# A HISTORY OF COLEORTON BRICKWORKS (COLEORTON BRICK AND TILE COMPANY)





By Samuel T Stewart – Feb 2020

### **PREFACE**

There is little in the way of records for Coleorton Brickworks, but a study of the Coleorton archives combined with a knowledge of brick making at Griffydam over a similar period has contributed to the author being able to put together a synopsis of what is recorded about Coleorton Brickworks, hopefully in a format that will make interesting reading. This is free to download and read on the author's website, along with numerous other local social and industrial history publications.

Unfortunately, we have not been able to locate any bricks with impressed names to prove they were made at Coleorton Brickworks.

If anyone is able to contribute any further information, photographs or bricks from Coleorton Brickworks, this would be gratefully received and will be included in an update of the publication.

The American architect Frank Lloyd Wright said he could make a humble brick worth its weight in gold

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### THE DEVELOPMENT OF BRICK MAKING

Bricks produced by the traditional method in Britain were first used by the Romans. The structure of the industry and the methods used in it were developed over several centuries in response to the variety of physical, social and economic conditions encountered in different regions of the country.

The Saxons' and Normans' did not make bricks, but brick making, as practiced on the Continent, was reintroduced into East Anglia only in the late thirteenth century and spread slowly to other parts of the country. Modern brick making really began in the Tudor period, made fashionable by Henry V111's rebuilding of Hampton Court Palace. Kirby Muxloe Castle, the part built fortified manor house built by Lord Hastings, is regarded as the first brick building in the country and was started in 1480, employing Flemish brick makers to make the bricks. In the same period, the Greys started building the house at Bradgate.

Clay suitable for brick making was abundant and generally accessible in surface deposits in most locations and this generally determined where the small traditional brick making sites were established, for example in Coleorton, Peggs Green, and on the Lower Brand at Griffydam

By the middle of the eighteenth century, bricks had become a fashionable and prevalent building material and most English parishes had at least one brick kiln to supply its needs. Although brick making was traditionally a relatively small industry, it formed an important part of the local economy in many areas, as it did in Griffydam and Coleorton. Little capital or plant was required to begin brick making operations when hand methods were used. As local building projects created a sufficient demand for bricks, new works were often opened to supplement the supplies available from permanent kilns. Brick Masters frequently were employed in other trades, such as farming or building, and entered the industry as a part-time occupation or for a short-term investment. Some even rented the land they worked. Once the brick clay was extracted to a certain level or building activity slumped, many operations closed down and the land was returned to cultivation.

A predominant feature of the traditional industry was its inherent seasonality. For the most part, the entire process of brick making was carried on in the open air and was subject to the uncertainties of the weather. The clay was usually dug out in the autumn or winter and left in heaps to weather so that it could be broken down into lumps to make it more easily worked. In 1813 at Coleorton wooden shovels were used to dig the clay out. In April or May, the clay was turned over, or put in a pug mill, a grinding machine which was driven by a horse or later on by an engine. At this point the stones and pebbles were removed to prevent the bricks cracking during firing. Tempering and moulding only commenced in March or April after the danger of winter frosts had passed. From then on, until the following autumn, brick makers worked extremely long hours, sometimes as much as thirteen hours a day, in order to maximize production during the spring and summer months (British Parliamentary Commission, hereafter BPP, Childrens' Employment Commission 1866, p.103).

The clay was next removed from the soaking pit or pug mill by a **temperer** who delivered it to the moulding table. The assistant brick moulder was called the "clot" moulder and he would prepare a lump of clay and give it to the brick moulder. The **brickmoulder** was the key to the operation and he was the head of the team. He would stand at the moulding table for twelve to fourteen hours a day and with the help of his assistants could make 3500 to 5000 bricks in a day. He would take the clot of clay, roll it in sand and "dash" it into the sanded mould. The clay was pressed into the

mould, filling every corner with the hands and the excess clay was removed from the top of the mould with a strike, which was a flat stick that had been soaking in water or a wire bow. This excess clay was returned to the clot moulder to be reformed. Sand was used to prevent the clay from sticking to the mould.

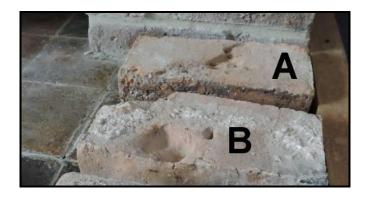
Single, double, 4 or 6 brick moulds were used. The single brick mould had an advantage in that a child could carry it to the drying area. Beech wood was the preferred material for the mould for it was claimed that the clay would not stick to it. The top of the mould was laminated with iron to prevent wear. The brick slid easily out of the mould because it was sanded and these bricks are referred to as "sand struck bricks". The process was also referred to as slop moulding.

The next person on the team was called an **off-bearer**. He would walk up to the moulding table, remove the newly formed 'green' (unfired) brick and place it onto a hack barrow. This was a barrow on which bricks could be stacked and then wheeled to the drying area where the green bricks were placed on a level bed of sand. He would then return the mould to the table and wet and sand it to receive the next clot of clay for the process to be repeated.



Even during the brick making season, work frequently was obstructed by inclement weather. The newly moulded "green bricks" were especially vulnerable to damage. Before firing in the kiln, these were usually stacked in open-air "hacks" to dry for up to six weeks, protected from the weather by a covering of straw matting, tarpaulins and, later, wooden boards with louvers.

There follows an example of bricks found in a cottage at Griffydam with hoof prints imprinted in them which demonstrate how green bricks left in the open air to dry were subject to damage by animals. These would probably have been made in the 17<sup>th</sup> & 18<sup>th</sup> century.



Sometimes, a few flimsy and temporary buildings were erected in the brickfields, such as roughly made thatched moulder's huts or lightweight drying sheds open at the sides (Samuel 1977, p.31-32). In Nottingham and the Midland counties, drying sheds occasionally were warmed by flues running under the floors from the kilns to provide protection against frost (Rivington 1879, p.93). In most of the country however, the temporary and seasonal character of the work meant that brick yard owners had little incentive to invest in buildings or expensive equipment. Natural environmental factors were accommodated as far as possible, and brick makers accepted a certain number of ruined bricks as an inevitable outcome of their business.

Even though the locality was well served with Turnpike roads, the difficulties and expense involved in transporting bricks generally limited supplies to what could be produced locally, consequently it was necessary to locate brickworks as close as possible to the source of demand, rather than bring the finished products from any great distance.

We can safely assume that Griffydam's brick works only supplied bricks centred on the localities of Griffydam, Pegg's Green, Worthington, Osgathorpe etc.

After Sir George Beaumont established a brickworks in **Coleorton** and significant volumes of bricks and other products like suff / sough (drainage) tiles were made there for projects on his own estate and repairs to his tenant's cottages etc. Bricks etc were produced for his coal mines, the Coleorton Railway and private customers which we will discuss later. Many examples are recorded in the **Coleorton** brickworks registers for bricks and other building products like sough tiles, plain tiles, ridge tiles, floor bricks and flue bricks etc being supplied for building to private individuals in the vicinity of **Coleorton** such as Swannington, Whitwick and Pegg's Green, so there would have been significant competition between Coleorton and Griffydam where the lord of the manner at that time was Earl Stamford. The Earls Ferrers had at least three brick making facilities on his estate also, although interestingly there is an example of bricks being supplied to Earl Ferrers from **Coleorton Brickworks**.

The structure of the traditional brick making industry developed in response to demand. It was made up of a large number of relatively small works dispersed throughout the country with concentrations around urban areas. Studies of regional brick making industries show that small enterprises rather than large-scale works were predominant until the end of the nineteenth century. Expansion of the industry when necessary was accomplished by an increase in the number of small works rather than a fundamental change in the size of individual firms (Bowley 1960, p.59-60; Samuel 1977, p.25). For example, one study of brick making in the South-East Midlands reported that in 1831, an average of 5.9 brick makers only were employed by 103 brickworks. An examination of trade directories in Oxfordshire for 1861 indicated that the 69 brickfields operating in that county employed fewer than five labourers each. This is borne out by the Griffydam, Gelsmoor, Pegg's Green, Coleorton and Worthington census information, where the number of people employed at the brickyards was clearly minimal.

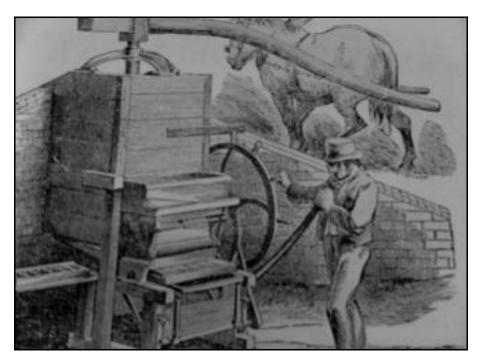
As explained above, the system adopted for the organization of work in the traditional brick making industry was particularly suited to small-scale, temporary enterprises with low capital investment. In most areas the brickfield owner hired a brick master at a price per thousand bricks to superintend the site and take full responsibility for the output of the operations, and from the records, this appeared to be the case at **Coleorton** which we will expand on later. He in turn contracted with moulders to temper, mould and hack the bricks. Each moulder then hired his own "gang" of subsidiary labourers and acted as their employer. This was similar to the "Butty" system employed in the coal mines.

A team of five men and a boy could mould 5,000 bricks in a twelve hour day. These rates were often exceeded, and on one occasion a Calisle brick maker is recorded as producing 1,000 bricks in an hour (E.Dobson 1850 Vol I (pp 19-30 & 34).

The demand for bricks had increased especially in the 19<sup>th</sup> century, and by the mid 19<sup>th</sup> century extruded wire-cut bricks were being produced, followed by press-moulded bricks and hand finished bricks which were hand moulded and machine pressed to make extremely dense bricks.

In the Leicester Chronicle 3<sup>rd</sup> October 1832, Samuel Bakewell was advertising brick making machines. One of the best known pressing machines was that patented in 1830 by Samuel Roscoe Bakewell, a brick manufacturer then residing in in Whiskin Street, St. James, Clerkenwell. His patent included an improved method for grinding and mixing clay using grinding stones in a pit. (British Patent No. 5985, 1830).

It is quite possible that a horse driven "Pugmill" would have been in use at **Coleorton** for mixing the clay as shown below



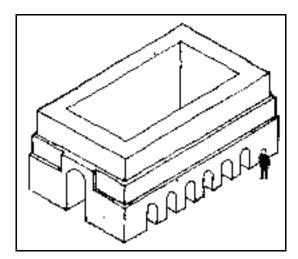
As at Griifydam, it is thought that throughout the nineteenth century, up-draft kilns of the type usually known as the "Scotch Kiln" would have been in use at **Coleorton**. This was the most commonly used in the UK. It consisted of a rectangular building which is open at the top and has side doors with arched fire holes built from fire bricks. The kilns could accommodate approximately 80,000 bricks at full capacity. Raw / green bricks are arranged in the kiln leaving gaps in between each brick to ensure an even burn. It took approximately three days to burn off

the moisture from the bricks, at which point the firing was increased for the final burn. It took between 48 and 60 hours to completely burn a brick to achieve its maximum strength. The bricks from the centre of the kiln would have been of the highest quality, whilst the ones from the edges were sometimes clinkered and unsuitable for exterior work. The open top of the kiln was covered with old bricks and turf to help conserve heat, though flames would often be seen at night rising from the top of the kiln. The map evidence that is available for **Coleorton** brickworks support the idea of rectangular shaped kilns as shown below at Griffydam





Remains of an up-draft "Scotch" kiln at Griffydam of the type thought to have also been used at Coleorton brickworks also



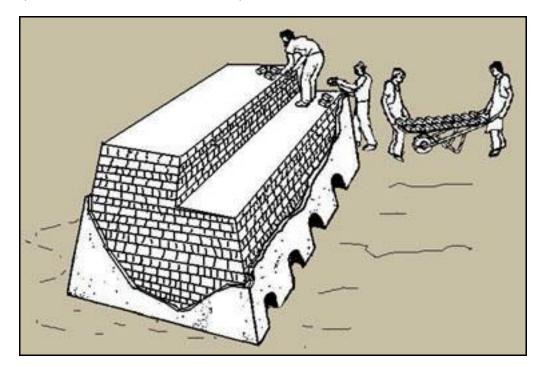
Drawing of a typical updraft kiln (note scale relative to person)

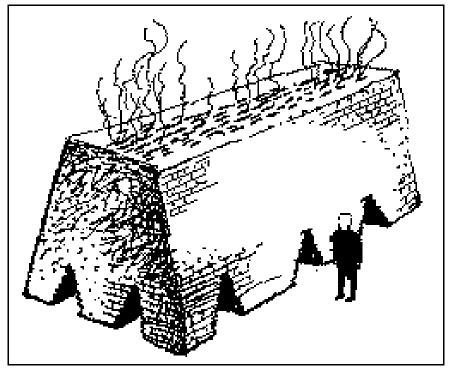
As time moved on, bricks were pre - dried in "Hovels" or drying sheds which had heated floors from flues running underneath from the heating source. There is evidence in the brick ledgers that a new hovel was under construction at **Coleorton** brickyard in 1825. After all bricks have been allowed time to dry they are placed in a kiln for burning which finishes off the brick to achieve the optimum strength and colour.

We have firm evidence of bricks etc being produced in a kiln at Coleorton brickworks in 1813, but we cannot assume that this was when brick making started on the site and would have most likely been in the mid 18<sup>th</sup> century in a limited capacity. However, we now only have fields to look at so we have to leave it to educated conjecture for the time being.

### A CLAMP KILN

Firing bricks in a "Clamp" is the oldest method and has been in use right from the Middle Ages and could have been used in **Coleorton** and Griffydam although we know that updraft kilns were in use prior to 1813, so it would have been prior to then.





A "Clamp" was a temporary construction made from green bricks ready to be fired, and was dismantled when firing had been completed. "Clamps" could be easily assembled on a building site, where often the clay was also dug. In effect, an ordered pile of green bricks was assembled. There might be 30,000 to 45,000 bricks in a Clamp, but as many as 150,000 was not uncommon. A Clamp would take two or three weeks to burn out, though a big Clamp might burn for as many as ten to twelve weeks. Bricks at the bottom were often over burnt, and bricks around the edge under burnt. The remainder were properly burnt, but would have differences in colour and texture according to the vagaries of the burning process. All bricks were liable to distortion in Clamp burning.







### BRICKMAKER'S AGREEMENT.

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**Example of an 1883 Brick Makers Agreement** 

ARTICLES OF AGREEMENT FOR SERVICE, made this (31st) day of (March) 1883, Between (Thomas Rowe) Brickmaker and Moulder, the parish of Tottenham, Middlesex and THOMAS PLOWMAN, Brickmaker of the same place. The said (Thomas Rowe) hereby agrees for the consideration hereafter expressed, to serve the said Thomas Plowman in his capacity as a Moulder of Bricks for the Brickmaking Season of 1883, at his Brickfields at (Edmonton) the commencement and termination of such season to be regulated and determined by the said Thomas Plowman. The said (Thomas Rowe) hereby agrees to work the full time allowed for work by the "Factory Act," or the "Workshops' Act," whichever the Field may be classed under, whenever the weather shall permit him to do so, and to execute the work in a good and workmanlike manner, to the satisfaction of the said Thomas Plowman; to leave off Moulding at any time rendered necessary by the weather, and to begin Moulding again when the weather is fit for that purpose; and to thatch and unthatch his Bricks when required by the said Thomas Plowman, or his authorized agent; and not to neglect or delay the work in any way: and the said Thomas Plowman hereby agrees to employ the said (Thomas Rowe) for the Brickmaking Season of 1883, and to pay him at the rate of (4) Shillings and (11) Pence per 1000 if the earth is pugged by horse, or (4) Shillings and (8) Pence per 1000 if the earth is pugged on to the table, for all Bricks properly made; and further sum of (7) Pence per 1000, at the end of the Season: no such further sum to be payable if he neglect or desert his work, or is discharged for a just and sufficient reason, whereby the Season is not completed. As Witness our hands (Thomas Rowe).

### **SOCIAL HISTORY INFORMATION - BRICKYARD CHILDREN**

### THE LEICESTER CHRONICLE DECEMBER 4<sup>TH</sup> 1869 - GEORGE SMITH WAS A MANAGER OF THE WHITWICK COLLIERIES COMPANIES

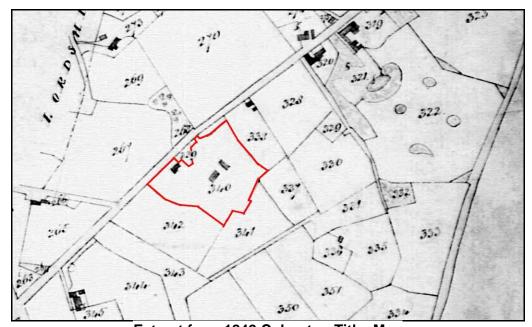
We have received the following letter from Mr George Smith, of Coalville, which tells his own sad story. May we hope that during the forthcoming session of Parliament, the condition of the poor children in brickyards will have consideration. Where is the Clarkdon or Wilberforce of the present day who will plead the cause of the poor "little ones" who are suffering?

The following facts illustrate the deplorable conditions of the brickyard workers in Leicestershire and Derbyshire in 1869. Some of the boys employed are about 8 years old, each one is engaged in carrying 40-45ibs weight of clay on his head to the maker for 13 hrs a day, transversing a total of 14 miles. The girls employed are between 9 and 10 years of age. They are not engaged in carrying clay on their heads the whole of the day but are partly occupied in taking bricks to the kiln. Some of the children are in an almost nude state. Many of hem in Derbyshire work what is called "eight hour shifts" which reckoning from 12pm on Sunday to 12pm on Saturday night following, make a weekly labour of 75 hours. To ascertain really what work these children have to do, we must suppose a brick maker (not over quick in his operations) making 3,500 bricks a day. The distant a child has to travel with mould, weighing four and a half pounds (with bricks in it ten and a half pounds), one way, and back to the brickmaker with mould only, is upon average 12 yards. This multiplied by 3,500 makes the total distance nearly 24 miles??, that each child has to walk every day carrying this weight with it. I assert (says Mr. Smith) without fear of contradiction, from 30 years general observation and practical experience, that masters are not gainers by employing children of such tender age. I feel strongly that girls should not be employed in brick and tile yards on any account, as the work is totally unfit for them. To see the girls engaged in such work, and at such unseasonable hours, mixed up with boys of the roughest class, must convey to the mind some idea of the sort of wives, with such training, they will make, and the kind of influence they will eventually bring to bear on society.

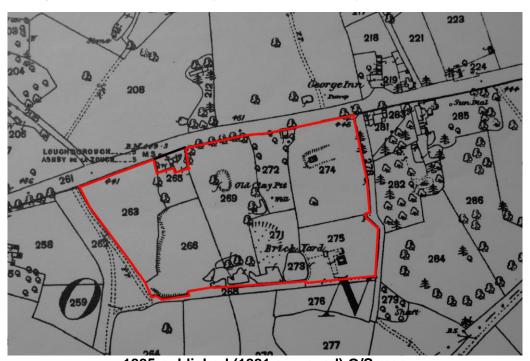
### AN EXTRACT FROM "THE GRAPHIC, MAY 27<sup>TH</sup> 1871"

......At the Social Science Congress last year, Mr. Smith exhibited a lump of solid clay, weighing 43ibs, this, in a wet state had been taken three days previously from off the head of a child aged 9 years, who daily had to walk a distance of twelve and a half miles, half that distance being traversed while carrying this heavy burden. The calculation was thus made, the brickmaker manufacturing on average 3, 000 bricks per day, these weighing some twelve tons, the whole of which has to be carried by two children from the clay heap to the brickmaker's table. The distance between the heap and the table is 35 yards, and the number of journeys to be made by each child to and from the clay heap, amounts, as above stated, to twelve and a half miles. The employment lasts thirteen hours per day, sometimes longer, except during the slack season. If the children are not sufficiently quick in their movements, they are punished with curses and blows from their task-masters. Mr Robert Baker in one of his official reports says he has seen a boy 5 years old being "broken in" as it is termed to the labour. "In one case a boy of 11 years of age was carrying 14lbs weight of clay upon his head, and as much more within his arms, from the temperer to the brickmaker, walking 8 miles per day upon the average of 6 days". This is painful, but still more so is the following statement, also by Mr. Baker: - "I have seen females of all ages, 19 or 20 together (some of them mothers of families), undistinguishhable from men, save by the occasional peeping out of an ear-ring, sparsely clad, up to the bare knees in clay splashes, and evidently without the vestige of human delicacy, thus employed, that is, in carrying bricks". These women, so lost to all sense of shame, so unwomanly in appearance and habits, were, be it remembered, simply grown-up child-workers......

## LOCATION OF COLEORTON BRICKWORKS TO THE SW OF THE GEORGE INN (SEE THE 1885 MAP BELOW)



Extract from 1842 Coleorton Tithe Map
Plot 340, enclosed by red line is described in register as
Brickyard 2 acres, 1 rood, 24 perches-in ownership of Sir GHW Beaumont



1885 published (1881 surveyed) O/S map

Area enclosed by red line thought to be total area of brick works site –
in the ownership of Sir GH Beaumont

With reference to the preceding maps, the 1842 Tithe map shows very little detail. The three rectangular shapes are taken to be two rectangular updraft kilns and a hovel / drying / brick making shed based on interpretation of the brickworks register.

The 1885 map shows more detail although it is difficult to interpret and is much changed from 1842. The rectangular block on plot 274 is taken to be an updraft kiln. The Old Clay Pit is self explanatory. The buildings on plot 275 in the area of the brickyard are taken to be a kiln and drying / brick making sheds, however, why the lines are shown dotted is confusing with one leading to the clay pit marked 273, which is presumably the one in use when the map was surveyed. Clay excavation areas are also shown on 266 and 271.

It is almost certain that short tramways from the clay pits would have been installed as shown in the photograph below.

The latest date for the sale of bricks in the brickworks register is 1844, however much of the estates records were destroyed in the fire at the Ginn stables which was likely to have been the case here.

With regard to when the brickworks finally closed, the author is of the view that the 1885 published O/S map would surely have specified brick works disused if that had been the case at that time, as is usual on O/S maps. The author has studied the Coleorton Census from 1841 onwards regarding brick makers / brickyard labourers listed in Coleorton (no brick masters listed?) land residing near to the brickworks and feels it reasonable to assume that these would have been employed at the Coleorton brickworks. These details are featured in a chart at the end of the publication.

In 1881, when the enumerator did the census returns, there were two brick makers and one brickyard labourer listed but by 1891 there were was no one listed as employed at the brickworks. The author feels that it is reasonable to assume therefore that Coleorton Brickworks finally closed sometime between 1885 and 1891.



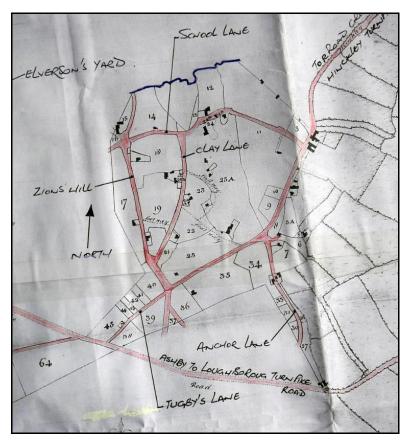
Note the turntables

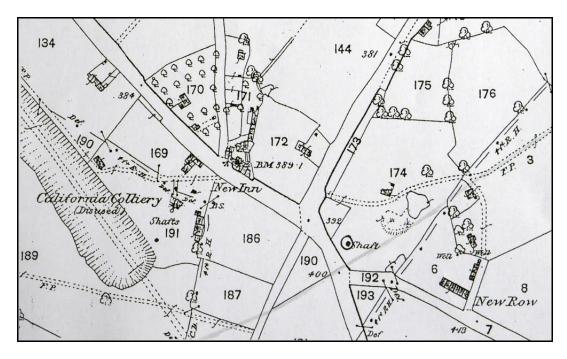
### NOTES ON THE CALIFORNIA BRICKWORKS AT PEGGS GREEN WITH SUPPORTING MAPS AND DIAGRAMS

The California Brickworks were sited on plots 40 and 41 which are shown below on the extract from the 1807 Thringstone and Peggs Green inclosure map. At this time, plots 40 and 41 were in the Township / parish of Thringstone which was owned by Joseph Boultbee and didn't come back into Coleorton parish / the Beaumont estate till c.1884. The adjacent California Colliery, opened in 1849 and closed in 1873 was known also as **Coleorton No.1**. and although constructed by William Worswick and Benjamin Walker, the colliery would have been on **Coleorton** Beaumont Estate land, and therefore leased to Worswick and Walker. The location of the colliery to the east of the brickworks is shown on the following 1882 and 1903 O/S maps.

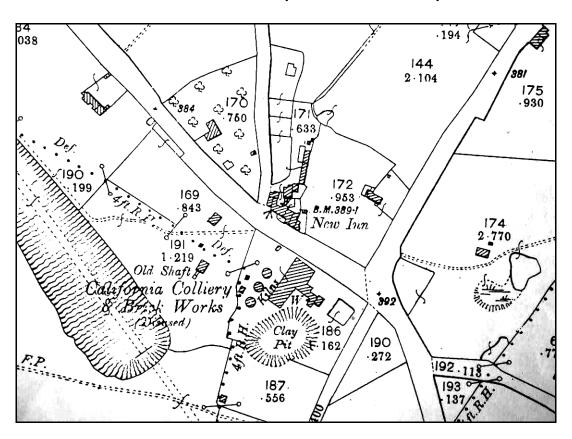
The author was surprised what a short life this brickworks apparently had as it is not shown as being there on the 1882 map (plot 186) but is then described as being disused along with the colliery on the 1903 map. Therefore, assuming this evidence is correctly interpreted, it was probably only operating for some 15 years. It certainly could not have supplied bricks to the Coleorton Railway or St. Pancras Station, London which has been inferred elsewhere. The brickworks opened at least 10 years after the colliery closed.

It is interesting to note that being a more modern brickworks than Coleorton, round type down draft intermittent burning kilns were used. The layout on the map suggests that heat from the kilns was also transferred by underground flues to heat the green brick drying sheds opposite the New Inn and out to the atmosphere by perhaps a common tall chimney.



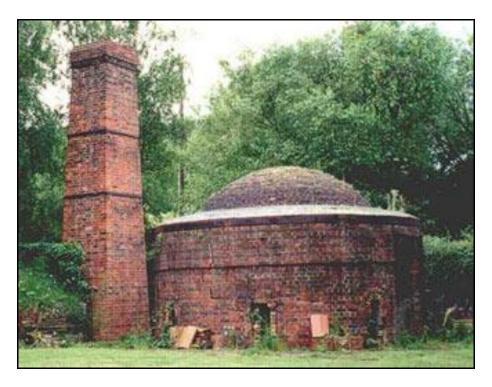


Extract from the 1882 O/S map - no brickworks on plot 186

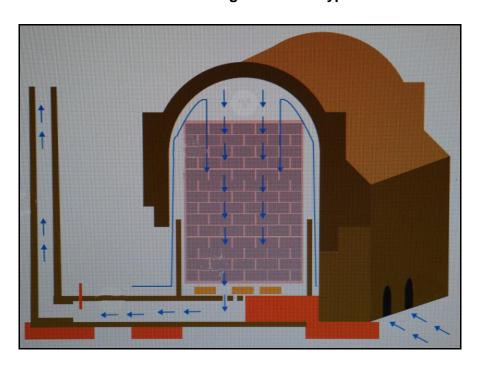


Extract from 1903 O/S Map showing brickworks on plot 186 as being disused

16



Intermittent burning down-draft type kiln



Principle of intermittent down-draft kiln

17

# INFORMATION ON COLEORTON BRICKWORKS BASED ON RESEARCH OF THE BRICK SALE LEDGERS AND ACCOUNTS BOOKS

Sir George Beaumont was a main recipient of Brick Kiln products, and in the early days from 1813 to 1820, the brickworks were run on a hand to mouth basis there being no records of payments made by Sir George for products supplied to him. It would appear that the brickyard was run as an estate asset to provide materials for Sir George's building projects (which were numerous), for maintenance of tenant's properties on his estate, and for his coal mines. The brickyard record books in this early period are in a parlous state and often illegible. They contain many unpaid accounts with some taking up to six years to recover the debt. The inconsistencies in allocating brickyard products to Sir George and his tenant's is certainly confusing and probably intentionally so in the author's view, in order to avoid payment. Where records were entered in the ledger for tenants who collected their own bricks, tiles etc to carry out their own repairs (as was often the case - and clearly more frequently than the entries suggest), it appears that they only had to say the materials were for maintenance and no charge was made ie: stated "had for repairs, not too charge". This infers that a verbal instruction had been given to this effect. Clearly a black market for building products from the brickyard would have grown up around this loop hole! Later, from about 1820, a more business like approach was taken with the accounts, and changes for sales to Sir George were levied against the estate. All other sales from the earliest records in 1813 were charged to private non-estate customers according to the following price list:-

# PRODUCT PRICE LIST FROM KILN AT COLEORTON BRICKWORKS IN 1813 – TRANSCRIBED FROM BRICKWORKS ACCOUNTS REGISTER

ARTICLE	1000 OFF	100 OFF	EACH
Common Bricks	28/-	2/10	-
Plain Tiles	38/-	3/10	-
Soughing Tiles			
(Drainage)			
71/2 inches Lg	35/-	3/10	-
81/2 inches Lg	40/-	4/-	-
91/2 inches Lg	45/-	4/6	-
Barn Floor Bricks		10/5	1 ¼ d
Half Round Bricks		10/5	1 ¼ d
Flue Bricks		12/6	1 ½ d
Leaded Ridge Tiles			6d
Plain Ridge Tiles			4d
Leaded gutter Tiles			4d
Quarries 9inch sq		12/10	2 ½ d
Plain Gutter Tiles			3d
Front Bricks	32/-	3/3	
Large Half Round		12/6	1 ½ d
Bricks			
Floor Bricks		4/6	
Hip Tiles			

The fixed Price of the sufferent certiles at the Brick This or under 1813. — Common Brichs 28/1 f Thousand or 2/10 f Hom? Plain Tiles \_ 38/ 4 Do \_ 0, 3/10/1.....? Juffing Tiles 7th Inches long 35/- f Thous /7 Hhand Ditto 8'h Inches long 40/ I Thom 1/ Phone Ditto 9% Inches long 45/- \$ Do Bonn Sloor Bricks 10/5 flam? Thu Bricks \_ 12/6 \$ 20 Leaded Ridge Tiles & each Plain Ridge Siles Lycart Lended Gotter Viles 4 canh June 20/10 ft Himd 2% canh.

Quinius g Instru Square 20/10 ft Himd 2% canh.

Plain Gitter Viles - 3 cach \_ 3/3 ft Hims.

Front Brithe \_\_\_\_ 32/4 Hour \_ 3/3 ft Hims.

Large Half Round Bricks 12/6 ft Himd \_ 9% courts

Thorn & Bricks | pdv . 4/6

Copy of actual page from accounts book transcribed on previous page

1019 Old Stock continued cars	lane!
may 22 fough Else 2 Long Brich _ 1/2	3
Ditto leaded Midge Viles 13 for Bakehoure	
mill in 5 het of Il HBeaumont 400 plain Vites for Cottages	
Robullan Ditto 220 De for Detto	
Il AB common 400 Man hloor Brish histor Nouse	
IGH Beaumons 7 Guller Viles	
Ditto 420 long The Bricks -	
The second secon	

Example from accounts book showing no cash payment entry for Beaumont

1813 Bricks Tilw to Job since the 18 January 1813 Ma Stock
1 190 Mi John Datter jum 7000 affing Tiles will fillen 1.8-
Solution Me Hor Hidge _ 1880 Ditto well 3. 1hr John Bird leaded Midge Siles 3. 160 . 1.6
The Lord 50 Ditte 2-
John Bird leader Midge Siles 3. 1.6
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r g Ditto 1800 Do 2.10.8
10 Each hours 350 Com. Bucks by Clomas
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Jonne Bakevele 50 Com? Bichs P.9% 15
16 Mo. Maller Smell 450 tom Bulls
27 Benj. Malhe De 250 De
The Walker smile to leaded Midge Tiles -
Auty Mc Yearners 120 De 19.9. 3. 13-
20 M Hodges to Lead & Order villes
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months of the part of the second of 1.6
29 Jam. Punberton 20 Ditto as 6 po 18.
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4. 4 MR 173.800 com Bricks
for new Hattes & Couch Hours
for new o laces o Comment

Another example from the register demonstrating that Beaumont was not paying for materials eg: 74,918 common bricks for stables and coach houses

### **EXAMPLE OF 1813 BRICKYARD ACCOUNTS**

At this time John Fisher (Solicitors) Ashby were the agents / accountants for the brickyards and details of the following account was obtained from them.

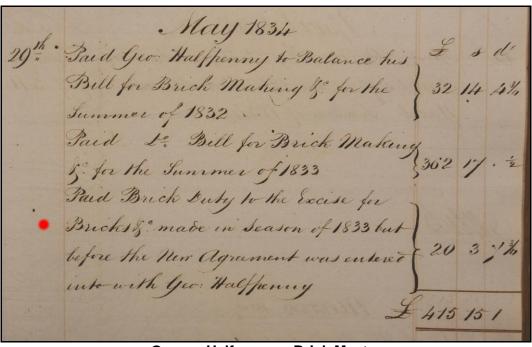
		£. s. d
April 25 <sup>th</sup>	Cash to George Halfpenny for digging clay	14 10 0
April 25 <sup>th</sup>	Cash to John Hall for digging clay	7 0 0
May 1st	Cash to George halfpenny for digging clay	4 0 0
	6 wooden shovels for Brickyard	11 6
	New sieve for Brickyard	2 3
	Excise duty at Ashby by George Halfpenny	6 5 9
	Loading bricks for Hall	1 0 0
May 29 <sup>th</sup>	Paid to J. Platts for repairing kiln	3 0 0
September	Excise duty at Ashby by John Hall	8 9 2
October	Excise duty at Ashby by George Halfpenny	9 12 10
December	Excise duty at Ashby by George Halfpenny	14 9 2
	Loading bricks	1 15 3
	Balance for making bricks and tiles on Bill	4 3 61/2
Dec 12 <sup>th</sup> and 18 <sup>th</sup>	Digging Clay	10 0 0
Add	Cash payments to George Halfpenny May 15 <sup>th</sup> to Nov 14 <sup>th</sup> On account	42 0 0
Add	Cash payments to John Hall May 8 <sup>th</sup> May 8 <sup>th</sup> to Nov 27 <sup>th</sup> On account	69 0 0
	ie: regular payments ranging from £2 to £5	
		£195 -19 - 51/2
		Expenditure
To Balance	Cash received per account book	£49 11 6
	Cash – Bricks etc sold	£17 9 41/2
	Balance received Dec. 1813	£128 18 7
		£195-19 - 51/2
		Receipts

### EXPLANATION OF EXCISE DUTY INCLUDED IN ABOVE ACCOUNTS

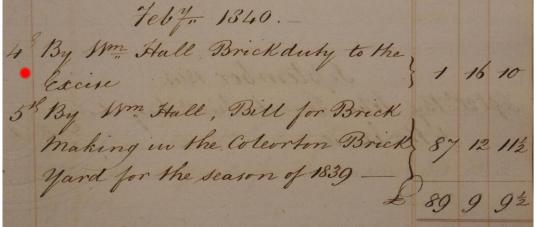
The several wars of the 18th century, requiring as they did, direct payment of the Royal forces and indirect subsidy of the allies, were hard on the exchequer. In the absence of an income tax and with limitations in revenue from custom duties, successive governments looked increasingly to excise duties for their support. Among those considered in the "Plan for Supplies and Taxes of 1756" was one on bricks and tiles. This was rejected at the time on grounds which included the geographical and architectural points that fashionable houses built of stone would avoid tax. whilst bricks for cottage building would be taxable. However, in 1784, at the conclusion of the expensive War of American Independence, the Prime Minister, Pitt the younger, secured passage through Parliament of "An Act for Granting to His Majesty certain Rates and Duties upon Bricks and Tiles made in Great Britain and for laying Additional Duties on Bricks and Tiles Imported into the Same". Pitt was reported in the "Gentleman's Magazine" for 1784 as saying that 'a tax on bricks and tiles had long been talked of......the rage for building was now universal.' It had been stated that more than 205 million bricks had been manufactured for years in the neighbourhood of London only, and it was reasonable to suppose as many more in the rest of the Kingdom.. These then at 2s.- 6d. per thousand added to a like number of tiles would produce £50.000 for the exchequer. By the time the brick tax was repealed in 1850, the yield was more than ten times that amount. The act came into force on 1<sup>st</sup> September 1784 and imposed duties to be paid by brick and tile manufacturers as follows:-

For all bricks	2s 6d per 1,000
For all plain tiles	3s 0d per 1,000
For all pan or ridge tiles	8s 0d per 1,000
For all paving tiles, not above 10 inches square	1s 6d per 100
For all paving tiles above 10 inches square	3s 0d per 100
For all other tiles	3s 0d per 1,000

The brick maker was required to give notice to he local excise office before manufacturing of the items began. The excise officer was then to be given the opportunity of counting the bricks or tiles when they had been turned out of their moulds. An allowance of 10% was given for bricks spoiled in the firing. The tax gradually increased over the years until the tax was repealed in 1850, by which time the cost of bricks had been inflated due to the taxes imposed. Nothing changes does it???



George Halfpenny - Brick Master



William Hall - Brick Master

1841. December 1841.	g s d
On 23rd By the Escise, Brick duty due for the Coleorton Brick Yard	w 3 y 42
By John Smart bill for Brick-	
making to at the Coleorton Gard	15 / 4.
the many the	18 14 8 2.

John Smart - Brick Master

### PRODUCTION / PURCHASING RELATED INFORMATION

As explained previously, the brickworks owner (Sir George Beaumont) would have hired a Brick Master at a price per thousand bricks to superintend the site and take full responsibility for the output of the operations and the records confirm that this was the case at **Coleorton**. He in turn contracted with moulders to temper, mould and hack the bricks. Each moulder then hired his own "gang" of subsidiary labourers and acted as their employer. This was very similar to the "Butty" system in the coal mines.

From interpretation of available records between 1813 and 1844 the following are assumed to have been "Brick Masters" at Coleorton Brickworks, and are listed in chronological order:-

George Halfpenny 1813 TO 1833

Thomas Thirlby Joseph Dawson

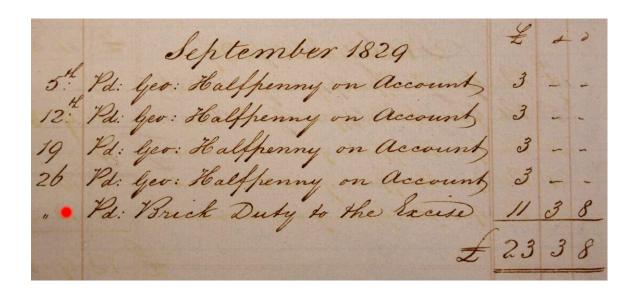
William Hall

John Smart

Unfortunately, we have not been able to locate any bricks with impressed names to prove they were made at Coleorton Brickworks.

### EXAMPLES OF PAYMENTS MADE TO GEORGE HALPENNY IN HIS CAPACITY AS BRICK MASTER

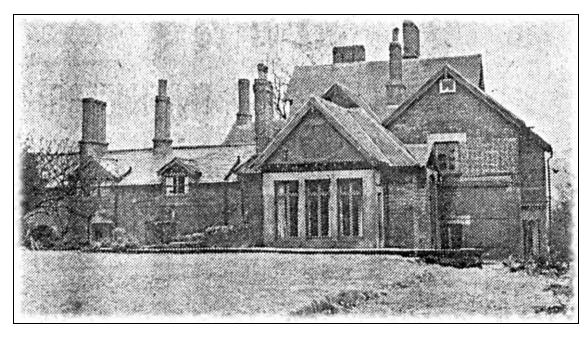
	June 1827.	£	50
2 th	Paid Geo: Halfpenny on account		" "
10.	Paid Geo: Halfpenny on account  Paid Geo: Halfpenny on account		» »
30th	Paid Geo: Halfpenny on account		" "
16: 0	and Briok Duty to the Excess	3	15 10
	1	20	15 10



#### THREE INTERESTING GEORGE HALFPENNY CUSTOMERS

### John Gadsby and the Rev. Merewether

During George Halfpenny's tenure as "Brick Master", the following quantity of materials supplied to John Gadsby and the Rev. Merewether for the building of the original Coleorton Rectory was as follows. This is thought to be the largest order supplied by George Halfpenny. The project for building the rectory appears to have taken just over two years to complete. The Rev. Merewether was noted as being a late payer and Mr. Wade (presumed to be accountant at Fisher's solicitors) penciled in a note commenting "Why not paid out of his Tithes?" Materials were supplied over a 4 year period.



The original "Coleorton Rectory" was mainly financed by the Rev. Francis Merewether and constructed by John Gadsby of Coleorton, starting in June 1816.

Although John Gadsby was listed as a "carpenter" in the "1827 Cottage Book", he was clearly a building contractor, and for that reason was chosen to build the rectory. He also had a shop separate from his cottage which was included in his rent. At this time he had six children!

During the period from June 1816 to April 1820, John Gadsby purchased **134,050** common bricks at a total cost to him / Rev. Merewether of £18,157. In addition he purchased:-

2,900 plain tiles

40 plain ridge tiles

28 ridge tiles

1,552 flooring bricks

218 quarries

4 barn floor bricks1030 leaded tiles

3 leaded ridge tiles

12 flue bricks

18 gutter tiles

21 soughing tiles

Clearly this was not all the building material, as for example, special round chimney bricks / chimney pots of which there were many, were not mentioned, so there would have been another source besides Coleorton Brickworks. There is a record that John Gadsby purchased 32,000 common bricks between Jan 1814 and May 1816 which could well have been for footings etc for the Rectory. Between Apr 1818 and Apr 1824, the Rev. Merewether purchased 12,100 common bricks plus other materials.

### The "Sherwins" of Coleorton

Other significant customers were the wealthy Sherwins' of Coleorton (see the book on the website entitled "The Coleorton Sherwins" by Samuel T Stewart.) William Sherwin was a major benefactor to the poor of Coleorton. William was the only person to hold land and buildings of any significance on the Beaumont Estate besides the Beaumonts and the Church and in his book the author suggests he was more wealthy than the Beaumonts which is supported by documentation.

Between 1813 and 1839, William and his son John had purchased 81,300 common bricks plus other supporting materials. The orders ran over from 1833 into Thomas Thirlby's, the new Brick Master's Account (see below).

George Halfpenny continued as the "Brick Master" responsible for the brickyard until 1833 when he was succeeded by a Mr. Thirlby under a new agreement and at the time when significant orders came in for the Coleorton Railway.

### **Robert Chaplin, the Ashby Architect**

In 1831/32, Robert Chaplin who was employed by Sir George Beaumont to carry out various project designs at the hall had an account with Sir George. He purchased **145,150 common bricks** plus other materials during this period, which were thought to be for the new "Kitchen Gardens."

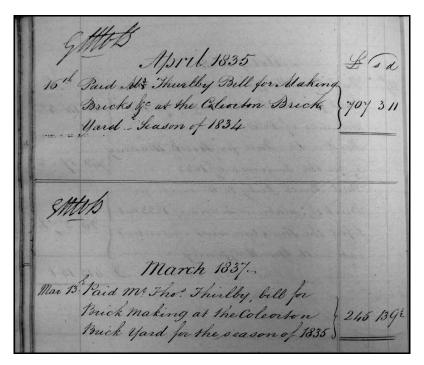
The reader can learn more about Robert Chaplin plus his design projects at the hall by referring to the book by Samuel T Stewart entitled "Coleorton Village History (As Seen Through The Eyes of The Newspapers)" which is free to down load and read on his website.

Chaplin's projects:-The Dairy House The Pheasantry The New Kitchen gardens

#### A MAJOR THOMAS THIRLBY CUSTOMER

### **Nowell & Sons / The Coleorton Railway Company**

Below is a record of payments made to Thomas Thirlby for the 1834 and 1835 season which were not made till April 1835 and March 1837 respectively. These payments are significant, in that they clearly relate to the high volume of bricks being supplied to the Coleorton Railway during that period, as shown in the following tables.



### BRICKS SUPPLIED TO MESSR'S NOWELL & SONS CONTRACTED TO THE COLEORTON RAILWAY TO BUILD THE PEGGS GREEN TUNNEL

Date	Quantities of common bricks
Aug – Dec1833	237,200
Dec 1833 to Jan 1834	112,350
Jan 1 <sup>st</sup> 1834	(25 ridge tiles)
Feb 7 <sup>th</sup> 1834	6,000
May 12 <sup>th</sup> 1834	102,000
June 14th 1834	105,000
June 17th 1834	39,200
June 25th	66,450
July 7th	16,950
July 22 <sup>nd</sup>	43,950
Aug 2 <sup>nd</sup>	13,600
Aug 20 <sup>th</sup>	30,600
Sept 2 <sup>nd</sup>	32.600
Sept 26 <sup>th</sup>	32,250
Oct 25 <sup>th</sup>	22,900
Nov 8 <sup>th</sup>	7,550
Total	868,600 bricks + 25 ridge tilles

TOTAL COST TO RAILWAY COMPANY £955 - 15s - 9d

FURTHER MATERIALS SUPPLIED TO THE COLEORTON RAILWAY COMPANY

Date	Common Bricks	Other materials
Jan 1834	12,800	450 plain tiles + 42 flue bricks
March 1834	13,600	320 Sough Tiles
April 1835	2,500	
May 20 <sup>th</sup> -21 <sup>st</sup>	300	1007 large quarries + 175 sough tiles
June 22nd	250	
July 6 <sup>th</sup>	200	170 large sough tiles
Aug 1st	100	120 sough tiles
Total	29,750	

This made a total of almost 900,000 bricks supplied to the Coleorton Railway project



THE ENTRANCE TO THE CIRCULAR PEGGS GREEN BRICK TUNNEL AT ST. GEORGE'S HILL, SWANNINGTON WHICH HAS NOW BEEN FILLED IN

### JOINT GEORGE HALFPENNY AND THOMAS THIRLBY CUSTOMER

### **Thomas Ayre**

PURCHASING OF SUFF / SOUGH (DRAINAGE) TILES BY THOMAS AYRE "WEST FARM", FARM TOWN FROM 1820 – 1839 (DURING THE PERIOD OF BRICK MASTERS, GEORGE HALFPENNY AND THOMAS THIRLBY)

Details of report from Thomas Ayre regarding "West Farm" at Farm Town (Part of the Beaumont Estate) in 1827:-

The farm, homestead and buildings are in good repair, except the roofing of the barns and cow sheds which want retiling. Drainage has been affected on this farm to a considerable extent as the general character of the farm is that of cold, wet subsoil; there remains now about 160 acres which want soughing. Perhaps there is no farm belonging to a Leicestershire estate that will be so benefitted by drainage as this. West Farm schedule dated 9<sup>th</sup> October 1838 gives West Farm as containing 347acres 3 roods 26 poles.

During the period 1820-1839, Thomas Ayre purchased a total recorded **188,350 sough tiles** for drainage of the land around his farm plus quantities of plain tiles, although some may have been used on his sub-tenant's properties.

Thomas Ayre had a number of sub-tenants, the maintenance of whose cottages was his responsibility. As with the main farm building, the costs of repairs were borne by the landlord.





A typical old sough drainage tile which could be laid on a plain tile as shown in the RH photograph or on a bed of gravel.



The moulds for making sough tiles required an inner and an outer so were more complicated and time consuming to make

Poor drainage around the village of Coleorton must have been quite common based on the amount of sough tiles that were produced at the brickworks.

# A SYNOPSIS OF PRODUCTION AND SALES FIGURES FOR COMMON BRICKS AND TILES (PRESUMABLY PLAIN TILES) FOR THE YEARS FROM 1820 TO 1833. BRICKS WOULD HAVE MADE UP THE LARGER PERCENTAGE OF THE TOTAL

Year	Bricks and Tiles	Total Sales Quantity
	made	
1820	115,000	102,310
1821	70,350	71,730
1822	120,000	50,745
1823	142,500	150,325
1824	176,000	241,259
1825	265,000	270,460
1826	117,000	47,700
1827	75,500	31,150
1828	60,000	113,125
1829	84,250	43,000
1830	359,775	431,925
1831	289,000	264,550
1832 + 1833	255,750	233,595
1834	635,875	635,310
TOTAL	2,666,000	2,687,184

The final total was boosted by the sales to the Coleorton railway project in 1833/34, and the new brickyard Kiln and sheds in 1833.

The significant quantities of bricks made in 1830 and 1831 are of interest. The 7<sup>th</sup> Baronet of Stoughton, Sir George Howland Beaumont died in 1827 followed by his wife Margaret in 1829.

Following Sir George's death, a number of major building projects were in progress which are too complex to deal with in this publication. However, it is recommended that the reader acquaints themselves with these by referring to the book written by the author entitled "Coleorton Village History (As seen through the eyes of the newspapers") which is free to download and read on his website. As an example 513,635 common bricks alone were used in the hall garden wall, the garden, Sharpe's barn and the hall itself.

The following document in the form of an IOU and dated 1838 is interesting, in that it confirms better controls are being imposed on non Beaumont estate customers who have ordered materials from the Brickworks. Mr. E. Butt Knight was Sir George Beaumont's agent at the time.

There are water marks in the document which state:-

London Superfine 1838

Mhitwick 14th Suly 1838.

I promise to pay to Mr. Etskinight on Demand, the sum of Seventeen pounds, ten shilling, Palue received:

Edward Mah.

Fry 10.0

### SUPPLEMENTARY HISTORICAL INFORMATION

In 1825, - 10,000 bricks + 300 floor bricks + 6,500 plain tiles were used in the repairing of a kiln and the building of a new "Hovel"

In 1829, - 16,000 commons and 300 barn floor bricks were being made for a kiln.

In 1831, - 2,200 plain tiles + 60 ridge tiles are being made for the brickyard hovel.

In 1833, - 28,000 commons are being made for a "New Kiln" presumably to support the large orders for the Coleorton Railway project.

In 1833, - 37,900 commons are being made for "The Sheds" (presumed to be drying or brick making) sheds. This again fits in with the timing for the Coleorton Railway project.

Under "Coleorton Workhouse" on May 26<sup>th</sup> and June 28<sup>th</sup> 1821, 700 common bricks + 100 plain tiles+ 4 ridge tiles are recorded.

Under "Bakehouse" in Oct 1813 the following is recorded, however, we cannot be sure which bakehouse this was for but it is significant in that it helps establish when the bakehouses had been built by. See the publication on the website regarding the bakehouse on Aqueduct Lane. As these are for Quarries, plain tiles and ridge tiles, it seems that the latter would have been for the roof and the bakehouse was therefore almost complete.

At the end of 1825, 200 floor bricks are recorded as being for the ice-house at the Hall.

In 1828, 1830 and 1836 material are recorded for the Ginn Stables, presumably for jobbing work, but again useful in recording the ages of buildings.

In 1824 and 1825, 12,800 common bricks @ 25s. per thousand + 1,300 plain tiles +17 ridge tiles were supplied to Gracedieu Lime Works, which were thought to have been leased by Sir George Beaumont at this time.

It has been said and written in publications that bricks (blue) were supplied from Coleorton Brickworks to St. Pancras Station. The brick legers and accounts do not appear to bear this out. It is recorded in the brick ledger that 86,700 common bricks were shipped to a Mr. King, London. In 1824/25 but the dates are wrong for this to be for St. Pancras station.

PART 8

### **COLEORTON CENSUS ANALYSIS**

YEAR	NAME	OCCUPATION	EMP / UNM	ADDRESS
1841	John Brewin 25	Brick Maker	?	The Moor
	James Davies 35	Brick Maker	?	The Moor
	Thomas Davies 45	Brick Maker	?	The Moor
1851	James Davies 46	Brick Maker	?	The Moor
	William Haywood 47	Brick Maker	?	The Moor
	Thomas Lord 16	Brick Maker	Unm	The Moor
	James Hale 30	Brick Maker	?	The Moor
	Joseph Ball 17	Brick Maker	Unm	The Moor
1861	Joseph Ball 28	Brickmaker	?	The Moor
	Joseph Williamson 16	B/Yard Labourer	Unm	The Moor
	William Haywood 55	Brick Maker	?	The Moor
	James Davies 56	Brick Maker	?	The Moor
	Henry Toon 29	Brick Maker	?	The Moor
	Joseph Mould	B/Yard Labourer	Unm	The Moor
1871	Joseph Ball 38	Brick Maker	?	Moor Town
	Nathan T Ball 16	B/Yard Labourer	Unm	Moor Town
	Thomas Ball 15	B/Y Labourer	Unm	Moor Town
	Henry Toon 38	Brick Maker	Unm	Moor Town
	Thomas Whyman 49	Brick Maker	?	Moor Town
	Joseph Whyman 19	Brick Maker	Unm	Moor Town
	Austin? Whyman 14	B/Yard Labourer	?	Moor Town
1881	Joseph Ball 48	Brick Maker	?	Moor Town
	William T Ball 19	Brick Maker	Unm	Moor Town
	Mathew T Ball 26	Brick Maker	?	Moor Town
	William Bott 56	B/Yard Labourer	?	Moor Town
	Henry Toon 48	Brick Maker	Unm	Moor Town
	James Woodley 18	B/Yard Labourer	Unm	Moor Town
	Thomas Whyman 59	Brick Maker	?	Moor Town
1891	John Taylor 21	B/Yard labourer	Unm	Rotten Row
	Jack Robinson	B/Yard Labourer	Unm	Rotten Row

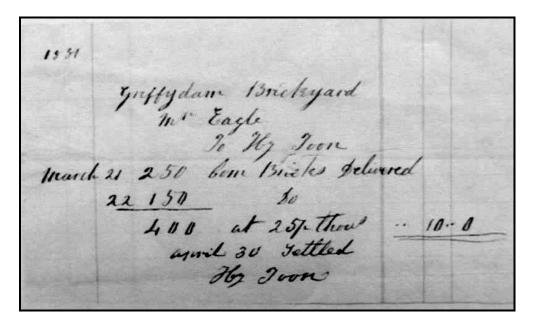
The reader must take into account the seasonality of brick making, and if the enumerator took the census at the beginning of the year, which was usual, then it was unlikely that the brickworks would have been in production. Where a question mark appears, the enumerator didn't make a record as the column asked whether the person was married or not and this took precedent in that case, ie: where there is a question mark the person was married. It is assumed that as all the above resided on The Moor or in one case Rotten Row, all within a stones throw of Coleorton Brickworks. However, we have to accept that they may also have worked at Griffydam Brickworks also.

### Comments:-

**A** – In 1841, John Smart appears to be the Brickmaster but he does not appear in the census. As we only have records up to 1843 we cannot make any further checks via census records.

**B** - The author believes that Henry Toon who is listed in the above chart became the owner of Griffydam Brickworks on the Lower Brand by 1881.

There follows copies of receipts for bricks brought from the brick works on the Lower Brand, Griffydam by Samuel Eagle Esq., together with a photograph of an actual brick. Samuel who had purchased a house on Elder Lane in 1877 on a buy to let basis previously ran a Bakers, Grocers and Sub-Post Office business in Rotten Row, Coleorton (actually in Thringstone parish at that time) which was taken over by John Kendrick from Griffydam who lived in property almost opposite Griffydam Infant School. Samuel Eagle was a man of some status in Coleorton, and Kelly's 1891 trade directory for Leicestershire & Rutland part 2., includes him as a member of the "Court List", and records that he should herby be known as Samuel Eagle Esq. These receipts are important in that they are the only record discovered for the price of bricks (commons) from Griffydam brick works, which is shown as being 25 shillings a thousand in 1881. This compares with the 28s.per thousand that Sir George Beaumont at Coleorton Brickworks was charging in 1813. Presumably the price was significantly less, considering the time gap, because Toon's prices were based on pressed bricks and those supplied in 1813 from Coleorton were hand made at that time.



15-80 March 4	In Eagle Jo Hoy Town & Y 500 bom Bricks Delive . 12-0
	April 2" Paid Henry Town



Example of pressed brick made when Henry Toon from Coleorton was operating the brick works on the Lower brand