequently bands of decoration in low relief were used, Art Deco patterns being accentuated by the use of colour, in subtle tones near ground level, but brighter in the higher and receding stories. Spanish, Aztec and Egyptian motifs were used in America several years before they were introduced in British

(1) British Clayworker, 30, 1921, p. xxvi-ii.

(2) British Clayworker, 30, 1921, p. 94-5.

(3) C. Hussey, 'The aesthetics of faience architecture', Architectural Review, 70, 1931, pp. 136-140 (p. 139). This is the second of a pair of articles by Hussey, the other being 'Faience as a medium for modern architecture', Architectural Review, 70, 1931, pp. 101-4.

architectural ceramics. Mexican-Spanish style buildings of the seventeenth century offered an indigenous inspiration; their motifs were revived as early as 1885 in the Ponce de Leon Hotel, using red and buff terracotta supplied by the Perth Amboy Terracotta Company.⁽¹⁾

The Americans also took the lead in the technical development of glazes for faience, introducing black, gold and other finishes. They gave considerable attention to the adaptation of designs for neon and flood-lighting. It was in the 1930s that streamlining became an important aesthetic, but the Chanin Building in New York, completed in 1929 and designed by Sloane and Robertson, had already introduced fin-like buttresses of faience.⁽²⁾ Slab faience, termed 'terracotta tile', was being used on a large scale in the early thirties, 145,000 square feet being supplied by the Atlantic Terracotta Company for the semi-dome of Cincinnati Union Terminal, designed by Fellheimer and Wagner and completed by 1933.⁽³⁾

While British cinema designs, in particular, continued to be influenced by American practice, it was the revival of brickwork in northern Europe, and the concrete and plaster of the Modern Movement, that came to hold the strongest credibility, in the years before the Second World War. The discussion following

(1) A very brief but valuable history of American terracotta is in *British Clayworker*, 36, 1928, pp. 347-8.

(2) Illustrated in C. Hussey, 1931, *op.cit.*, p. 137.

(3) *British Clayworker*, 42, 1934, p. xliii.

a lecture by J.R. Leathart, which had concentrated on the use of brick by Dudok and de Klerk in Holland, demonstrated exactly where the manufacturers saw their role within all these cross currents of modern design. H.J.C. Johnston of Leeds Fireclay sympathised with Leathart's criticism of the lack of inspiration in British ceramic architecture but exonerated the manufacturers as being 'entirely in the hands of the architect'.⁽¹⁾

The Major British Manufacturers in the Twentieth Century

In practice, the architect retained his dominance in the design of architectural ceramics, though being more closely influenced by the development and usage of the materials, both within Britain, and in Europe and the United States. Just as in the nineteenth century, most of the profession who used terracotta or faience developed close ties with a particular manufacturer. Again the explanation seems to lie, not so much in the outcome of competitive tendering, as in the architect's choice of a firm whose management and labour force worked in accordance with his tastes and practical approach.

The characteristic features of a firm's output seem to have been partly defined by the capabilities of its draughtsmen and modellers. At Gibbs and Canning, continuity of service brought considerable consistency to the work of the terracotta

(1) The paper given to the Clay Convention was titled, 'Some modern aspects of design in brick and terracotta work'. British Clayworker, 41, 1932, pp. 94-102 (p. 102).

section. F.C. Harrison, the son of an architect, was the chief draughtsman throughout the inter-war period, having originally joined the firm in 1894.⁽¹⁾ He was succeeded by H. Stephenson who was working for the Company by 1913 and still in 1940.⁽²⁾ One of the assistant draughtsmen, Harry Parsons, claimed that they were expected to be knowledgeable and competent with regard to classical and other details, leaving the architects to provide a modern interpretation of particular styles if they so required. There was only one decorative modeller, John Evans, who worked at Gibbs and Canning between 1895 and 1934. He was trained as a stone carver, possibly at the Royal College of Art.⁽³⁾ His work was characterised by being strongly naturalistic and executed in high relief. Wreaths, cornucopias of fruit and garlands or clients emblems were all modelled in the greatest detail.⁽⁴⁾

In contrast with Gibbs and Canning's traditional approach of responding to the requirements of architects, Carter presented a more positive identity. This was established through the expertise of its own artists, most of whom had received an art school training. James Radley Young came to Poole from the Sheffield School of Art and was head of the faience department until shortly before his death in 1933. One

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- (1) Gibbs and Canning, Directors' meeting, 10 April 1894.
(2) Gibbs and Canning, Directors' meeting, 28 March 1940.
(3) Conversation with Harry Parsons, 24 March 1981.
(4) Gibbs and Canning, Photographs of modelled work for submission to architects.

of his fellow students at Sheffield, William Carter Unwin, became the head decorative modeller from 1896, having also studied at the National Art Training School at South Kensington. He in turn trained Harry Brown, his successor as the chief modeller, who took over the position in about 1920. The major designers of faience in the inter-war period were Harold Stabler and Reginald Till. Stabler had taught and Till been a student at the Royal College of Art.⁽¹⁾

Carter gained several contracts for supplying faience for modernistic buildings in the 1930s. In the Edwardian period the strength of its designing staff was expressed primarily in the extent to which Young and Unwin were responsible for detailed design, particularly on the shopfronts and public houses that constituted the majority of their orders. In addition to the Renaissance and Art Nouveau tile designs, and small forms of faience available from stock, Unwin frequently modelled sculptural or surface decoration for commissions. The White Hart in Poole was given an appropriate animal figure and The Hearts of Oak in Portsmouth a frieze of leaves and acorns underneath the windows.⁽²⁾

Doulton did not maintain their level of involvement in designing architectural ceramics. Barry Pittar, the successor to Neatby as head of the architectural department, worked in a comparable style though never on any very significant

(1) J. Hawkins, (1980) op.cit., pp. 24, 202, 207-8.

(2) Carter, Record photographs. The Hearts of Oak has been demolished but the facade is being kept in store.

commissions. The company was slow to recover its production of architectural ceramics after the First World War but did revert to a relatively frequent collaboration with sculptors. Among these was Frank Dobson who designed the panels on Goodhart Rendel's Hay's Wharf Building of 1932. Sculptural motifs associated with the river trade, such as crates, drums and chains were surmounted by figures representing Industry, Capital and Labour.⁽¹⁾ (Fig. 9.16). Gilbert Bayes had a more prolific association with Doulton, stating that the mission of architectural sculpture should be to appeal directly to the ordinary public.⁽²⁾ He designed stoneware figures as finials on washing line posts, roundels on a seaside pavilion and finally two friezes illustrating 'Pottery through the Ages' and 'Dutch potters arriving at Lambeth', for Doulton's new head office, built in 1939.⁽³⁾ (Fig 9.17).

Burmantofts never really achieved an identity in their exterior facades comparable to that of their interior schemes of tiles and faience. E.C. Spruce was responsible for some highly intricate and flowing modelling around the turn of the century, a fine example being the panel over the entrance to the Passmore Edwards' Library in Southwark, designed by C.J. Phipps and dating to 1898.⁽⁴⁾ Most of Burmantofts' work

(1) Studio, 103, 1932, pp.152-4.

(2) G. Bayes, 'In praise of colour', *British Clayworker*, 41, 1932, p. v.

(3) The offices were demolished in 1978 but the friezes preserved by the Ironbridge Gorge Museum.

(4) Illustrated in: *Leeds Fireclay, Burmantofts' faience*, volume of photographs of terracotta and faience schemes and details submitted for architects' approval (1902).



Fig. 9.17. Doulton House, Albert Embankment, London, by T. P. Bennett with the relief panel 'Pottery through the Ages', by G. Bayes, 1939 (Doulton).

in the inter-war period, some on a very large scale, is characterised by being devoid of sculptural or richly polychromatic detailing.

It was Shaw whose output of architectural ceramics grew most rapidly in the twentieth century, even though the Company had a reputation of being unable to undertake fine modelling work. Whether as a reflection or an explanation of this criticism, their schemes were particularly angular and bland in detail. It was only upon winning the contract for the Winter Gardens in Blackpool in 1929 that they appear to have taken on a significant staff of draughtsmen and modellers. One of the draughtsmen came from J.C. Edwards and another from Gibbs and Canning, both companies that were ailing during the thirties. Other draughtsmen were recruited from artificial stone manufacturers.⁽¹⁾

In contrast with the varying identities presented, and in some cases advertised, by these firms, one manufacturer remained intentionally anonymous in its image. Hathern never encouraged its draughtsmen and modellers to establish personal reputations or specialisations. Instead they advertised to undertake both terracotta and faience in any form or colour and proved themselves to be capable in the complete range of current styles.

It is apparent that the shift in attention that occurred at about the turn of the century, from terracotta to faience, introduced new aspirations and approaches to the use

(1) Conversation with Harry Parsons, 24 March 1981.

of architectural ceramics. It is equally clear that many of the failings in design identified by the Victorians came to apply equally to the new material. The use of colour for decoration was taken up extremely slowly, only supplanting moulded relief in the 1930s. While the Victorian excesses of over-ornamentation were avoided in the Renaissance style buildings of the twentieth century, this restraint resulted in an even closer imitation of stone in most designs.

Britain can be seen to have been less tied to historical precedent than most countries in the design of terracotta in the nineteenth century. The use of faience in Victorian interiors resulted in some sophisticated designs and technically brilliant forms and colours. With the application of the material to exteriors there appears to have been a loss of nerve or of interest. The few Art Nouveau inspired compositions were the exception to a hardening rule of copying the effect of Portland stone. More inspired approaches were taken up largely from American examples in the inter-war period, but it was only Doulton and Carter who continued to produce ceramic sculpture of real artistic quality.

Faience, through its development as an adjunct to the production of decorative tiles, could have brought a new approach into the manufacture and use of architectural ceramics. With simple mouldings of faience being pressed under dies and used in conjunction with stock designs of tiles it might have been expected that architectural faience for external use would have been employed in largely standard forms. It certainly promoted a greater consistency in clay bodies, but until the thirties, was always made to order in a wide variety

of shapes, colours and textures. The increased rather than diminished complexity of architectural ceramics in the twentieth century, following from their use with structural steelwork and in a wide variety of colours, resulted in most architects acting in close collaboration with a particular manufacturer. It is therefore valuable to examine in detail the work of one firm, observing how it worked with architects in designing and manufacturing terracotta and faience.

CHAPTER TEN

THE ARCHITECTURAL USE OF HATHERN'S TERRACOTTA AND FAIENCE

1896 - 1939

The Hathern Station Brick and Terracotta Company presents an ideal case study in the architectural use of terracotta and faience in the twentieth century, since its output is so representative of all the building types and schools of design involved in using the materials. The management never restricted their work to particular markets, geographical areas or styles, or even tried to establish a particular identity. A comment by the managing director, G.A. Hodson, during the discussion of J.R. Leathart's paper on brick and terracotta could have formed the motto of the Company:

The material used had remained the same throughout the centuries. It was the adaptation of the material which had changed and in this matter the move must first be with the architect.(1)

It is worthwhile considering whether this service or subservience to architects represented an astute commercial policy or a weakness amongst the management. They appear to have been anxious to gain any type of order rather than being willing to concentrate on the work that would be most profitable. Hathern's success in expanding to become the largest producer of architectural ceramics by the 1920s needs to be presented in the context of the operation of the regulations of the Terra Cotta Association, and a consideration as to whether the pricing

(1) British Clayworker, 40, 1932, pp. 94-102 (p. 102).

structure that the Association imposed allowed the Company a worthwhile profit.

The commercial architects, builders and engineers who made repeated use of architectural ceramics in the twentieth century were condemned for not producing proper architecture at all. By considering the attention that they gave to the design of each of their stores, factories or cinemas one can judge whether they were merely exploiting the material for a strident effect and possibly a corporate image, or whether they were in fact sincerely committed to the ideal of developing a modern architecture that was both practical and decorative.

The development of Hathern into a major manufacturer of terracotta, just at a time when the industry was being forced into collaboration by a serious decline in trade, was a remarkable if not illogical achievement. Though it was founded in 1874, presented designs for terracotta in 1883,⁽¹⁾ and had a catalogue soon after, there is no evidence of any major schemes being undertaken until the autumn of 1896. Production had been mostly of facing and common bricks and, at their Cliff Works near Tamworth, blue engineering bricks and pavers. However in the last years of the century the terracotta section developed rapidly to supply contracts totalling an average of £10,000 each year. In the period 1921-5 Hathern were just ahead of the Burmantofts section of Leeds Fireclay as the largest manufacturer of architectural ceramics in the country.⁽²⁾ (Fig. 10.1).

(1) Building News, 44, 1883, p. 288. These designs are considered in more detail in Chapter 8.

(2) The pattern of production and the details of specific orders are drawn from the Hathern order books, which, with the last four years in the ledger form, run from 1896 to 1939.

Source: TCA Statements



Source: Hathern Order Books



Source: Hathern Order Books



Much of this growth can be credited to the efforts of G.A. Hodson, who developed a particular enthusiasm for architectural work. The son of the founder of the firm, George Hodson, he directed the business from 1899 to 1938 with a dogged determination and a unwavering belief in the value of his terracotta and faience.⁽¹⁾ He succeeded in giving Hathern a more commercial and therefore more flexible outlook than the longer established works. The structure of the competing firms had been established by a management, working with committed architects and local art schools, to effect the revival of terracotta as an architectural material. By the late 1890s their investments, public images and specific designs were often becoming acutely out-of-date.

G.A. Hodson's underlying belief that it was essential to be able to respond to the varying demands of architects became applied most directly in the draughting office and modelling shop. Most of his draughtsmen were trained within the office as school-leavers, though at least one, Harry North, did come from a local architectural practice. They and the modellers were expected to produce whatever detailed designs were asked of them.⁽²⁾

Consequently, architects were able to realise their own tastes in the use of architectural ceramics, constrained

(1) A brief history of Hathern is contained in the booklet, Hathernware 1874-1974 (Hathernware Ltd, Loughborough 1974).

(2) Conversation with Harry North, 22 January 1981.

only by the capabilities of the staff and production process at Hathern. The members of the profession who regularly gave contracts to the Company took differing approaches to the development of their designs and the delegation of responsibility. Some initially impressed upon the designers and modellers exactly how they wished their meeting hall, railway buildings or shop-fronts to appear and only supplied one-eighth inch scale drawings for subsequent schemes. Many were glad to delegate the production of full-scale and shrinkage drawings and the design of the decorative detailing. With shops and dairies it was theoretically possible simply to introduce the house-styles, leaving Hathern's staff to adapt the designs to suit the site and layout of each branch.

However most of the major architects retained very tight control over the design of terracotta and faience by supplying full details themselves, or demanding alterations when the works' drawings were submitted to them for approval. Even with cinemas, where stylistic forms appear to have been loosely combined to achieve a striking visual impact, architects usually demanded to be consulted over the decorative detailing. W.E. Trent was not a qualified architect at all but required that the details of his facades were archaeologically correct. With the Super Cinema, in Ilford (20.12.1921) he rejected the sections drawn at Hathern for the entrance columns, suggesting that the draughtsmen referred to those on the Erechtem in Athens, presumably from a published illustration.⁽¹⁾

(1) Hathern, Drawings, Ilford Cinema, architect's sketch for capitals. The drawings first submitted by Trent in 1921 had included a large scale detail of the tower. In this Chapter dates in brackets are those when material for the building was ordered from Hathern or Shaw.

George Coles, the leading figure amongst all the inter-war cinema architects, was known to be so autocratic and particular, that many of the draughtsmens' drawings would be rejected as a matter of course. Even for a simple streamlined design such as the Odeon in Loughborough (- .12. 1935), he demanded alterations to the mouldings around the entrance and in the use of colour in the faience recesses for the neon lighting. (1)

The architect for the Co-operative Wholesale Society, W.A. Johnson, was equally meticulous as to the attention to detail in his buildings. His department designed little other than shop facades, and as such would have been held in scant regard by the elite of the profession and its critics. However he was well educated as to architectural and planning history and saw his own work as part of a new architecture:

In keeping with the motor cars, the aeroplane and other phases of our time. It must make use of synthetic materials including marble and stone, ceramics, and mass production articles. It should aim at the building which is the assemblage of mass production in the workshop, and put together in the site. (2)

Like many of his contemporaries he had an arcadian vision of pre-industrial and particularly Georgian towns which contrasted sharply with a general condemnation of the conditions and

(1) Hathern, Drawings, Odeon Cinema, Loughborough, 1936.

(2) E. Hampton, 'The architect of adventure', The Producer, August 1930, pp. 221-223 (p. 223). P.P. Craymer, the chief architect of the Co-operative Society supplied this article and further information on W.A. Johnson.

architecture of Victorian cities. His use of faience retained elements of classical decoration until the late 1930s.

The management at Hathern appear to have encouraged the retention of stylistic decoration in architects' designs. G.N. Hodson, who succeeded his father as the Managing Director in 1938, appreciated that plain slab faience was both economical and honestly expressive of the material. Nevertheless he considered it:

Doubtful, even in this standardised age, if we shall ever get a standard box-form architecture since condition of site and position vary so much. It is more likely that a reaction will resurrect the cherubim and garlands of flowers with which our grandfathers loved to decorate their buildings. (1)

It was the figureheads within the RIBA, the academics and the critics who condemned the way that faience was being used in the twenties. While some simply associated it 'with the blatant exteriors of public houses', (2) more considered judgments, such as from Professor Charles Reilly and H.S. Goodhart Rendel, claimed that the material was being developed along entirely the wrong lines. They considered that smooth surfaces with rounded edges were the most logical expression for a plastic material, with decoration being provided through colour and modern sculptural forms. (3) Probably more significant than any attitudes specific to faience was the general development in architecture to simplify or avoid period decoration in favour

(1) G.N. Hodson, 'Architectural terracotta and faience', Transactions of the Ceramic Society, 35, 1935-6, pp. 43-51 (p. 44).

(2) In the text of a lecture by J.F. Watkins on the practice of Collcutt and Hamp. British Clayworker, 36, 1927, pp. i-iii (p. iii).

(3) British Clayworker, 35, 1927, pp. 199-201 and 46, 1937, p. v.

of compositions of straight lines and simple masses.

To both the architects and the manufacturers, slab faience was a logical outcome of the taste for plain and unbroken surfaces. Introduced largely for reasons of economy it did not immediately result in a standardisation or mass-production in architectural ceramics. As G.N. Hodson emphasised, architects frequently required special sizes, textures and colours and there could be problems in matching cast or extruded slabs with the moulded blocks used to form ribbing, stepped forms or other detailing and corners. Even the size of the blocks or slabs was subject to the tastes of individual architects; typically a compromise had to be reached with the manufacturing shop at Hathern who were reluctant to produce forms over two square feet in surface area.⁽¹⁾

A wide range of standard colours was available but the Company also offered to match any colour samples that were supplied, returning fired trials for approval. Faience could be supplied in a range of glazed finishes, from high-gloss through egg-shell to rough textured. Hathern's production was categorized into three groups: unglazed terracotta, vitreous glazed finishes and fully glazed faience under the trade name of Hathernware.⁽²⁾ Apart from the division of the fully glazed faiences into two categories, greys and other colours respectively,

(1) G.N. Hodson (1935-6), *op.cit.*, p. 49. Modern practice in architectural terracotta (Hathern Station Brick and terracotta Co. Ltd. undated). p. 2. Hathern's practical booklet for architects recommended one cubic foot as an ideal size.

(2) Hathern, *Modern practice in architectural terracotta*, *op.cit.*, pp. 16-18.

these groups accorded with those defined by the Terra Cotta Association. They were used for the system of compensation and price regulation whereby a manufacturer was given an entitlement in each group. He was compensated if he failed to reach that quota by being allowed to quote lower prices and receiving payments from the general fund of the Association. Conversely, if particularly successful in a group, a contribution had to be made each quarter and a higher price quoted.⁽¹⁾

Because of the influence of the Terra Cotta Association, it is worthwhile discussing the market for Hathern's terracotta and faience by category, together with their pricing. There is evidence of the prices charged by Shaw between 1914 and 1932 and by Gibbs and Canning between 1920 and 1933 that allows some comparison of pricing policies between the Companies.⁽²⁾ However the rates offered by Hathern and their competitors were not just determined by the Association, but also by the precise nature and complexity of the clay body and glazes, the richness and extent of decorative modelling and the size of the contract. The rates per cubic foot increased up to almost a doubling as the value of the orders dropped below about £150, a factor that must have reduced the demand for components such as pier caps

(1) A more complete account of the structure and workings of the Terra Cotta Association is given in Chapter 5.

(2) Shaw, Order book, 1914-1932. The draughtmen's books for the remainder of the inter-war period survive but were not analysed for the total prices or rates of contracts. Gibbs and Canning, Stockbooks, 1920-1933. The quantity and value by rate per cubic feet, material in green and burnt state, is recorded with the title of the building.

and copings used on their own in construction. In addition, Hathern, Shaw and Gibbs and Canning usually gave a discount of 5%, in return for prompt payment. Other variable factors in pricing were delivery and fixing, the former normally being included but the latter forming an additional expense. The rate for fixing averaged 4s6d per cubic foot in the 1920s.⁽¹⁾

For the first decade from 1896 most of Hathern's contracts were for terracotta rather than for faience. (Fig 10.2). Using clays from Devon and Scotland as well as from their own claybank they could honestly advertise a full range of red, biscuit, buff and grey colours. Buff and tawny terracotta were the most common, with greys coming into demand just before the First World War. Although evidence on the prices being quoted by other firms in the Edwardian period is almost entirely lacking it is probable that Hathern achieved a rapid penetration of the market by undercutting their competitors. In 1904, Hathern tendered £6,252 against the sum of £6,950 put forward by Gibbs and Canning, for the contract for a generating station in Birmingham.⁽²⁾ In general Hathern's prices for terracotta dropped from around 5s at the turn of the century to 3s9d per cubic foot in 1914.⁽³⁾ This also affected the other

(1) For example: Lyon's premises, Briggate, Leeds, 13s per cubic foot and 44s6d for fixing. Shaw, January-February 1924. Many of Shaw's schemes were fixed by R.Parker and Son of Watford.

(2) Gibbs and Canning, Directors' meeting, 8 November 1904.

(3) The average price for each group of material in a given period was calculated by excluding those rates that were exceptionally high and for orders below £150 and then by averaging the rates per cubic foot over one or more years. Since specially modelled sections were sometimes costed separately and discounts of up to 5% were common on large orders, the average rates should only be regarded as an approximate indication of the basic price to which a manufacturer was working.

major firms and provided the main motivation for the formation of the Terra Cotta Association.

The fully glazed faience, Hathernware, was introduced in 1910, twenty-two years after Doulton had introduced their Carraraware. Hathern never rivalled the subtleties of glazed effects achieved by Burmantofts, Doulton or Carter. These firms had typically adapted compositions developed for tiles and art pottery to architectural faience. More mundanely, they had found a cheap source of material for the most common greens and browns, by mixing the waste glazes made up for these finer wares. Hodson ensured that stocks were held of 'Hathernware' glaze, presumably in the white colour which was most commonly specified;⁽¹⁾ but as with all the aspects of production, the management offered 'our best advice on this matter as regards colours available and combinations'.⁽²⁾

The Cinema House in Sheffield, by Hickton and Farmer (3.10.1912) (Fig 10.30) was the first major contract to use Hathernware; within a year the material was being specified for over a third of their contracts, and after the First World War faience completely dominated production. Whereas in 1914 Hathernware cost an average of 60% more than terracotta (6s3d to 3s9d), in 1922 when trade had revived after the War, the difference was only 14% (13s to 11s6d). The dramatic increase in prices largely reflected higher labour costs; these imposed more severely on the richer modelling used in terracotta work

(1) Hathern, Loose stock sheet, 1920.

(2) Modern practice in architectural terracotta, op.cit., p. 18.

than on the simple process of glazing faience. Vitreous finishes came between the two materials in price, costing 5s3d before the War and 12s in 1922; they consisted of clear glazes applied onto terracotta bodies and remained in demand for shops and cinemas throughout the twenties.

Comparing Hathern's prices just after the First World War with those of the other manufacturers, Gibbs and Canning were considerably more expensive, charging 17s3d per cubic foot for white faience. This firm was at its most competitive in producing a faience glazed to a granite finish which was often used on public houses. Achieved by spraying specks of a darker glaze over a lighter colour, Gibbs and Canning found a technique of avoiding the expense of an additional firing between the two stages of glazing. This economy won them the contract for a public house in Loughborough, against predictable competition from the nearby works of Hathern.⁽¹⁾

Shaw appear to have executed only 28 contracts from 1914 to the end of 1923. Seventeen were supplied in the following year alone, and their production increased progressively during the rest of the twenties. Most of the demand was for their fully glazed 'Marmola' faience which they were selling in 1924-5 for around 13s per cubic foot. (Fig 10.1).

During the twenties the prices charged by all three companies dropped slightly. Due to the system of grading and compensation imposed by the Association, it was the least successful firms that took contracts at the lowest rates in 1929,

(1) Conversation with Harry Parsons, 24 March 1981.

just as a serious slump in demand started to affect the industry. Gibbs and Canning were supplying faience for as low as 11s10d and terracotta for 9s7d while Hathern's prices were closely comparable at 12s and 9s9d.⁽¹⁾ Meanwhile Shaw, who were beginning to gain large contracts at the expense of the other firms, were recorded as charging 14s6d for both their fully glazed and vitreous finishes. They only produced a minimal quantity of terracotta. These differentials confirm G.A. Hodson's belief that price was a less important factor in gaining contracts, than a reputation for efficiency and contacts with the appropriate architects and clients.⁽²⁾ In the late twenties, Shaw benefitted from close ties with the architectural practices of L.G. Ekins and W. & T.R. Milburn, which brought them numerous orders for Co-operative stores in London and for commercial premises in the north-east of England.⁽³⁾ (Fig 10.7).

The other feature of pricing at the end of the twenties was that the range of rates became far wider as complex polychromatic effects came into demand, most typically for particular Co-operative Societies and cinema chains. One order to Hathern in 1930 involving ivory and gold Hathernware, cost £1 per cubic foot.⁽⁴⁾ The justification for this high price

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- (1) The 12s that Hathern quoted to supply the faience for the Commodore Cinema in Hammersmith was the minimum permitted rate. Letter from G.A. Hodson to W.H. Facon, Derby, 9 October 1928.
 - (2) He wrote to the general manager of Leeds Fireclay at Burmantofts, 'You have no difficulty in securing work at a higher price than ourselves'. Letter from G.A. Hodson to H.J.C. Johnston, Leeds, 1 December 1928.
 - (3) Ekins provided 16 orders between (8.9.1926 and 9.7.1931) while Milburn's total between (27.5.1925 and 9.7.1931) was 17 orders.
 - (4) Ship Inn, Kilnhurst, by J.E. Knight (4.4.1930).

Fig. 10.4

Hathern: Geographical distribution of orders for
terracotta and faience, 1896-1939.

Source: Hathern order books

<u>County</u>	<u>Orders 1896-1917</u>	<u>1918-1939</u>	<u>Total</u>
Avon	2	11	13
Bedfordshire	6	4	10
Berkshire	-	7	7
Buckinghamshire	-	8	8
Cambridgeshire	1	5	6
Cheshire	9	17	26
Cleveland	8	5	13
Clwyd	-	4	4
Cornwall	4	1	5
Cumbria	-	11	11
Derbyshire	30	99	129
Devon	2	5	7
Dorset	2	10	12
Durham	15	16	31
Dyfed	1	5	6
Essex	6	47	53
Glamorgan - Mid.	4	1	5
" - South	1	3	4
" - West	2	7	9
Gloucestershire	2	5	7
Gwent	7	1	8
Gwynedd	1	2	3
Hampshire	4	35	39
Hereford & Worcester	6	12	18
Hertfordshire	4	14	18
Humberside	6	18	24
Isle of Wight	1	1	2
Kent	9	33	42
Lancashire	6	61	67
Leicestershire	36	94	130
Lincolnshire	8	18	26

Greater London	111	260	571
Greater Manchester	78	191	269
Merseyside	15	13	28
Norfolk	2	30	32
Northamptonshire	3	11	14
Northumberland	-	7	7
Nottinghamshire	39	90	129
Oxfordshire	1	3	4
Powys	2	-	2
Shropshire	3	1	4
Somerset	-	2	2
Staffordshire	6	44	50
Suffolk	3	3	6
Surrey	3	13	16
Sussex	3	19	22
Tyne & Wear	9	42	51
Warwickshire	18	11	29
West Midlands	133	178	311
Wiltshire	-	8	8
Yorkshire - North	1	15	16
" - South	19	88	107
" - West	7	38	45
Scotland	3	1	4
Northern Ireland	-	63	63
Eire	-	3	3
Channel Islands	-	2	2
Canada	7	-	7

Fig. 10.5. Architectural practices using Hathern's terracotta and faience for five or more commissions, 1896-1939.

Source: Hathern order book.

(Initials or names in brackets denote alterations in the title of a practice).

<u>Name and Location of Practice</u>	<u>No. of Orders</u>	<u>Date Span of Orders</u>
E. T. Allock (& Grieves), Loughborough.	5	1925-38
Ansells Brewery, Aston, Birmingham.	8	1935-38
D. Archer, London.	12	1910-20
Barrowcliffe (& Allcock), Loughborough.	13	1902-36
J. S. Beard (& Clare), London.	14	1912-33
Halstead Best, Blackpool	22	1921-39
A. E. Beswick (R. J. Beswick & Son), Swindon.	7	1926-31
F. Bethell (& Swannell/& Durnford), London.	17	1915-29
W. V. Betts, Old Basford, Nottingham	27	1914-38
Capt. Blumberg, Newcastle-on-Tyne.	6	1935-38
Bradshaw & Gass (& Hope), Bolton.	9	1904-31
Bridgman & Bridgman, Torquay	7	1913-29
A. Brocklehurst, Manchester	39	1911-38
A. Bromley, Nottingham.	8	1898-1907
H. H. Brown, Manchester.	13	1908-32
M. Burton, Leeds.	5	1934-39
M. J. Butcher, Birmingham	6	1900-25

A. Bye, West Bromwich.	7	1914-19
Chapman & Jenkinson, Sheffield.	6	1913-30
T. Claybyn, Grimsby.	6	1933-35
H. E. Cogswell & Sons, Portsmouth.	8	1924-34
G. Coles, London.	37	1922-37
Co-op Wholesale Society (inc. L.G. Ekins), Derby, Manchester and London.	140	1913-38
A.W.S. & R.M. Cross (& Kell), London.	6	1935-37
Dallas & Lloyd, Birmingham.	6	1914-26
M. A. Dancey, Gloucester.	5	1914-30
J. Davis, Lincoln.	5	1931-35
F. J. Dear, London.	6	1925-28
J. G. Dunn, Birmingham.	5	1908-13
A. Edwards, Birmingham.	7	1907-24
Essex, Nicol & Goodman, Birmingham.	7	1897-1908
Evans & Son (Clark & Wollat), Nottingham.	5	1911-30
H. S. Fairhurst, Manchester	5	1919-38
A. L. Farman, London.	6	1935-36
P. R. Fincher, Leigh-on-Sea.	6	1923-35
Fine Cotton Spinners Association (H. S. Porter), Manchester.	5	1923-25
Graves & Ellerton, Manchester	5	1924-35
H. Gray & Jones, Birmingham.	5	1934-35
T. Guest, Birmingham.	8	1897-1923
N. Hartley Hacking, Manchester.	12	1919-39
Hetherington & Wilson, Newcastle-on-Tyne.	5	1936-39
W.H. & T.V.G. Higginbottom, Nottingham.	5	1912-23
H.M. Office of Works, London.	7	1911-38

Hollins & Jones, Newcastle, Staffs.	12	1931-38
Holt Brewery, Birmingham.	8	1935-38
P. W. Home, London.	20	1924-32
E. Douglas Heyland, London.	7	1911-15
W. Johnson & Sons, Manchester.	12	1925-38
H. Keighley (F. Keighley), Blackpool.	7	1911-38
A. E. King, Loughborough.	18	1902-36
Kitson, Parish & Ledgard (& Pyman), Leeds.	8	1928-39
J. E. Knight (Rotherham), Rotherham.	11	1923-30
Aubrey Lane (Son & White), Mansfield.	8	1925-38
G.E.J. Lawrence, London.	14	1900-10
J. & L. Lea & Sons, Birmingham.	39	1899-1930
F.W. Lloyd, Birmingham.	6	1899-1906
W. H. Longworth, Manchester.	12	1910-29
F. Matcham, London.	15	1901-35
A. Moreton & Son (J. Moreton & Sons), Nuneaton.	6	1898-1914
J. McBride Neill, Belfast.	8	1935-37
J.P. Osborne, Birmingham.	8	1909-21
Owen & Ward, Birmingham.	6	1900-04
V. S. Peel, Birmingham.	6	1920-33
R. P. Peirce & Son, Stockport.	11	1908-25
J. St. John Philips, Belfast.	9	1924-35
Potts, Son, & Hennings, Manchester.	6	1902-07
Prices Tailors Limited, Leeds.	5	1935-38
E. Proctor, London.	6	1911-29

J. T. Proffitt (& Proffitt), Walkden.	9	1909-22
H. Quick, Coventry.	11	1911-28
J. Blythe Richardson, Doncaster.	11	1923-38
Hurley Robinson, Birmingham.	8	1913-37
Satchwell & Roberts, Birmingham.	5	1924-36
J. Scott, Belfast.	6	1925-35
A. E. Sewell, London.	5	1913-29
G. A. Sexton, London.	6	1922-38
T. Smith & Son (J.E. Smith & Son), Bolton.	6	1923-38
Starr & Hall, Nottingham.	8	1913-37
W. Stockdale, North Shields.	8	1913-38
Stockdale, Harrison & Sons, Leicester.	7	1934-38
J. B. Surman, Birmingham.	11	1934-38
E. R. Sutton & Gregory, Nottingham.	6	1905-09
Taylor, Roberts & Bowman, Oldham.	8	1931-39
J. Thorpe (T. H. Thorpe), Derby.	6	1923-38
A. J. Thraves, Nottingham.	5	1936-38
G. Trubshaw (Midland Railway Company), Derby.	12	1896-1905
F. A. Tugwell, Scarborough.	6	1919-26
M. O. Type, Birmingham.	6	1919-27
G. F. Ward (& Ball), Birmingham.	8	1906-11
B. Waterhouse, Salford, Manchester.	9	1924-36
Watkin & Maddox, Burslem.	7	1928-38

S. J. Wearing, Norwich.	12	1926-39
H. W. Weedon, Birmingham.	8	1935-36
Geo. Westcott (& Son), Manchester.	17	1925-36
Wilburn & Atkinson, Doncaster.	14	1923-37
Wilcockson & Cutts, Chesterfield.	7	1922-32
C. E. Wilford, Leicester.	5	1935-37
E. J. Williams, Leicester.	7	1930-38
G. Winter, Darlington.	5	1907-14
Wood & Kendrick, Birmingham.	7	1906-22

Fig. 10.6. Shaw: Geographical distribution of orders for terracotta and faience 1914-32

Source: Shaw order book.

<u>County</u>	<u>1914-32 Total</u>
Avon	6
Bedfordshire	1
Berkshire	1
Cheshire	3
Cleveland	4
Clwyd	1
Cumbria	2
Derbyshire	1
Devon	1
Dorset	4
Durham	24
Dyfed	1
Essex	6
Glamorgan - West	1
Gwent	1
Hampshire	6
Kent	19
Lancashire	83
Leicestershire	1
Lincolnshire	2
Greater London	99
Greater Manchester	39
Merseyside	9
Norfolk	3
Northamptonshire	6
Northumberland	8
Nottinghamshire	1
Shropshire	1
Somerset	2
Staffordshire	7
Surrey	2

Sussex	5
Tyne & Wear	5
West Midlands	24
Worcestershire	8
Yorkshire - North	1
" - South	4
" - West	18
Scotland	3
Northern Ireland	4
France	1
New Zealand	1

Fig. 10.7. Architectural practices using Shaw's terracotta and faience for five or more commissions, 1914-32.

Source: Shaw order book.

<u>Name and Location of Practice</u>	<u>No. of Orders</u>	<u>Date Span of Orders</u>
Brameld & Smith, Manchester	7	1926-29
C.W.S. Building Department, Manchester.	6	1923-32
J. C. Derham, Blackpool.	6	1929-30
L. G. Ekins, London.	18	1926-31
Messrs. Joseph, London.	5	1929-32
F. M. Kirby, London.	7	1927-29
Marshall & Tweedy, Newcastle-on - Tyne.	6	1924-29
W. & T. R. Milburn, Sunderland.	17	1925-31
Reeve & Reeve, Margate.	5	1926-30
J. B. Thornley, Manchester.	5	1914-26

was that gold was one of the few colours of faience requiring an additional low temperature firing. With large schemes and less exotic colour contrasts the additional cost was more modest, 16s being a typical rate for a cinema front incorporating bands of black and jade green faience.⁽¹⁾

The early thirties saw a dramatic decline in Hathern's sales of faience and prices fell accordingly. A Burton's store in Stafford (28.11.1934) was supplied with white Hathernware at 8s10d per cubic foot. The order of £5,959 worth of red terracotta for the re-fronting of the Prudential Offices in Holborn (19.3.1931) was particularly valuable to Hathern in this difficult period and a vindication of the policy of continuing to produce unglazed ware. (Fig 10.2).

With the revival of trade around 1937-8 prices returned to a level of about 15s, rising to 16s just before the Second World War. Many orders in the late thirties included slab faience measured by the square yard. Shaw had introduced slabwork as early as 1931, charging 22s per square yard,⁽²⁾ and Hathern followed four years later. In 1936 Hathernware was supplied for the Spa Cinema in Buxton at 26s per square yard.⁽³⁾ Slab faience did not effect a revolution in the economics of using architectural ceramics because it always

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- (1) Five colours were provided for the Commodore Cinema, Glasgow, by J. McKissack at 13s per cubic foot (22.8.1930).
- (2) Gillingham station, designed by G. Ellison (-.10.1931).
- (3) Designed by G.E. Westcott (17.8.1936) Separate rates for slab and block faience were not given for most of Hathern's contracts.

had to be combined with moulded work. The average size of the cinemas also became larger; the Odeon facades dating to 1937-8 cost in the range of £1,000 to £2,000 while most of the independent cinemas of the early thirties had involved orders in the region of £500 to £1,000.

In relating these developments in forms, glazed finishes and pricing to architectural usage, one does not find architects veering from one manufacturer to another to achieve the keenest price or to take advantage of new developments in manufacturing and glazing; their allegiance to a particular manufacturer appears to have been at least as strong as in the Victorian period.

The links with particular architects are reflected in the pattern of geographical distribution of the terracotta and faience contracts supplied by Hathern and Shaw. Several concentrations of orders in particular parts of the country represent one or more local architects using architectural ceramics supplied by one firm for a series of buildings, increasingly of a particular building type. (Figs 10.4 & 6). Shaw gained numerous contracts from the north-east in the twenties, the majority coming from only three architects. During the following decade Hathern came to dominate the trade in faience with the architects designing cinemas in northern Ireland. Such strong regional markets were partly built up through the efforts of particular sales representatives or agents.⁽¹⁾

(1) Gibbs and Canning, Directors' meeting, 17 May 1912. The role of representatives and agents is considered in Chapter 5.

Other large concentrations of sales were in the areas which had seen the extensive use of terracotta in the previous century, such as London, Birmingham and Manchester. However different manufacturers were likely to be proving the most successful in these regional markets. Many orders came from the major seaside resorts, particularly those nearest to one of the works. Since the manufacturers had to cover the cost of delivery, they were able to offer lower prices or higher discounts for relatively local work. Hathern supplied much of the architectural ceramics used in Derby, Leicester and Birmingham while Shaw dominated in Lancashire and Carter along the south coast.

Hathern and Shaw appear to have undertaken few orders for export. They may have accepted the lessons learnt by Doulton and Gibbs and Canning in the Edwardian period, when these firms had attempted to develop trade with Canada; both had been hindered by the costs and administrative problems of transshipment and establishing a network of agents. Meanwhile Maw appear to have been more successful in selling decorative tiling and faience for the interiors of public buildings, in the colonies and particularly Australia and New Zealand.⁽¹⁾

The inter-war period is notable for its lack of major orders from the continent; prohibitive tariffs were put forward as an explanation. However Burmantofts did export to New Zealand and supply a remarkable scheme in Belgium. Their terracotta had already been used on a group of town houses

(1) Maw, Record photographs. Leeds Fireclay, Annual reports, 1935, p. 7 and 1937, p. 6.

built in Ghent around 1910 and designed by A. von Huffel; in 1936 they made dressings worth about £100,000 for the Basilica du Sacré Coeur in Brussels designed by von Huffel and Rome.

Architectural ceramics had always been regarded as best suited to urban architecture and to commercial and public buildings. In the twentieth century the materials gained particular associations with development in the inner suburbs and with new building types. In the Victorian period these had been represented by schools and libraries, while in the Edwardian and inter-war periods Hathern's production concentrated on public houses, chain stores and cinemas. (Fig 10.3).

Public Houses in Birmingham

The first architects to make extensive use of Hathern's terracotta were James and Lister Lea, on twenty-six of the public houses that they designed in Birmingham between 1899 and 1914. J. and L. Lea epitomised the commercialism of the provincial practices who came to make an extensive use of terracotta. As well as designing banks and offices, the firm undertook surveying and legal work for breweries and managed a large estate in Birmingham. Their principal architects, Mr Brassington and Mr Roberts, were probably too busy to have any qualms over delegating most of the responsibility for detailing their designs to the draughtsmen and modellers at Hathern.

By the time of the pub-building boom at the turn of the century, the essentials of J. and L. Lea's plans and elevations for public houses had evolved into an almost standard arrangement,

with a variety of decoration being used to create a feeling of individuality and opulence for each building. Typically located at a street junction a tower was positioned over the corner entrance and terminated in a cupola or a spire. One or two gables were set to either side with wide-arched openings on the ground floor, which were filled with painted or engraved glass. The facade was subdivided by string courses, cornices and polygonal ribs which either ended in tourelles or extended into the shaped gables. Motifs popularised by the 'Queen Anne' style were worked in heavy mouldings and crowded round the large windows and along the line of the cornice.

It is difficult to discern any path of development in the use of terracotta through the twenty-two public houses designed by J. and L. Lea before the end of 1908.⁽¹⁾ Similarly the competing breweries do not appear to have imposed anything of a house-style. The Dog and Partridge in Moseley (10.1.1900) and the King's Arms, Bishop's Gate Street (8.6.1901) were given similar designs but had the Holt Brewery Company and Mitchells and Butler as their respective clients.

The size of the building was a significant factor, the decoration being made more three-dimensional and sculptural the larger the order for terracotta. A small facade cost around £300 and a larger one up to £600. Hathern were paid £353 for the Salutation Inn in Snow Hill (-.3.1902) which was decorated with moulded dolphins and festoons, and £548 for the Red Lion

(1) The character of this practice is presented in A. Crawford and R. Thorne, *Birmingham pubs 1890-1939*. (University of Birmingham 1975), unpagged.

in Soho Road, Handsworth (- .1.1902) with its more imposing caryatids and its 'lions séjants'.⁽¹⁾ (Fig 10.8). The Bull's Head, Upper Priory (29.4.1901), with terracotta costing £426, was given curious arches over the top of each gable and connecting three ball finials; such roof-line features were included possibly to compensate for the lack of a corner tower. (Fig 10.9).

The Bull's Head had spiral balusters running round the entrance doorways and in the jambs of the first floor bays. The same form of decoration was also used on the Roebuck Inn (1.8.1901) and five years later on the Birmingham Horse (21.7.1906). The latter presented another characteristic detail of Hathern's work, in the form of small projecting studs at the join of the blocks which formed the window lintels. In slightly differing shapes these studs appear on other buildings, unconnected except for the fact that they were made of Hathern's terracotta. Examples are Newton Chambers in Cannon Street, designed by Essex, Nicol and Goodman (10.9.1897), and the interior of Woodcock Street Baths by F.W. Lloyd (31.12.1900). (Fig 10.10) Such details would have been the work of the terracotta draughtsmen and approved rather than designed by the architects. In all the public houses designed by J. and L. Lea there is no evidence of any individual forms being repeated from one contract to another, except for the simplest string courses and roof details. It is reasonable to assume that in each case the

(1) The pricing of the Red Lion suggests a reason why Hathern's supplied so little red terracotta. They charged 10s per cubic foot for that used on the ground floor front and only 5s9d for the buff of the upper storeys (- .1.1902).



Fig. 10.8 Red Lion, Soho Road, Handsworth, Birmingham, by J. and L. Lea, 1902 (Hathern).



Fig. 10.9. Bull's Head, Upper Priory, Birmingham, by J. and L. Lea, 1901 (Hathern).



Fig. 10.10. Woodcock Street Baths, Birmingham, by F. W. Lloyd, 1900 (Hathern).

draughtsmen worked up a sketch elevation by the architects.

Two public houses in Birmingham designed by J. and L. Lea, of slightly earlier date, are not recorded as having their terracotta manufactured by Hathern. The Woodman in Albert Street of 1897, and the Swanpool Tavern in Lichfield Road, dating to a year later, have entirely different detailing to the other terracotta in Lea's Birmingham pubs. The most distinctive features are the arched windows with a series of keystones set into the mouldings. The terracotta on the Swanpool Tavern is orangey in colour, suggesting that a Ruabon firm may have been responsible.

M.J. Butcher was another architect who used Hathern's terracotta on pubs in Birmingham. Of these the Dog and Duck, Aston (14.5.1900) and the Gunmaker's Arms in Gerrard Street (4.6.1902) only involved small orders. Craven Dunnill supplied the ground floor front of faience and mosaic for the Dog and Duck and a faience bar-front for the Gunmaker's Arms.⁽¹⁾

Theatres designed by Frank Matcham

Edwardian theatres and music-halls shared many characteristics with public houses. They needed to be built rapidly and to contain wide interior spaces, and they were frequently given frontages in an exuberant Baroque style. Most were designed by specialist architects, of whom the most successful was Frank Matcham. Matcham fully appreciated the potential of industrial materials, using steel girders to support

(1) The Dog and Duck has been demolished.

curving balconies, forming interior decoration in his own type of fibrous plaster and using Hathern's terracotta for some of his most inventive facades.⁽¹⁾

It was a group of theatres built in London at about the turn of the century that presented his most committed and original use of architectural ceramics. The Richmond Theatre, using biscuit-coloured terracotta to the value of £987, constituted the third largest contract undertaken by Hathern (6.8.1898). Despite the size of the order, they had to commence delivery in six weeks and complete within fourteen weeks. Matcham's characteristic composition of having towers either side of a central gable over the entrance was given curvaceous detailing in the outline of the pediments, buttresses and other forms. Only the draped figure in the centre of the facade could be described as being directly classical in style, and this was sculptured in a pale grey terracotta, probably at Doulton's works.

The design of the Richmond Theatre relates closely to that of the County Arcade in Leeds dating to 1899-1900. Matcham treats the entrances to this and other of the Leeds arcades like the centre of his theatre facades, with a gable and archway flanked by towers and cupolas. The scale of the detailing is reminiscent of J.T. Smith's heavy-handed use of

(1) Much of Matcham's work was in rebuilding and alteration work. Of the 107 theatres in which he was involved only 10 are recorded as using Hathern's terracotta and there appear to be two where he used material from another manufacturer. A record of all Matcham's theatres is provided in B.M. Walker (ed.), Frank Matcham, theatre architect (Blackstaff, Belfast 1980).

terracotta a decade earlier, in Mayfair.

More originality was shown in the design of the Hackney Empire (25.2.1901) and with justification, considering its use for variety shows and its suburban location. The forms of the dressings were mannered to the point of eccentricity. Matcham's typical wide arch over the central balcony was terminated at each end with a scroll, resting on bulging columns no more than five feet in height. The domed turrets were given slit windows set in the sides of the octagonal bases.⁽¹⁾ (Fig 10.11).

However Matcham, instead of developing this embryonic 'ceramic style', reverted to a more traditional classicism for the Marlborough Theatre (5.11.1901) in Holloway Road which was given heavily Baroque detailing. The Coliseum in St Martin's Lane called for a truly monumental design. It was to be the impresario, Oswald Stoll's commercial tour-de-force and had a site just above Trafalgar Square. The design of the tower followed closely those on the west end of St Paul's Cathedral. The terracotta was given channelled rustication and an imitative stone colour. At £3,635 this was Hathern's largest order before the First World War. (4.6.1903).

The subsequent theatres designed by Matcham and using Hathern's terracotta consist of re-workings of his most characteristic arrangements and motifs. The Hippodrome, Willesden (4.1.1907) was given statues (Fig.10.12), the Hippodrome, Lewisham.

(1) The facade of the Hackney Empire has suffered from the removal of the two turrets.



Fig. 10.11. Hackney Empire, Mare Street, London, by F. Matcham, 1901 (Hathern).



Fig. 10.12. Hippodrome, High Street, Willesden, London, by F. Matcham, 1907 (Hathern).

(26.4.1910) a statue on the scroll gable over the entrance, and the Empire, Finsbury Park (3.11.1909) a group of circular windows in the centre of the facade. The detailing on the New Empire, Chiswick (5.2.1912) was made far plainer, akin to that on the cinemas being built just before the First World War. Tawny coloured terracotta was used for the New Empire but for Matcham's Victoria Palace, built in the previous year, white Pentelica ware was supplied by Gibbs and Canning.⁽¹⁾

The other theatre architects made less use of terracotta in London, partly because they were largely involved in reconstructing interiors. One of Matcham's pupils, Bertie Crewe, used buff material supplied by Shaw for the Princes Theatre, in 1911.⁽²⁾ Hathern was the supplier for Crewe's Theatre in Liverpool (2.1.1906).

It was almost inevitable that Matcham's use of terracotta would be emulated by several provincial architects, since theatres were being built in most of Britain's major towns and cities during the Edwardian period. The partnership of Owen and Ward used Hathern's terracotta for seven theatres executed between 1900 and 1905. In their home city, Birmingham, they designed the Lyceum (no record of order but illustrated in one of Hathern's advertisements). The composition was comparable and the date, 1901, the same as Matcham's Hackney Empire (Figs 10.11 & 13). In fact these two theatres share the same design of central gable, incorporating a curving broken pediment,

(1) British Clayworker, 22, 1913, p. xxx.

(2) British Clayworker, 20, 1912, p. xl.



Fig. 10.13. Lyceum, John Bright Street, Birmingham, by Owen and Ward, 1901 (Hathern).

festoons, a statue and date-plaque, identical even in the form of each block. It is an unique case of plagiarism, achieved by Hathern probably with the connivance of one of the architects.⁽¹⁾ Owen and Ward appear to have had some arrangement with Hathern that ran from one contract to another. While the Lyceum was not entered into the order book, the basic prices for the Hippodrome in Wigan (9.6.1903) and the Royal Palace in Grimsby (26.1.1904) were the same at £130. The 10% discount offered on the latter could be explained by the same moulds being re-used, as Owen and Ward repeated this time their own rather than another architect's designs. After 1910, G.F. Ward made regular use of Hathern's terracotta for the 'Electric' theatres that he built in various Midland towns.

James and Lister Lea are recorded as designing only one theatre, the Aston Hippodrome (15.6.1908). Possibly because of its later date it had none of the exuberance of their public houses. Grey terracotta was used and the twin towers were squat and simply decorated.⁽²⁾ Another Birmingham architect, Thomas Guest, used terracotta for a variety of commissions. The Alexandra Theatre in Hull must have been one of his most spirited designs (3.5.1902). Again there are similarities with Matcham's work, but one of the towers rises up to a spire with a belvedere. The detailing was curvaceous and drew loosely on both Gothic and Renaissance motifs.

(1) On stylistic grounds one would expect that Owen and Ward had 'stolen' Matcham's design. However the Lyceum was opened seven months earlier in May, 1901. J. McKenna, Birmingham as it was (Birmingham Public Libraries 1979) unpagged. The Lyceum was renamed the Alexandra and replaced in the thirties by a new building of the same name, again using Hathern's ceramics.

(2) The Aston Hippodrome has been demolished.

Railway Stations and other Edwardian Public Buildings

None of the other ties between Hathern and Edwardian architects had such distinctive results as with J. and L. Lea and Frank Matcham. There was an architect in most cities using terracotta for commercial premises and industrial buildings, and most were working to some personal formula of Baroque, French or a simplified classicism. In Birmingham, Newton and Cheate, and Essex, Nicol and Goodman employed a variety of manufacturers; the latter practice was sufficiently prolific in the ten years from 1897 to bring eight contracts to Hathern alone. In contrast to a series of very routine office blocks, the Birmingham Technical School, opened in 1905, was richly impressive, taking inspiration from the nearby Assize Courts. Gibbs and Canning were the suppliers. (1)

Hathern supplied some terracotta for the Liverpool practice of Briggs, Wolshtenholme and Thornley and for H.S. Fairhurst of Manchester, but Burmantofts gained a larger quantity of work from these two Lancashire firms of architects. The Burmantofts section of Leeds Fireclay was particularly successful in gaining the contracts for a series of massive buildings in Whitworth Street, Manchester including two warehouses designed by Fairhurst, (1912-15), (2) the Institute of Science

(1) During the negotiations after Gibbs and Canning had submitted their first tender, 'an abatement in price to the sum of £6,700' was made by the chairman. Directors' meeting, 14 November 1893.

(2) Lancaster House and Bridgewater House, dating between 1912-15. Modern Building Record, 5, 1914, p. 36.

and Technology by Spalding and Cross (1895-1912) and almost certainly the Police and Fire Station by Woodhouse, Willoughby and Langham (1901-6).

Burmantofts supplied the 80,000 cubic feet of terracotta required for the Midland Hotel in Manchester, dating to 1898 and designed by the architect of the Midland Railway Company, Charles Trubshaw.⁽¹⁾ He had already used architectural ceramics in rebuilding Leicester Station in 1892, where the spandrels over the 'departure' archway had been filled with faience putti, one holding a steam-engine. Hathern manufactured the terracotta for some of Trubshaw's smaller stations, and his offices and warehouses in the Midlands and north London, totalling twelve contracts between 1896 and 1905. (Fig 10.5). In the last two years of the century, the Midland Railway's new rival, the Great Central, also used terracotta for its station at Leicester and Nottingham, the supplier for the latter being Burmantofts.⁽²⁾

Numerous contracts for the station fronts of the London Underground also went to Burmantofts. Their 'sang de boeuf' coloured faience formed the basis of an overall identity given to the stations built by the Underground Electric Railways Ltd.⁽³⁾ Their architect, Leslie W. Green used virtually the

(1) British Clayworker, 14, 1905, p. xxviii.

(2) Illustrated in: Burmantofts' faience, volume of photographs of terracotta and faience schemes and details submitted for architects' approval (1902).

(3) British Clayworker, 15, 1907, p. lxxxi.

same design, whether the entrance was for the Northern, Bakerloo or Piccadilly lines. The deep red colour and the composition of a line of arcades with square columns, a deep entablature and semi-circular arches were repeated between stations, and used the same models and moulds. At Leicester Square and Russell Square on the Piccadilly Line, the forms are identical but the arrangement was adjusted to suit the length of the frontage and the location of the actual entrances and exists. (Fig 10.14). This extensive group of underground stations appear to be the only instance of complete building forms such as window surrounds and cornices being consciously repeated to achieve a visual consistency and presumably a degree of economy.

South Kensington and other underground stations of the same period shared the same overall composition but were executed with slightly different proportions and details and in a different shade of red faience. (Fig.10.15). A possible explanation is that another manufacturer was involved, most probably Woolliscroft. The form of an arcade divided into two storeys as also used for some of the station rebuildings on the Metropolitan and District Line; at Earl's Court, C.A. King used Hathern's brown vitreous faience (7.11.1906). The facade is quite distinctively different from those of other underground stations, with double columns separating the arches and an open balustrade running above the cornice.

Subsequently Shaw and Carter executed some free standing underground stations, examples being Great Portland Street and Wembley.⁽¹⁾ However, it was for the interiors of

(1) Shaw and Carter, 'Record photographs.



Fig. 10.14. Leicester Square Underground Station, London, probably by L. W. Green, c. 1905.



Fig. 10.15. South Kensington Underground Station, London, probably by L. W. Green, c. 1905.

stations that the largest orders were being let, and most were won by the tile firms. Maw, through their London agent W.B. Simpson, appear to have been most successful in the Edwardian period, supplying ticket windows in green faience, as well as tiling for the booking halls, corridors and platforms. After the First World War, S.A. Heaps and then Charles Holden used stone, brick and concrete for their station exteriors. For the interiors, it was Carter who gained the most contracts, some involving moulded faience. They also designed a special series of relief tiles, used mainly in the refurbishment of the City Line.⁽¹⁾

Generally, in the South of England, the major contracts went to the longer established firms and especially Doulton. Hatherly had executed 79 contracts within the area of Greater London by the end of 1914. The largest number for a single architect were the fourteen Board Schools in the northern suburbs designed by G.E.J. Lawrence between 1900 and 1910. (Fig 10.5). The most successful schemes, judging by contemporary criticism, were a series of apartment blocks designed by Palgrave and Company. Their designs combined the intricacy of Renaissance eclecticism with the fashionable details of the Edwardian period. Egg and dart mouldings, spiral balusters, shields surrounded by ribbons and a derivation of the Frampton tree motif were combined in Parliament Chambers, in Smith

(1) Their faience was used in the booking halls of Waterloo and Bank stations. Carter, Record photographs. I am grateful for information on the use of ceramics in London's Underground from Douglas Rose and his colleagues who are recording tiling schemes on the station platforms.

Street, Westminster (7.6.1904), (Fig 10.16). Palgrave again used Hathern's terracotta for a large and more routinely decorated block of flats in Fulham Road (22.1.1906) and for Ashley House in Vauxhall Bridge Road (14.2.1907).⁽¹⁾ However Henry Dennis of Ruabon, supplied the terracotta for Palgrave's most richly decorated design, Wellington House, in Buckingham Gate, dating to 1908. The head architect visited the Hafod Works before entrusting their modellers with the sculptural work, including figures of Wellington and George IV.⁽²⁾ It seems as though Hathern did not have the capability of executing fine sculptural work in the Edwardian period.

Churches and Chapels

The large number of churches, chapels and meeting halls for which terracotta was supplied by Hathern, up to the 1930s, contrasts with the reduced quantity and physical scale of ecclesiastical building in general, during the twentieth century. A partial explanation lies in the loosening of high-Victorian prejudice against the use of terracotta in churches, but the need for economy and the desire for a slight modernity may have been just as significant influences in promoting the adoption of architectural ceramics.

The most remarkable designs of the Edwardian period fall loosely within the range of the Byzantine Revival. This style

(1) Parliament Chambers and the Fulham Road blocks were illustrated in *British Clayworker*, 17, 1909, pp. xviii-ix.

(2) *British Clayworker*, 17, 1908, pp. x-xi.



Fig. 10.16. Parliament Chambers, Smith Street, London, by Palgrave and Company, 1904 (Hathern).

accommodated other traditions that were in vogue from the Edwardian period, such as the Baroque, and Celtic and Romanesque decoration. The Byzantine emerged at its most eccentric in the Cemetery Chapel at Compton, near Guildford, designed in 1896 by the wife of G.F. Watts, the late Victorian painter. The red blocks were made by the Potters' Art Guild, founded by Mrs Watts. They were moulded with Celtic designs and other motifs chosen for their symbolic meaning.⁽¹⁾ Detailing which was more obviously influenced by Art Nouveau was used in the interior of St James', London Road, Leicester, designed by H.C. Goddard and built from 1899. While the aisle windows and arches were formed of plain blocks, low relief panels were moulded in the form of angels and in a decorative frieze running round the apse. Burmantofts manufactured the biscuit coloured terracotta.⁽²⁾ When the west end of the church was completed in 1913-4, Hathern supplied the rather simpler dressings to the end arches (23.6.1913) but the Baroque front was faced in stone. St Osmund's, Parkstone near Poole was also built in two stages. In 1904-5, G.A.B. Livesay designed the chancel with columns, arches and a baldachino in red and buff terracotta which was supplied by Carter.⁽³⁾ Edward Prior also used terracotta for his completion of the church, from 1913-6; a strong feature of his work was a low archway of terracotta, decorated with a vine pattern and which linked the western turrets.

(1) Country Life, 166, 1979, pp. 388-90.

(2) British Clayworker, 21, 1913, p. lxxxii.

(3) British Clayworker, 19, 1910, p. ii.

The subtle combination of terracotta and multi-coloured local brick on the west front of St Osmund's reflects Prior's Arts and Crafts' sensibility to materials. In contrast, probably the only church to be completely clad in faience, the Congregational Church at Fairhaven near Blackpool, was meant to be strident in its effect. The intention was to present a strong contrast to the seven other churches in the same road, all built in brick and stone, and Gothic in style.⁽¹⁾ The initiator of the scheme, a Blackburn art dealer, Luke Walmsley, suggested the use of faience after visiting the 1909 Building Trades Exhibition,⁽²⁾ and a group went to Leeds to study the process of manufacture. Middleton Fireclay were given the contract which incurred an additional cost of £800 over the use of brick, as had been the original intention.⁽³⁾

The design by Briggs, Wolstenholme and Thornley is essentially Romanesque, with a tall domed corner tower, two lower turrets and some Baroque detailing. The effect of having the walls completely covered in a thick, white glaze is startling, possibly suited to a seaside resort but hardly subtle. The church was opened in 1912.

(1) British Clayworker, 21, 1912, p. lxxiv.

(2) The British Clayworker doubted whether 'the resources of the clayworker have been put to more charming effect than at Fairhaven'. 25, 1916, p.lxxiv.

(3) Information provided by Clyde Binfield who has studied the records for the church as part of his research into non-conformist architecture.

Meanwhile Hathern had developed an extensive trade in supplying ashlar and simplified tracery for the churches and halls being built by the Wesleyan and Methodist denominations. Grey and buff terracotta was used by the Bolton firm of Bradshaw and Gass for a large group of chapels and central halls, mostly in Lancashire but also as far south as London. John Bradshaw Gass may have gained his enthusiasm for the material through studying at the local School of Art and serving with Ernest George.⁽¹⁾ In their churches, such as that built for the Wesleyans at Haulgh near Bolton (9.8.1904), traditional Gothic elements were largely restricted to the main windows, the other dressings being very simply moulded. The large Wesleyan meeting halls were designed in a freer style with traces of Art Nouveau entering into the detailing. The Central Hall in Liverpool (21.6.1904) was given a large tower receding in stages and flanked by smaller cupolas. Further domes formed accents along the range fronting to Renshaw Street. Terracotta was used for a wide plain string course, swirls of tracery across the main windows and a plaque portraying the Liver Bird. (Fig 10.17). The dressings on the King's Hall in Bolton (9.8.1906) were made far plainer. Since the plan was also reduced in scale, the terracotta cost only £390 as opposed to £3,263 for the Central Hall in Liverpool.

The move towards using simplified Perpendicular forms was pursued by a number of architects who were combining terracotta dressings with large areas of sand-faced bricks. E. Procter

(1) Who's who in architecture (Architectural Press, London 1923), p. 99.



Fig. 10.17 Central Hall, Renshaw Street, Liverpool, by Bradshaw and Gass, 1904 (Hathern).

used Hathern's terracotta for three churches. At the Presbyterian Church in Hove (30.6.1911), the east and west windows were given rectilinear tracery, but the tower with its raking buttresses, tall pinnacles and a spire had only the simplest terracotta dressing. A.E. Lambert of Nottingham adopted a heavy Baroque style for the Albert Hall in his home city (2.1.1908); he also used Hathern's terracotta for three dissenting churches. Of these, the Wesleyan Church, Gorton, in Manchester (11.6.1909) and the United Methodist Church, Lenton Sands near Nottingham (5.5.1913) were boxy compositions with simple terracotta decorations at each gable end.

The practice of Brocklehurst and Company of Manchester maintained the use of Hathern's terracotta in Wesleyan churches and halls to the end of the 1920s. Their style remained essentially unchanged from that used in the Edwardian period. The churches were typically given broad arched windows with sparse and angular tracery; the windows were separated by square topped buttresses. The church at Wigton Road, Carlisle (12.6.1928) was given the additional feature of a tower with tall lancet windows. Inside the church in St James' Road, Southampton (9.3.1927), terracotta was only used for the columns and the chancel arch. A ponderous free style was adopted, with domed towers and heavy rustication for a series of Wesleyan halls, located as far apart as Ashington in Northumberland (1.12.1922) and Southampton (4.9.1923). (Fig 10.18).

The Wesleyan church in Carlisle represented a contract worth £1,855 to Hathern and the Central Hall in Southampton one for £2,400; between 1925 and 1929 Brocklehurst gave nine



Fig. 10.18 Central Hall, Southampton, by Brocklehurst and Company, 1923, (Hathern).



Fig. 10.19. Sandon Hotel, Oakfield Road, Liverpool, by A. E. Shennan, c. 1932 (Hathern).

such orders to the Loughborough firm. At a time when all the manufacturers were unable to gain their quota of terracotta work, defined as Class 1 within the Terra Cotta Association, such a run of large orders must have been extremely valuable.

Inter-War Public Houses

The ad hoc way in which Renaissance classicism evolved into some form of modernistic expression during the twenties can be seen in the design of public houses. Breweries appear to have employed a local architect to develop a suitable house style, but left them to choose the manufacturer of the architectural ceramics.

Brains Breweries of Cardiff built a series of small public houses completely clad with faience and using a simplified Tudor composition, with transom and mullion windows, and straight sided gables. Doulton and Carter supplied some of these pubs and Hathern undertook what must have been the smallest of the group, the Glastonbury Arms Hotel, in Bute Street, designed by Ivor Jones and Percy Thomas (23.6.1922).⁽¹⁾

Hathern gained numerous contracts for public houses in Lancashire. Whoever the architect or the brewery, they usually supplied blocks of vitreous faience. Decorative detailing was normally restricted to ribbed lintels, jambs and copings, simple fretwork patterns and possibly a low relief plaque.

(1) Record photographs indicate Doulton and Carter working for Brains Breweries. The cream front of the Glastonbury Arms Hotel has recently been painted over in a bright green colour.

N.H. Hacking's designs became progressively simpler except where he introduced Tudor style half-timbering. In their home town of Bury, A. Brocklehurst and Company were responsible for the design of the Napier Inn (30.7.1929).

Spanish styles, which were popular during the thirties for suburban houses, were also adopted for pubs. The Sandon Hotel in Oakfield Road, Liverpool, dating to around 1932, was one of the most curious schemes executed by Hathern. The architect, A.E. Shennan, decided to cover the facades with cream Hathernware, but in the form of slabs only eight inches square. Tiles decorated in relief with trees, ships, turkeys, fishes and other forms were placed at random across the otherwise plain wall surfaces. The entrances were surrounded by panels of vines and the main upper windows separated by detached spiral columns. (Fig 10.19). The Seven Oaks Hotel in Nicholas Street, Manchester, designed in 1935 by the staff architect of Threlfall's Brewery, was also slightly Spanish in flavour, it was given simpler round-headed openings and a plain cladding of mottled vitreous and black faience.

In Birmingham, the Holt Brewery Company built at least two modernistic pubs using black faience. The Golden Eagle in Hill Street by F.J. Osborne and dating to 1935 was particularly dramatic with its Art Deco detailing:⁽¹⁾ the slightly more traditional Warwick Castle in Aston, designed by O.M. Weller (10.12.1937), used material supplied by Hathern.

(1) Illustrated and described in A. Crawford and R. Thorne, (1975), op.cit., unpagued.

As the breweries came to concentrate their building activity in the expanding suburbs, neo-Georgian and neo-Tudor became the predominant styles. This in turn made plaster, brick and timber the more appropriate materials. Hathern still provided faience for public houses in the thirties but mostly in the form of simple ground floor fascias.

Fewer major hotels were built between the Wars than in the Edwardian period. Three of the largest developments in London followed the example of the Savoy Hotel in being clad in cream-coloured faience in a Renaissance style. The Regent Palace Hotel was actually completed by 1917 while the Park Lane Hotel, finished in 1927, incorporated a steel frame erected in 1913.⁽¹⁾ Both were designed by Sir Henry Tanner with the faience being supplied by Burmantofts. Their Marmo was again used on the Strand Palace Hotel, completed in 1930, and for the extensions to the Regent Palace of five years later, the architect in both cases being F.J. Wills.⁽²⁾ The only full-scale hotel, rather than large public-house, supplied by Hathern was the Seacroft Hydro at Skegness, designed by E.R. Sutton (4.7.1907).

Seaside Resorts

One of the major associations that faience gained in the twentieth century was with the development of seafronts.

(1) British Clayworker, 35, 1927, pp. xlii-xliii.

(2) Leeds Fireclay, Annual report, 1927, p. 9 and British Clayworker 43, 1935, p. xliii. Shaw also supplied some faience for the Strand Palace Hotel, (31.3.1926).

The material was not only resistant to the salt-laden air of coastal areas but, with moulded and coloured decoration, it exuded a suitably light-headed architectural flavour. Often the impetus and the basic designs came from the Borough architect or surveyor, who probably appreciated the assistance of the draughtsmen and modellers in creating classical colonnades and ornamental features.

Panels portraying St Michael, St George and a dragon were incorporated in the faience for Brighton Pier Pavilion, supplied by Hathern and designed by the architect of the County Borough. At Great Yarmouth, the Borough surveyor produced designs for the promenade and bandstand, executed by Burmantofts in about 1937.⁽¹⁾ Carter gained several contracts in the south coast resorts; the Grand Parade at Eastbourne, dating to about 1930, featured a bandstand with a squat onion-dome and completely executed in Ceramic Marble, while a pier pavilion at Hastings was given a more modernistic cladding of slab faience.⁽²⁾

Faience was most widely adopted in Blackpool. As the resort grew rapidly during the first half of the twentieth century the material was used for hotels, guest houses, cinemas and churches, as well as the structures erected along the

(1) Leeds Fireclay, Annual report, 1937, p. 5. Much of this scheme which the report stated had been 'described as one of the best examples of faience in the world' has been lost through subsequent rebuilding.

(2) Carter, Record photographs.

promenade. Blackpool was to become the town with the heaviest concentration of architectural ceramics in the country. While Burmantofts undertook the shelters and information kiosks along the front,⁽¹⁾ the cladding for the comparably styled lifeboat station was made by Hathern (-.5.1937). The architect was Halstead Best. It was through his successful practice and obvious predilection for faience that Hathern won so many orders in Blackpool. (Fig 10.5). Whatever the building type, Best's designs were given squared proportions and juxtaposed large areas of plain brickwork with faience dressings. He used Hathern's faience for seven residential hotels along the North Shore, all dating to the thirties, for a Co-operative shop at Morton (20.3.1937) and for a church. The First Church of Christ the Scientist (16.8.1928) was given a remarkable circular arcade of Corinthian columns which projected from a recessed entrance and which was entirely moulded in cream faience. (Fig 10.20).

However it was the more local firm of Shaw that gained the largest contracts in Blackpool. In 1929, having previously undertaken only small schemes in the town, they out-competed Hathern and Gibbs and Canning amongst other manufacturers, to supply the Winter Gardens. The total price for the 30,374 cubic feet was £23,638.⁽²⁾ For such a large building, J.C. Denham's design was relatively simple, using mostly white faience moulded into columns, pilasters and projecting cornices, with gold and

(1) Leeds Fireclay, Advertisement page, undated.

(2) Shaw, Record photographs.



Fig. 10.20 First Church of Christ the Scientist, Whitegate Drive, Blackpool, by Halstead Best, 1928 (Hathern).

blue polychromy being restricted to the lettering, swags and other classical details. The Winter Gardens is said to have confirmed Shaw's status as a major producer of faience, and they supplied many commercial schemes in Blackpool during the following decade.⁽¹⁾ Of these the most striking was the rebuilt facade of the Woolworth store sited next to the tower on the promenade. The design of 1938 and probably produced by Woolworth Construction Department, emulated the modernism of American tower blocks. The two ranges running back from the corner entrance and clocktower were divided into bays by ribbed vertical fins. The slab faience was glazed to a cream colour with brown inserts.⁽²⁾

Industrial Buildings

Faience might be expected to have found its most widespread use in the facades of industrial buildings, where the concern for efficiency and a clean, modern image ran stronger than any preconceptions as to correct styles and materials. In practice the role of architectural ceramics was rather inconsistent. Standardisation and financial economies were achieved more through efficient ground plans and the use of steel or concrete framing than by the adoption of a particular type of cladding. Meanwhile white plaster or concrete appeared just as progressive as glazed ceramics. Consequently the expressive use of faience was usually the result of a firm

(1) Conversation with Harry Parsons, 24 March 1981.

(2) Shaw, Record photographs.

wishing to convey a stylised rather than just a modern image, whether because of its location or on the nature of its product. The adoption of faience also generally followed from the employment of an architect generally convinced of the value of the material.

Smooth claddings and polychromatic decoration were considered more appropriate for factories than traditional, relief decoration.⁽¹⁾ Consequently it was not the traditional terracotta firms but the manufacturers who were the most oriented towards the economical production of slab panels with coloured glazes, such as Shaw and Carter, that became the most successful in supplying facades for industrial buildings. Hathern, Gibbs and Canning and Burmantofts provided material for several warehouses and small factories. A combination of white and blue faience was the most typical choice for dairies, examples by Hathern being those built by Express Dairies in north London, for example at Cricklewood (19.6.1934). During the twenties Hathern gained several contracts for industrial buildings in Birmingham. One of the most successful schemes was the works of Sheffield's Ltd, in Cornwall Street (4.10.1923). The design by Bloomer and Gough was very restrained with round arches along the ground floor and the upper windows being divided by plain round columns. The grey terracotta was inset with minute billet and chevron patterns. Doulton's major industrial contract of the inter-war period was to supply plain white and black Carraraware for the Ansells Brewery

(1) Architects' Journal, 86, 1937. The 2 December issue was entirely devoted to factory design.

at Aston, designed by Stone and Partners and dating to around 1930.⁽¹⁾

The largest order supplied by Hathern for an industrial building also involved some of the most massive individual blocks ever made. They measured approximately five feet in depth and were for the plinth of Ferrybridge Power Station (2.9.1925).⁽²⁾ The Yorkshire Electric Power Company made an entirely traditional use of the mottled vitreous faience to form dressings for the brickwork. The payment to Hathern totalled £9,013.

This was fairly modest in comparison to the £23,750 contract won by Shaw in 1930 for the faience used to line the first turbine hall at Battersea Power Station. The design for the interior was by Halliday and Agate. Faience slabs measuring 24 by 12 inches and 24 by 17½ inches were fixed in alternate courses. The colours chosen were, light grey with black decorative strings and dados, the other details being moulded in blue coloured blocks.⁽³⁾ In the following year another large industrial order came to Shaw, for the Melias Warehouse in Liverpool. The architect, A.E. Shennan, used polychrome faience to a value of £8,600, the bands of differing colours being concentrated round the central entrance.⁽⁴⁾

(1) P. Atterbury and L. Irvine (1979), *op.cit.*, p. 100.

(2) Some of the blocks made for Ferrybridge remain at Hathern's works on the edge of the claybank.

(3) Shaw, Record photographs and advertisement page.

(4) Shaw, Record photographs and order book (18.3.1931).

Faience was used in the brightest colours and most fashionable forms for the factories built along arterial roads to accommodate the manufacture of modern products such as car tyres and vacuum cleaners. Carter came to supply the particularly prestigious schemes located along the Great West Road and Western Avenue, in Brentford and Perivale, through a close association with the architectural practice of Wallis, Gilbert and Partners. In three examples, the actual works were screened by a symmetrical administrative block with Carter's faience being used to emphasise the central entrance. The rest of the fronts were executed largely in rendered concrete.

The design of the office block for the Firestone Tyre Company, completed in 1929, drew on the Egyptian style that had become fashionable earlier in the twenties. The bases and capitals to the columns that subdivided the facade were richly coloured and a ribbed architrave to the entrance was surmounted by a plaque containing a stylised initial of the Company. For the Hoover Factory, completed three years later, Carter supplied a fan shaped panel in polychrome faience and gold radiating above the recessed entrance, in addition to large areas of plain interior tiling. The nearby Pyrene Factory, dating to 1934, was given a simpler entrance surround of green and red faience with a frieze of faintly Aztec flavour forming the plinth to the jambs and columns.⁽¹⁾

(1) Carter, Record photographs. The Firestone Factory (demolished) and the Hoover Factory are described in J. Hawkins, *The Poole potteries* (Barrie and Jenkins, London 1980), pp. 135-6.

The styles chosen for industrial buildings in the thirties were generally simple and streamlined in their image. Wallis, Gilbert and Partners used Carter's faience in the form of ribbing and fins for the main entrance of Victoria Coach Station, completed in 1932. In contrast to the use of accents of ceramic colour by Wallis, Gilbert and Partners, other architects gave the fronts of factories a complete cladding of plain slab faience. The Berlei Corset Factory, also facing the Great West Road, designed by Sir John Brown and A.E. Henson and dating to 1932, was completely faced with primrose coloured faience in two foot by one foot slabs.⁽¹⁾ Faience was most likely to be used on factories where a bright and hygienic image was most desirable; examples are a butter and cheese works in West Smithfield designed by Joseph Hill and an ice-cream factory in Wolverhampton by Lavender and Twentyman, both dating to the late thirties.⁽²⁾ In the latter, ivory Carraraware was used without any special mouldings and combined with a large area of glass subdivided by stainless steel frames.

Commercial Buildings

In contrast to the contribution made by faience to the image of industrial architecture, the material found little favour for offices, public buildings and even for public services such as hospitals. The pace of office building appears to have

(1) Architects' Journal, 86, op.cit., pp. 900-1, 910-11.

(2) Doulton, Record photograph.

slackened the inter-war period. At the same time stone and, increasingly, brick were regarded as conveying a stronger sense of dignity than slab faience, which was considered fit more for cinemas and seaside resorts than for financial or governmental institutions.

The Prudential Assurance, who had established an architectural identity through the use of red terracotta, concentrated in the twentieth century on adapting their existing branches and establishing smaller offices in provincial towns. J.H. Pitt succeeded Alfred Waterhouse and Son as the architect to the Company. Just before the First World War he produced a quiet Renaissance design for a new block at Holborn. It was executed in green and egg-shell coloured faience which was supplied by Gibbs and Canning.⁽¹⁾ Of the small branches that Pitt designed in the twenties, Hathern supplied those at Loughborough (28.8.1913) and Southend (9.8.1927); the only decorative modelling on the latter being the consoles over the ground floor windows. Of the few offices in London faced with architectural ceramics, several received favourable criticism. Messrs Spicer's Building in New Bridge Street, designed by F.W. Troup and commenced in 1913, was complimented for the extent to which the classical decoration, executed on Carrara ware, had been simplified and made subordinate to the grid pattern of the fenestration. Dating to almost twenty years later and using slab faience, Westwood and Emberton's Summit House gained attention for its uncompromising expression of the underlying steel frame and of the nature of architectural ceramics; the

(1) British Clayworker, 22, 1913, pp. xxi-ii.

edges of the wall surfaces were all slightly rounded.⁽¹⁾ One of the few designs of real architectural quality was Artillery House in Westminster, completed in 1930. The composition of Sir Aston Webb and Sons and Harvey A. Dawson, and executed in Burmantofts' faience, showed a sophisticated approach to giving some visual strength to a steel framed building and to introducing original forms of decoration. The two main entrances were set in round arches edged with cable moulding and were surmounted by a small cannon. Above flat pilasters rose up through six storeys raking back in a curved profile. The complete absence of horizontal mouldings achieved a strong verticality and served to prevent staining of the wall surfaces.⁽²⁾

If contracts for the exterior of offices were less common than in the Victorian and Edwardian periods there was even less demand for the lining of offices with tiles and faience. The only scheme on a major scale was for Shell-Mex House near Waterloo, dating to 1930, designed by Messrs Joseph, and supplied by Shaw. The restaurant was given a simple decorative scheme, being lined with faience of a deep cream colour relieved by vermilion bands.⁽³⁾ During the thirties Doulton's Carraraware was used for refurbishing the interiors and platform buildings of several stations on the Great Western

(1) The design of Spicer's Building and Summit House was complimented by C. Hussey, 'Faience as a medium for modern architecture' *Architectural Review*, 70, 1931, pp. 101-4 (p. 104) Gibbs and Canning supplied the faience for both stages of Summit House, Stockbook, 1933.

(2) *Architects' Journal*, 71, 1930, pp. 271-4.

(3) Shaw, Record photographs.

Railway, the most extensive schemes being at Cardiff and Bristol Temple Meads.⁽¹⁾ (Fig 10.21). However most of the linings for public interiors, such as for schools, hospitals and pithead baths, used standard size tiles to the exclusion of moulded faience.

Chain-stores

In the 1920s the market for architectural ceramics became dominated by the demand for chain-store facades. The value of a house-style for shops had already been appreciated by Lipton and more specialist firms such as Jaeger and Kodak.⁽²⁾ The subsequent growth of multiples was accompanied by a pre-occupation with the advertisement of their goods and of a fashionable image. Startling innovations in shop-front design were enabled by the use of rolled steel joists, plate glass and modern decorative materials. In this context faience was recommended in one report as being virtually indestructible and offering a range of delicate colours.⁽³⁾ It gave a more architectural and seemingly permanent identity to a store than the metals, polished stones and vitrolite which were used solely for ground floor fascias.

House-styles based on the use of architectural faience were usually developed by one architect working with one

(1) Doulton, Record photographs.

(2) Described and illustrated in H. Dan and E. Willmott, English shop-fronts (Batsford, London 1907), pp. 22,31.

(3) Architectural Design and Construction, 9, 1939, pp. 189-90 (p. 189).



Fig. 10.21. Platform building, Cardiff Station, probably by P. Culverhouse, c. 1935 (Doulton).



Fig. 10.22. Panel modelled for a Co-operative Society, c. 1925. (Gibbs and Canning).

manufacturer for a particular retailing company. This arrangement was first established and became most widely applied in the branches of the Co-operative Societies. Starting just before the First World War, many of the Societies that had been established across the country employed one architect to design their stores, whether they were located in town centres, suburbs or even in villages. Generally adhering to a basic formula of a single-storey front made of white faience with classical detailing, each architect and Society established its own variation within this theme. The architects appear to have remained with one manufacturer through their series of commissions. Consequently one would expect the draughtsmen and modellers at that works to have influenced the nature of the Society's house-style by their own tastes and capabilities. This is confirmed through the stylistic evidence of surviving record photographs. Gibbs and Canning supplied Co-op's in Reading and Bedworth and their modelling shows intricate designs modelled in high relief.⁽¹⁾ (Fig 10.22). A far blander style is apparent in the work by Carter at Luton and for the Bath and Tiverton Co-operative Society.⁽²⁾ Shaw are recorded as undertaking shops in Bristol, London and Lancashire.⁽³⁾ (Fig 10.7).

(1) Gibbs and Canning, Stockbooks, 1929, 1930, 1931 and Photographs of modelled details.

(2) Carter, Record photographs.

(3) In addition to the designs of L.G. Ekins, five shop facades from the Co-operative Wholesale Society were supplied by Shaw. This contrasts with the 140 contracts that the CWS gave to Hatherly.

Hathern probably gained the most contracts for supplying Co-operative stores. Their first was in the Birmingham suburb of Witton (5.3.1913). By the end of the twenties they had produced faience for 67 shops for various Societies. (Fig 10.5). About twelve miles away from the works, the Derby Society built ten suburban shops at the end of the twenties; they were all faced with mottled vitreous faience and closely related in design. The stall, risers and pilasters were kept plain, with a panel above carrying the title of the Society and its establishment date. However each design was given a slight variation that was sufficient to prevent the re-use of any moulds at Hathern. Balustrades and simple garlands were introduced at Spondon (9.5.1927), and a small curving pediment at Burton Road (13.2.1929), while at Osmaston Park Road (26.3.1925) the projecting details were in green Hathernware. The style of lettering frequently varied but, even if repeated, the size or spacing would be adjusted to suit the scale of the facade. (Fig 10.23).

The Radcliffe and Pilkington Society used a comparable style of front while Nottingham made the economy of having the title and branch number painted onto the fascia. For the Norwich Co-operative Society, S.J. Wearing, who had been trained at Leicester Art School, was responsible for some refined, almost neo-Grecian designs.⁽¹⁾ The shops at Aylsham Road (31.12.1926) were given a well proportioned dentilled cornice and the dairy in Chapel Field Road (11.6.1927) a wide

(1) Who's who in architecture (Technical Journals, London 1914) p. 236. Wearing was also the architect to a large number of housing schemes in East Anglia.



Fig. 10.23. Co-operative Shop, Nottingham Road, Spondon, Derby, by L. G. Ekins, 1927, (Hathern).

moulded surround surmounted by a low pediment.

The Co-operative Wholesale Society, based in Manchester and with W.A. Johnson as the chief architect, used Hathern's faience in numerous designs that were produced for Societies in the north of England and occasionally around London. A slightly differing classical theme was established for each of the Societies; small sculptural lions and dolphins were introduced for the Beswick Society while Manchester and Salford's Co-operative shops incorporated a contrasting material such as tiling or imitation marble in the window surrounds.

During the thirties, slab faience became used for the smaller branches, while the High Street stores became more diverse in design. For the central premises of the Woodley Co-operative Society, (13.3.1935) W.A. Johnson used a granite coloured faience for the base and bronze-coloured letters on the fascia in a neo-Georgian facade. However for what must have been his most sophisticated design, combining a range of materials and classical and Art Deco motifs, he turned to Doulton. On the facade of the Sheffield and Eccleshall Co-operative Society building of 1930, ribbings and zig-zag patterns were introduced in the white Carraraware with the cornice and vases and flowers being made in salt-glazed stoneware. The inclusion of some bronze colour created a lustre effect. The vases were set on pier-like pilasters that divided the facade into bays, while the modelling was in very low relief.⁽¹⁾ (Fig 10.24).

(1) This design was complimented by Hussey in Architectural Review, 7), 1931, (op.cit.), pp. 138-9.

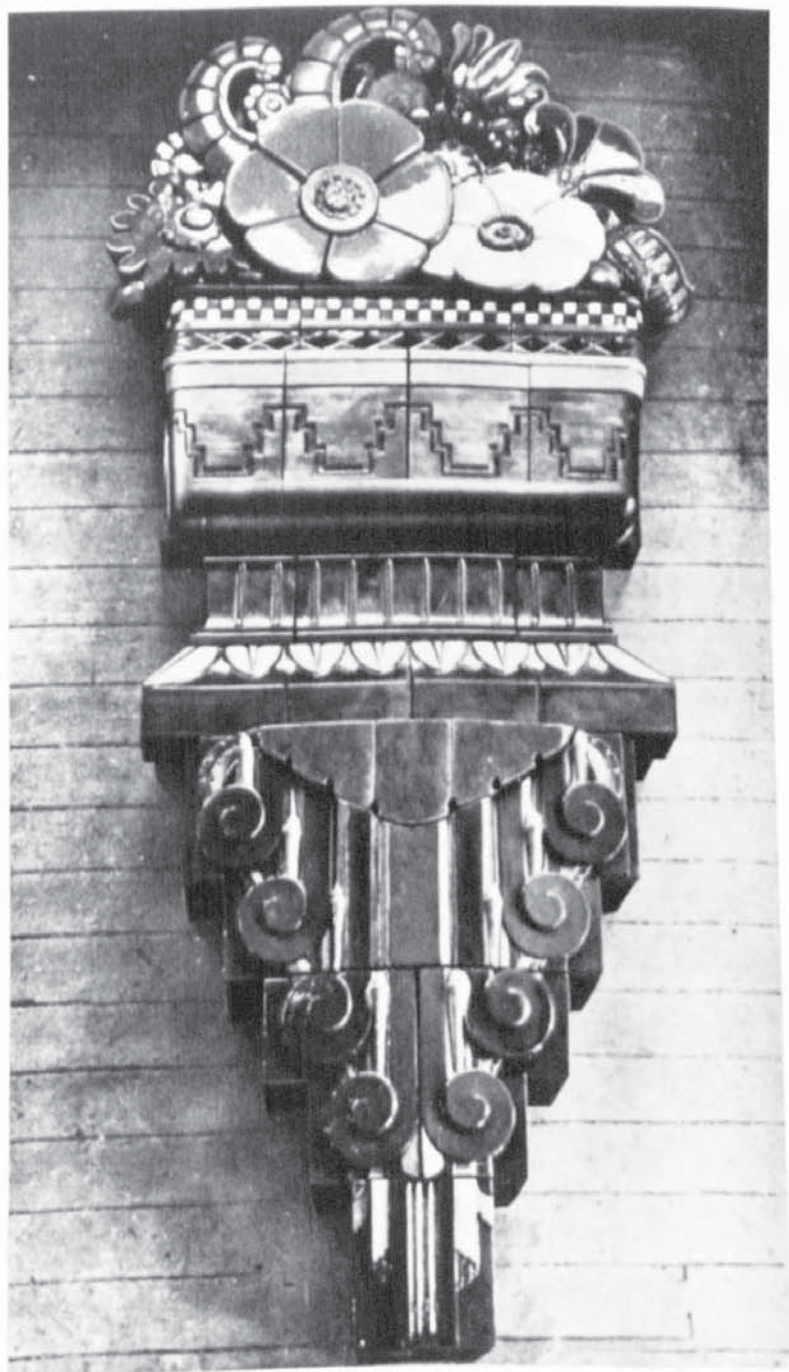


Fig. 10.24. Vase terminal to pilasters in salt-glazed stoneware, for Co-operative store, Eccleshall Road, Sheffield, by W. A. Johnson, c. 1930 (Doulton).

Other architects also became less bound by the stripped classicism of the Co-operative house-style. For Gray's Co-operative Society in Dagenham (24.5.1935) L.G. Ekins clad the upper storey in blue mottled faience. The staff architect of the Royal Arsenal Co-operative Society produced a most novel design in the facade of the Tower House, Lewisham (17.1.1933). The balustrade was made of white Hathernware modelled into side views of lorries, railway locomotives and ocean liners while more ships were portrayed in low relief panels between the third and fourth floors (Fig.10.25)

With the recovery of the retail market and commercial building around 1922, other chain-stores established house-styles based on or incorporating architectural ceramics. David Greig employed their own architect P.W. Home to design their stores in the south of England, three being supplied by Hathern. The branch at Bristol (1922) was probably the first to have the Company's characteristic oversized wreaths and hanging garlands decorating the top storey.

The Times Furnishing Company achieved a particularly progressive image by employing C.J. Eprile who described himself as a 'consulting architect to multiple shop companies'.⁽¹⁾ Having studied at the Central School of Arts and Crafts, he married a daughter of the Jacobs family, who owned Times Furnishing. His strikingly modernistic store designs used white faience above a black plinth with large areas of plate glass recessed in thin metal frames.⁽²⁾ At their branch in High

(1) Who's who in architecture (1923), op.cit. p. 85.

(2) A.Sawyer of Times Furnishing provided information on the relationships between Eprile and the Company.



Fig. 10.25. Co-operative store, Tower House, Lewisham, by S. W. Ackroyd, 1933, (Hathern).

Road, Ilford (16.9.1926) the Company's name was set in a faience panel, lit by large spotlights mounted on plates radiating in a sun ray pattern. Later Times stores such as in the Old Kent Road, by Burnett and Eprile (1931), and at Lewisham (1938) were simpler in design and probably used Shaw's faience.⁽¹⁾ (Fig.10.26).

The most strongly Art Deco house-style was that of Montague Burton. It was established by the architect Harry Wilson in the twenties using a polished black granite plinth, bronzed windows frames and metal lettering. The 'Spanish' windows and projecting elephant's heads became the hallmarks of the style, the heads having been designed by E.A.W. Moore. The upper floors were executed in stone or artificial stone as least as frequently as in faience. Hathern's contracts for branches at Belfast (9.11.1932) and Deptford (20.5.1933) date to after the formation of an architectural department at Burton. (Fig 10.27) The chief architect, N. Martin adopted stylised classical motifs such as the angular Corinthian capitals incorporated in the facade at Deptford.⁽²⁾

Wilson and then Martin defined the detailing of each store very precisely. They then appear to have chosen their faience manufacturers more according to cost than by reputation or by established ties. The Middleton Fireclay Company, using their position outside the Terra Cotta Association to undercut

(1) Architectural Design and Construction, 8, 1938, pp. 202-3.

(2) Information, record photographs and drawings were supplied by E. Fairfoot of the Burton Group. Wilson supplied precise full-size drawings of the decorative details to Hathern, in addition to overall elevations at a scale of eight feet to one inch.



Fig. 10.26. Times Furnishing store, High Street, Ilford,
by C. J. Eprile, 1926 (Hathern).



Fig. 10.27. Burton store, Ann Street, Belfast, by N. Martin, 1932 [Hathern].

the competition, undertook the most facades for Burton in the twenties. When Edward Shaw heard that a Burton's store was to be opened in Darwen, he wrote to the secretary of the T.C.A. asking for his permission to quote as low as necessary to win the contract.⁽¹⁾

Faience was used by other companies to more restrained effect, examples being the British Home Stores, Woolworth, Austin Reed ⁽²⁾ and Messrs J. Lyons for their Corner Houses.⁽³⁾ However, as with public and commercial offices, faience was largely disregarded for the largest and most prestigious department stores. The only example of any architectural note was for C. and A. Modes in Glasgow, designed by North, Robin and Wilsdon in about 1930 and using Burmantofts' faience. Above the deep fascia over the ground floor, faience ribs subdivided the facade into bays of glass and metal which rose to the full height of the building.⁽⁴⁾

Cinemas

Much of the way in which faience evolved, and the prejudice for and against the material, in the inter-war period

(1) Letter from E. Shaw to W.H. Facon, Derby, 27 March 1928.

(2) Most of Austin Reed's branches incorporating faience were supplied by Gibbs and Canning, though the Stourbridge Firebrick Company was involved in one branch. *British Clayworker*, 35, 1926, pp. xiv-v. Stockbook, 1933.

(3) These companies also appear to have alternated between using faience and various types of stone.

(4) *British Clayworker*, 38, 1930, pp. xxxviii-ix.

can be explained by its use in cinemas. This applies most strongly from 1929 when the introduction of the 'talkies' led to the construction of many large cinemas just when the national crisis reduced the general level of building activity. During the thirties cinemas provided the bulk of orders for Hathern and Shaw and, because of their relative simplicity, a high level of profit.

The value of faience in cinema design was most directly expressed by the architect who became its strongest exponent, George Coles:

Much can be done by the correct use of materials to render the entrance facade the attraction it should be, and the use of white glazed terracotta has much to recommend it from the point of view of appearance and durability, it is also easily cleaned down, and when floodlighted, has a very festive appearance.⁽¹⁾

Other important qualities were a resistance to fire and the potential offered for rapid construction; slabs could be attached to the completed brick shell of a cinema while the interior was being fitted out. However the main value of faience was to contribute to the advertisement of the cinema and its programme. Described as the 'architecture of pleasure' and calling for striking novelty in design,⁽²⁾ full rein was given to the inventiveness of both architects and manufacturers, first in decorative modelling and then in bright polychromy and modernistic forms.

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- (1) Article in Cinemas, theatres and ballrooms of 1928, quoted in D. Atwell, Cathedrals of the movies (Architectural Press, London 1980), pp. 93-4.
- (2) Report of a lecture by J.R. Leathart to the RIBA in Architects' Journal, 72, 1930, pp. 841-3 (p. 841).

Hathern supplied its first cinema facade almost as soon as they became purpose-built rather than converted from other uses of building. Their earliest contract was for the Electric Theatre in Birmingham, designed by Wall and Ball (20.4.1910). It was a group of three cinemas in London designed by J. Stanley Beard which first demonstrated how decorative faience could make a simple cinema front stand out from other buildings in a high-street. The Walpole Picture Theatre in Ealing (14.5.1912) was converted from a roller skating rink; there was only room in the front for the entrance archway and above, wreaths and swags modelled with the greatest possible richness.⁽¹⁾ A year later the Majestic Theatre in Clapham (6.9.1913) used white Hathernware with more fully French Renaissance decoration. The space to either side of the arched entrance was let for shops and apartments. By the end of 1914 Hathern had received twenty-five orders related to cinemas.

This early experience in supplying cinema fronts, unequalled by the other manufacturers, would explain Hathern's success in winning three extremely large contracts soon after the end of the First World War. The orders, from Nottingham, London and Ilford in Essex, contributed most to the tripling of sales within the terracotta section between 1920 and 1921. The Elite Picture Theatre at Nottingham (20.12.1919) brought £14,191 to Hathern, but only after they had contributed some of the £100,000 capital to finance the scheme.⁽²⁾ The

(1) Illustrated in D. Atwell (1980), op.cit., p. 15.

(2) Hathern bought 1,000 shares in the Elite Picture Theatre (Nottingham) Ltd, Recorded in Hathern, Other companies files.

architects, Adamson and Kimms, had promised that Hathern would be rewarded for supporting the project, by being given the faience contract. The design was highly ostentatious with decorative shields set between each storey and large figures in niches that rose above the line of the cornice.

The Rivoli in Whitechapel Road, London (23.12.1919) was the cinema most widely presented in Hathern's own publicity.⁽¹⁾ Intricate modelling was involved in the florid Parisian design produced by Adams and Coles. (Fig 10.28). This was the first major project in which George Coles was involved.

The Super Cinema in Ilford (20.12.1921) was an early work by W.E. Trent. He was to be responsible for some of the first 'super' cinemas, containing over 2000 seats and built from 1928 by the Gaumont-British Picture Corporation. At Ilford he used the same approach to achieving a striking elevation as adopted by the Edwardian public house and theatre architects, that of a exaggerating and distorting historic Baroque forms. Large columns and a tower were arranged to accentuate the corner entrance. (Fig 10.29).

During the twenties faience was used not so much by specialist architects such as Frank Verity who produced the first cinema designs to receive critical approval, but more by provincial architects to whom the building type was element of their local practice.⁽²⁾ The decorative potential of

(1) For example in, Hathern Station Brick and Terracotta Co. Ltd., Terracotta buildings, undated, unpagged.

(2) D. Atwell (1980), op.cit., p. 54.



Fig. 10.28. Rivoli Cinema, Whitechapel Road, London, by Adams and Coles, 1919 (Hathern).



Fig. 10.29. Super Cinema, Ilford, by W. E. Trent, 1921 (Hathern).

faience and the capabilities of the draughtsmen and modellers would have been appreciated by such designers as assisting them in creating original and dramatic facades.

Hathern supplied several contracts in and near to Sheffield, and they present a wide variety in terms of design. Of two dating to the 1920s, the Hillsborough Park Cinema was given a florid but straightforward Renaissance front while the Adelphi in Attercliffe was in a heavy Baroque. Two earlier cinemas built in Sheffield and Rotherham were more dramatically original. Messrs Hickton and Farmer had already designed the Electra Palace in Sheffield; dating to 1911 it had been given a front of Burmantofts' faience incorporating Egyptian heads.⁽¹⁾ For the Cinema House (3.10.1912), they used white Hathernware. Most of the decorative motifs were characteristic of many of Hathern's schemes dating to just before the First World War, with banded rustication, moulded plaques, square 'nail-heads' and thick swags. (Fig 10.30). However the voussoirs of the entrance arch were boldly extended up to a eight feet high keystone which was topped by a crown. Above was a 'St Paul's Cathedral' type tower, but with a skeleton dome made of ribs of faience. The design was heavy and brash but sufficiently forceful to rival for attention against E.W. Mountford's Town Hall almost directly opposite.⁽²⁾ For the Cinema House in Rotherham, Hickton and Farmer decided on a completely Turkish flavour with minarets, onion-shaped windows

(1) Sheffield Daily Telegraph, 10 February 1911.

(2) The Cinema House, Sheffield has been demolished.



Fig. 10.30. Cinema House, Fargate, Sheffield, by Messrs. Hickton and Farmer, 1912 (Hathern).

and a frieze of stylised lotus leaves. Contrasting bands of faience completed the exotic effect.

Across the country the diversity in the use of Hathern's faience largely reflected the individual taste of the local architect involved. The new facade provided for the Coliseum Cinema, Whitley Bay (3.10.1927), by W. Crooks of Blaydon, was comparable in design to a typical Co-operative Society shopfront, apart from the scale of the Ionic columns. In the same year, Butterworth and Duncan of Rochdale applied most of Hathern's typical motifs for the Railto Super Cinema (21.10.1927) in their home town. In Birmingham, H.S. Scott used archaeologically correct detailing in stone coloured terracotta on the Regal, Handsworth (21.11.1928), with the result that it could easily have been mistaken for a meeting hall. Such restraint contrasted with the originality and exuberance sought in the majority of twenties cinemas faced with architectural ceramics.

This diversity gained little admiration from the critics. P. Morton Shand commented in 1930 that:

the newer ad hoc buildings more often vie with one another in that nouveau riche ostentation. The design of our cinemas is part of the heavy price we pay for our public neglect of architecture. (1)

Leathart and Grainger were the only architects to gain Shand's approval; their designs evolved from using a Renaissance style to the incorporation of Art Deco motifs with mild colour contrasts, but the effects remained quietly restrained.

(1) P. Morton Shand, *Modern theatres and cinemas* (1930), quoted in D. Atwell (1980), *op.cit.*, p. 60.

The Sheen Cinema of 1930 used Doulton's Carraraware, which was biscuit coloured except for vertical facets and figure groups coloured jade green and wide bands across the base in a darker green. The low relief figures on horseback were one of the few examples of sculptural decoration in faience being used for cinemas; they were designed by Eric Aumonier.⁽¹⁾

Doulton were responsible for relatively few cinema commissions, perhaps as little as a dozen, with the majority located in the south-east of England. Gibbs and Canning are only recorded as supplying six during the twenties, all of which appear to have been for small independent proprietors.⁽²⁾ The annual reports for Leeds Fireclay referred to cinema facades being made at Burmantofts but none of their contracts received any publicity in the journals.⁽³⁾

In contrast Hathern supplied 43 cinemas in the decade and Shaw 19, most of them dating to 1928-9. (Fig 10.3). Hathern's supplied the white, red and blue faience details for the Twickenham by Leathart and Granger (26.3.1928) and the far larger order worth £7,772 for the Astoria in Finsbury Park (11.6.1929). The Astorias designed by E.A. Stone were among the first of a chain to show a consistent house-style, though most were given fronts in brick and stone rather than faience. Shaw's faience was used for the columned facade of the

(1) Architects' Journal, 73, 1931, pp. 8-12.

(2) Gibbs and Canning, Stockbooks, 1920, 1921, 1924, 1928.

(3) Leeds Fireclay, Annual report, 1930, p. 6.

Granada, Tooting (9.7.1931); Cecil Masey's imposing exterior merely set the tone for the most exotic of all the cinema interiors in Britain, designed by Theodore Komisarjevsky.⁽¹⁾

In the ten years up to the Second World War, Hathern and Shaw shared the bulk of cinema commissions involving faience. Hathern was the most successful in the first half of the decade, but then lost some ground to Shaw who supplied most of the later generation of Odeons designs by Mather and Weedon.

Hathern owed this pre-eminence to an almost unwavering tie with the greatest of the cinema architects, George Coles. There appears to be only one of his designs, the Odeon, Balham Hill of 1938, that was not supplied by them.⁽²⁾ The association was based as much on reputation as economics. Hathern's willingness in responding to any architectural challenge, whatever the difficulty or expense, would have been appreciated by Coles who turned his hand to Renaissance, Egyptian, Chinese and Art Deco styles and employed various forms and colours of faience. His autocratic personality established him as the directing half of the partnership, with Hathern's staff making every effort to satisfy their most valued customer. At one stage Coles almost persuaded Hathern to withdraw from the Terra Cotta Association so that he or his clients could be quoted at a lower rate, offering as an inducement even more business in return.⁽³⁾

(1) British Clayworker, 40, 1931, p. xxix.

(2) Illustrated in D. Atwell (1980), op.cit., p. 157.

(3) Conversation with Harry North, 22 January 1981.

Having already supplied several cinemas designed by Coles, G.N. Hodson did nothing to hide his eagerness to win the large contract out to tender in 1929, for the Commodore at Hammersmith.⁽¹⁾ This was one of Cole's loosely Renaissance compositions, which proved most effective at night when the arched windows, panels and festoons were brought into dramatic relief by the flood-lighting.⁽²⁾

Three of Cole's designs dating to the end of the twenties present the most exotic choice of styles and use of faience polychromy. The Carltons in Upton Park (28.4.1928) and Islington (2.1.1930) were given facades in an Egyptian style, with bulbous ribbed columns, coved cornices and, in the latter, a frieze of stylised papyrus leaves and battered side windows. The use of underglaze enamels produced particularly vivid colours but incurred considerable expense since they had to be hand-painted. The relatively small facade at Islington cost £3453 for 4251 cubic feet. (Fig. 10.31).

Chronologically in between supplying the Carltons, Hathern created the only British cinema in the Chinese style. Coles had been influenced by Grauman's Egyptian and Chinese cinemas in Hollywood, dating to 1922 and 1927. The Palace at Southall gained its decorative effect largely through polychromy, the simple wall surfaces being glazed in seven different colours, in addition to the ivory background. The cornice and ridge tiles were hand-painted, while the

(1) Letter from G.A. Hodson to W.H. Facon, Derby, 9 October 1928.

(2) Many of the record photographs showed the facades under floodlighting.



Fig. 10.31. Carlton Cinema, Essex Road, Islington, by G. Coles, 1930 (Hathern).



Fig. 10.32. Palace Cinema, South Road, Southall, by G. Coles, 1929 (Hathern).

finials of dragons and fishes completed the Far Eastern flavour. In one sense, Coles was at the mercy of Hathern's costings to be able to realise this design. He had also to submit an alternative, plainer design to be priced, but United Picture Theatres obviously decided that it was worth paying an additional £402 for such a distinctive facade.⁽¹⁾ (Fig.10.32).

Generally economy was becoming more, rather than less, necessary as the circuits spread into the suburbs. Coles produced a series of designs combining large areas of brickwork with simple dressings in a mottled vitreous finish, an example being the Savoy at East Acton (28.8.1930). The Trocadero at the Elephant and Castle (6.12.1929) was his largest cinema in London but only the wall surfaces above the two entrances were clad in faience. With one entrance on a corner, the arrangement of the pilasters, pediment and moulded name was repeated three times. A later design for Troxy, in Commercial Road, Stepney (13.10.1932), was completely clad in faience but the repetition of simple chevron patterns and rustication enabled 2836 cubic feet to be supplied for £1347. Since some of the faience ashlar measured 2 feet 9 inches by 2 feet it is likely that this scheme involved the use of slab faience, though it may have been moulded rather than cast.⁽²⁾

(1) Estimate from Hathern to United Picture Theatre for the Palace, Southall, 14 January 1929.

(2) Two approaches to the use of faience on cinema facades were discerned, either juxtaposing decorative work with areas of plain brick or providing a complete facing in plainer forms. *British Clayworker*, 46, 1938, p. xlii.

Also initiated by Troxy, but opened as the Gaumont State (3.4.1936), the 4,000 seat cinema built in Kilburn came to be regarded as Coles' masterpiece. The faience was priced at an expensive rate, 2324 cubic feet costing £2449, possibly because of the complexities of the three stage tower, which made the cinema a landmark along the High Road.⁽¹⁾ A series of black curved fins were set in the facade but the faience, some of it in slab form, was kept plain to serve as a background for strips of neon lighting. (Fig 10.33).

The fastest growing cinema circuit of the thirties was the Odeon. By 1934 Oscar Deutsch had started using architects well experienced in cinema work, including George Coles. Cream or white faience became a strong if not universal element of the house-style. Some designs by Harry Weedon's office used unrelieved brickwork while for the leading house in the circuit, the Odeon in Leicester Square, Mather and Weedon specified slabs of granite measuring six by five feet.⁽²⁾

It was the first architect with whom Deutsch collaborated, A.P. Starkey, who gave the chain an identity based on the use of large unbroken areas of cream faience, in a group of cinemas built in the London suburbs around 1934. A year later at Kingstanding, Weedon introduced the slim faience-clad

(1) Economy in the faience work was probably not very important. £2449 was not a very significant proportion of the total cost of the cinema at £340,000. D. Atwell (1980), op.cit., p. 99.

(2) Architects' Journal, 86, 1937, pp. 967-9.



Fig. 10.33. Gaumont State Cinema, High Road, Kilburn, by G. Coles, 1937 (Hathern).

tower that became the trademark of the later Odeons.⁽¹⁾

Coles worked within this house-style but to strikingly original results on most of the fourteen Odeons where he used Hathern faience. Those dating to 1934 and 1935 were still given decorative detailing, for example vertical ribbing at Welling in Kent (17.5.1934) and Spanish style windows at Kenton in Middlesex (24.9.1934). The transition to using slabs of faience with unbroken surfaces and rectangular forms came as late as 1936. Of the two of his Odeons for which Hathern received orders in February 1936, Horsham in Sussex was still faced in blocks measured by the foot cube. In contrast most of the faience used at Muswell Hill was in slabs, every two or three courses being alternated with thinner bandings.

The design for the Odeon at Horsham included a cylindrical beacon to be sited in the forecourt. (Fig 10.34). Such tightly curved pieces had to be moulded rather than cast but offered little technical difficulty. The use of rounded forms and slabs faience by Coles culminated in the facade for the Odeon at Woolwich (-.11.1936). The buff faience was curved round the end staircase, over some vertical fins along the auditorium and round to the entrance front where a square tower was set within two bays and given a central fin. The screen wall in front of the car park was also curved with the line accentuated by thin black mouldings. (Fig 10.35).

(1) D. Atwell (1980), op.cit., pp. 146-7.



Fig. 10.34. Odeon Cinema, Horsham, Sussex, by G. Coles, 1936 (Hathern).

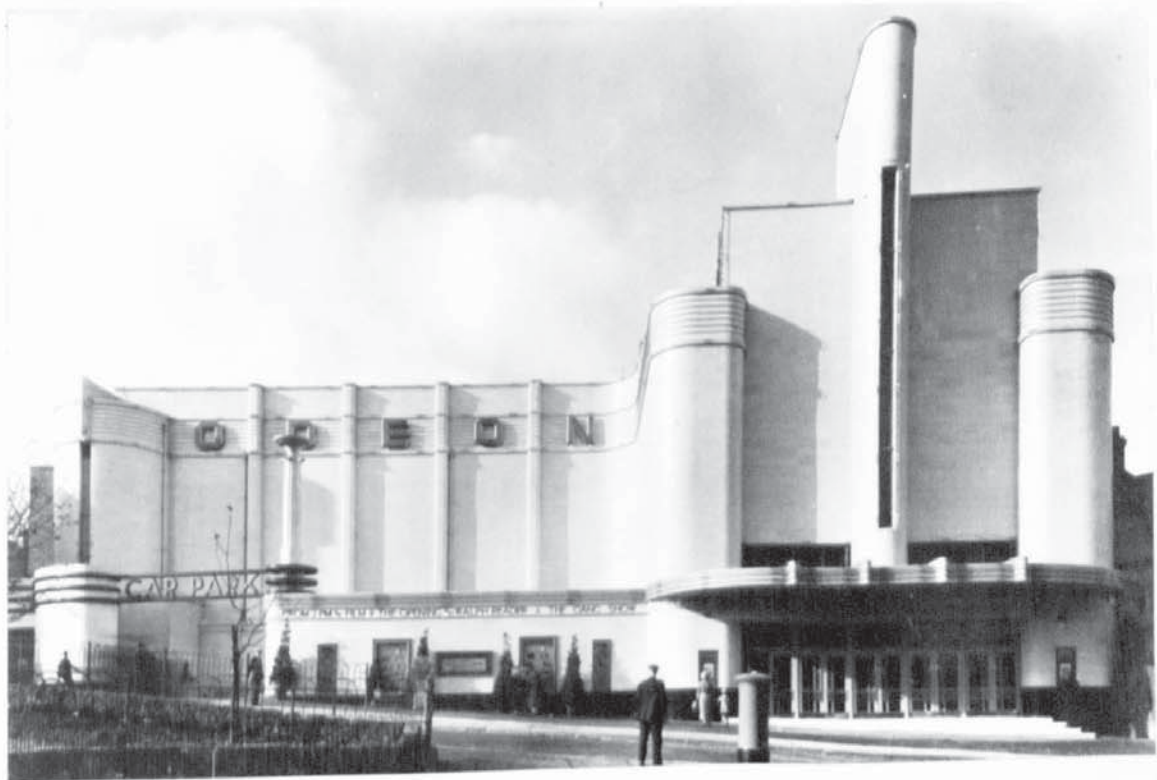


Fig. 10.36. Odeon Cinema, Parsons' Hill, Woolwich, by G. Coles, 1936 (Hathern).



Fig. 10.36. Odeon Cinema, Rochdale Road, Bury, Lancashire, by H. Weedon, 1936 (Hathern).

Woolwich was a prestigious project costing £47,000 in total, of which £1,935 was paid to Hathern. However this was far less than the payments made for the 'super cinemas' of the early thirties. Typical Odeon fronts designed by Coles in the late thirties cost around £1,500, as in the case of Deptford (5.11.1937). This scheme involved the use of green bands to enliven the otherwise plain surfaces of white and black faience. These colours were also used for the Loughborough Odeon where the standard two foot by one foot slabs were arranged into a chequerboard pattern. The actual form of the flat facade had been pared down to a logical cladding of the structure behind, with colour and patterning of the joints being used to provide some decorative interest.

Odeons such as that built in Dudley in 1937, were in the form of simple symmetrical fronts. Where a large corner site was available an asymmetrical composition was created with rectangular and curved masses grouped either side of a slim tower, itself set with a taller fin of faience carrying the title of the chain or simply the word 'Cinema' in ceramic or neon. Whatever the precise arrangement of entrance, foyer and auditorium, masses of brick were juxtaposed with flat and curving surfaces of faience. Dramatic by day, the effect became even more striking when the outline was lit only by blue strips of neon.

The other architects who made repeated use of faience in the thirties, such as J. Stanley Beard, T. Mclean and A. Mather, also produced increasingly broad and un-cluttered designs. (1) The predominance of standard slabs of faience

(1) Examples of these architects using Hathern's faience are Modern Cinema, 1933 (J. Stanley Beard), the Astoria and Broadway in Belfast, 1935 and 1937 (T. Mclean), and Hamilton and Motherwell Cinemas, 1939, (A. Mather).

and the rapid pace of construction gave the advantage and the highest number of orders to the most efficient manufacturers for this type of work. Shaw were able to complete an Odeon contract, from the submission of sketch drawings to the final delivery, in about eight weeks, and were renowned for their competitive pricing.⁽¹⁾ In 1936 and 1937 they supplied at least seven of Weedon's large Odeons, of which those in Sutton Coldfield and Harrogate were probably the most successful and widely publicised schemes. Hathern supplied the rather smaller Odeon at Bury in Lancashire. (Fig.10.36). The only important contract in this group that is recorded as going to another manufacturer was for the Scarborough Odeon. It was gained by Rainfordware, one of the firms outside the Terra Cotta Association who used their freedom to undercut the longer-established member companies.⁽²⁾

Hathern are said to have pulled out of the Terra Cotta Association shortly before the outbreak of the Second World War. Though the firm was losing ground to Shaw, sales reached a peak in 1938 that almost matched those of the twenties. It was the fluctuations in the building cycle, and in the extent of work being undertaken by architects and clients with whom Hathern had special ties that made the demand so inconsistent. The ties between manufacturer and architect and rivalry of competition can be seen to have outweighed the principles of

(1) G.A. Hodson had virtually accepted the inevitability of being out-competed by Shaw by the end of the twenties. Letter from G.A. Hodson to H.J.C. Johnston, Leeds, 1 December 1928.

(2) British Clayworker, 45, 1936, pp. x-xi.

an economic price and a fair market share that had led to the formation of the Terra Cotta Association.

The Association appears to have reinforced the non-commercial attitudes held by management at Hathern. Prevented from competing on price they offered a responsive service to architects' requirements. The policy was essentially sound because it is obvious that the most prolific users of architectural ceramics, such as Frank Matcham, W.A. Johnson and George Coles insisted on determining the detailed design of their buildings. The architectural quality of Hathern's theatres, shops and cinemas fully justified this level of service and the belief of their architects that they were contributing to a modern architecture rather than simply producing efficient designs for commercial buildings.

A fundamental contrast with the previous century was that these architects did not go so far as to assume that they were forming the basis of an original architecture independent from the styles in contemporary favour. They were rather more modest in their intentions; most simply believed that the mannered and curving forms of Edwardian terracotta, or the stripped classical forms of the 1920s, or the smooth faience cladding of the thirties simply presented a highly appropriate character, whether opulent, hygienic or futuristic, for the form and purpose of the buildings that they were designing.

Post-War Period

The demand for architectural ceramics virtually disappeared at the outbreak of the Second World War, as projects for commercial buildings were cancelled or postponed. Twenty schemes being undertaken in Weedon's office for Odeons were abandoned, two where building work was already in progress.⁽¹⁾ The entertainment and retailing industries, whose architecture made such extensive use of faience, did not revive their building programmes until the early fifties by which time several manufacturers such as Gibbs and Canning had almost collapsed.

At Gibbs and Canning cut backs in the drawing office started in July 1939 and the terracotta department was closed in September 1940.⁽²⁾ They re-advertised faience in the autumn of 1945 but do not appear ever to have resumed production.⁽³⁾ Doulton closed their architectural department for good at the outset of the War. Hathern, Shaw, Carter and Burmantofts, having supplied utilitarian products in chemical, sanitary or tableware, as part of the war effort, returned to supplying architectural ceramics, initially with small contracts for repair work to bomb damage. The capabilities of these firms remained restricted during the late forties as a result of the requisitioning of workshops and the loss of skilled workers.

(1) D. Atwell, (1980), op.cit., p. 158.

(2) Gibbs and Canning, Directors' meetings, 17 August 1939 and 10 October 1945.

(3) Gibbs and Canning, Directors' meeting, 10 October 1945.

In the discussions concerning the rebuilding of bomb-damaged city centres, the merits of architectural ceramics were expounded in by now all too familiar terms, concentrating on their durability and the potential for colour and moulded decoration. It was advised that faience appeared at its best in flat surfaces, relying for added effect on discreetly contrasting colours, any moulded decoration being kept in low relief.⁽¹⁾ The matter of relative economy does not seem to have been considered in the ceramic journals.

In response to promotion from the Terra Cotta Association, the Ministry of Works replied that it would be willing to contemplate the use of terracotta rather than Portland stone for rebuilding schemes in London, if the industry could supply a material of a quality comparable to that of Coade stone.⁽²⁾ Little came of these plans and the post-war period saw considerable criticism of architectural ceramics, most of the blame being laid on the faulty manufacture of faience slabs. The industry argued that architects were failing to use the material appropriately, by leaving out the necessary expansion joints and damp-proof membranes in the backings, and by attempting to fix slabs to lightweight concrete.⁽³⁾

(1) British Clayworker, 43, 1944-5, pp. 76-7.

(2) Information provided by David Hamilton and referred to in, D. Hamilton, 'Licence to decorate', Crafts, July/August 1980, pp. 17-24, (pp. 17-18).

(3) The respective arguments are referred to in N. Johnson, 'Constructional faience', Builder, 203, 1962, pp. 279-281 (pp. 279-280).

The collaborative ideal between architect and art manufacturer was virtually forgotten as structural engineering factors, a 'functional' expression and the specification of standardised materials became dominating factors in many large scale projects. Tiles and faience became most widely used in building-types where durable and easily cleaned surfaces were of great value such as in schools, food-processing factories and power stations. Shaw gained a specialisation during the 1950s in supplying both the linings and exteriors of swimming pools while about two-thirds of the output of faience from Burmantofts appears to have gone to the continent and particularly the ex-colonies, for municipal and industrial buildings.⁽¹⁾ Hathern provided standard-size slabs for numerous shop-fronts and several garages and blocks of flats, Belfast becoming a particularly strong market.⁽²⁾

In terms of design, the juxtaposition of different materials and colours, and of plain and decorative surfaces was popular during the fifties. Patterning and the incorporation of bright red, yellow and blue colours were encouraged by the example presented by the Festival Pattern Group which promoted crystalline and other abstract motifs as forming the basis of a truly contemporary decoration.⁽³⁾ Such designs were rapidly adopted by Carter for printed tiles and simpler repeat patterns

(1) Leeds Fireclay, Annual report, 1956.

(2) Hathern, Record photographs.

(3) W. Feaver, Festival star, in M. Banham and B. Hillier, A tonic to the nation, the Festival of Britain 1951 (Thames and Hudson 1976), pp. 40-55, (p. 51).

such as diamonds, circles and wave shapes were moulded into relief tiles and faience. Non-rectangular blocks and slabs, typically elongated hexagonal and octagonal shapes, became used for sections of building facades.

Most of the major examples of post-war faience date to around 1960 in what amounted to a minor revival. A honey-combed front of hexagonal blocks was provided by the now combined group of Shaw-Hathernware for the Lewis' store in Blackpool, designed by Duke and Simpson and dating to 1962-4. Facetted faience slabs were used on the other three elevations.⁽¹⁾ Shaw-Hathernware also supplied simple motif slabs, in the form of a flame symbol for British Gas and of a barrel for Walker's Brewery.

Such designs soon passed out of fashion as tastes moved towards starker surfaces that expressed more directly the underlying structure of a building. To have retained a rational purpose in modern architecture faience needed to develop into an economical cladding material for concrete and steel structures. However slabs remained largely hand-made and relatively heavy and expensive. The Americans had perfected techniques of casting concrete directly onto the back of faience in the thirties.⁽²⁾ However, on both sides of Atlantic such curtain walling has become undertaken almost exclusively with smaller mass-produced tiles. Shaw-Hathernware

(1) Shaw-Hathernware, Faience, architectural ceramic cladding, (undated).

(2) British Clayworker, 66, 1957, pp. 52-8 (p. 52).

concentrated their architectural production in the sixties on Twin Tiles. These were designed to be extruded in pairs with a keyed back which would adhere to concrete, whether pre-fabricated or moulded in situ. The largest scheme using Twin Tiles in pre-cast panels has been the Arndale Centre in Manchester designed by H. and L. Womersley and built in the early seventies.⁽¹⁾

The two firms still manufacturing terracotta and faience, the now re-separated Hathernware Ceramics and Shaw of Darwen, concentrate on making architectural ceramics for restoration work. Whereas faults had often been made good with paint, cement or more latterly glass reinforced plastics, the increased appreciation of late Victorian and early twentieth century architecture has resulted in higher standards of repair, and the re-making of blocks where necessary.⁽²⁾

Manufacture for building conservation requires the attributes close to the philosophy that has always prevailed at Hathern, a willingness to undertake the most intricate and time-consuming work and an underlying pride in the concept and appearance of architectural ceramics. In contrast, the economics of production have become a negation of the

(1) Shaw-Hathern, Twin Tiles (undated).

(2) The first comprehensive study relating to the conservation of architectural ceramics was produced in the inter-war period. W.A. McIntyre, Investigation into the durability of architectural terracotta and faience (Department of Scientific and Industrial Research, London 1929) Since the Second World War the Americans have led in the development of sympathetic cleaning and restoration techniques. I am grateful to John Fidler of the Greater London Council for information on such conservation practice.

conditions traditionally thought so vital to the industry; restoration contracts are characterised by involving small production runs, high unit costs and long time-periods for manufacture. This enables the work to be undertaken with a very restricted staff and ensures that each project is costed to be profitable to the Company, a circumstance by no means typical during the periods of large scale production in both the nineteenth and first half of the twentieth centuries.

C O N C L U S I O N

'The Victorian architectural decoration' was a description given to terracotta in 1881.⁽¹⁾ Fifty years later it was stated that 'faience architecture is streamlined architecture'.⁽²⁾ The image sought through the use of architectural ceramics changed fundamentally through this period, but the overall ideals of economy, durability, originality and the presentation of a path towards a valid contemporary style remained unaltered. It is now necessary to examine how far the achievements of manufactures and architects fulfilled or fell short of these proclaimed merits and ideals.

Practical Advantages and Architectural Appropriateness.

The practical attributes accorded to architectural ceramics in terms of building construction prove to have rarely been absolute or even convincing. Fireproofing appears to have become less of an issue as heating and lighting systems came to use boilers and electricity; meanwhile more economical means were found for protecting iron and steel columns and beams. The durability of well-made terracotta in situ was complimented in the report by the Building Research Board of 1929.⁽³⁾ However it had rapidly

(1) Builder, 40, 1881, pp. 428-9 (p. 428).

(2) C. Hussey, 'The aesthetics of faience architecture'. Architectural Review, 70, 1931, pp. 136-140 (p. 140).

(3) W. A. McIntyre, Investigations into the durability of architectural terracotta and faience (HMSO, London 1929), p. iii.

become appreciated that an under-fired material was as vulnerable to atmospheric decay as cheap, soft stone. The effect of soot and fumes in discolouring and eroding building facades remained a strong incentive towards the use of architectural ceramics. It appears that faience's image of cleanliness became a stronger attraction to architects and their clients than its long-term ability to resist grime and decay. This is evinced by the situation that facades were rarely designed to be cleansed by rain water and that the washing of terracotta and faience was almost unknown until the advent of conservationist attitudes in the last decade.

Image also appears to have been paramount in the all too practical factor of pricing. The balance of costs between stone and terracotta was obviously very fine in the late nineteenth century. Major economies frequently had to be made in the design of public buildings when the tenders proved to be too high, but there is no record of the response being to substitute terracotta for stone. The fact that Bath and other soft stones were probably cheaper, but those of comparable quality to Portland stone more expensive, seems to have resulted in terracotta being categorised as a safe material to specify if financial constraints were tight. Terracotta or faience may have implied a responsible use of the shareholders' or public money but could never rival the prestige of the best stones.

The economies achieved by Henry Cole in South Kensington depended upon the use of free labour in the art

schools and a fundamentally re-organised building process. Elsewhere, real savings were dependent upon an architect committed to the use of architectural ceramics, producing a design appropriate to the material. For the numerous Prudential offices, Waterhouse used small blocks of terracotta, and with each form repeated sufficiently to minimise the expense of model and mould making. The financial advantage was more likely to lie with terracotta if the building involved complex moulded surfaces and if its location was nearer to a terracotta works than quarries of a suitable building stone.

In the inter-war period it was accepted that the low cost of artificial stone virtually forced terracotta off the market. Similarly none of the contemporary advertisements or reports recommended faience on grounds of economy. In part this would have followed from the desire that the material should be appreciated in its own right. It is also apparent that remarkably strict codes of appropriateness to particular building types helped to determine the choice of material; while terracotta had been used extensively for museums and art schools and for offices and suburban churches, faience became strongly associated with public houses, shops and cinemas. In this strictly commercial milieu, the use of faience permitted more complex decoration than could otherwise have been affordable and it presented a particularly up-to-date image. While slab faience facilitated streamlined styling with considerable economy, polychromatic effects were possible at only marginally greater expense. In large buildings such as cinemas, the faience only constituted

a very minor proportion of the total cost of the building so that the level of pricing was hardly critical. However, by the thirties, the use of faience had become so strongly associated with advertising rather than architecture that it could never achieve a universal adoption. It was not to fulfil the visions of its advocates, such as Halsey Ricardo, in creating 'streets vibrant with colour'.⁽¹⁾

This commercialism was the last stage along a path whereby architectural ceramics had come to be related to the economy and tastes of a modern society increasingly dictated to by the middle classes. The concern that architecture should be, in terms of practicalities, more responsible, and in design more approachable for the public, was exemplified in the work of Henry Cole and by the design of the Victoria and Albert Museum. His use of terracotta came to symbolise the aim of 'forming an institute or college for improving public instruction in Science and Art'.⁽²⁾ Pressed and fired in a factory, terracotta demonstrated a close relationship between art, manufacture and commerce. By involving decorative artists to design the sculptural detail, it served to promote the unification of architecture and the decorative arts.

(1) British Clayworker, 10, 1902, pp. 431-437 (p. 437).

(2) H. Cole, Fifty years of public work (G. Bell, London 1884), Vol. 2, p. 282.

The style of Sykes' decoration, though derived from a precedent in the Italian Renaissance, had a direct appeal to Victorian taste with its naturalistic and animated modelling. The use of such natural forms, the delegation of detail design and the looseness of the architectural style, was condemned by G. E. Street, his attitude being indicative of the prejudice with which leading architects came to regard terracotta. Generally the figureheads of high Victorian architecture, and their pupils, showed little enthusiasm for architectural ceramics. Of those trained by Street, Philip Webb and William Morris never used the material while it appears in only one of Norman Shaw's least spirited designs, Parr's Bank in Liverpool, dating to 1899.

In general, such artist-architects were opposed both to the hardness of the effect of terracotta and to the delegation of detailed design to industrial workers, as well as to the fact that the decoration could not be modified once construction commenced. There were also practical doubts as to the inconsistency in quality of the material and the liability to delays in deliveries. By the 1880s many figures in the architectural profession would have been alienated from the use of the material simply by the insensitive way in which it was being worked by second-rate architects. The blame for such designs may not lie so much with the architects but with the draughtsmen and modellers at some of the terracotta works. Probably trained through the South Kensington curricula at one of the art schools, the laborious copying of

Renaissance details that they had to undertake could easily result in their creating facades of heavy handed and poorly juxtaposed columns, pediments and festoons.

Essentially there were architects who did, and those who did not use terracotta and faience. One described himself as becoming 'a "vert" to terracottatism'.⁽¹⁾ Its use on a building usually followed from the appointed architect being enthusiastic for architectural ceramics and having a sympathetic client. Some of the more discerning patrons, such as the Duke of Westminster, no doubt chose their architect bearing in mind which material he typically adopted.

If it is difficult to find a common characteristic amongst the architects who used terracotta, there is a consistent strand in the nature of their commissions. These were mostly for town buildings where it was appropriate to create a striking presence, and one which was slightly progressive. However the forms remained entirely architectural and this in Victorian terms virtually implied period decoration. While red brick and the 'Queen Anne' style had conveyed an air of enlightenment and practicality, mostly in domestic architecture, terracotta and a broader eclecticism presented these attributes rather more stridently for public buildings as well as large town houses.

(1) G. Gordon Hoskins in *British Clayworker*, 11, 1902, pp. lxvi-ii(p.lxvi)

It was emergent businesses such as the Prudential Assurance, and institutions such as board schools, public libraries, museums and art schools and even the dissenting churches who related most directly to terracotta's image. Similarly the cities where the most extensive and expressive usage occurred, were precisely those most strongly Victorian in their wealth and character. London, Birmingham, Manchester and Leeds gained by far the most terracotta buildings. To Asa Briggs these four typified:

the cities of the railway and tramway age,
of the age of steam and of gas, of a society,
sometimes restless, sometimes complacent,
moving, often fumblingly and falteringly,
towards greater democracy.

(1)

Longer established commercial centres such as Liverpool and Bristol remained for the most part true to stone. The proximity of coal-measure clays, the problems of atmospheric pollution and the more progressive tastes prevailing in commerce and local government partly explain the concentration of terracotta in the rapidly growing industrial towns. Another factor was that it was here that the art schools became most strongly developed. It was in these institutions that many local architects, and the draughtsmen and modellers at the terracotta works, were trained in the practicalities and artistry of architectural ceramics.

(1) A. Briggs, *Victorian cities* (Penguin, Harmondsworth, Middx. rep. 1977), p. 16. Briggs also examines Middlesbrough and the colonial city of Melbourne.

Within the major cities, a precise hierarchy of appropriateness served to influence the distribution of terracotta, largely according to the status of buildings and their precise location. In London it was not accepted for Whitehall but was considered suitable for the major redevelopments in Queen Victoria Street and Mayfair. In the provinces, it was adopted in the commercial areas surrounding the banks and exchanges, which were themselves usually built in stone. The most extensive uses occurred in commercial developments dating to the 1880s and 1890s; terracotta was used to line most of the upper sections of Corporation Street in Birmingham, for the shopping arcades in Leeds and for a line of warehouses and public buildings in Whitworth Street, Manchester. For churches, J. A. Chatwin in the West Midlands and Paley and Austin in Lancashire and Cheshire used stone in the centre of towns and cities, and terracotta in industrial settlements and suburbs.

In the twentieth century this structured view of both architecture and the urban landscape altered, as the use of architectural ceramics became more influenced by building type than location. Suburbs and seaside resorts did see an extensive use of architectural ceramics but it was specific types of building located within these areas, such as production-line factories, chain-stores, pavilions and cinemas that became most closely associated with the use of faience. In flat but brightly coloured form it was regarded as a new material and hence appropriate for the most modern branches of commerce and enter-

tainment.

This re-orientation of the codes of design in architectural ceramics reflects how architects were becoming increasingly specialised in their practices. Many accepted being dependent on one or two clients for their commissions while others were directly employed by a company to produce series of designs. In these situations a suitably committed architect could use the brightness and colours of faience and the skills of a firm's draughtsmen and modellers to develop and apply a distinctive house-style.

What is so remarkable is that the apparently logical and economical step of repeating designs and hence the forms of individual blocks was only taken in one group of buildings. Apart from the red faience station entrances made by Burmantofts for the Underground Electric Railways Ltd., designs appear to have been altered in their decorative detailing for each project. House styles were defined and then, in subsequent commissions, adapted to the size and location of the building as well as to introduce some elements of diversity. This emphasis on individuality in expression was maintained into the inter-war period, preventing the acceptance of catalogued and standardised forms. The expensive catalogues produced by most of the manufacturers were used more for the general promotion of the firm's capabilities than to advertise specific forms held in stock. It was only pier-caps, key-stones and other details used in domestic architecture

that were generally available on demand. The major inhibition to the use of stock forms was that constructional terracotta had to be made to course in with whatever size of brick was being used on a building. Meanwhile, for the manufacturer, it was simply too expensive to make complex forms on the speculation that they might be ordered. It was simple forms of moulded faience, for interior use and designed to match with six or nine inch tiles, that were more likely to be held in stock, though often in unglazed form.

One of the most widespread complaints made by campaigners for reform in the industrial arts was that design was rarely related to the processes of production. The evidence with terracotta is that exuberant decoration was the outcome of an enthusiasm shared by architects, artists and manufacturers alike for intricate modelling in plastic clay, this attitude typically outweighing the rationality of making repeated use of simple low relief forms.

To the Victorian architect and client, the terracotta usually formed a sufficiently small proportion of the total cost of a major public building for the additional cost involved in intricate modelling to be almost insignificant. Similarly, the manufacturers appear to have been more anxious to display artistic and technical virtuosity than to ensure an adequate profit, which came from large, simple orders.

Management in the Terracotta Industry

It was, typically, the second generation in a brick or pottery business which developed the manufacture of terracotta. Figures such as Henry Doulton and J. C. Edwards characterised the commercial but educated class that their product was meant to appeal to; they used architectural ceramics themselves in the construction of their country homes. In the late nineteenth century the major firms regarded terracotta and faience as prestige lines that were not expected to realise large profits but which raised the status of the firm and which would produce associated orders for bricks and tiles. In the twentieth century it was only firms that made both frostproof tiles and faience, such as Shaw and Carter, who could use architectural ceramics as a loss leaders to gain profitable orders for a mass produced product.

There was an element of fatalism in the attitudes of some of the management and in particular the managing directors at Hatherly. They regarded the market as being largely dictated by the building cycle and by the individual success of the architects with which they had close ties, in obtaining commissions. During slumps in demand they were willing to quote at uneconomically low prices simply to win orders. As well as wishing to retain their skilled staff and maintain their industrial plant ready to be able to quote short delivery times when large jobs came in for tender, G. N. Hodson appears to have

been fighting to maintain the terracotta section because he believed its work to be worthwhile for its own sake.

Henry Doulton demonstrated a more strongly commercial astuteness when he allowed Gibbs and Canning to undercut his tender for supplying the Natural History Museum. The Tamworth firm supplied faulty material and became bankrupt. Meanwhile Doulton commented:

Unless we had such a price as would enable us to maintain our reputation as to quality of manufacture - and yet at a fair profit also - we are content it should pass us.

(1)

In the twentieth century, higher labour costs and greater competition both from new manufacturers such as Shaw, Carter and Bispham, and from other materials did not lead directly to the installation of drying ovens or machine presses that could have reduced the cost of production. Instead efforts were concentrated on the development of new forms and decorative finishes that would enhance the material's appeal and status. It took over a decade for the industry to counter the price advantage of artificial stone with the introduction of slab faience. The British manufacturers clung to a technical ideal in the manufacture of architectural ceramics that had been proven by Coade in the late eighteenth century. Most of the terracotta made in the nineteenth century followed the same sequence, of

(1) Letter from Henry Doulton to John Hardcastle, 23 January 1873. Quoted in E. Gosse (ed. D. Eyles), *Sir Henry Doulton* (Hutchinson, London 1970), p. 78.

clays passing from careful preparation and the addition of grog to being hand pressed, slowly dried, and fired in a small muffle kiln.

By the Edwardian period, the cost in coal of firing these kilns was very heavy; however the management of several firms put off the installation of more economical continuous or tunnel kilns using the justification that they restricted the variety of ornamental work that could be handled. In contrast, the terracotta industry in the United States was largely dependent on tunnel kilns by the 1920s and was rapidly introducing machine pressing.

These problems of uneconomic prices and low investment were not solved by the system of regulation and compensation operated by the Terra Cotta Association. Established primarily to ensure a reasonable price and share of the market for all its members, the Association came to promote the survival rather than the necessary adaptation of the weaker firms. By allowing them to quote especially low rates when they were below their quota of orders, contracts became supplied at hopelessly unprofitable prices with the result that clients came to expect low quotations in the future.

Even when large orders were forthcoming for Hathern or Gibbs and Canning, they might not produce the necessary profits to fund the investments needed to ensure a long term viability. In some cases the most immediate effect of receiving a major contract was to make the section return a loss, through necessitating the hiring of additional labour and rebuilding part of the works.

Given that faience was competing on its merits with longer established materials it was a serious failure of both the individual firms and the Terra Cotta Association not to implement extensive campaigns of advertising to architects and potential clients. By contrast, in America the Terra Cotta Society co-ordinated advertising that helped to spread the use of faience to prestigious and profitable contracts for skyscrapers, banks and other public buildings.

The purpose of the Terra Cotta Association in controlling the competitive process of tendering was largely circumvented by the strength of the ties developed between individual architects and manufacturers. It appears that whatever the relative competitiveness in price, George Coles would give the orders from his clients to Hathern, while Wallis, Gilbert and Partners would work with Carter. Managers and draughtsmen were probably justified in concentrating their efforts in responding to the practical requirements and tastes of such prolific architects.

Even before the formalised procedure of the Terra Cotta Association was established, architects could usually ensure that they had control over the choice of manufacturer.

One means to this end was to include a clause in the schedule of quantities stating that the name of the supplier of the terracotta chosen by the builder should be submitted to the architect for approval. This arrangement reflects the importance that was placed by architects on the material quality of terracotta and in its style of modelling. The firms gained distinct reputations for the particular physical characteristics of their products as well as for their skill in draughting and modelling architects designs.

Patterns of Production and Architectural Use.

Coade had not been attempting to achieve a distinctive colour or texture in their 'artificial stone'. Used to imitate carved stone there was little that need have prevented terracotta passing entirely from use when production stopped at Lambeth in 1839. Similarly, the small potteries working at the middle of the nineteenth century, such as Pulham or Millichamp do not appear to have developed an artistic character in their modest amount of architectural work. They could not justify the employment of decorative artists and often had to work together to be able to supply major schemes such as the Victoria and Albert Museum.

However the two major firms of the fifties and sixties, Blanchard and Blashfield, though making terracotta of a stone colour, differed fundamentally both in their approach to detailing and in their choice of clay bodies. Architects could either accept neo-classical decorations and Eocene

clay from Blanchard or favour heavier and more naturalistic details and Blashfield's mixture of Jurassic and ball-clays, and other ingredients.

Differences in the geology of a manufacturer's clay reserves became of the greatest significance in the last two decades of the nineteenth century. Because of the scale of production and the commercial association with coalmining, that resulted from the use of marls and fireclays, works were increasingly located on major coal reserves. Exploiting the variety of clay geology and following historic precedent, red as well as buff terracotta came into widespread production and usage. The major firms advertised their ability to produce any colour and to execute any style, however eclectic its derivation. In practice a general correspondence developed between the use of buff terracotta in a more Renaissance based style and red material with variations on the free Gothic. The only building judged as being on the borderline between Renaissance and Gothic styles, the Assize Courts in Birmingham, used red terracotta on the exterior and buff inside.

These two strands in the relationship between style, colour and supplier is typified by the work of Doulton of Lambeth and of J. C. Edwards and the other Ruabon firms. Ernest George and T. E. Collcutt most typically used Doulton to supply their buildings in London, which were mostly buff or pink in colour and decorated with motifs drawn from the Renaissance of northern Europe. In the Midlands and in the north-east of England, the connected group of architects, including Douglas, Ould and the

partnership of Paley and Austin, came to depend on red terracotta from Ruabon for their free Gothic churches and rather more Tudor secular buildings. With commissions spread through the country, Waterhouse usually gave the contract to J. C. Edwards when he sought a red or orange colour and to Burmantofts of Leeds for a buff material. Although the distinction is by no means absolute he usually used red terracotta for his most strongly Gothic designs.

The explanation of this regional and architectural pattern lies partly in geology. The bulk of the Ruabon marls were dark red in colour and were ideally worked into reasonably small simple blocks, otherwise undue warpage would occur. The ball-clays from Dorset used by Doulton could be made into large forms if grog was added, and carry fine modelling with the addition of china clay. The background of the two firms helps to explain the different approaches to decorative modelling. Doulton had developed an architectural department through making ornaments and a close association with Lambeth School of Art. J. C. Edwards was essentially a heavy clayworking business without any strong artistic associations. Any sculptural work that they undertook was usually the result of a direct collaboration between the architect and a decorative artist.

The other manufacturers of the late Victorian period developed characteristics which were almost as distinctive. Burmantofts and Gibbs and Canning primarily produced buff terracotta while some of the smaller firms such as Gunton of Costessey virtually worked in one combination of

colour and style, in this case a deep red and the Tudor Gothic.

The coating of clay bodies with glazes to form faience, led to a weakening of the relationship between clay geology and architectural design. Most firms came to mix clays from different sources, and the ability to carry intricate detailing became a less important characteristic of a clay body than its shrinkage relative to that of glazes during firing. Due to the incompatibility of their clays, the Ruabon firms gradually dropped out of the market for architectural ceramics.

The result was not that the output of different firms became anonymous in character but that their schemes expressed more strongly the capabilities of the draughtsmen, modellers and the glaze chemists in each works. The architect was increasingly dependent on their skills to handle the complexities of glaze compositions and to relate the design of the faience to underlying structural steelwork. With factories, shops and cinemas having to be designed and constructed with great rapidity and often presenting a continuity in design through the adoption of a house-style, it was logical that commercial and company architects should be willing to delegate some design responsibility for a series of commissions to a particular works.

Exhibitions, publicity in the ceramic journals and brochures, or the efforts of trade representatives, were the means used by manufacturers to establish these links.

As for the architects, practices undertaking mainly local commissions appear to have been content to work with the most local firms while the major figures working throughout the country paid more attention to finding a firm that followed their approach to the design and execution of architectural ceramics. Only in a few examples of where the client was a major company, as in the case of the Midland Railway or Burton Stores was the choice of manufacturer dictated more by price and hence decided by competitive tendering.

In the Edwardian period, Hathern and Gibbs and Canning presented contrasting characteristics in their detailing of the outline designs supplied by architects. Hathern typically worked in a stylised Baroque style with distinctive forms of arch details and fixing that were used in public houses, theatres and other commercial buildings. Gibbs and Canning's work is typified more by the use of florid decoration, frequently modelled in high relief.

After the First World War, the major firms gained reputations and orders according to their approaches to architectural colour and in balancing the use of traditional styles and the various strands of modernism coming into vogue. While Gibbs and Canning tended to be particularly traditional, and Shaw orientated towards a stripped classicism, it was Carter who proved most proficient at undertaking Art Deco and Spanish styles. Meanwhile Hathern took a consciously passive stance, presenting themselves as being able to respond to any manner of demands

from an architect. This flexibility was clearly appreciated by W. A. Johnson in his designs for the Co-operative Wholesale Society and by George Coles in the remarkable range of his cinema designs. Johnson and Coles used both stripped classical and streamlined styles with the inclusion polychromatic effects, to create a wide variety of striking images, that would advertise their factories, shops or cinemas. Their designs demonstrated many of the characteristics promoted in late Victorian architectural ceramics, such as a strong individuality, a combination of tradition and modernity and a direct appeal to public taste. More significantly, these commercial architects of the inter-war period shared the same belief as the proponents of terracotta in the 1880s, that they were at the forefront of the path towards a modern architecture. The attitudes propounded in the 1930s were a rather more modest re-iteration of the ideal presented in 1884 by Ingress Bell, the joint architect of the Birmingham Assize Courts. He had regarded terracotta as the material that could combine the practical requirements of large-scale construction with an expression of modern culture and its aspirations. His paper was entitled 'a terracotta style'.⁽¹⁾

(1) Building News, 46, 1884, p. 580.

In discovering how far terracotta and faience came to attain their own style, the earliest achievement was in connection with the new sculpture movement. From the Renaissance inspired but naturalistic putti in the quadrangle of the Victoria and Albert Museum to the variety of Harry Bates' and W.J. Neatby's modelling, a spirit of life and fantasy was introduced into decorative sculpture. The direct working of the clay by these artists resulted in a taughtness of line and an animated approach to realism. The latter found its most logical application in the sculpture panels and groups portraying narrative or allegorical subjects. Bates modelled the stages of harvesting for Hill's Bakery and Neatby incorporated trees and peacocks for the entrances of Orchard House. Their work showed originality in its conception and form but the narrative idea became stultified in the endless panels representing Art and Science, or aspects of commerce, that were used on museums and offices throughout the country.

A more subtle expression of the plasticity of clay, and of the form and purpose of Victorian buildings, was achieved in the way that terracotta mouldings were designed and arranged across a facade. The adoption of rounded and chamfered edges, pierced decoration, and around the turn of the century, intricate flowing patterns in low relief, offered a distinctive contrast against the angularity of most carved stone detailing.

By ordering the size and intricacy of such terracotta blocks, through a hierarchy of decorative richness, a strong articulation could be given to the structure and composition of a building.

Waterhouse illustrated his designs in picturesque watercolour paintings; in built form his best work can be read as finely composed compositions in which the forms and details are perfectly proportioned and juxtaposed. Entrances, the range of fenestration and lines of gables were all framed by appropriately scaled terracotta mouldings, forming a complex grid over the facade. Martin and Chamberlain and Paley and Austin were the other masters of this approach to design in terracotta, and created original forms of decoration out of lattice patterns and clusters of mouldings.

The late Victorians were well aware that the cultivation of individualism and the expression of the qualities of a decorative material could easily carry the design of terracotta beyond the bounds of an appropriate fitness to over-ornamentation and the pursuit of novelty. In purely visual terms the borderline occurred when the forms became too coarse and over-scaled. The Edwardian taste for a mannered Baroque, with accentuated proportions and details, could result in the worst excesses. Frank Matcham had the inventiveness to make some of his music-hall facades such as the Hackney Empire appropriately witty. Comparable forms became more ponderous in effect when worked by provincial

architects in their theatres and public houses. Meanwhile, all too many Victorian and Edwardian architects simply substituted the use of terracotta for stone, once it had become technically possible to fire large blocks without undue warpage; they considered the distinctive colour and texture of burnt clay to be sufficiently progressive in itself. Whereas in the case of terracotta the role of the architect was paramount in the attainment of a quality of expression in design, with faience the manufacturer gained a more important role. Having evolved largely as an adjunct to mass-produced tiles, it is not surprising that the patterns and colouring for faience used in interior schemes should have been largely devised at the works. However the technical and artistic brilliance of Burmantofts' interiors were at their greatest when designed with an architect such as Waterhouse who had an assured taste for colours. In contrast, the virtuoso display of Craven Dunnill's barfronts represented a few stock designs that gained their quality from the relation between the low relief modelling and the hand painting of the glazes.

During the Edwardian period, buildings in white faience and a French inspired classicism, such as the Savoy Hotel and Debenham and Freebody's store, gained considerable admiration. This is essentially a reflection of a retrenchment in architectural taste; it is difficult to appreciate any expressiveness of the material in comparison to the effect if the facades had been clad in Portland stone. Through into the inter-war period, classical

forms were adapted to try and achieve some distinctiveness for architectural ceramics. Rusticated walling was given curved edges, the fruit in festoons was modelled with intense naturalism, and numerous breaks of surface were moulded into otherwise plain surfaces.

Much of the work showing Art Deco influence, such as the shopfronts for Burton or Times Furnishing, was stylistically accomplished but could equally have been executed in other materials. It was the use of polychromatic colour and the streamlined styling of the thirties that brought a new and virtually the final identity to faience. Some of the colour patterns achieved by Carter, the subtle combination of Doulton's Carraraware and stone on the Sheffield and Eccleshall Co-operative store, and the curving forms of the Odeons supplied by Hathern and Shaw, should not be deprecated because of the overt commercialism of the architecture. Wallis, Gilbert and Partners, W. A. Johnson and George Coles were meticulous designers who were sincerely committed to the development of new forms of architectural expression.

The obvious failure of this period was in allowing the schism between commercial and artistic or progressive architecture to deepen. The work of the major sculptors still using faience may have been of exceptional quality, but their ornaments and decorative panels were not integrated into architectural design in a comparable manner to the work of the new sculpture movement in the late nineteenth century.

The continuing accordance of attitudes between commercial architects and the terracotta and faience industry suggests that it was the artistic elite and contemporary critics who had turned their backs on the collaboration that had been established by the Victorians and worked to such inspired and original effect. This rejection was led by the revolution that occurred in the art world. It was closely followed by the detachment of high architecture from attempting to appeal to the general educated public, first to oblige the tastes of financial and bureaucratic institutions and later, in the Modern Movement, to further a political cause espoused by the middle class intelligentsia and as a reaction to the stylistic confusion of the Victorian and Edwardian periods. A distinctive use of architectural ceramics had largely followed from the architect believing that the use of non-archaeological styles on commercial and public architecture could result in designs that were both appropriate and likely to be widely appreciated.

Terracotta decoration was sometimes narrative in form or it could convey symbolic meanings, but most designs relied upon the associations carried by particular styles and the use of naturalistic or stylised forms to articulate the parts of a building composition. However, increasingly such decoration appeared backward and meaningless. The richness of late Victorian terracotta became seen as self-indulgent and as exemplifying the redundancy of eclectic Gothic and Renaissance styles. If the simple banding of ribs of inter-war faience was devoid of historical references it also appeared to have no contemporary

justification. The design of architectural ceramics largely remained dependent on the styles of design generally in favour; the materials never achieved an entirely independent form of expression and the elements of distinctive design that did emerge rarely gained the approbation of either the leading contemporary architects or of the critics.

The concept of a 'terracotta style' and its evolution into a contemporary architectural expression had depended on a practical willingness amongst architects and clients, and increasingly the industrial management, to accept the effort and expense involved in the use of a decorated building material. The craft approach of an architect developing designs in collaboration with a potter or a decorative artist clearly failed, when faced with the scale and pace of commercial building. The sculptor Conrad Dressler, after the failure of his sculptural department at the Della Robbia Pottery, concluded that it was impossible to combine such practical demands with those of individual creativity.⁽¹⁾ However firms such as Carter and Hathern proved that a rich artistry was in fact practicable at an industrial scale. Shaw demonstrated that, providing the firm and architect were willing to accept a compromise between aesthetics and the economies achieved with simple mouldings and the repetition of forms, and avoided small over-complex schemes,

(1) British Clayworker, 13, 1904, pp. 82-3.

manufacture could be genuinely profitable. What is left as the fundamental but imponderable issue is whether a labour-intensive works such as Hathern could have rationalised their structure sufficiently to achieve an adequate profitability and yet retained the ability to respond to the variety of requirements presented by the architects who associated with them.

It was the continuation of pragmatic approaches to management, such as prevailed at Hathern and Gibbs and Canning in the inter-war period, that was to promote a reaction in the increasing standardisation of products and of tight cost control. Prestige lines that failed to cover their overheads, and surface decoration had become anathema to industrial management and architects by the 1960s. What was lost was the final vestige of a union between architecture and an art manufacture, and an approach to building design that could carry a direct appeal to the tastes and sensibilities of the public. However the modest revival of the terracotta industry within the last decade, with blocks being made at Hathern and Shaw for restoration work, has followed from the growing appreciation of Victorian, Edwardian and inter-war architecture and their ideals. Having been berated as an ill-disciplined and retrogressive approach to architecture that came to stand in the way of a universal art of the age, the present is perhaps an opportune time for re-considering the values of individuality, colour and decorative richness, which motivated the revival of terracotta and faience.

A P P E N D I X

THE MANUFACTURERS OF TERRACOTTA AND FAIENCE IN BRITAIN

This appendix provides an outline history of the firms known to have made architectural ceramics within the last 250 years. Numerous firms included 'terracotta' in their title or paid for inclusion in the 'terracotta' section of a trade directory without appearing to have ever made the material on a significant scale. Only those for which there is evidence of terracotta actually being produced rather than just advertised are included.

The main sources used are Kellys Directory of the Building Trades, and periodicals. The date spans given are intended to define, as accurately as possible, the period when terracotta or faience were being manufactured; they are not, except where the firms has been making the materials throughout their history, the dates of establishment and closure. Dates taken from an examination of the directories are suffixed (R.D.) and those from periodicals, books or other references by (R.). The directories were examined at intervals of approximately 6-8 years, according to their availability, between 1883 and 1939.

ACCRINGTON BRICK AND TILE CO. LTD.

1890-1939 (R.D.)

Whinney Hill, Altham, Accrington, Lancashire.

The founder and first managing director of this works is credited with pioneering the large scale exploitation of the Lancashire shales for making bricks and terracotta. Henry Stephenson left a fireclay and sanitary works at Burnley in 1887 to form the Accrington Company, along with his son Frederick Stephenson. Having proved the viability of machine pressing shale into facing bricks, he sold out of the business in 1893.¹

Sited by Whinney Hill Pit, an adjacent claybank provided the shale used for making red bricks, tiles, pipes and chemical ware. Terracotta was recorded as being made in 1896.² Their catalogue shows a wide range of decorative plaques, paterae and other components, intended largely for use in houses.³ There is no evidence of any large architectural contracts being supplied or of the production of faience.

In 1925 the Company was wound up, along with the Whinney Hill Plastic Brick Co. Ltd.⁴ The firm was reconstituted, and from the twenties through to the present day, the 'Nori' facing brick and engineering bricks have formed the main lines of manufacture.⁵

1. *British Clayworker*, 21, 1912, p. 7.
2. *British Clayworker*, 5, 1896, p. xxvi.
3. *Accrington Brick and Tile Co. Ltd., Catalogue* (undated)
4. *British Clayworker*, 33, 1925, p. 316.
5. *Claycraft*, 6, 1932, p. 34.

ORD ADAMS

1860s (R.)

1883-1890 (R.D.)

Fife.

An advertisement, probably dating to the 1860s, described the firm as making 'every description of plain and ornamental fire-clay goods' and illustrates a wide range of classical vases and architectural details.¹

1. *Ord Adams, Advertisement in a trade directory* (undated)
(Supplied by Graeme Cruickshank).

JOHN ARMITAGE AND SON

1852 (R.)

1883-1890 (R.D.)

John Armitage bought the brick and tile works of Messrs. W. J. & R. Turner, and by 1852, was offering fountains, figures and vases, as well as firebricks, sanitary ware and drainage pipes.¹ In Sheffield he had a depot at 140 Devonshire Street and a second home, Etruria House; both survive and are decorated with terracotta details. Armitage died in 1890.²

1. J. Kenworthy, *The early history of Stocksbridge* (J. Kenworthy, Sheffield 1914-28), p. 22. An advertisement dating to 1852 is reproduced showing a view of the works.
2. J. Kenworthy (1914-28), *op.cit.*, p. 27.

ASTON HALL BRICK COMPANY

1895 (R.)

1898-1906) (R.D.)

Their display at the 1895 Building Trades Exhibition included keystones, brackets and wall copings made in terracotta.

1. *British Clayworker*, 4, 1895, p. xi.

AYLESFORD TERRACOTTA WORKS

1851 (R.)

AYLESFORD POTTERY AND BRICK COMPANY

1883-1906 (R.D.)

Aylesford, Maidstone, Kent.

Edward Betts established this works, having discovered a valuable bed of gault clay on his estate. He displayed a terracotta vase designed by the architect and sculptor, John Thomas, at the 1851 Exhibition.¹ Through the 1880s and nineties they advertised white facing bricks, ornamental roofing tiles, terracotta details and offered to execute architectural designs to order.²

1. *Official catalogue of the Great Exhibition* (Royal Commission, London 1851), p. 765.
2. *Advertisement, Kelly's directory of the building trades*, (Kelly and Company, London), 1883, p. 10.

C. I. C. BAILEY

1872 (R.)

Fulham Works, London.

Domestic pottery and some china were made during the eighteenth century, while ownership of the works passed from the Dwight to the White families. The proprietor after 1864 was C. I. C. Bailey. He exhibited stoneware and terracotta at the Dublin Exhibition of 1872 and produced vases, statues, architectural decorations, chimney shafts and stoves. R. W. Martin may have designed some of these items in addition to his glazed 'Martin Ware'.¹

1. L. Jewitt, *The ceramic art of Great Britain*, 1883
(P.P.B. Minet, Chicheley revised new edition 1971)
pp. 90-2.

BELL AND COMPANY.

1851 (R.)

Glasgow, Strathclyde.

At the 1851 Exhibition they exhibited vases and columnar bases in terracotta, as well as Parian and stoneware.

1. *Official catalogue of the Great Exhibition (Royal Commission, London 1851), Vol.2, pp. 724-5*

BISPHAM HALL COLLIERY COMPANY

1906-33 (R.D.)

BISPHAM HALL BRICK AND TERRACOTTA WORKS LTD.

1937-9 (R.D.)

Orrell, near Wigan, Lancashire.

Established around 1901, when James Marsden built a completely new works adjacent to his colliery, this was probably the last firm to be established with the prime intention of making terracotta amongst other products. The terracotta section was supervised by Frank Fidler who had formerly worked at Leeds Fireclay.¹ At a time when the demand for red terracotta had collapsed, Bispham offered a wide range of other colours and finishes, specialising in white and cream glazes, and greys and buffs in various tints.²

By the First World War they were supplying contracts for large public buildings in Lancashire; in the inter-war period they competed successfully within the Terra Cotta Association. In 1925, the management of the colliery and the brickworks was separated, the latter becoming referred to as the Bispham Hall Terra Works. William Moyers was promoted to managing director in the same year that much of the works was rebuilt, with the erection of a new hot-air plant and faience clad offices.³

1. *British Clayworker*, 11, 1902, p. 11-14.
2. *Advertisement, Architects' standard catalogues*
(Standard Catalogue Publishing Co. Ltd., London
1914-17), p. 17.
3. *British Clayworker*, 33, 1925, p. 329, and
34, 1926, pp. 401-2.

MARK HENRY BLANCHARD

1839-80 (R.)

Blackfriars Road, London.

MARK HENRY BLANCHARD AND COMPANY

1880 (R.)

1883-98 (R.D.)

Bishop's Waltham, Hampshire.

Working at Coade in its final days, Blanchard bought some of the moulds when the works finally closed in 1839. He set up in Westminster Road, London to undertake plaster-work and built a small kiln for experimenting with terracotta.

An increasing demand for his vases and statues resulted in a move to larger premises in Blackfriars Road, about 1850. Three kilns together with the workshops survived into the twentieth century. He was assisted by his two brothers who undertook the modelling.¹

Unlike the majority of manufacturers, Blanchard exhibited architectural details at the Great Exhibition. The exhibits at the 1851 and 1862 Exhibitions won him medals

and by this time he was producing material in both red and buff colours.²

His most publicised early contracts were for the Brighton Aquarium, the Victoria and Albert Museum, the arcades in the Royal Horticultural Gardens and the panels depicting the months of the year on the Wedgwood Institute, Burslem.³

Blanchard was one of the first to develop an extensive export trade, which extended to India, Russia, America and the West Indies. One particularly large shipment was for the Grand Hotel, Cairo.

In 1880 the firm moved to Bishop's Waltham to work the Thanet clay beds. The works expanded to cover twenty acres of ground. Bricks and roofing and blue paving tiles became far more important than the now modest output of terracotta.⁴

1. *British Clayworker*, 13, 1904, p. xxi.
2. *Art Journal*, 11, 1872, pp. 301-2.
3. R Gunnis, *Dictionary of British sculptors 1660-1851* (Abbey Library, London, revised edition 1964), p. 56.
4. L. Jewitt (1883), *op.cit.*, p. 102.

JOHN BLASHFIELD

1851-1858 (R.)

Poplar, Millwall, London

1859-1875 (R.)

Stamford, Lincolnshire.

Blashfield is probably the most important figure in the application of terracotta to be used as a structural building material. His early career was spent importing Italian marble, manufacturing cements and scagliola and then laying down tessellated pavements. He was among the purchasers of Coade moulds when Croggon ceased manufacture,¹ and three years later, in 1839, he employed Bubb on experimental terracotta work.

Through the 1840s Blashfield was preoccupied with the development of tile pavements from Prosser's patent, in co-operation with Herbert Minton and Matthew Digby Wyatt.² Between 1843-7 he was involved in property development.

But by the end of 1851 he was making terracotta at Millwall. Predictably his early wares were mostly figures and vases, though by 1853 friezes, chimney-shafts and terminal ornaments were being advertised.³ The catalogue of vases and sculpture shows that Blashfield had succeeded in recruiting the best mid-Victorian sculptors to design for him.⁴

Galleries were opened in Praed Street which were the scene of a remarkable three day sale of stock when the works moved to Stamford in 1858. Stamford was, presumably, chosen to be near the beds of clay discovered on the Marquis of Exeter's estate at Wakerley. The Marquis also supplied the lease for the works, no doubt far more cheaply than a comparable site would have cost in London.

The new works had a showroom along the street frontage and was thought to be capable of employing 500 workers. The range of wares widened from purely classical ornaments to include more structural features and Italianate styles. In 1864 a complete terracotta portico was made for a house in Hyde Park⁵ and four years later gate piers were erected at Castle Ashby, Northamptonshire.⁽⁶⁾ The two buildings most significant for the use of Blashfield's terracotta in the Italian Gothic Style are the Wedgwood Institute, Burslem, Staffs. of 1866 and Dulwich College, London of a year later.

In 1874 the firm became a limited liability company. But in the next year it became insolvent and the plant and stock were sold by auction.⁷

1. R. Gunnis (1964), *op.cit.*, p. 56.
2. *Building News*, 5, 1859, p. 196. The *Building News* printed eight articles on Blashfield's new works over the first year of production, concentrating on the massive statues and vases that were being produced.
3. *Art Journal*, 5, 1853, supplement, p. 56.
4. J. M. Blashfield, A selection of vases, statues, busts &c. from terracottas (J. Weale, London 1857).
5. *Building News*, 11, 1864, p. 249.
6. N. Pevsner, *Northamptonshire* (Penguin, Harmondsworth, Middlesex 1961), p. 142.
7. L. Jewitt, (1883), *op.cit.*, p. 249.

BOURNE VALLEY POTTERY

1853, 1883 (R.)

Near Poole, Dorset.

Clayworking commenced on the estate in September 1852 and the first terracotta products were made in June of the following year.¹

In the 1870s the pottery was worked by Messrs. Standing and Marten. Established as the leading firm in the area for glazed stoneware, and sewage and sanitary pipes, they also made terracotta vases, figures, chimney-tops, garden edgings and architectural enrichments.² The works was sold in 1895 and industrial production does not appear to have been continued.³

1. *Builder*, 14, 1856, p. 237.

2. L. Jewitt (1883), *op.cit.*, p. 102.

3. *Builder*, 69, 1895, p. 177.

BRACKNELL BRICK AND TILE COMPANY

1890 (R.D.)

1905 (R.)

When managed by John Phillips, at about the turn of the century, this works was producing sand stocks, rubbers and wire-cut bricks, tiles and some terracotta.¹

1. *British Clayworker*, 14, 1905, p. 111.

BRANKSEA POTTERY

1855, 1883 (R.)

BRANKSEA ISLAND COMPANY LTD

1883 (R.D.)

Near Poole, Dorset.

These potteries were built in 1855 by Colonel Waugh, to exploit claybeds up to 70 feet deep on the island. Goods were shipped out from a tramway and a pier.¹ Stoneware, sanitary goods and terracotta were the main products.²

1. *Builder*, 14, 1856, p. 237.

2. L. Jewitt (1883), *op.cit.*, p. 102.

JAMES BUBB & JOHN ROSSI

c.1818-c.1827 (R.)

London.

Both Bubb and Rossi had been employed as modellers at Coade. About 1818 they began manufacturing terracotta in partnership. The nature and duration of their collaboration is uncertain though it has been suggested that Bubb concentrated on statuary while Rossi undertook most of the architectural ornament.¹ Their partnership may have collapsed after the criticism of their work on the Custom House.

In 1818 Bubb modelled the reliefs for the Italian Opera House in the Haymarket.² A year later Rossi and his son Henry are named as starting to execute the decorations for St. Pancras Church.³

Rossi was still producing terracotta coats of arms, friezes and statues during the 1820s and thirties, the largest contract being for Buckingham Palace. Bubb is said to have become bankrupt, the premises being taken over by Joseph Browne, a marble mason and scagliola manufacturer. Bubb designed and modelled terracotta for Browne for about a decade. Once Browne had given up his terracotta manufactory, Bubb concentrated on sculpture until Blashfield employed him, in 1839, on experimental terracotta work at Canford, Dorset.

1. *British Clayworker*, 13, 1904, p. xiv.

2. R. Gunnis (1964), *op.cit.*, p. 66-8.

3. R. Gunnis (1964), *op.cit.*, p. 326-8.

BUCCLEUCH TERRACOTTA CO. LTD.

1906-20 (R.D.)

Sanquhar, Dumfries.

This works was founded in about 1850 adjacent to the Dumfries to Kilmarnock Railway and on the Dumfries coalfield. A narrow gauge line connected the clay pit with the works. The main products were facing bricks and small items of terracotta, such as pier-caps and finials.¹

1. J. Hume, *The industrial archaeology of Scotland*,
Vol. 1. *The Lowlands and Borders* (Batsford, London
1976), p. 105.

BUCKLEY BRICK AND TILE CO. LTD.

1903 (R.D.)

Buckley, near Chester

The range of products of this works almost matched that of the nearby Ruabon firms, including firebricks, floor and wall tiles, chimney pots and terracotta.¹ J. M. Gibson was the managing director at the turn of the century, assisted by his two sons. J. P. Gibson acted as the works manager until his death in 1916.²

1. *British Clayworker*, 11, 1903, p. 373.

2. *British Clayworker*, 25, 1916, p. 239.

CANDY AND CO. LTD.

1886-1914 (R.D.)

1930 (R.)

Heathfield, near Newton Abbot, Devon.

Candy were founded around 1880 with the Great Western Potteries being built on a site by the main railway line, to exploit the white ball clays found at a depth of about seventy feet.¹ The clays were ideally suited to the manufacture of fire, paving and glazed bricks, and stoneware; they could also be used for buff terracotta.

A range of components from paterae to keystones and balustrades were advertised and architectural commissions undertaken, mostly in the south or south-west of England.²

Terracotta was still being offered in 1905³ and in 1930 faience blocks were shown on a stand at the Building Trades Exhibition. But the major growth was in the use of tiles and glazed bricks for fireplaces. The 'Devon' fire was produced for over fifty years, inglenooks being replaced by more modern forms, including some designed by Behrens.⁴ In 1933 the works had a Dressler kiln and 320 employees. It had a small output of art pottery called 'Westcontree Ware'.⁵ The Company is currently making glazed tiles.

1. Geological Survey and Museum, *Special reports on the mineral resources of Great Britain*. Vol. 31, *Ball clays* (HMSO., London 1929), p. 32.
2. Candy and Co. Ltd., *Catalogue* (1898).
3. *British Clayworker*, 14, 1905, p. 57.
4. *British Clayworker*, 39, 1930, pp. 249, 251.
5. *Claycraft*, 7, 1933, p. 13-16.

CARTER AND COMPANY

1886-1939 (R.D.)

Encaustic Tile Works, Architectural Pottery and White Works, Hamworthy, Poole, Dorset.

Jesse Carter became established as a clayworker at Poole

by purchasing a floor tile works at East Quay, in 1873. By the time of his retirement in 1901, Carter had become one of the leading firms making tiles, faience and pottery in the country. With the trade in tiles expanding rapidly, Jesse took his three youngest sons into partnership in 1881, and in 1895 purchased the Architectural Pottery located across the harbour at Hamworthy.¹ Production was grouped so that floor tiles were made at Hamworthy and glazed tiles, terracotta and faience at East Quay. In 1901 another factory was bought at Hamworthy, which became known as the White Works, producing plain glazed tiles. In 1908 the business was formed into a limited company.

Architectural terracotta was only produced on a restricted scale, but by the early nineties Carter were supplying complete schemes of tiles and faience.² The firm came to specialise in tile painting and mosaic work. During the Edwardian period and the 1920s the head of the faience section was James Radley Young and the chief sculptor, William Carter Unwin.³ During the First World War Radley Young established a pottery and in 1921 a new company, Carter, Stabler and Adams, was formed to produce pots and tableware. Harold and Phoebe Stabler were also involved in designing sculptural faience, particularly for memorials and garden ornaments. Most of the larger architectural schemes used a single-fired faience called 'Ceramic Marble', developed by Alfred Eason in 1909.⁴ The Company executed fewer buildings than Shaw or Hathern in the inter-war period, but many were

strikingly original in their polychromatic decoration.

Tile manufacture was revived after the Second World War but faience and mosaic were produced on a far smaller scale. In 1964 Carter combined their interests with Pilkington Tiles Ltd. Since 1971 Poole Potteries and Pilkington have continued as autonomous units within the Thomas Tilling Group.⁵

1. *British Clayworker*, 4, 1895, p. 202.
2. *British Clayworker*, 1, 1982, p. 20.
3. J. Hawkins, *The Poole potteries* (Barrie and Jenkins, London 1980). Comprehensive information is provided on the artists and work of the faience section.
4. *British Clayworker*, 21, 1912, p. lxvi.
5. Leslie Hayward of Poole Potteries Ltd.

CHARLES CARTER

c. 1815 (R.)

Dean Street, Oxford Street, London.

A stone-mason who was involved in the Roman cement trade, Carter made a few architectural ornaments in terracotta about 1815. More significant was his work on tiles incised with Roman cement. Parker and Wyatt inherited this experience which in turn led to Blashfield's experiments in mosaic pavements.

1. C. Barry, 'Terracotta', *Builder*, 26, 1868, p. 546.

CATTYBROOK BRICK COMPANY LTD.

1886-1939 (R.D.)

Aldmondsbury, near Bristol.

The Cattybrook works owed its establishment to the Great Western Railway and the Severn Tunnel in particular. While promoting the construction of the tunnel, Charles Richardson took a lease on the Aldmondsbury site where engineering bricks had been made on a small scale. He became chief engineer to the tunnel project and saw his works supply thirty million bricks over a period of ten years from around 1870.¹

The output broadened to include terracotta and several large contracts were supplied in the Edwardian period.² One of Richardson's engineering pupils held the post of the Managing Director until his death in 1907. In 1903 the Company purchased the Shortwood Brickworks near Mangotsfield to manufacture red bricks and floor quarries.³ Both works were still operating after the Second World War.

1. *British Clayworker*, 59, 1950-1, pp. 175-9.

2. *British Clayworker*, 19, 1910, p. 1xvi

3. *British Clayworker*, 24, 1916, p. 179.

THOMAS TAYLOR CHAPMAN AND SON

1890 (R.D.)

WALWYN T. CHAPMAN

1898-1914 (R.D.)

Cleethorpes, Humberside.

Having taken over his father's brickworks, Walwyn T. Chapman added a terracotta section in 1893. Red architectural details were made, no doubt primarily for local use.¹

1. *British Clayworker*, 12, 1903, p. 279.

CLARK AND REA LTD.

1890-1898 (R.D.)

Wilderness Works, Wrexham, Clwyd.

These works were located adjacent to Gresford Colliery. When worked by Messrs. Clark and Rea, they supplied a large number of major contracts in Lancashire, the Midlands and London. Amongst other architects they worked with Waterhouse, Martin and Chamberlain, Grayson and Ould and Paley, Austin and Paley.¹ Red, pink, orange and buff terracotta were offered, the claypit containing both red and blue clays.

1. *Advertisement, Academy Architecture*, 9, 1896, unpagged.

CLEGHORN TERRACOTTA CO. LTD.

1913 (R.)

Near Glasgow, Strathclyde.

The discovery of clays having similar properties to the marls of Ruabon and Staffordshire led to the establishment of the Cleghorn Works in 1891. Blue metallic bricks, tiles and terracotta were manufactured. The Company was acquired by the Kelvinside Brick Co. Ltd., just prior to the First World War.¹

1. *Portrait of the managing director, A. K. Foote.*

British Clayworker, 22, 1913, p. 247.

JOSEPH CLIFF AND SONS

1849, 1867 (R.)

Stanningley, Wortley, Leeds, West Yorkshire.

Cliff was one of the earliest firms to use the Leeds fireclays for making firebricks and they gained a particular reputation for their glazed bricks and sanitary ware.

The works were founded by John Cliff in 1795. Clay retorts, drain pipes and glazed bricks were also produced. In 1849 'Cliffe Terracotta Works' was advertising that they would make terracotta to architects' designs.¹ In 1867 Cliff were exhibiting terracotta at the Paris Exhibition.² Their tawny products and glazed ware received particular praise just before the turn of the century.³

However in 1889 the business had become part of Leeds Fireclay and all the large-scale architectural contracts were executed at Burmantofts. Cliff promoted a variety of innovative and patented products, such as the Shepwood patent partition brick which would be finished with a glazed or moulded face, Adam's patent dovetail frog and Hall's patent hanging tiles.⁴

John Matthew Joined Cliff and Sons soon after coming to Leeds in 1851 and became the manager, until his retirement in 1904.⁵

1. *Builder*, 7, 1849, p. 441.
2. *Catalogue of British section, Paris Universal Exhibition (London 1867)*, p. 201.
3. *British Clayworker*, 6, 1897, p. vi.
4. *British Clayworker*, 8, 1899, pp. xviii-xix.
5. *British Clayworker*, 13, 1904, p. 94.

COADE'S ARTIFICIAL STONE MANUFACTORY

1769-1839 (R.)

King's Arms Stairs, Lambeth, London.

The Coade works was established when the family, the parents and a daughter, came up from Dorset. The father died soon after the opening of the works so the two Eleanors were left to run the firm. Jewitt suggests that another daughter, Elizabeth, was also involved.¹ The younger Eleanor was a clay modeller and is credited with the rapid growth of the business. When the mother died in 1796, her nephew, John Sealy was taken into partnership. When he died in 1813 his place was taken by William Croggon. He was a cousin by marriage to the younger Eleanor. Once she died, in 1821 and still unmarried, William Croggon gained complete control.² Finally the works was relet, in 1837, to Thomas Routledge and John Greenwood. They carried on the manufacture of terracotta and scagliola but the high standards of workmanship and design seem to have been lost.³

Drawings show the works at Lambeth to have been a private house with a weather-boarded factory building behind.⁴ Later a more imposing front was added with columns and other decoration in Coade stone. In 1799 an exhibition gallery was opened on Westminster Bridge Road, this facade being covered with Coade stone decoration, designed by John Bacon.

John Bacon was responsible for most of the early designs. Subsequently John De Vaere and Joseph Panzetta regularly produced designs for the firm. Rossi, Flaxman, Bubb and Banks were among the sculptors who worked for Coade.⁵ Despite employing such first class designers the wares were modestly priced. Their architectural details were used throughout London from the 1770s. Country landowners were the main clients for sculptures and garden ornaments.⁷

The firm started making scagliola under Croggon's managership. Several colours and finishes of this imitation marble were produced.

1. L. Jewitt (1883), *op.cit.*, p. 93.
2. S. B. Hamilton, 'Coade stone', *Architectural Review*, 116, 1954, pp. 295-301 (p. 296).
3. Sir H. Roberts & W. H. Godfrey, *Survey of London*, Vol. 23 (London County Council, London 1951), p. 61.
4. K. A. Eskdaile, 'Coade stone', *Architect and Building News*, 161, 1940, pp. 94-6 (p. 94), Eskdaile and Hamilton provide complete though overlapping accounts of the Coade works and its output.
5. R. Gunnis (1964), *op.cit.*, p. 105.
6. The range of wares and prices is shown by three catalogues dated 1777, 1784, and 1799 held in the British Library.
7. J. E. Ruch, 'Regency Coade: a study of the Coade record books, 1813-21', *Architectural History*, 11, 1968, pp. 34-56 (p. 34). Ruch's study of the Coade record books show that business was still growing in the years up to 1820.

COAL ISLAND WORKS

1882 (R.)

Dungannon, Northern Ireland.

This works is recorded as making terracotta chimney-pots, flower-pots and vases.

1. L. Jewitt (1883), *op.cit.*, p. 599.

COALBROOKDALE COMPANY

1861, 1867 (R.)

Coalbrookdale, Shropshire.

This firm of ironfounders established a commercial brickworks, having discovered a good quality clay on land at Horsehay, purchased in 1838.¹ White and blue bricks and roofing tiles were the main products. Simple forms of buff terracotta were used on local buildings in the 1850s.

In 1861 a terracotta works was established, and ornamental products were displayed at the International Exhibition of the following year.² A price list covered vases, pedestals, corbels and chimney-pots.³ Some large sculpture groups including 'the Three Graces' were modelled by a Monsieur Kremer.

1. B. Trinder, *The Industrial Revolution in Shropshire*, (Phillimore, Chichester 1973), p. 239.
2. L. Jewitt (1883), *op.cit.*, p. 177.
3. Coalbrookdale Company, *Terracotta goods* (June 1867).

WILLIAM COFFEE

c. 1708-1816 (R.)

Derby

Coffee was a fireman at Coade but left in 1792 after a disagreement with John Sealy.¹ Returning to his home town Derby, he was a modeller at the Derby China Works before setting up on his own to make plaster and terracotta busts and animals.² The busts were mostly of public figures such as Richard Arkwright and Erasmus Darwin. In 1809 a nine foot figure of Osculapius was made for Derby Infirmary.³

He went back to London but, by 1816 had arrived in the United States and started to model terracotta busts of American personalities.

1. R. Gunnis (1964), *op.cit.*, p. 109-10.

2. H. G. Bradley, *Ceramics of Derbyshire* (G. Bradley, London 1978).

3. *Derby Mercury*, 25 January 1806.

S AND E COLLIER LTD.

1886-1929 (R.)

Grovelands Brick and Tile Works, Reading, Berkshire.

This was the only firm to use the reading clays for making terracotta on a large scale. It was founded in 1848 and

became a partnership between the brothers Samuel and Edward Collier. A son, Edwin P. Collier, joined the firm in 1865 and was responsible for making the Grovelands Works one of the most progressive in the country at about the turn of the century. It was the fourth site around Reading worked by Collier and covered 50 acres, with 300 men being employed in 1902.¹

The range of products covered most of the requirements of commercial and suburban architecture: bricks, roofing tiles, finials, chimney-pots and various terracotta decorations. Garden pots and paving bricks were also made.² Constructional forms of terracotta were first referred to in 1895,³ but only seem to have been made as plain hollow blocks for cheap construction.⁴

Bricks in an increasing variety of finishes, tiles and fireplaces dominated inter-war production.⁵ The works was still under family control after the Second World War, but has now closed.

Edwin Collier's second son established an independent works at Marks Tey in Essex.⁶

1. *British Clayworker*, 11, 1902, p. 45.

2. *British Clayworker*, 3, 1894, p. xxii.

3. *British Clayworker*, 4, 1895, p. ix.

4. *British Clayworker*, 20, 1911, pp. xxv-vi.

5. *British Clayworker*, 30, 1921, p. 42.

6. *British Clayworker*, 63, 1954-5, p. 315.

CORONET RED BRICK AND TERRACOTTA COMPANY

1897 (R.)

1906, 1920 (R.D.)

Measham, near Atherstone, Warwickshire.

This firm was exhibiting red terracotta at the Building Trades Exhibition of 1897.¹

1. *British Clayworker*, 6, 1897, p. ix.

THE COUNTY INDUSTRY FOR DORSET AND HANTS

1909, 1911 (R.)

Forest Garden, Burley, Hants
and Keyworth, Wareham, Dorset.

Lady Baker established a small workshop and kiln at Burley to experiment with the richly coloured clays found in Dorset and Hampshire. By using varying amounts of heat, a variety of colours was achieved, in imitation of stone and marbles.¹ Vases, columns and fireplaces were produced in shades of yellow, brown and pink, and marketed as 'Ceramic Marble' or if glazed, 'Oxidine'.²

1. *Display at Building Trades Exhibition. British Clayworker*, 20, 1911, pp. xxvi-vii.
2. *Brick and Pottery Trades Journal*, 17, 1909, p. 288.

CRAVEN DUNNILL & CO. LTD.

1898-1906 (R.D.)

Jackfield Works, Jackfield, Shropshire.

A tile works that had been operated by Messrs. Hargreaves and Craven was taken over by H. P. Dunnill; he formed a Company in 1871 to rebuild and develop the concern.¹ By 1874, new warehouses, showrooms and an office had been built.²

Having been manufacturing encaustic, printed and enamelled tiles, Craven Dunnill undertook faience for architectural commissions, during the 1890s. Their facades and bar fronts for public houses are among the finest examples of glazed architectural ceramics produced in Britain.³

By the inter-war period they had reverted to concentrating on tile production and the works closed in 1951.⁴

1. L. Jewitt (1883), *op.cit.*, pp. 181-2.
2. *Architect*, 11, 1874, p. 139.
3. Craven Dunnill, *Album of photographs of completed schemes* (c.1905).
4. A. T. Herbert, *The Jackfield decorative tile industry*. (Ironbridge Gorge Museum, Ironbridge 1978), p. 5.

WILLIAM CUBITT AND COMPANY

1850, 1860, 1884 (R.)

Thames Bank, London.

The building contractors had a single kiln at their depot which was used for making terracotta, from around 1850.¹ Although there were modelling and showrooms, there is no evidence of a catalogued range of components being advertised.² One of their largest schemes was the details for Broad Station dating to 1866.³

1. *Builder*, 8, 1850, pp. 304-5.

2. *Builder*, 46, 1884, p. 732.

3. *Trans. RIBA.*, 18, 1867-8, pp. 259-79 (p. 272).

DELLA ROBBIA POTTERY

1894-1906 (R.)

2A Price Street, Birkenhead, Cheshire.

The pottery was founded in 1894 by Basil Rathbone, a painter and designer who had been taught by Ford Maddox Brown. His partner was the sculptor, Conrad Dressler. An early catalogue advertised seventy architectural pieces, including panels, tiles and overmantels.¹ Figures were modelled in relief and coloured with majolica glazes. A fountain was supplied for the Savoy Hotel and panels installed in two churches in the Wirral.²

Once Dressler had left in 1897. little architectural work of any importance was undertaken. Most of the production

was of vases and plates in an Art Nouveau style.³

1. *Della Robbia Pottery Ltd., Catalogue* (1896).
2. *British Clayworker*, 5, 1896, p. 1xiii.
3. *Della Robbia Pottery, Birkenhead 1894-1906*,
(Williamson Art Gallery and Museum, Birkenhead, undated). David Hillhouse of the Williamson Art Gallery provided extensive information on the pottery.

HENRY DENNIS

1890-1933 (R.D.)

Hafod Red Clay Works, Ruabon, Clywd

Henry Dennis was a Cornish engineer who settled in Denbighshire initially to build railways, but soon started to invest in collieries and lead mines. Discovering good seams of clay, the Ruabon Coal and Coke Company started making terracotta.¹ The Hafod Works was built in 1893 and several large contracts for terracotta were supplied up to the time of Henry Dennis' death in 1906.² His son, Henry Dyke Dennis took over the management and in 1934 a private limited liability company was formed under the name of Dennis Ruabon. The output became concentrated on floor quarries, supplemented in recent years by dust-pressed tiles.³

The Company also owned the Pant Works at Rhos, which was used for making glazed bricks and tiles. It was sold shortly after the First World War.

1. G. Lerry, 'Henry Dennis', *Transactions of the Denbighshire Historical Society*, 1, 1952, pp. 33-45.
2. *British Clayworker*, 15, 1906, p. 116-7.
3. G. G. Lerry, 'The industries of Denbighshire', *Transactions of the Denbighshire Historical Society*, 8, 1959, pp. 108-9.

LEWIS DILLWYN

1849 (R.)

Cambrian Pottery, Swansea.

Lewis W. Dillwyn took over the Swansea works in 1802 and made earthenware and china. Around the middle of the century his son Lewis L. Dillwyn started making imitations of Etruscan vases.¹ In 1849 some tazzi and brackets were admired for their beauty and strength.²

1. L. Jewitt (1883), *op.cit.*, pp. 569-571.

2. *Art Journal*, 11, 1849, p. 128 (pp. 128-9).

DOULTON AND WATTS

1820s- c.1846 (R.)

DOULTON AND CO. LTD.

c.1846-1939 (R.)

Lambeth, London.

1883-1910 (R.D.)

Rowley Regis, Dudley, West Midlands.

Doulton's production of terracotta and faience continued for well over a century, a longer record than for any other works. The firm was responsible for a unique variety of ceramic compositions, and collaborations with sculptors and decorative artists.

In 1815 John Doulton bought a pottery in Lambeth. During the 1820s he began to produce terracotta building components such as chimney-pots and ridge tiles, as well as ornamental vases. His son, Henry, introduced sculptural work in the following decade, assisted by Samuel Nixon, a local sculptor.¹

John Sparkes, headmaster of the Lambeth School of Art, arranged for students' designs to be executed in terracotta, at the nearby works. While competing manufacturers were starting to gain large architectural contracts, Percival Ball and George Tinworth were producing figures and medallions at Lambeth.² However, around 1870, progress was made in the quality of the terracotta body and in 1876-78 new showrooms and studios were built, incorporating terracotta and stoneware in the facades.³

In the thirty years up to the outbreak of the First World War Doulton supplied an enormous number of major public buildings throughout Britain, particular allegiance being gained from major architects such as T. E. Collcutt, Ernest George and C. F. Doll. A new works was established to supply the Midlands and north of England. Opened in 1889, alongside an established pipe works at Rowley Regis,

chimney-pots and blue bricks were made in addition to terracotta.⁴

Many of Doulton's schemes demonstrated a high quality of decorative sculpture, executed either by resident artists such as John Broad and M. V. Marshall or by sculptors known to Sparkes, including W. S. Frith and F. W. Pomeroy. The Company pioneered the incorporation of rich polychromatic effects. Several buildings and fountains in the 1870s incorporated tiles in salt-glazed stoneware. From this 'Doultonware' a diverse range of interior linings in faience, tile panels and, from the late eighties, matt-glazed Carraraware, were developed. The most impressive schemes were produced when W. J. Neatby was the head of the architectural department, between 1890 and 1907.⁵

Doulton continued to make Carraraware in the inter-war period and introduced slab faience in the thirties. They never rivalled the scale of output attained by Hatherly or Shaw but were responsible for some ambitious sculptural work, in collaboration with Gilbert Bayes. The production of architectural ceramics ceased during the Second World War and the Lambeth factory was closed in 1956.⁶

1. E. Gosse, (ed. D. Eyles), *Sir Henry Doulton* (Hutchinson, London 1970), pp. 13-4.
2. *Builder*, 28, 1870, p. 595.
3. *Builder*, 34, 1876, p. 1192.
4. E. Gosse (1970), *op. cit.*, P. 158.

5. P. Atterbury & L. Irvine, *The Doulton story*,
(Royal Doulton, Stoke-on-Trent 1979), p. 73.
*An illustrated survey of their major architectural
schemes is included in this catalogue covering
the history of Doulton.*
6. *British Clayworker*, 64, 1956, pp. 286-7.

J. C. EDWARDS

early 1870s (R.)

1883-1939 (R.D.)

Pen-y-bont Brick, Tile, Terracotta and Encaustic Tile
Works and Trefynant Fireclay Works, Ruabon, Clwyd.

This firm became renowned in the late nineteenth century
as being the largest manufacturer of terracotta in the
world. J. C. Edwards himself was credited with doing more
than any other manufacturer to promote the revival of the
material.¹

J. C. Edwards was born at Trefynant. He established
a brickworks there, in about 1850, his father having
taken over some coal workings. Production expanded to include
firebricks and earthenware pipes, and then tiles and
terracotta. The Pen-y-bont works near Newbridge, was
built about 1870. Sited on fine beds of Ruabon marl,
it was used for making roofing tiles, red facing bricks,
and the red terracotta for which the firm became famous.²
It supplied many of the major buildings in Britain that
were faced in red material, such as the Assize Courts in

Birmingham, the Constitutional Club in London and numerous of Alfred Waterhouse's commissions. Unlike most firms, J. C. Edwards probably did make large quantities of ornamental details to catalogued designs.³ The general manager of the terracotta section was a Mr. Bryan who had trained at the South Kensington Art School while the chief draughtsman, Mr. Richardson, had been a pupil of the architect, Thomas Verity.⁴

At the time of J. C. Edwards' death in 1896, the works at Trefynant and Pen-y-bont, the glazed brick works at Rhos and the Plas Kynaston Potteries covered thirty acres and employed nearly 1,000 workers.⁵ The firm was taken over by his son, Coster Edwards and E. Lloyd Edwards who died in 1934 and 1956 respectively. J. C. Edwards were formed into a limited liability company as late as 1926.⁶ Terracotta was made on a decreasing scale through the twenties and there is no record of faience being introduced at all. Quarry tiles became the most successful product during the twentieth century. They were made at Pen-y-bont until the works was closed in the early 1960s.

1. *Building News*, 62, 1892, p. 622.
2. *Bye-Gones relating to Wales and the Border Counties*, 13, 1895-6, p. 314.
3. J. C. Edwards, *Brick, tiles and terracotta, catalogue of patterns* (c.1903). The catalogue contains a list of the firm's major contracts.
4. *Builder*, 43, 1882, p. 188.

5. G. G. Lerry, 'The industries of Denbighshire',
Transactions of the Denbighshire Historical Society,
8, 1959, p. 107.
6. *British Clayworker*, 42, 1934, pp. 332-3 and 65,
1956, p. 7.

MESSRS. ELLIS, PARTRIDGE AND COMPANY

1894 (R.)

Greyfriars, Leicester.

In the 1890s this firm was manufacturing a typical range of facing and ornamental bricks and some terracotta architectural details.¹ The firm had become reconstituted as John Ellis and Sons Ltd. by 1908.²

1. *British Clayworker*, 3, 1894, pp. ix-x.

2. *British Clayworker*, 17, 1908, p. 82.

ENFIELD BRICK AND TERRACOTTA CO. LTD.

1906-1939 (R.D.)

Whinney Hill, Accrington, Lancashire.

This works was developed by Albert and Charles Foster. Having been established as a Company in 1893, it grew rapidly with the terracotta section expanding to produce 20,000 cu. ft. per annum by 1913.¹ Production of architectural details appears to have continued into the twenties.²

1. *British Clayworker*, 22, 1913, p. 221.

2. *Illustration of terracotta drying room. British Clayworker*, 37, 1928, pp. 12-13.

EREWASH VALLEY BRICK PIPE AND POTTERY COMPANY

1905 (R.)

Nottingham.

Red and buff terracotta was exhibited at the 1905 Building Trades Exhibition.¹

1. *British Clayworker*, 14, 1905, p. 56.

FARNLEY IRON COMPANY

1853 (R.)

1883, 6 (R.D.)

Farnley, Leeds.

This firm is the first recorded as making architectural terracotta in Leeds. About 1846 a blast furnace had been built, leading to the working of local ironstones and fire-clays.¹ By 1853 the finer clays were being made into vases, brackets and chimney-tops, and the firm was offering to execute architects' own designs.² There is no evidence of any large contracts being undertaken during the 1880s.

1. *Art Journal*, 5, 1853, p. 20.

2. *Builder*, 11, 1853, p. 479.

MESSRS. FERGUSON, MILLER AND COMPANY

1851, 1853 (R.)

The Heathfield Fireclay Works, Heathfield, Strathclyde.

This was one of the earliest manufacturers of terracotta in Scotland. Peter Ferguson established a small pottery and brickworks during the 1830s on the Heathfield estate. In 1847 Robert Miller was taken into partnership.¹ Salt-glazed, cane and Rockingham ware as well as fireclay goods were manufactured. They displayed large terracotta vases at the 1851 Exhibition and more vases and a twenty-four foot high fountain at the Irish Exhibition of 1853.²

The works were bought by Messrs Young in 1862. Despite taking over the stock of moulds, the manufacture of terracotta appears to have ceased.³ The firm became known as the Heathfield and Cadowan Fireclay Company in 1913 and refractories were made until the works were closed and demolished in about 1969.

1. *Notes on the Heathfield Fireclay Works forwarded by Graeme Cruickshank.*
2. *L. Jewitt (1883), pp.616-7.*
3. *Art Journal, 1853, supplement, p. 55.*

COLONEL JOHN FLETCHER

1842, 1851 (R.)

Ladyshore Terracotta Works, Little Lever, Bolton, Lancashire.

J. FLETCHER AND SONS

1920-1929 (R.D.)

Parkfield Brickworks, Great Lever, Bolton, Lancashire.

Having discovered seams of fireclay in his colliery, Fletcher promoted the construction of a church at Lever Bridge, in terracotta. His future son in law, Edmund Sharpe produced the designs for St. Stephen's, the first building in Britain to be built entirely in the material. Fletcher and Sharpe collaborated again for the church of Holy Trinity, Platt, commenced in 1845.¹

Two years later, the Ladyshore Works was advertising a range of decorative products.² It was in the proprietorship of E. P. Willcock and Company, who exhibited terracotta at the Great Exhibition.³ Several small manufacturers of terracotta around Bolton continued business into the 1920s, one located at Great Lever being titled J. Fletcher and Sons.

1. R. Jolley, 'Edmund Sharpe and the "pot" churches', *Architectural Review*, 146, 1969, pp. 427-431 (pp. 427-8).
2. *Builder*, 5, 1847, unpagcd.
3. *Official descriptive and illustrated catalogue of the Great Exhibition (Royal Commission, London 1851)*, Vol. 2, p. 764.

F. G. FOWKE

c.1835 (R.)

Lowesby, Leicestershire.

Fowke started making pottery, using the clay from his estate, purely for his own and his friends' requirements. These garden pots were followed by the manufacture of red and black Etruscan style vases. A shop was opened in King William Street, London, which was managed by a Mr. Purden who supervised the painting and enamelling.¹

The Etruscan vases were shown to a government committee as a model of how art could be introduced into manufactures.² However the trade did not develop and the works was turned over to ordinary brick and tile manufacture.

1. L. Jewitt (1883), *op.cit.*, p. 243

2. *Report from the select committee on arts and their connection with manufactures* (1836), Vol. 1, p. 49.

GARNKIRK COAL COMPANY

1833, 1848, 1851, 1853, (R.)

GARNKIRK FIRECLAY COMPANY

1883 (R.)

Garnkirk, near Heathfield, Strathclyde.

This company was probably the first to produce terracotta in Scotland. It was founded in 1828 by Mark Sprott after the discovery of large deposits of fireclay. An extensive range of products was being advertised in 1833, including firebricks, paving and ridge tiles, ornamental chimney-pots and vases.¹ They were exhibited in Glasgow in 1848, at the Great Exhibition in 1851 and at Dublin in 1853. Trusses and balustrades were included in the 1853 catalogue. E. H. Bailey designed 'Eve at the fountain' and other sculptural groups.²

By 1860 the firm had been re-named the Garnkirk Fireclay Company. From 1862 James Gillespie was the managing partner of the firm, being joined by James Cameron in 1872, upon the retirement of Mark Sprott Junior. They took out a series of patents on brick, tile and pipe manufacture. The terracotta section never developed into supplying architectural contracts. The firm closed in 1901 when the claypits became exhausted.³

1. L. Jewitt (1883), pp. 615-6.

2. Garnkirk Coal Company, Catalogue (1853) reprinted by the Scottish Pottery Society.

3. Notes on the Garnkirk Fireclay Company supplied by Graeme Cruickshank.

GARNSIDE TERRACOTTA MANUFACTORY

1853 (R)

Garnside, near Glasgow, Strathclyde.

Located near the other firms working the fireclays of central Scotland, the Garnside Works was producing vases and chimney-pots at about the middle of the nineteenth century.¹

1. *Art Journal*, 5, 1853, supplement, p. 63.

ARTHUR GEE

1880 (R.)

1883 (R.D.)

Brereton, near Rugeley, Staffordshire.

A building contractor as well as a clayworker, Arthur Gee made terracotta on a small scale during the early 1880s. His stock designs were complimented as demonstrating good taste.¹

1. *Builder*, 39, 1880, p. 397.

GIBBS AND CANNING

1867-1940 (R.)

Glascote, near Tamworth, Staffordshire.

Gibbs and Canning pioneered the transformation of terracotta manufacture from being largely of ornamental ware made in

potteries to undertaking large architectural contracts from works usually located on coalfields.

The works was established in 1847 and was possibly the first to make glazed socket pipes in England. Three main groups of products were developed: glazed pipes and sanitary ware, bricks and tiles, and terracotta.¹ Their terracotta was not exhibited at either the 1851 or 1862 Exhibitions, or used on the early schemes involving architectural ceramics in South Kensington. However the firm gained the complete contracts for supplying the Albert Hall, commenced in 1867, and for the Natural History Museum. During this period an enamelled terracotta, termed Della Robbia Ware, was also being produced.²

Charles Canning had been in control through the seventies, but the firm went into liquidation in 1881. It was re-vitalised by a group of solicitors from Evesham, with William Smith being appointed as the works supervisor. After being formed into a limited liability company in 1893, A. E. Smith took over as the manager.³ The factory was located adjacent to Glascote Colliery and had access to both the Midland and London and North Western Railways. The works was extended during the nineties and a pottery was established at Deptford in London.⁴

Terracotta had become an increasingly important element in the firm's business, a buff coloured material being used

for a series of major contracts during the eighties. Their matt-glazed 'Pentelica' was introduced in the Edwardian period.⁵ After the First World War their schemes tended to be more traditional than modernistic in design and Gibbs and Canning became out-competed by the more recently established firms.

The terracotta department was closed in 1940, the clay mine shut down soon after the Second World War and the production of pipes finally ceased around 1958. The site has now been totally cleared and the name of the Company changed to Hopworth Clay Products.

1. Gibbs and Canning, *Particulars of sale at Glascote works at Tamworth*, 1881.
2. L. Jewitt (1883), *op.cit.*, pp. 244-5.
3. Gibbs and Canning Limited, *Register of directors or managers*, 2 January 1901. Companies House.
4. O S Map 25 inch, Warwickshire sheet 12 S E 6, 1890, and 1903 editions.
5. *British Clayworker*, 22, 1913, p. xxx.

W. GILBERT

1857-8 (R.)

Tividale Works, near Birmingham, West Midlands.

In 1857 the range of products included terracotta statuary, in addition to glazed bricks, floor tiles and drainpipes.¹ Gilbert wrote to the Building News promoting the adoption of terracotta.²

1. *Building News*, 3, 1857, pp. 64-5.

2. *Building News*, 4, 1858, p. 537.

GLENFIELD PREMIER BRICK AND TERRACOTTA COMPANY

1901 (R.)

GLENFIELD BRICK AND TILE WORKS

1929 (R.D.)

Glenfield, Leicester.

The firm exhibited finials, floral panels, window heads and other forms in red terracotta at the 1901 Building Trades Exhibition.¹

1. *British Clayworker*, 10, 1901, p. 105.

GEORGE GUNTON

1830 onwards (R.)

GUNTON BROS.

1870 onwards, 1914

Costessey, near Norwich, Norfolk.

An estate yard supplied the moulded bricks used in the rebuilding of Costessey Hall, undertaken in 1827. Subsequently, George Gunton, the son of the original foreman, started selling decorative brickwork and small solid blocks of terracotta made up into architectural components.¹ In 1851 he was offering ornamental chimneys, Tudor style window frames, turrets, cornices and copings.² A finer red and white 'Costessey Ware' could be made from the clays.

Costessey brickwork and terracotta was used by Alfred Waterhouse in the 1870s for hotels round the coast of East Anglia and for the window tracery of numerous chapels.³ When George Gunton retired in 1870 the title was changed to Gunton Bros., though his son William was the sole proprietor. With the exhaustion of the red clay, the works at Costessey closed, at about the time of the First World War. However Gunton had three other works in Norfolk and production of ordinary and moulded bricks continued at Little Plumstead until the Second World War.⁴

1. L. Jewitt (1883), (1883), *op.cit.*, p. 261.
2. Advertisement, *Norwich Mercury*, 5 April 1851.
3. Gunton Bros., Catalogue (1893). Contains a list of major commissions.
4. *British Clayworker*, 49, 1940, pp. 100-1.

JOHN HALL AND SON

1883-1939 (R.D.)

Wharf Street, Dukinfield, Manchester.

At a compact works close to the centre of Manchester, terracotta decorative details such as pier-caps and finals, and moulded bricks were manufactured.¹

1. Anon., *Notes on John Hall and Son. In the local history section of manchester Central Library.*

JONATHAN HARMER

c.1802-c. 1840 (R.)

Jonathan Harmer returned from America to inherit his father's stone masonry business. He manufactured bas-reliefs in terracotta to be inserted in headstones or to surround memorial tablets. Made at his Heathfield home or his workshop, production remained at a very small scale. The clay probably came from the local park.¹ There were only seven lines of products, though special coats of arms were made on commission and at greater expense.²

The business was made over to Jonathan Harmer's sons, Sylvan and Edwin. Edwin died in 1851 and Sylvan pursued a career as a land surveyor.

1. P. Lucas, *Heathfield memorials* (A.L. Humphreys, London 1910), pp. 104-8.
2. G.L. Remnant, 'Jonathan Harmer's terracottas'. *Transactions of the Sussex Archaeological Society*, 100, 1962, pp. 142-8.

HATHERN STATION BRICK AND TERRACOTTA COMPANY

1883 to 1939 (R.)

HATHERNWARE LTD.

1939-1979 (R.)

HATHERNWARE CERAMICS LTD.,

1979 to date (R.)

Hathern, near Loughborough, Leicestershire.

This firm became among the most successful of the manufacturers during the inter-war period and is now one of the only two still making architectural ceramics. The works was founded in 1874 by George Hodson, the sanitary inspector for Loughborough Board of Health, when he discovered good beds of clay at Sutton Bonnington. In conjunction with his brother, James, he bought a piece of land by the Midland Railway and established a brickworks. A second yard was built at Cliff near Tamworth, for making blue engineering bricks and pavers.¹

Designs for architectural forms in terracotta, such as window surrounds, were published in 1883.² It appears that only modest schemes involving moulded bricks and terracotta were supplied until 1896. From then onwards the terracotta section developed rapidly, valuable ties being established with architects including Frank Matcham and James and Lister Lea. A new catalogue of stock designs was produced in 1904, but there appears to have been little demand for such components.³

James Hodson died in 1899 and was succeeded by George Hodson's son, G. A. Hodson. A limited liability company was formed in 1902 and all the subscribers belonged to the Hodson family.⁴ During the First World War, chemical stoneware was introduced to compensate for the slump in demand for architectural work, and continued to be made to the present day. The Company was particularly successful in the 1920s and thirties in supplying shop-

fronts and cinema facades, and was responsible for some striking polychromatic schemes.⁵

In 1934 the Company title was changed to Hatherware Ltd. G. A. Hodson died four years later and was succeeded by his son G. N. Hodson. Production was again concentrated on chemical stoneware during the Second World War; faience, mostly in slab form predominated during the fifties.

In 1961, Hather and Shaw's Glazed Brick Company merged to form the Shaw-Hatherware Group. Production was divided, with architectural materials being made at Darwen and chemical ware and plastics at Hather. However the link was severed in 1979 and Hatherware Ceramics Limited are now making terracotta and faience for restoration work.

1. *Hatherware, Hatherware 1874-1974 (1974). A centenary booklet that provided a brief history of the firm.*
2. *Designed by Maurice Adams. Building News, 44, 1883, p. 288.*
3. *Hather Station Brick and Terracotta Company, Catalogue (1904).*
4. *Hather Station Brick and Terracotta Company, Memorandum of association, 31 October 1902.*
5. *A representative selection are illustrated in Hather Station Brick and Terracotta Co..Ltd., Terracotta buildings (undated).*

RICHARD HOLT

1730 (R.)

York Buildings Stairs, Lambeth, London

Holt took out two patents for 'artificial stone' in 1722, the second one for making a whiteware without using any clay.¹ By 1730 he had established an 'Artificial-Stone-Ware-House' in Lambeth, by York Buildings Stairs, and had published a catalogue. There was another warehouse in the Strand. The range of wares that Holt claimed to produce covered the main classical details and specialised garden ornaments such as grottos, cascades and obeliskes.²

Production ended with Holt's death. According to Pincot the material had proved durable but the painted decorations were crudely designed and executed.³

1. E. A. Eskdaile (1940), *op.cit.*, p. 94.
2. R. Holt, *A short treatise of artificial stone* (S. Austen, London 1730), p. 13.
3. D. Pincot, *An essay on the origin, nature, uses and properties of artificial stone* (R. Hett, London 1770), p. 47.

HUNCOAT BRICK AND TERRACOTTA CO. LTD

1898-1933 (R.D.)

Huncoat, Accrington, Lancashire.

The Company was formed in 1894, as one of the several clayworking firms being established around Accrington in the nineties.¹ Facing bricks were supplied across the country and engineering bricks, tiles, pipes and terracotta were also manufactured.² The prosperity of the Lancashire clayworking industry collapsed with the First World War and the Company was wound up in 1917.³

1. *British Clayworker*, 3, 1894, p. 206.
2. *British Clayworker*, 6, 1897, pp. 186, 8.
3. *British Clayworker*, 26, 1917, p. 109.

GEORGE JENNINGS

1860 (R.)

1883-1910 (R.D.)

South Western Pottery, Parkstone, near Poole, Dorset.

The South Western Pottery was founded in 1856, to complement a works owned by Jennings in London. From 1860 a specialisation was developed in terracotta.¹ The pale grey or yellow coloured material was used extensively in Poole, on the nearby Canford Estate and in south London, where Jennings was involved in property development.

His catalogue shows an impressive range of forms as well as bricks and sanitary ware.² In 1890, his sons who had taken over the management of the business, issued new catalogues, concentrating on hydraulic and sanitary appliances.³

The early achievements with terracotta did not lead to large-scale production towards the end of the century and the department was closed around 1909.⁴ Sanitary ware and acid resisting stoneware continued to be made and the works closed in 1967.

1. A. J. A. Cooksey, 'Jennings South Western Pottery, Parkstone', *Industrial Archaeology*, 6, 1969, pp. 164-171 (pp. 164-5).
2. George Jennings and Company, *The South Western Pottery, Catalogue* (1894). The copy consulted probably dates to the end of the decade, and was supplied by Leslie Hayward.
3. *Builder*, 58, 1890, p. 16.
4. J. Hawkins, *The Poole potteries* (Barrie & Jenkins, London 1980), p. 40.

JOHNSON & CO.

1883 (R.D.)

Ditchling, Burgess Hill, Sussex.

An undated catalogue shows Johnson and Co. offering a range of magnificent finials in the forms of dragons, lions and eagles as well as a more typical range of architectural details.¹

1. Johnson and Company, *Catalogue* (undated) held in Boston Public Library, Boston, Massachusetts.

JOSEPH KING AND COMPANY

1886-1914 (R.D.)

KING BROTHERS (STOURBRIDGE) LTD.

1920-1937 (R.D.)

Brick, Tile and Terracotta Works, Netherend, Stourbridge,
West Midlands.

In an area where the clays were best suited for the manufacture of fireclay goods, Charles and his son H. C. King had a second works for making facing and glazed bricks, and terracotta.¹ In the Edwardian period they exhibited material in deep red, grey and buff colours.²

1. *British Clayworker*, 1, 1892, p. 189.

2. *British Clayworker*, 14, 1905, p. 56.

KINSON POTTERY COMPANY

1867 (R.)

1883-1937 (R.D.)

Parkstone, near Poole, Dorset.

This works was established in the 1850s. The poorer clays were used for making firebricks and sanitary pipes while those from better horizons were sold to manufacturers of porcelain in Staffordshire.¹

Production ceased after a few years but resumed in 1867 under the title of the Kinson Pottery Company. The range of products included sanitary pipes and a variety of architectural and purely ornamental terracotta.² William Carter bought the Pottery in 1884, and in 1904 his son, Herbert became the director.

Wire-cut and lime-sand brickmaking were introduced but the production of terracotta never developed on a significant scale.³

1. *Builder*, 14, 1856, p. 237
2. L. Jewitt, [1883], *op.cit.*, p. 239.
3. *Portrait of Herbert Carter. British Clayworker*, 21, 1912, p. 199.

KNUTSFORD BRICK AND TILE COMPANY

1883-1898 (R.D.)

Over Knutsford, Cheshire.

Red terracotta was supplied by the firm for Paley and Austin's church of St.Cross and probably other buildings in Knutsford.¹

1. *Builder*, 41, 1881, pp. 437-8.

LAGAN VALE ESTATE BRICK AND TERRACOTTA WORKS. LIMITED

1898-1920 (R.D.)

Lagan Vale, near Belfast, Northern Ireland.

This was the only clayworks in Ulster to make terracotta on any scale. It was established by H. R. Vaughan in conjunction with a building contractor from Belfast. Vaughan had previously worked in English yards and been the manager of the nearby Annadale Brick and Tile Company.¹ An impressive catalogue was produced and after a large profit was made in the first year a Company was established with Vaughan as the managing director.²

Production was mostly of red, sand-faced and ornamental and moulded bricks, supplemented by terracotta building components.

1. *Portrait of H. R. Vaughan. British Clayworker*, 15, 1906, p. 69.
2. *British Clayworker*, 7, 1898, pp. 116, xlv.

MESSRS. WILCOCK AND COMPANY

1858-1889 (R.)

LEEDS FIRECLAY COMPANY

1889-c.1956 (R.)

Burmantofts Works, Leeds, West Yorkshire.

Exploiting the variety of fireclays underlying Leeds, this firm developed into the largest clayworking business in

the north of England, producing one of the widest ranges of architectural, domestic, sanitary and refractory wares, at works in Leeds, Halifax, Hipperholme and Huddersfield.

Firebricks had been made around Leeds from 1845. Finding a layer of high quality fireclay adjacent to a coal seam, Wilcock and Company was founded in 1858 to make firebricks and drainpipes. The first terracotta to be produced was a range of stock architectural details; a finer body was used for Wilcock's 'Yorkshire Art Pottery'. These were mostly domestic wares such as vases, flower-stands, pot-pourris and water-bottles. Some had hand-modelled, sgraffito or stipple decoration. From around 1880 jardinieres and large Persian vases became the most popular forms.²

Wilcock only started producing terracotta on a large scale from the late 1880s, when they had become able to apply glazes to the buff terracotta and make large blocks and slabs of architectural faience. Their most characteristic colours are a soft green and chocolate, with the depth of glaze varying over the surface.³

To expand the architectural trade, catalogue designs were commissioned and draughting shops set up. Maurice B. Adams produced designs for window surrounds, fireplaces and other components of domestic architecture. He also designed new offices and warehouses for the company at Burmantofts.⁴ Burmantofts' terracotta dominated the market in West Yorkshire. Through clients such as the Midland Railway,

the Prudential Assurance and London Transport and its adoption by leading architects such as Alfred Waterhouse, it was used throughout central and southern England. It was Mr. Holroyd, the manager of Burmantofts, who largely organised this expansion. In 1889, amalgamation made Wilcock part of Leeds Fireclay Limited. The constituent firms were Joseph Cliff and Sons, Wortley; the Burmantofts Company Limited, Burmantofts; William Ingham and Sons, Wortley; Wortley Fireclay Company, Elland Road; Edward Brooke and Son, Huddersfield; and Joseph Brooke and Son, Hipperholme and Halifax. It appears as though the name Wilcock Company had just previously been altered to the Burmantofts Company Limited.⁵

While Burmantofts produced terracotta, faience, pottery and glazed bricks and tiles, the sanitary ware and refractory bricks made at the other works were in more consistent demand. The production of art pottery was discontinued in 1904 and their output of architectural ceramics fluctuated markedly in the Edwardian period. The Company made a loss for several years after 1907.⁶

Fortunes only really revived in the late 1920s as the general manager H.J.C. Johnston rationalised the six works.⁷ Burmantofts supplied faience for hotels, cinemas and other public buildings, but was being out-competed by newer firms such as Shaw's of Darwen. Two of Burmantofts' largest orders were for the Promenade at Great Yarmouth and a cathedral in Brussels. In 1929 the works covered sixteen acres and employed 300 men.⁸

In the early fifties there were major plans for reconstruction and faience was still being produced in 1956. As losses accumulated the works were progressively sold off for redevelopment or as industrial sites, the Company now only existing in name.

1. L. Jewitt (1883), *op.cit.*, p. 300.
2. S. Wilkin, 'Burmantofts faience', Leeds Art Calendar, 1979, pp. 15-20.
3. Builder, 39, 1880, p. 303.
4. Building News, 38, 1880, p. 628.
5. The new Company had a nominal capital of £1,000,000 making it the largest ceramic business in the north of England. Yorkshire Post, 19 June 1889, p. 2
6. Leeds Fireclay, Annual reports, 1907-12.
7. H.J.C. Johnston joined the Company in 1892 and became chairman in 1940. He died in May 1950. British Clayworker, 59, 1950-1, p. 64.
8. Claycraft, 2, 1929, pp. 147-8.

LEEDS ART POTTERY AND TILE CO. LTD.

1900-1909 (R.)

LEEDS POTTERY AND MIDDLETON FIRECLAY WORKS

1909, 1912 (R.)

Leathley Road, Hunslet, Leeds.

MIDDLETON FIRECLAY COMPANY

1925-1939 (R.D.)

Middleton Hall, Middleton, Leeds.

Founded as an offshoot to the Leeds Fireclay Company, this firm became a significant competitor in the inter-war period. William D. Cliff and James Holroyd, directors in Leeds Fireclay and Harold E. Cliff who was to become a director, took directorships in the Leeds Art Pottery and Tile Company, at its formation in 1900.¹ The firm's catalogue covered tile decoration and architectural faience, with example schemes being designed by William Henman.²

By 1909, the business was titled the Leeds Pottery and Middleton Fireclay Works, and James Holroyd was acting as works manager.³ Glazed bricks, terracotta and a matt glazed faience with the trade name 'Ceramo' were being produced. Ceramo was supplied for the Congregational Church at Fairhaven, Lancashire.⁴

In the twenties the range of faience finishes had broadened and sanitary ware was also being produced.⁵

1. *British Clayworker*, 9, 1900, p. 356.
2. *Leeds Art Pottery and Tile Co. Ltd., Catalogue* (undated)
3. *British Clayworker*, 18, 1909, p. 53.
4. *British Clayworker*, 21, 1912, p. lxxiv
5. *British Clayworker*, 35, 1926, p. 53.

LIPSCOMBE AND COMPANY

1883(R.D.)

Brampton near Chesterfield, Derbyshire

This firm was best known for its patent filters, However they exhibited statues and architectural details in 'glazed terracotta' at the Building Exhibition of 1881.¹ Contemporary use of the material was made on some premises in Oxford

Street.²

1. *Builder*, 40, 1811, p. 428.
2. *Builder*, 40, 1811, p. 555.

MAW & CO.

1862-1883 (R.)

Benthall, Shropshire.

1883-1930s (R.)

Jackfield, Shropshire.

In the late nineteenth century Maw constituted the largest decorative tile manufacturer in the world; during this period they were supplying some impressive schemes incorporating faience.

George and Arthur Maw moved their tile works from Worcester to Broseley in 1852 and started making encaustic tiles and mosaic of increasingly sophisticated design.¹ A chimney piece exhibited at the 1862 Exhibition marked possibly the first attempts to apply majolica to architectural uses.² Majolica was also used for art pottery, typically in the form of vases and tazzas.

In 1882-3 a new works was built in Jackfield beside the Severn Valley Railway. The factory dramatically increased the firm's capacity and in 1888 the four brothers formed a Company.³ Through the last two decades of the century they undertook complete tiling schemes for hotels, libraries and other public buildings, with faience being used for columns, plinths and cornices.⁴ The principal designer from 1887 to 1907 was C. H. Temple, his most elaborate work being the stand for the World's Fair at Chicago in 1893.⁵

The only terracotta made was in the form of plant-markers, as a consequence of George Maw's botanical interests.

Simpler forms of faience were made in the inter-war period, often for export. Ceramic fireplaces came into demand and were made virtually until the works closed in 1969.

1. A. T. Herbert, *The Jackfield decorative tile industry* (Ironbridge Gorge Museum, Ironbridge, Shropshire, 1978), pp. 2-3.
2. Maw, *A few selections of Maw and Co's designs of geometrical patent mosaic, encaustic and plain tiles, pavements, and majolica etc.* (undated).
3. Maw & Company Limited, *Memorandum of association*, 19 September 1888.
4. Maw, *Examples of faience and wall tiling*, (c.1900.)
5. *British Clayworker*, 2, 1893, pp. 82-4.

MEASHAM TERRACOTTA COMPANY

1899 (R.)

Measham, Leicestershire.

Located in an area where most firms restricted themselves to making bricks and roofing tiles, this works was advertising terracotta at the turn of the century.¹ In February 1904 the buildings and plant were put to auction.²

1. *British Clayworker*, 8, 1899, p. xvi.

2. *British Clayworker*, 12, 1904, p. 453.

MIDLAND BRICK AND TERRACOTTA CO. LTD.

1859, 1875 (R.)

Coalville, Leicestershire.

1875 (R.)

1883-1906 (R.D.)

Polesworth, Warwickshire and Market Bosworth, Leicestershire.

Following clay tests in 1859, George Smith and J. Whetstone established terracotta works at Coalville and Ibstock, in connection with the Whitwick Colliery Company. Sewage-pipes, pottery and architectural details in terracotta were manufactured.

Employing J. Joiner, the principal manager from Blashfield at Stamford, a works was established at Polesworth in 1875, shortly followed by another at Market Bosworth.¹

1. L. Jewitt (1883), *op.cit.*, pp. 243-4.

HENRY MILLICHAMP AND CO.

1883, 6 (R.D.)

Bermondsey Wall, London.

Fountains, vases and some architectural details were made in terracotta possibly from as early as the 1850s.

MINTON AND CO.

1851, 1860 (R.)

1883-1890 (R.D.)

MESSRS. MINTON, HOLLINS AND CO.

1870s, 1905 (R.)

Stoke on Trent, Staffordshire.

Although Minton's reputation lay largely with their production of tiles, Parian ware and china, the Company also made terracotta and some most impressive forms of majolica. Terracotta ornamental vases and flower pots were shown at the Great Exhibition of 1851¹, and later in the decade decorations were supplied for the exterior of the Museum in Stoke.²

More significantly, Herbert Minton led the revival of majolica ware, using the knowledge of glazes possessed by Leon Arnoux.³ The majolica made by Minton Hollins for the Victoria and Albert Museum was predated by an enormous fountain, designed by John Thomas for the 1862 International Exhibition.⁴ Unlike the other tile manufacturers, Minton did not develop from making

majolica into supplying schemes of architectural faience.

At the turn of the century Minton, Hollins and Co. were making jardinieres and fountains in majolica and faience. The latter material was used for a large drinking fountain exhibited in 1905.⁵

1. *Official descriptive and illustrated catalogue of the Great Exhibition (Royal Commission, London 1851)* Vol. 2 p. 770.
2. *Illustrated London News*, 36, 1860, p.140.
3. *Builder*, 16, 1858, pp. 390-1.
4. *Builder*, 20, 1862, pp. 206-7.
5. *British Clayworker*, 14, 1905, p. 84.

NOSTEL BRICK, TILE AND TERRACOTTA WORKS

1909, 1913 (R.)

Walton, near Wakefield, West Yorkshire.

Buff, grey and salmon coloured terracotta, constructional faience, roof, floor and wall tiles, fireplaces in faience and briquettes were advertised in 1913.¹ Their dull glazed terracotta was given the brand name 'Venora'.²

1. *British Clayworker*, 22, 1913, pp. xxiv-v.
2. *British Clayworker*, 17, 1909, pp. 55-6.

NOTTINGHAM BUILDERS' BRICK COMPANY

1905 (R.)

1910-20 (R.D.)

Carlton Road Brick Works, Nottingham.

Nottingham had many large brickworks located in its suburbs; this is the only one recorded as producing terracotta. Under the management of John Phillips, it was manufacturing architectural details in a red body as well as red, white and blue bricks.¹

1. *British Clayworker*, 14, 1905, p. 111.

THOMAS PEAKE

1883-1925 (R.)

The Tileries, Tunstall, Staffordshire.

The claybank at the Tileries, near Tunstall, had already been worked for almost a century by 1837. At this time, tiles, bricks and vases, urns and ornamental garden pots were being made under the direction of Thomas Peake. He died in 1881 and the works became owned by his trustees and managed by his eldest son, John Nash Peake.¹ Their stand at the Chicago Exhibition of 1893 contained highly ornate finials, terracotta panels and mural tiles.²

Most of the production in the twentieth century was of roofing tiles and associated terracotta decorations.

1. *British Clayworker*, 3, 1894, p. 5.
2. *British Clayworker*, 2, 1893, p. 127.

MESSRS PERRETT BROS.

1901 (R.)

Cheam, Surrey.

This firm was located on the Reading beds and well placed to supply the demand for bricks in South London. At the 1901 Building Trades Exhibition their stand showed highly decorative red goods, including ridge tiles, ball finials, raised letters on tiles and terracotta decorated with allegorical and heraldic subjects.¹

1. *British Clayworker*, 10, 1901, pp. 103-4.

DANIEL PINCOT

1767 (R.)

Goulston Square, Whitechapel, London.

1770 (R.)

King's Arms Stairs, Lambeth, London.

In 1767 Pincot was described as an 'artificial stone manufacturer in Goulston Square, Whitechapel', and recorded as exhibiting an antique bas-relief at the Free Society.¹ In 1770 his address was King's Arms Stairs, Lambeth, the same location at which Coade had established themselves the previous year.²

From his writings it seems as though he had gained a considerable knowledge of the technicalities of production. Given this expertise and the difficulties that he experienced in selling his products there would have been a mutual advantage in uniting with the Coade family. They had the business acumen and the necessary contacts in high society.

1. R. Gunnis (1964), *op.cit.*, p. 304.
2. D. Pincot (1770), *op.cit.*, p. 47.

PRITCHETT AND CO. LTD.

1898-1910 (R.D.)

Hillis Works, West Cowes, Isle of Wight.

Mr. Pritchett was the managing director of the firm, running works at Hillis and Gunville. Terracotta arches were made at the former, in red and white colours. The red clays were sorted for the other products, the best being used for tiles, the next quality for red facings, and the inferior grades for wire-cut bricks.¹

1. *British Clayworker*, 16, 1907, pp. 22-3.

JAMES PULHAM AND SON

1846, 1867 (R.)

1883-1939 (R.D.)

Broxbourne, Hertfordshire.

There were four generations of James Pulhams involved in making architectural decorations, and the middle two

produced terracotta. The eldest James had been a modeller of architectural details in plaster and later Roman cement. His employer, William Lockwood, moved to Tottenham having invented an artificial stone confusingly called 'Portland Stone Cement'. After modelling for Lockwood he set up on his own, patenting a similar material called Pulhamite.¹

Upon his father's death the next James took over; in 1843 he took the business to Hoddesdon, Hertfordshire and continued to make a variety of architectural forms in both cement and artificial stone.²

He is credited with having produced a satisfactory terracotta in 1843, but production only really commenced once he had moved the two miles to Broxbourne. The terracotta could be of a stone or pale red colour and is said to have been made using similar recipes and methods to those of Coade and Sealy.³

The firm expanded to employ about forty people including office staff.⁴ His typical range of architectural and garden ornaments were well publicised through exhibitions and the art and architectural journals. At the 1867 Paris Exhibition his centrepiece was the Mulready monument, designed by Sykes, which won a silver medal.

In 1865 the third James entered the firm which now became known as Pulham and Son. It was probably in the 1880s that they gave up architectural decoration to concentrate on garden and landscape work. The elder James Pulham died

in 1898 and the firm closed in 1945.

1. R. Gunnis (1964), *op.cit.*, p. 312.
2. A. J. Francis (1977), *op.cit.*, p. 104.
3. J. Gwilt, *An encyclopaedia of architecture*
(John Weale, London 1888), pp. 575, 1908.
4. R. G. Freeman, 'The house that James built',
Hertfordshire Countryside, 21, 1966, (unpaged)

RAINFORD POTTERIES LTD.

1929, 33 (R.D.)

Rainford, St. Helens, Lancashire.

This firm was on the list of the companies who successfully competed against the members of the Terra Cotta Association in supplying faience schemes during the inter-war period.¹

1. Repeated references in: *Terra Cotta Association, List of orders lost to outside competition, 1928.*

ROWLAND'S CASTLE BRICK AND TILE COMPANY.

1890-1920 (R.D.)

Rowland's Castle, near Havant, Hampshire.

This works was located adjacent to the London and South Western Railway, and run at the end of the century by E. P. Bastin. It gained a particular reputation for its red facing bricks, which were specified by Alfred Waterhouse, George Aitchison and Arthur Blomfield amongst other architects.¹

Terracotta sills and copings were also made during the 1890s but appear to have been discontinued by 1905.² In 1908 a receiver was appointed and the Company wound up.³

1. *British Clayworker*, 9, 1900, p. vi.
2. *British Clayworker*, 14, 1905, p. 52.
3. *British Clayworker*, 17, 1908, p. 114.

RUABON BRICK AND TERRACOTTA CO. LTD.

1890-1939 (R.D.)

Ruabon, Clwyd.

John Haigh of Penygardden, near Ruabon, established this works in 1883, with Henry Jenks becoming the managing director by 1890. In 1900 the Company had to be wound up, but it was reconstituted in the following year.¹

Reuben Haigh and his three sisters formed a directorate after John Haigh died in 1901.² Subsequently William Gray became the managing director.³

Though the terracotta catalogue published at the end of the century was extremely lavish, there is no record of any large architectural contracts being undertaken.⁴ After the Second World War it was just bricks and tiles that were being made and the site has now become an industrial estate.

1. *Brick and Pottery Trades Journal*, 2, 1901, p. 6.

2. *British Clayworker*, 10, 1901, p. 194.
3. *British Clayworker*, 28, 1919, p. 83.
4. *Ruabon Brick and Terracotta Company*,
Catalogue (undated).

ST. JULIAN'S BRICK AND TILE CO. LTD.

1898-1925 (R.D.)

Newport, Gwent.

This Company was founded by Tom Parry who bought an outmoded works on the outskirts of Newport and developed the manufacture of red bricks and terracotta.¹ The clay came from a large pit immediately adjacent to the works. Ornamental pier-caps, copings and vases were still being produced in 1909.²

1. *Portrait of T. Parry. British Clayworker*,
17, 1909, p. 325.
2. *British Clayworker*, 17, 1909, p. 320.

SHAW'S GLAZED BRICK CO. LTD.

1909-1935 (R.)

SHAW'S OF DARWEN

1935 to date (R.)

Whitebirk Works, Waterside, near Darwen, Lancashire.

Shaw was founded in 1897, simply as a reorganization of an established firm in the firebrick trade, but became one of the largest manufacturers of faience during the inter-war period.

Arthur Gerald Shaw had been running the Ganister Fireclay Works for his brother, who also owned the adjacent colliery. In 1897 he and his manager, John Hall, acquired the works to manufacture bricks and tiles.¹ It was after the business had been moved to a new works at Whitebirk near a mine at Pickup Bank, in 1908, that the manufacture of architectural ceramics was developed.² A series of theatres dating from 1909 and designed by Bertie Crewe probably constituted the first major contracts for terracotta.³ Just before the First World War, Shaw were advertising terracotta, 'Marmola' faience, glazed bricks and green enamelled Roman tiles.⁴

It was the gas-fired kiln developed by Arthur Shaw that formed the basis of the firm's prosperity in the inter-war period. The kilns were sold to other manufacturers and were being used at Whitebirk for burning faience by 1923.⁵ In 1921 the new Bottom Works was built for the large-scale production of sanitary ware.

Despite the setback of a serious fire at the works in 1929, it was in the following decade that Shaw pioneered the introduction of slab faience and gained a massive quantity of orders, particularly for the Odeons designed by Harry Weedon. Fireplaces and grave ornaments were also being made during the thirties. Chemical stoneware and electrical porcelain enabled production to be maintained through the Second World War, faience being reintroduced in 1945. As handmade faience slabs became too expensive, so mass-produced strip-tiles were introduced, around 1955.

In 1961, Shaw's of Darwen and Hathernware amalgamated to form the Shaw-Hathernware Group, with the intention that Shaw would specialise in architectural ceramics and sanitary ware. However the link was dissolved in 1980, Shaw becoming part of the Hereford Tile Group. Terracotta and faience are made for restoration work.⁶

1. Shaw's Glazed Brick Co. Ltd., Memorandum of Association, 11 February, 1897. (Companies House).
2. P.J. Bate, Architectural faience and terracotta (B.A. thesis, Manchester Polytechnic 1979).
3. British Clayworker, 20, 1912, p. xc.
4. Display at Building Trades Exhibition. British Clayworker, 22, 1913, p. 204.

MESSRS. GEORGE SKEY AND CO. LTD.

1883-1920 (R.D.)

Wilnecote Works, near Tamworth, Staffordshire.

The Wilnecote Works was established in 1860 by George Skey, who already owned coal mines in the area. A limited liability company was formed in 1864. Stoneware and sanitary ware were probably the most important products. In addition to a typical range of garden and architectural

terracotta, articles were made in 'Rustic Ware', a fine buff coloured terracotta glazed to a rich brown colour.¹

Irvine Bailey gained control of the business in about 1889, having previously worked at the Fulham Pottery.² Manufacture of a wide range of products was maintained, stoneware bottles, ducting for electric cables and tiles being advertised at the turn of the century³ and terracotta chimneys, stoneware and sanitary pipes being exhibited in 1932.⁴ Most of the terracotta produced was in the form of components for house construction.

1. L. Jewitt (1883), *op.cit.*, pp. 245-6.
2. Portrait of I. Bailey. *British Clayworker*, 11, 1903, p. 335.
3. *British Clayworker*, 8, 1899, p. xviii.
4. *Claycraft*, 6, 1932, p. 36.

SOMERSET TRADING CO. LTD.

1907 (R.)

Bridgwater, Somerset.

One of several roofing tile firms in Bridgwater, this firm displayed red terracotta medallions at the Building Trades Exhibition of 1907.¹

1. *British Clayworker*, 16, 1907, p. xiii.

VAN SPANGEN

c. 1800-c.1828 (R.)

Bow, London.

A Dutchman, Van Spangen was one of the few to set up in competition with Coade. When the firm had become Van Spangen, Powell and Co., a range of architectural details and tombstones were made.¹

The works closed in about 1828; many of the moulds and models were bought by Felix Austin who was just commencing to manufacture artificial stone as opposed to terracotta.²

1. R. Gunnis (1964), *op.cit.*, p. 408.
2. C. Barry, 'Terracotta', *Builder*, 20, 1868, p. 546.

STANLEY BROS. LTD.

1881 (R.)

1883-1920 (R.D.)

Tile, Pipe and Terracotta Works, Nuneaton, Warwickshire.

Two works were established about 1830, by Peter Williams, and were run by his eldest son and Walter Handley respectively. Both passed into the ownership of Messrs. Broadbent and Stanley Brothers, probably around 1867.¹

This was the year that Reginald Stanley became involved in brick and tile manufacture in Nuneaton after spending ten years in North America. Broadbent retired in 1871 and in 1895 a limited company was formed. By 1902 there were further works at Willenhall and Burslem and collieries in Nuneaton and Bedworth. Stanley also owned the Nuneaton Engineering Works which produced machinery for coal mining

and brick and tile manufacture.²

Red and buff terracotta, blue clay and glazed goods and patent air bricks were among the products displayed in 1881 at a Building Exhibition.³ The terracotta was mostly in the form of simple architectural details and garden ornaments. Towards the end of the century the firm gained a particular reputation for its range of glazed bricks.⁴

Three of the major figures in the business died in close succession: Reginald Stanley in 1914,⁵ one of the directors Stanley Broadbent in 1915,⁶ and the managing director William Westwood in 1916.⁷ However the business remained profitable during the inter-war period, making fireplaces, floor and wall tiling and sanitary ware as well as glazed bricks and some terracotta.⁸ It seems as though the terracotta was being made at the Willenhall Works during the 1920s.

1. L. Jewitt, (1883), *op.cit.*, pp. 246-7.
2. *Portrait of R. Stanley. British Clayworker*, 11, 1902, p. 10.
3. *Builder*, 42, 1882, p. 338. Stanley Bros. Catalogue (undated)
4. *British Clayworker*, 20, 1911, p. xxiii.
5. *British Clayworker*, 23, 1914, p. 121.
6. *British Clayworker*, 24, 1915, p. 53.
7. *British Clayworker*, 25, 1916, p. 262.
8. *British Clayworker*, 35, 1926, p. 56.

STAR BRICK AND TILE CO. LTD.

1898-1920 (R.D.)

Llantarnam, near Newport, Gwent.

The only confirmation that this firm actually produced terracotta is provided by drawings and references in Hasluck's manual. Garden ornaments, architectural forms such as finials and keystones and more bizarre designs including an umbrella stand are illustrated.¹

1. P. N. Hasluck, *Terracotta work* (Cassell, London 1905) p. 93.

JAMES STIFF AND SONS

1876 (R.)

1883-1910 (R.D.)

Lambeth, London.

A works that had been established in 1751 was taken over by James Stiff in 1860. It had a long frontage onto Albert Embankment and a private dock;¹ after new buildings had been erected in 1860 it was described as being one of the largest potteries in London.

Five kinds of pottery were manufactured during the 1880s: brown salt-glazed stoneware, white stoneware, porous ware for telegraphic use, fireclay crucibles and buff terracotta, in the form of vases, statuary, coats of arms and architectural details.²

Around 1876 Stiff's terracotta was used on some almshouses in Norfolk,³ and in the following decade it was chosen for several public buildings in London. Capitals and panels with rich modelling were displayed at the Building Trades Exhibition of 1899.⁴ In 1912 the business was bought by their neighbours, Doulton.⁵

1. *Description of the works. Builder, 36, 1878, p. 732.*
2. *L. Jewitt (1883), op.cit., pp. 95-7.*
3. *Builder, 34, 1876, p. 442.*
4. *British Clayworker, 8, 1899, p. xv.*
5. *British Clayworker, 21, 1912, p. 216.*

STONEHOUSE BRICK AND TILE CO. LTD.

1898-1920 (R.D.)

Stonehouse, near Stroud, Gloucestershire.

This firm was established, probably around 1890, following tests on the clay in Gay's Hill, Stonehouse. Arthur Anderson undertook the tests, laid out the works and acted as its manager until his death in 1914.¹ Located besides the Swindon to Gloucester railway line, it was regarded as something of a model in terms of organisation and mechanisation.²

Terracotta for garden and architectural use supplemented the production of red facing bricks and blue paving bricks. Despite supplying a national market the firm does not

appear to have exhibited at the Building Trades Exhibitions.

1. *British Clayworker*, 23, 1914, p. 174.
2. *British Clayworker*, 1, 1892, p. 99.
3. *Description of the works. British Clayworker*, 21, 1912, pp. 104-6.

STOURBRIDGE FIREBRICK COMPANY

1926, 1931 (R.)

Stourbridge, West Midlands.

This Company is recorded in the inter-war period as making faience. They supplied some large blocks for Austin Reed's head premises in Red Lion Square, London,¹ and exhibited faience at the British Industries Fair of 1931.²

1. *British Clayworker*, 35, 1926, pp. xiv-v.
2. *Claycraft*, 4, 1931, pp. 157.

STOURBRIDGE GLAZED BRICK (DUDLEY) LTD.

1947-9 (R.)

Stourbridge, West Midlands.

In 1892 the Thornleigh Fire Brick Works and Colliery was bought by the newly formed Stourbridge Glazed Brick and Fireclay Co. Ltd., In 1935 this Company sold its undertaking to SGB (Dudley) Ltd. Primarily manufacturing glazed and firebricks they advertised slab faience just after the Second World War.¹

1. *The Architects Standard Catalogue, 1947-9,*
Vol. 1, p. 77.

TAMAR TERRACOTTA AND BRICK WORKS

1881 (R.)

1883-1890 (R.D.)

Near Plymouth, Devon.

During the 1880s when John Phillips was managing the firm, architectural and decorative terracotta was made in addition to white glazed and blue bricks.¹ In 1881 two premises in Brighton were supplied from this works.²

1. *Portrait of J. Phillips. British Clayworker,*
14, 1905, p. 111.
2. *Builder, 41, 1881, pp. 754 and 632.*

MESSRS. JABEZ THOMPSON AND SONS, LTD.

1890-1906 (R.D.)

1909 (R.)

Terracotta Works, Northwich, Cheshire.

Having assisted his father in the management of a brickworks in Northwich and of the Alliance Salt Works at Marston, Jabez Thompson concentrated on clay working after his father's death. Interested in the arts, he devoted particular attention to the promotion of the terracotta section. Several major contracts were supplied,¹ but the production of terracotta appears to have ceased by the time of Jabez

Thompson's death in 1911.²

1. *British Clayworker*, 18, 1909, p. xxxviii.
2. *Obituary*, *British Clayworker*, 19, 1911, p. 291.

GILBERT TUCKER AND SONS

1883-1914 (R.D.)

Loughborough, Leicestershire.

The father and son established their works in Loughbrough in 1850, having supplied bricks for railway construction in both Britain and France. They became known for producing high quality sandfaced and engineering bricks, largely used by public authorities and railway companies.¹ Two additional plants were opened and a company formed, in 1904.²

Red and buff terracotta were made, but by 1905 the firm appears to have been concentrating on promoting its red-pressed and sand-faced bricks.³ Gilbert Tucker died in 1920.⁴ The company remained successful with the three works still operating in the 1950s.⁵ They had all closed by the end of the following decade.

1. *Portrait of G. Tucker*. *British Clayworker*, 15, 1906, p. 131.
2. *British Clayworker*, 13, 1904, p. 29.
3. *British Clayworker*, 14, 1905, p. 54.
4. *Obituary*. *British Clayworker*, 34, 1925, p. 313.
5. *Description of works*. *British Clayworker*, 59, 1950-1, pp. 197-202.

WATCOMBE TERRACOTTA CO. LTD.

1872 (R.)

1883-1890 (R.D.)

Watcombe, St. Mary Church, near Torquay, Devon.

This was probably the last firm to be established specifically to make decorative rather than architectural terracotta. The owner of Watcombe House, G. T. Allen, discovered a bed of fine plastic clays on his estate, had them analysed in 1865, and formed a Company, first to sell the clay but opening a pottery soon after.¹ Charles Hanley came from the Potteries to act as the manager and art-director. The workforce expanded from eighty in 1875 to a hundred by 1883.

The clay was worked in a pure state into art-productions, and later, architectural embellishments. Classical style vases and hand-painted plates were made in large numbers.² Small scale architectural contracts were undertaken of which the most significant was a proportion of the terracotta used on Waterhouse's Law Court in Lincoln's Inn, dating to 1878.³

1. *Art Journal*, 11, 1872, p. 200.

2. L. Jewitt, (1883), *op.cit.*, pp. 200-3.

3. *Builder*, 36, 1878, pp. 696, 699.

JOSIAH WEDGWOOD

1768, 1786 (R.)

Etruria, near Stoke-on-Trent, Staffordshire.

Wedgwood had produced terracotta before 1767 as part of his experiments with earthenware bodies. Believing, largely under the influence of his partner Bentley, that there was a potential market for ornamental plaques in the neo-classical style, a modeller, Voyez was set to making bas reliefs, in 1768. These panels were not successful and from the middle of the 1770s efforts were concentrated on applying the new jasper body to making large tablets.¹

A range was produced with classical figures on coloured backgrounds. But these large tablets took two months to produce due to the fine finishing required. As a result they were over-priced.² By 1778 Wedgwood was aware that builders were opting for the wider choice of cheap decoration readily available from artificial stone manufacturers, rather than buying his wares.³

1. E. Meteyard, *Life of Josiah Wedgwood* (Hurst and Blackett, London 1866), Vol. 1, p. 372.
2. J. Wedgwood to Mr. Capper, 22 July 1786, in A. Finer and G. Savage, *The selected letters of Josiah Wedgwood* (Cory, Adams and Mackay, London 1965), pp. 299-300.
3. A. Kelly, *Decorative Wedgwood in architecture and furniture* (Country Life, London 1965), p. 68.

WHINNEY HILL PLASTIC BRICK CO. LTD.

1906-39 (R.D.)

Whinney Hill, near Accrington, Lancashire.

As in the other Accrington firms, production developed rapidly around the turn of the century. The works was enlarged in 1906, introducing considerable mechanisation and with the bricks being burnt in a continuous kiln designed by the managing director, Henry Stephenson.¹ The output of terracotta was mostly of small details.²

The Company was reconstituted in 1925 after being voluntarily wound up.³

1. *Portrait of H. Stephenson, British Clayworker*, 21, 1912, p. 7.
2. *British Clayworker*, 21, 1912, pp. 43-5.
3. *British Clayworker*, 33, 1925, p. 316.

WITHNELL BRICK AND TERRACOTTA CO. LTD.

1898-1939 (R.D.)

Abbey Village, Withnell, near Chorley, Lancashire.

This Company was formed in 1897 and concentrated on making facing decorative and engineering bricks. However the output of terracotta was described as being considerable in 1905.¹

Soon after formation of the Company, Thomas Quinlan was appointed secretary and salesman. In 1911 he took the Company

to court. It was sold in the following year and traded through the inter-war period as the Withnell Brick and Terracotta Co. (1912), Ltd.² The works closed in the 1950s.

1. *Portrait T. Quinlan, British Clayworker*, 14, 1905, p. 211.
2. *Brick and Pottery Trades Journal*, 20, 1912, p. 172

GEORGE WOOLLISCROFT AND SON, LTD.

1852, 1894, 1909, (R.)

Hanley, Staffordshire.

Woolliscroft were the only ceramic firm in the Potteries to make architectural terracotta and faience on a significant scale. In 1852, probably having only just become established, Messrs. Bowers, Challinor and Wooliscroft were making a variety of cornices, brackets and balustrades.¹

The output of 'red and blue Staffordshire goods' expanded and the Company became involved in a wide range of commercial activities.² The memorandum of association of 1894 lists brick, tile, pipe, earthenware and terracotta manufacture, and states interests in building, decorating, coal mining, metallurgy and dealing in rolling stock and hardware.³

The list of subscribers was headed by two George Woolliscrofts father and son. Another subscriber, A. E. Blizzard, joined the firm in 1892 as the managing director.⁴ The growth of

the tiles section led to the introduction of a single-fired faience termed 'Pentellic'; several architectural contracts were supplied in the Edwardian period for both faience and terracotta and a range of fireplace designs were introduced.

The structure of the firm altered little in the inter-war period though the production of faience declined. Woolliscroft are still making floor tiles.

1. *Art Journal*, 4, 1852, p. 254.
2. *Brick and Pottery Trades Journal*, 4, 1902, pp. 66-7.
3. *Memorandum of association*, 24. December 1894
(Companies House).
4. *Portrait of A. E. Blizzard. British Clayworker*,
12, 1903, p. 203.
5. *British Clayworker*, 18, 1909, p. xviii.

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