# GRIFFYDAM BRICK, PATENT INTERLOCKING HOUSE TILE & EARTHENWARE WORKS



By Samuel T Stewart - December 2020

# **PREFACE**

The official name for the business which has loosely been referred to as "Griffydam Pottery" was in fact officially referred to as the "Griffydam Brick, Interlocking House Tile and Earthenware Works". From this we can clearly deduce that it was much more than a Pottery.

Since the author wrote his initial brief history on "Griffydam Pottery" as part of the book entitled "A Social & Industrial History of Griffydam & Peggs Green", more information has come to light, and it was felt that as this business played an important part in the industrial history of Griffydam it should be re-issued as a separate publication.

This business was not related to the brickworks on Breedon Brand, locally referred to as Griffydam brickworks, and was quite a small concern in relation to that. For the reader who wishes to know more about these brickworks and the processes involved in brick manufacturing, the author has written a history on these entitled "The Brickworks on Breedon Brand – Known Locally as Griffydam Brickworks" which is free to download and read on griffydamhistory.com

For those interested in knowing more about the history of earthenware pottery made in the locality and the processes involved, another publication by the author entitled "Coleorton Pottery 1835 to 1935" is also available to download and read on the website.

### **ACKNOWLEDGEMENTS**

Thanks to Caroline Sheffield for providing samples of pottery which had been unearthed on the site and which are illustrated in various photographs in the publication. These have proved invaluable to the author's research in establishing what type of earthenware pottery was made here.

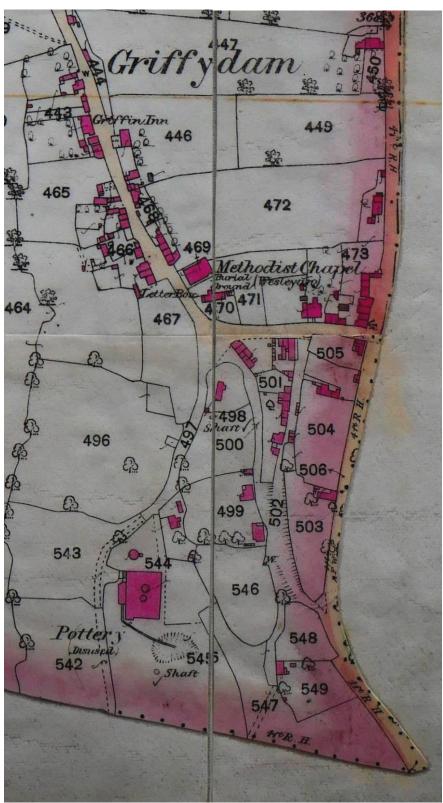
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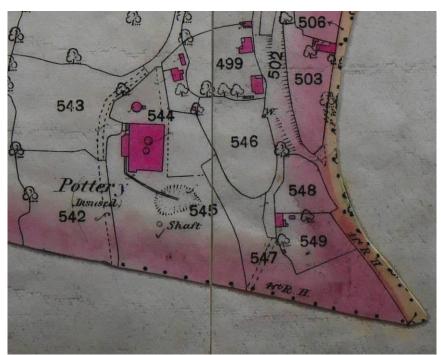
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# **SITE LOCATION MAP**



The above map is an extract taken from the 1901 revised, 1903 published O/S map The site is located at the bottom centre of the map.

# OUTLINE DETAILS OF SITE LAYOUT, KNOWN OWNERS AND PRODUCTS MANUFACTURED



This is an enlarged extract from the map on the preceding page

The dotted line along the bottom of the map is the border between Griffydam and Pegg's Green and the southerly aspect of the pottery site did extend into Pegg's Green although a record for the sale of the site in 1889 only mentions its location as being in Griffydam. The pottery was situated at the end of the road which forks off Elder Lane (formerly Main Street) and is numbered 497 on the map on page 3. This extension of Elder Lane was / is known as Swan's Lane, for the reasons outlined on page 7.

It is not possible from information currently to hand to know how long the site was open for. The earliest record the author has found of a "potter" living in Griffydam was a William Burton who is mentioned in a Lease and Release document dated 1830 (DE9109/50/1-2 deposited at the L&RRO).

The above map shows the pottery as being "Disused" at that time which is correct. In December 1889 the site was being operated by Messrs. Lager and Lakin and was being put up for sale as a going concern. However, it seems unlikely that a buyer was found as the 1901 revised, 1903 issued O/S map, confirms the site as being disused. The pottery building, the drying sheds, and the field kiln had all gone, but the clay pit remained. No further evidence has been found to suggest that the site was ever reopened. On the 1925 O/S map the clay pit wasn't shown, so it must have been filled in by that time.

It is recorded, by Colin Owen in his respected book "The Leicestershire & South Derbyshire Coalfield 1200-1900" that between 1874 and 1880, Joseph Smart & Son, who were brick and tile makers at the Breedon Brand brickworks, worked a small pit at Griffydam, probably extracting coal leased by the Curzon family of Breedon. The company was registered in Ashby de la Zouch. It would have been severely limited by

the "Thringstone Fault" to the north, and the workings of the former Pegg's Green Colliery in other directions. Two shafts were sunk and these are shown on the map on page 3, one just to the south of the pottery clay pit and the other adjacent to the number 498. It is possible that one of the two shafts would have been the down shaft and the other an up or air shaft, but we cannot be certain of that. Presumably the mine was worked to provide coal for firing the brick / tile / pottery kilns on the site. During a discussion the author had with a gentleman who lives on Elder Lane, he related a hand me down hearsay tale that coal miners were excavating a roadway below Elder Lane and knew they were near to the surface as the roots of the trees were coming through. Stranger things have happened!!

A sales advertisement for the Red Lion Inn, Pegg's Green and adjacent properties featured in the Leicester Guardian, Feb 9<sup>th</sup> 1876 states:-... A Brickyard and Potworks are in **full work** in close proximity to the Public House, and the property being situate in the centre of an important mining district, presents an opportunity for an investment rarely to be met with.....

A report in the Ashby de la Zouch Gazette dated July 10<sup>th</sup> 1880 reads as follows and confirms that by this date the site had been taken over by Lager and Lakin which we can see from the following site sale details was operated by them for nine years:-

FIRE. – About three o'clock on Saturday morning a fire was discovered in the expensive buildings of Messrs. Lager and Lakin, patent tile manufacturers. An alarm was given, and many of the inhabitants having been roused from their beds went to the spot and used every effort to extinguish the flames which had just burnt through the second floor. But for this assistance the damage must have been serious, owing to the vast amount of timber that is in the drying sheds used in the manufacture of the patent tiles. The resulting damage was not very great.

A Court case involving James Leach v Joseph Lager, which was reported in the Burton Chronicle date April 29<sup>th</sup> 1880 states - *Mr. Jesson for plaintiff, and Mr. Deane for defendant. The plaintiff sort to recover £35 16s. 5d., for work done by him for the defendant in the making of bricks since the latter took possession of the property of Messrs. Smart and Co., of Griffydam................................... Joseph Lager was also confirmed as the landlord at the "Traveller's Rest", Griffydam at this time. This confirms that Joseph Smart & Co had been the operator's of the site prior to Lager & Lakin.* 

Around this time, Joseph Smart, who was also involved in operating part of the brickworks on Breedon Brand was experiencing financial difficulties in association with his partners in the business which was subsequently dissolved by mutual consent in 1880. The author concludes from the evidence to hand that Joseph Smart was working both this site and the Breedon Brand site in parallel for a period of time.

A sales advertisement in the Burton Chronicle – December 1899, shows that the site together with "Prospect House" was being put up for sale. The Auction Sale was conducted by Messrs. Bellamy and Son at the Queens head Hotel in Ashby de la Zouch on the 17<sup>th</sup> December 1889. It is assumed that the name Lager in Messrs. Lager and Lakin is the same Joseph Lager referred to in the Court case who had a partner Lakin in this venture:-

All that valuable **FREEHOLD ESTATE** known as the **Griffydam Brick and Interlock House Tile and Earthenware Works**, late in the occupation of Messrs. Lager and Lakin, comprising extensive Brick-and-Tile Drying Sheds, with water Cisterns, Brick and Tile Work Sheds, Store Room, **3 large Kilns**; together with a SIX ROOM - DWELLING-HOUSE, Out-Buildings and Garden attached. The above property covers an area of 2 acres 2 roods, or thereabouts, and is adjoining land belonging to Lord

Donington, and is within easy distance of the Midland Railway. There is an inexhaustible supply of very superior clay, specially adapted for the manufacture of House-Tiles and Earthenware Goods of the choicest quality, and to an enterprising firm this affords a rare opportunity for carrying on an extensive and lucrative business.

It is thought that a buyer wasn't found for the site and it closed down at this point, although the private dwelling known as "Prospect House" has survived to this day.

In the Burton Chronicle dated April 20<sup>th</sup> 1899 a report on a "property sale" on the "Griffydam Pottery" site held at the Waggon and Horses, Griffydam, confirmed that it was occupied at the time of the sale by Mr. H. Powell and subsequently purchased by Samuel Hinds. It is thought by the author, that this sale was referring only to the house on the site known as "Prospect House". The 1911 census confirms that a Mr. E. Hinds was the occupier of "Prospect House" (total 5 persons). The 1935 register confirms that, Herbert Wilton, his wife Annie and family were the occupiers.

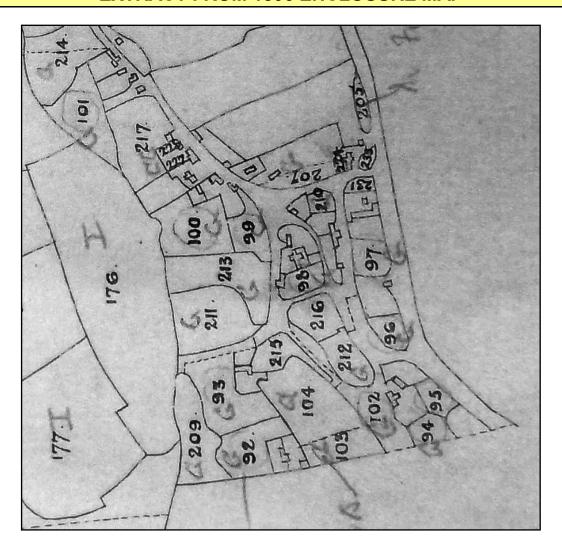
Two of the kilns (possibly bottle kilns) referred to in the sale were housed within the substantial **two story** pottery building with a third stand alone kiln to the north. The pottery had its own coal supply on site for the firing of the kilns as described earlier. This large building would probably have also housed the brick, tile and pottery manufacturing processes and the store room. Other buildings on the site would most likely have been drying sheds for the green bricks and tiles before they were fired in the kilns etc., and although not shown on the map, they are mentioned in the earlier report on the fire.

A short tramway is shown running from the clay pit to the main pottery building which would probably have been installed in the clay pit along the lines shown in the photograph below with turntables for the tubs.



This was a relatively small local brick, interlocking house tile and earthenware pottery manufacturing site, but even so, it is of significant historical importance, which surprisingly has not been recorded elsewhere. Perhaps originally dating back to c.1830 and finally closing c.1900, it would not necessarily have been in continuous operation, which applied to most sites of this nature in the 1800s. It seems unlikely that mechanisation to any degree was employed on this site and the bricks and tiles would have been moulded individually by hand in wooden moulds.

# **EXTRACT FROM 1806 ENCLOSURE MAP**



The above is an extract from the 1806 enclosure map. Plot 213 was an intake containing 1 acre – 36 perches, and described as Swan's Meadow. It was allotted to John Haywood by the enclosure commissioners at that time. The pottery was later situated on part of this land, although the boundaries changed somewhat from 1806.

# **EARTHENWARE POTTERY SHARDS FROM SITE**



The above shows examples of pottery shards unearthed on the site

An expert on the subject has put forward the view based on photographs that the appearance of the clay used in the manufacture of the Griffydam pots is of a different type to that which came from the North West Leicestershire and South Derbyshire coalfields.

The pots from which the shards came have been described as being well made, using plaster moulds, which suggests / confirms 19<sup>th</sup> century production. As can be seen from the photograph, there are lids with knobs, bases, part of a spout, two body shards

with the some moulded decoration (**not applied sprigs**) and the rim of a vessel made to take a lid, possibly a teapot. They are all unglazed, except for the lid, and most likely were discarded after the first firing in the Bisque kiln / oven.

The glazed piece below, possibly a teapot lid is different, and has the appearance of "Rockingham Ware" which was also widely made in South Derbyshire in the 19<sup>th</sup> century.



Teapot lid?



**Teapot spout** 

## SPRIGG DECORATION



This is a technique for decorating pottery with low relief shapes made separately from the main body and applied to it before firing. Usually thin press moulded shapes are applied to green ware or bisque (first firing). The resulting pottery is termed sprigged ware, and the added piece is a "sprig". The technique may also be described by terms such as "applied relief decoration", especially in non-European pottery.

The alternative way to achieve similar effects without sprigging is to mould the whole body, which was the case with the Griffydam pots as shown in the photograph above.

#### **ROCKINGHAM WARE**

Rockingham was the name acquired by a quite different lead-glazed earthenware, that began being made in 1757. Rockingham glaze, mottled in shades of brown and buff, was originally described as a rich chocolate brown glaze. It was used first at a pottery in Swinton, Yorkshire, which was owned for a time by the Marquess of Rockingham.

Before long, many other potteries in England were using a typical Rockingham glaze on a wide variety of practical and useful earthenware. Coleorton Pottery was recorded as making Rockingham Wares in the 1860's. Rockingham is highly-fired earthenware or stoneware, generally with a buff to yellow paste and a brown mottled and streaked glaze, often characterized by patches of the vessel's body showing through. Rockingham is generally not felt to be a specific ware type; rather simply a type of glaze applied to yellow, buff or (rarely) white-bodied ceramics.

Most of the Rockingham wares produced in the 19<sup>th</sup> century were quite gaudy. Therein, lay Rockingham's down side. The glaze's over powering nature could make anything look "fancy," so much so, that by the beginning of the 1900's, the Rockingham craze had run it's course.



A typical Rockingham Ware teapot

# Wilson Bros of Coleorton Pottery Retail price list for Rockingham teapots – Feb 13<sup>th</sup> 1889.

Plain, 12's to 36's - 10s. per dozen 11s per dozen

Figured (large) - no price

Black luster, 12's to 36's - 10s. 6d. Per dozen

#### **IRONSTONE CANE WARE OR YELLOW WARE AND BUFF**

The other main type of earthenware pottery made at Coleorton Pottery and in South Derbyshire, and no doubt at Griffydam also was:-

Ironstone Cane Ware, or Yellow Ware and Buff.

Cane ware, also known as 'yellow Ware' or 'Derbyshire Ironstone', is well known in archaeological deposits from the 1820's-1830's onwards. Yellow Ware is most commonly associated with the potteries of South Derbyshire, and especially with Thomas Sharpe and Sharpe Brothers of Swadlincote, where it was known as 'Derbyshire Ironstone Cane Ware'. The ware is characterised by a light buff-coloured fireclay body which when glazed is yellow in appearance. Typical vessel forms are related to food preparation (bowls, mixing bowls, dishes), the serving and consumption of liquids (jugs and mugs), storage (jars), and hygiene (ewers and basins), with small numbers of table wares. Decoration is common, and is most typically in trailed or banded slip, often with additional 'mocha' patterns in blue, brown or green. Moulded forms, especially jugs and mixing bowls, were also produced with the relief decoration. Yellow ware production was by no means confined to Derbyshire, with similar wares being made at other manufacturing centres.

These constituted the standard wares produced in the many potteries in surrounding areas such as Coleorton and the important South Derbyshire potteries

The likely reason for the two kilns / ovens shown in the main building area is that one would have been a "Bisque" or "Biscuit" kiln and the other a Glost kiln. Preliminary firing prior to glazing is carried out in a Biscuit Kiln. Glost is a term often used to describe the subsequent glaze coating firing. The kilns would most likely have been "Bottle Kilns", narrow at the top and wide at the bottom.

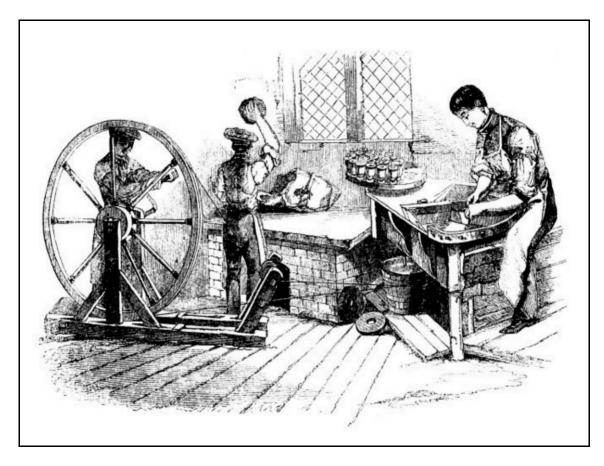
Glaze is a coating that is cured in the Glost Kiln to a glassy state and is fused onto the pot. The glaze in these times would have contained a lead compound.

The following is from evidence taken in the Staffordshire Potteries at Minton and Boyle Pottery by Samuel Scrivens and refers to the dipping house conditions. Dec 1840.

# No. 13: John Talbot aged 24

I have been in this department 2 years; have 9 persons working with me male and female. My business is to dip the ware as it comes from the biscuit ware house, the process does not take a moment, but my hands and arms are always wet with the solution or mixture; I do not know what the mixture is composed of exactly; it is chiefly lead; they tell us there is no arsenic, but we have our own thoughts about that; it destroys our health. We are obliged to be very careful by keeping ourselves clean and out of the dust. We have no washing-rooms, but bring the water in a small vessel from a pump in the yard. There are boys employed with me; their ages are from 13 up to 17. We come at 7 o'clock in the morning and leave at four, on account of its being bad stuff to work in; we work the effects off with opening medicine frequently, or it would soon all be over with us; We get better pay here than in any other department of the bank; it is considered of greater risk. I get 27s per week; the boys 3s 6d, and 4s. Everything that is made in the factory goes through our hands. I have often observed the effects of persons working with me during my 2 years; it affects women more than men: they have not died but have been very ill, and have never returned to it again; their places have been filled up by others. Some constitutions that are strong can stand it some time; it has never made me ill. I live at Lane End about 3 or 4 miles off and can't afford time to go home for dinner, I always take it here, as you see me, upon the work-bench; we have no rooms we can all meet together to dine in; I should much better like it if we had, and places wash in. I am married and have 2 children.

All the evidence to hand, suggests that Trivett only used leadless glazes at Coleorton Pottery from his first spell there in 1911, which demonstrated that he cared for his workers, and no dangers from lead poisoning in the dipping house would therefore be experienced by them. Lead has been an active ingredient in lead-glazed ceramic wares for centuries. However, it is not until the last 70 years that these products, along with others like paint, came under real scrutiny. Lead migration from ceramic ware was not recognised as a problem, until the time when harvest workers were poisoned by drinking cider from lead glazed pots. Indeed, famous Josiah Wedgewood, knowing that lead glazes for preserving acid fruits and pickles were improper, declared that "I will try to make glazes without lead".



A Potter at his wheel

# POTTERY WORKERS RECORDED

The earliest record the author has found of a "potter" in Griffydam was a William Burton who is mentioned in a Lease and Release document dated 1830 (DE9109/50/1-2 now deposited at the L&RRO).

In the 1881 Griffydam census, a Joseph Bourne aged 40 and **born in Staffordshire** is listed as a **mould maker** living with his wife Francis aged 42 who was born in Griffydam. Living with them is her daughter Eliza Richards aged 23 (unmarried) and her children, suggesting this was Francis' second marriage. Eliza's children are a son Eli Richards (aged 15), who is given as a **potter**, and a son Thomas Richards aged 13. There is also a Grandson Joseph Richards aged 4. Following the path of the census enumerator's walk, it suggests they are living in the area of the pottery.

Thomas Coulson, aged 55 and born in *Sheepshed* (Shepshed), was listed as a fireman in the 1881 census. This could have been at the kilns on the Breedon Brand Brickworks or combined with the kilns on this site. This was a skilled job requiring attention all around the clock. The author's great grandfather was a fireman at Coleorton Pottery which he combined with farming on his small holding across the road.

Again in the 1881 census, Rosy Hodges aged 22 and her sister Mary Hodges aged 19 who were the daughters of John and Hannah Hodges, are both given as working at terra works (Earth). This can presumed to be the pottery and not the brickworks as references to people working there is clearly stated by the enumerator as working at brickworks. He would have no reason to change the description. No pottery workers are listed / described in the 1841, 1851, 61 or 71 censuses for Griffydam.

There being other potteries in the locality, it would not have been difficult to hire labour, particularly as they were not in continuous operation. The author's grandfather Samuel Stewart, was a potter at Coleorton Pottery and lived at Gelsmoor for a time after he got married so he could well have worked at Griffydam also. His brother James, also a potter lived within quarter of a mile from the pottery.

It is lilely that the small scale Griffydam Earthenware Potworks would have been making pottery for the local pottery hawkers following the running down of the Ticknall Potworks. There is considerable evidence of pottery workers living and operating from Griffydam, which is recorded in the publication "A Social and Industrial History of Griffydam and Peggs Green".

Coleorton Pottery, opposite the hamlet of Lount ran for 100 years from 1835 to 1935 and Griffydam wouldn't have been able to compete with this sizeable pottery, except if it was making higher quality, specialised pots and there is some evidence that this could have been the case.

# BRICK AND PATENT INTERLOCKING ROOF TILE MAKING

Nothing is known at the time of writing about the brick and patent interlocking roof tile manufacturing which took place on the site, but it is unlikely that bricks would have been made in significant quantities due to the competition from the much larger mechanised brick making concern on Breedon Brand, and those made on this site would have almost certainly been hand moulded individually in wooden moulds. The author has not found any evidence to suggest this was a mechanised production site. However, it is worth bearing in mind that this site benefited from having its own supply of coal actually mined on the site, unlike the brickworks on Breedon Brand, which would have had to bring coal in on the turnpike roads from local collieries.

It is unlikely that tile making was highly mechanised on this site, and like the bricks, it is almost certain that the interlocking tiles would have been hand made in wooden moulds. The requirement for interlocking roof tiles increased significantly in the 19<sup>th</sup> century although they were more complex to make due to the interlocking features involved.

The process started in the clay quarry. The excavated clay was then stored in hoppers for about a year to weather. Following this weathering process, the clay would have been taken out for processing. The raw clay was broken down into smaller pieces and water added to create the correct moisture balance. The clay and water would then have been pulverised and mixed to an even consistency.

The tile-maker would have worked at a bench, with prepared clay in a heap to one side, and the wooden mould in front. The mould comprised a wooden base or stock, which is fixed to the bench. In the case of interlocking tiles, the stock would have had the required male interlocking part recessed into it. Another wooden mould frame was placed over the stock for sizing the flat main body part of the tile and to facilitate the tiles removal. The mould dimensions are made slightly larger than the required size of the tile, to allow for shrinkage. Some tile clays can shrink on drying by as much as 12 %. Fine sand was then lightly sprinkled into the mould to facilitate the release of the finished tile.

A handful of stiff clay was then taken from the pile and rolled into a 'warp' (also known as a wedge, clod or clop). The clay was then thrown into the mould and compressed into the mould and the corners of the removable frame. Excess external clay was cut away and a steel or wet timber strike pulled along the top of the wet tile to provide a smooth finish to the face.

Sand was evenly thrown across the tile to ensure that the tiles do not stick together when stacked. This can also have the effect of giving the tile an attractive appearance. The frame is then lifted away from the stock and the wet tile removed from the mould.

For flat peg tiles, which were presumably made here also, a stick or a metal spike is used to make the holes. Historically, pegs were usually tapered, but they varied in shape and size from square to round, and were anything from 6-mm to 16-mm wide.

The tiler would then have carefully placed the wet tiles in a bearing-off barrow, which was used to wheel the tiles to the drying sheds.

Stacking the green tiles had to be done with great care. Interlocking or nibbed tiles had to be placed alternately so as not to damage the interlocking or nib features. The top tile in the stack dries first, and as shrinkage takes place the tile will try to bend, giving it a natural camber. It is then taken off to expose the next tile, and a camber is subsequently taken up by all the tiles

When they became what was termed as "leather hard", they were placed on a curved board and patted to give each tile the correct camber, so that on the roof they fit edge-to-edge to avoid capillary draw. Other methods were used to obtain a consistent camber, for example, placing the tiles on slatted camber shaped racks which allowed the tiles to adopt the shape naturally over a period of time.

The tiles would then have been stacked on their ends to continue drying and when the optimum dryness had been achieved, they were stacked in the kiln and fired to vitrify the clay, and permanently fix their shape.







Example of a sophisticated old design of interlocking roof tile by

Guichard Freres

St Henri, Marseille, France