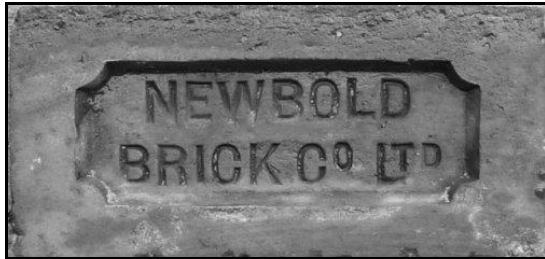


NEWBOLD BRICKWORKS
(includes references to the Pipe Works)



EXAMPLES OF NEWBOLD PRESSED BRICKS



THE ICONIC "NEWBOLD BRICK COMPANY LTD" CHIMNEY BUILT AS A FLUE CHIMNEY FOR THE HOFFMANN 22 CHAMBER KILNS c.1933.

BY SAMUEL T STEWART - DECEMBER 2021

COMPLIMENTARY READING

It will prove helpful to the reader to first refer to the publication on the author's website entitled "Coal Mining, Brick & Sanitary Pipe Making in the Vicinity of Newbold" which is located under the sub-section "Mining".

A second publication under "Light Industries" that may be beneficial to read is "The Brickworks on Breedon Brand"

Numerous publications on local social and industrial history are free to download and read on the website:- <https://samuelstewart940.wixsite.com/mysite>

NOTES

The manufacture of Bricks and Pipes overlapped for a long period at Newbold, but we can be certain that bricks were manufactured there first. The author has proof that pipes were being manufactured there in 1907 as his great uncle Robert Stewart started work at Newbold Pipeworks then at the age of 13 and was employed there for 52 years (see the supplementary section at the end of the publication). There is a record that by 1929, New Lount Colliery was delivering 31,000 tons of Stone-ware Clay to Newbold Pipeworks. It is not known over what period that was.

During his research, the author has come across numerous company names for both the brickworks and pipe works at Newbold throughout their later history, which causes considerable confusion. Bricks were still being produced at this site (even if of a more specialised nature) in 1973 which is qualified in the supplementary section at the end of the publication where there is a newspaper advertisement for a foreman at "Newbold Fire Brick Company Ltd" as is also one for a shorthand typist for "Newbold Refractories Ltd" (presumably the pipe works). The site was thought to have been closed c.1975.

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INTRODUCTION

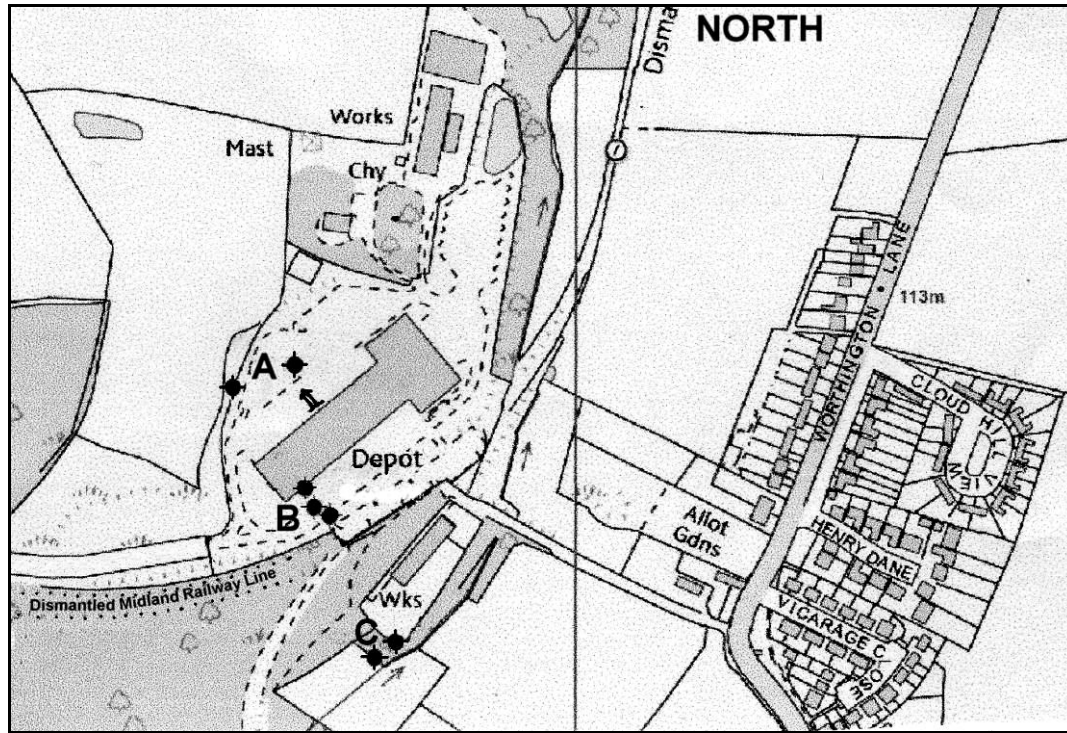


1835 PUBLISHED O/S MAP

This map shows the hamlet of Lount with a few buildings as it was at that time. To the north is shown a "Sandstone Quarry" which became known as Standing Dale on Standing Dale Lane, off the road to Worthington.

At this time, no colliery shafts had been sunk on what became the Newbold Brickworks site but there is some suggestion of buildings which the author believes are related to those shown later on the 1885 published O/S map, and thought to be related to early brick making

It will be useful for the reader to have a basic understanding of coal mining that took place prior to the Newbold Brickworks becoming established, but for detailed information the reader should refer to the publication under "Complimentary Reading"



This is an extract from a recent map showing the various coal mining shafts that were sunk on the old "Newbold Brickworks / Pipework site"

- **A - were the shafts sunk for Staunton Colliery (also known as Worthington Clash and Newbold Glory) - 1885 to c.1910**
- **B - were the shafts for Worthington Colliery - 1912 to 1919**
- **C - were thought to be exploratory shafts for Lount Brickworks ? Colliery - lasted less than 12 months**

The shafts are reasonably accurately located on the map, and in order to give an idea of scale, the distance from the first shaft at C to the site entrance road is 113.5 Metres.

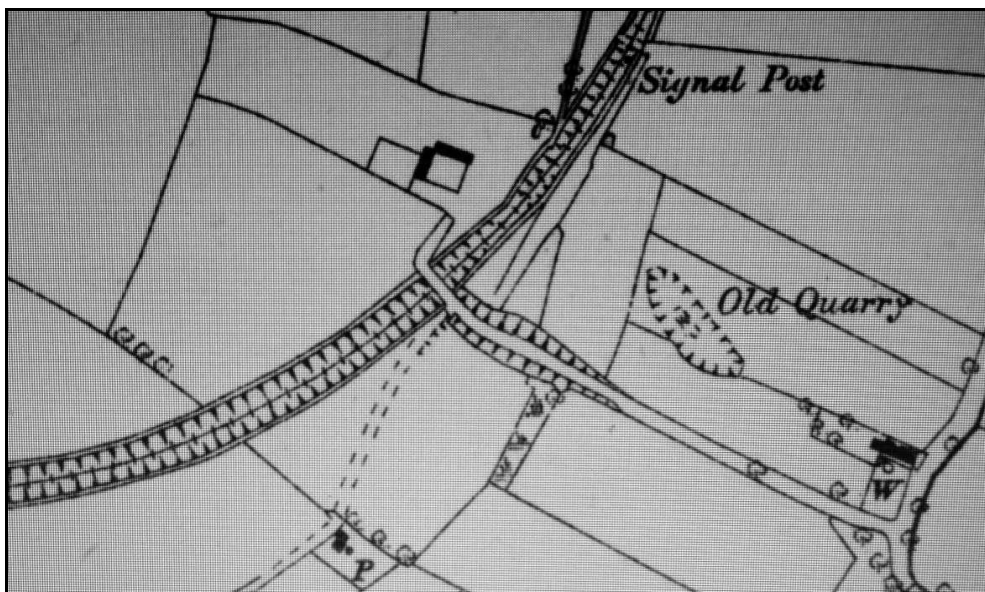
THE START OF BRICK MAKING AT NEWBOLD

There follows a series of extracts from O/S maps of the site from 1885, 1903, 1923 and 1925, shown in chronological order.

Two of these maps refer to the Staunton Colliery and Brickworks (1903 issued 6 inch and 25 inch O/S maps) and two refer to the Worthington Colliery and Pipe Works (1923 published 25 inch map and the 1925 published 6 inch map)

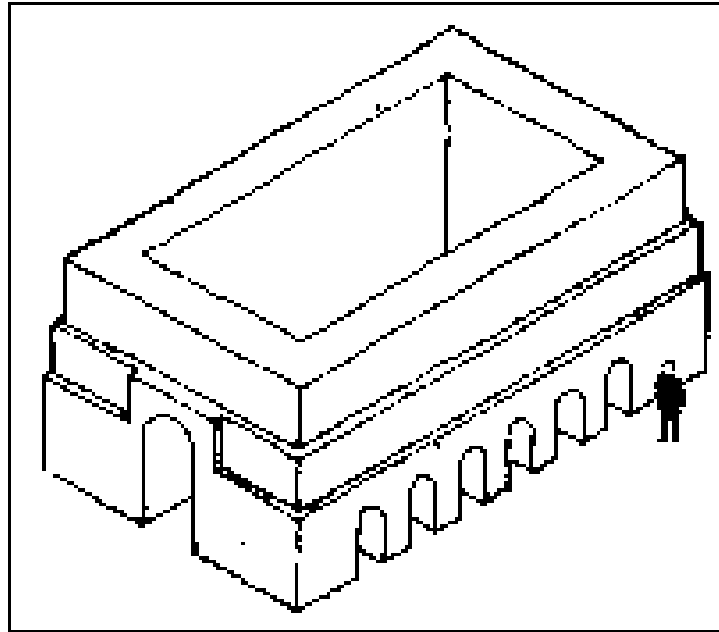
Although we have no concrete evidence, the author suggests that brick making probably took place on this site from the early 1800's. The 1881/2 surveyed map below shows an "Old Quarry" (most likely a former Clay Pit) with a track leading to buildings thought to be updraft kilns as an extension of what became Pipe Yard Lane. These can be related to some evidence of buildings in a similar location on the preceding 1835 O/S map. Over page is a photograph of an updraft kiln which still survives on the old brick making site on Breedon Brand. These were commonly known as "Scotch Kilns"

Brick making will almost certainly have continued on this site in some form until the new Newbold Brick Company Ltd was opened in 1934 by Frank Hodges which is recorded in newspaper articles which feature later. The following 1901 map clearly shows six down draft kilns with brick manufacturing and green brick drying sheds alongside. This demonstrates a substantial plant was in operation by this time.



AN EXTRACT FROM THE 1881/2 SURVEYED, 1885 PUBLISHED O/S MAP

Although there is nothing positive to show brick making taking place, the author believes that the old quarry would have actually been a clay pit and suggests that the track (which became Pipe Yard Lane) leads to a small brick yard with an updraft kiln similar to the one on "Breedon Brand" (see following photograph) with a brick manufacturing facility and possibly a drying shed.

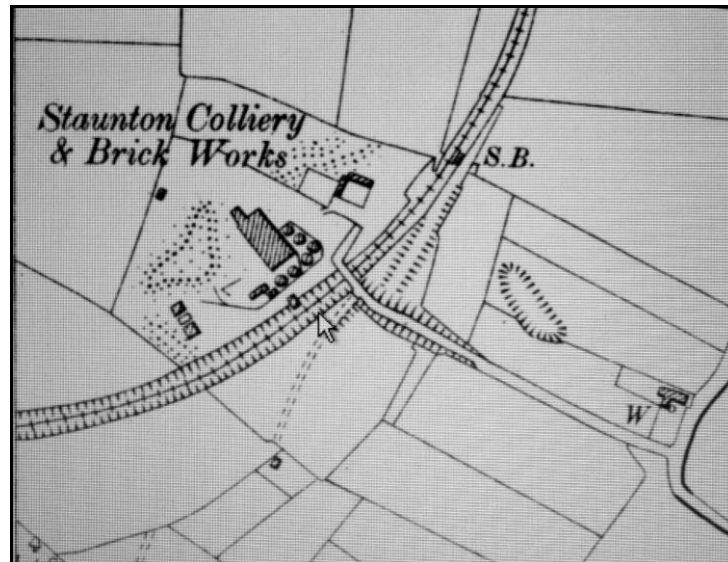


An outline illustration of an updraft kiln

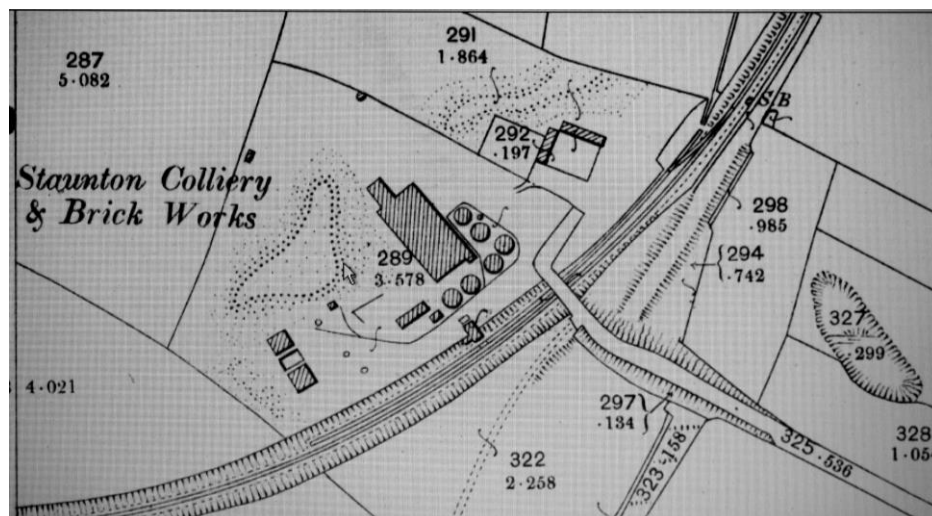


The surviving updraft kiln on Breedon Brand

**THE MAPS BELOW DEMONSTRATE THE
CONSIDERABLE DEVELOPMENT THAT HAD TAKEN
PLACE ON THE SITE 15 YEARS LATER**



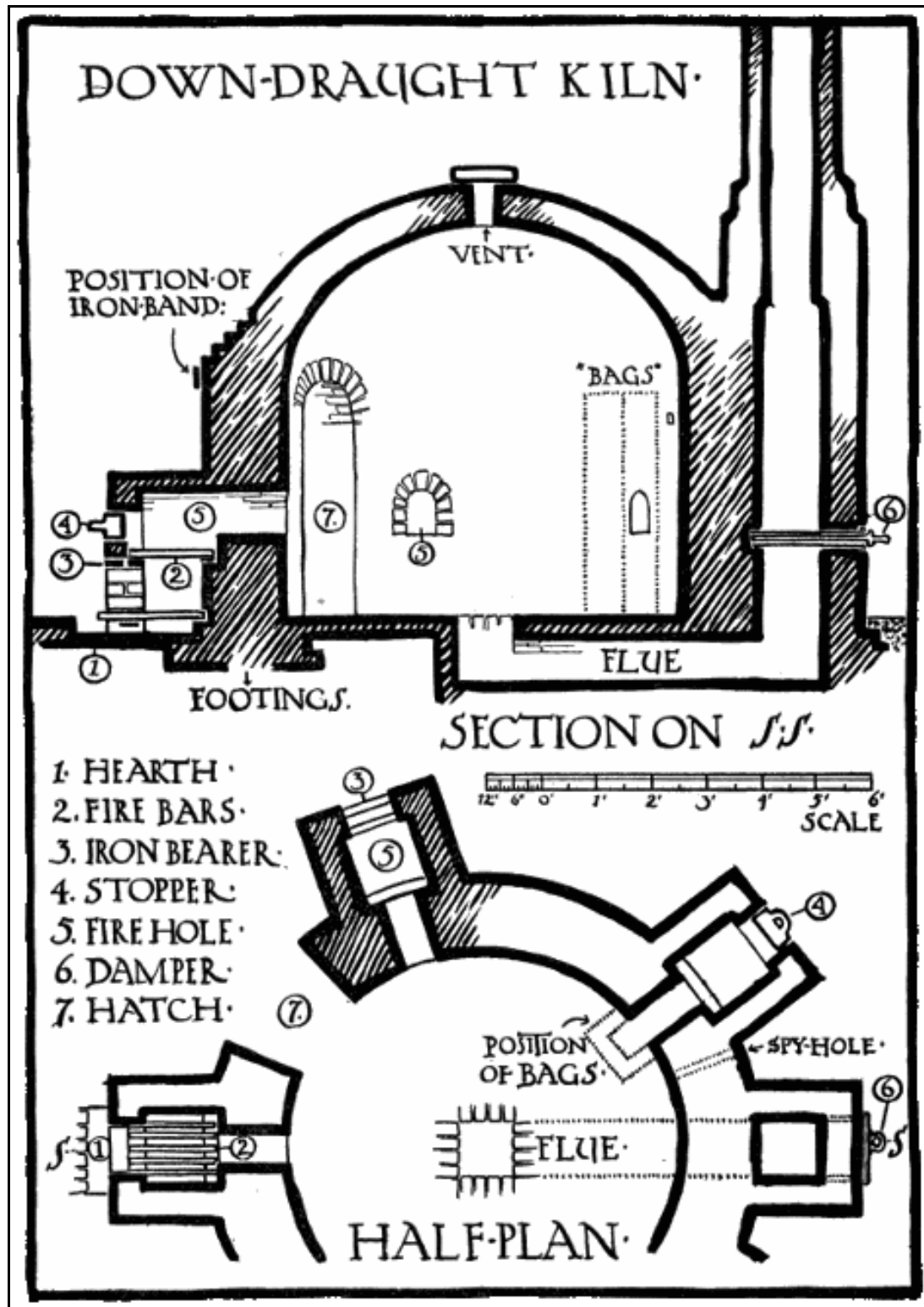
Revised 1901 6 inch O/S map published 1903 .



Revised 1901 25 inch O/S map published 1903

6 coal-fired circular down draft kilns have been built by 1901, so the output would have been considerable. Brick making would have been automated by this time with pressed bricks being produced in the large building. Underground flues were used to divert the heat from the kilns to pre-dry the green pressed bricks in the adjacent drying shed, prior to being loaded in the kilns for firing. The flue from the kilns after going through the drying sheds would have led to flue chimneys , and what is thought to be a bank of three of these can be seen to the left of the first kiln. Green bricks is a reference to the raw pressed bricks which needed a period of drying prior to being stacked in the kilns prior to firing. The down-draught kiln is more heat efficient than the up-draught kiln described earlier. It can be used for various ceramic products (e.g. drainage pipes and tiles of various types) in addition to the firing of bricks.

These kiln can be operated at high temperatures and may then be used for the production of refractory ware. It is almost certain that these kilns at Newbold, were not only used for making bricks but also for floor and roof tiles and the small land drainage pipes.

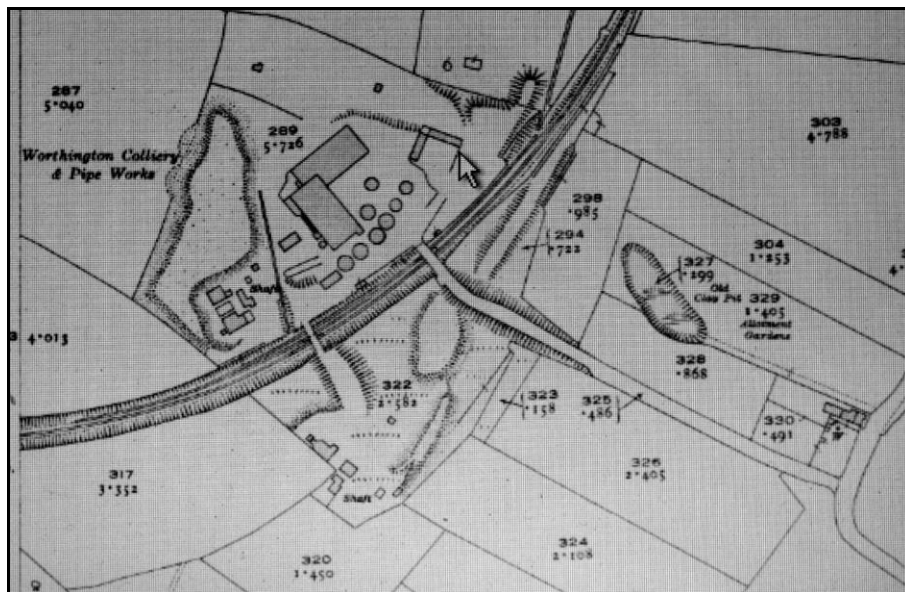




An illustration of a “Down Draft” kiln with adjacent chimney

20 YEARS FURTHER ON

We will not concern ourselves with why the following maps state "Worthington Colliery & Pipe Works" as this is misleading. The author would suggest that this infers some land drainage pipe making was taking place also, but our concern here is only with brick making. We can see that 3 further kilns have been built, and it is possible that the original updraft kiln referred to at the beginning is being utilised as it is still shown on the map. However, it is thought that some new circular kilns have been built based on the "Hoffmann" principal of continuous burning coal-fired kilns (see later explanation). Considerable areas of clay being dug out are identified to support the growing on site production. The adjacent railway sidings are also in evidence. Both maps, although with slightly different dates, and to a different scale, basically show the same information.



Revised 1920 25 inch O/S map - Published 1923



Revised 1920 6 inch O/S map - Published 1925

THE NEW "NEWBOLD BRICK CO. LTD" PLANT OPENED BY FRANK HODGES IN 1934 - WITH AN 8 MILLION BRICKS ANNUAL CAPACITY

Transcribed from the Leicester Evening Mail -
Tuesday 6th November 1934

GARDEN CITY PLANNED NEAR ASHBY BRICKWORKS OPENED - NEWBOLD'S CHANCE OF PROSPERITY

Brickworks with present plant for an annual output of 8 million bricks were formally opened at Newbold, near Ashby today.

Newbold Brick Company Ltd., a new enterprise in this part of the country, promises to be one of the most flourishing industries in Leicestershire. Plans are already prepared in expectation of considerable development in the area, and, if this materialises, the little village of Newbold will become the centre of a thriving district.

With the development of the works, accommodation will have to be found for the increasing number of employees, and with this in view, the company has formulated plans for a settlement on the lines of a "Garden City" in which with the brick workers will be able to live close to their work. The plans provide for playing fields, a recreation ground and a paddling pool.

CENTRAL LOCATION

The works have been built on the most modern lines with the "Hoffman" 22 chamber continuous kiln having a capacity of 220,000 bricks. It is the first kiln of this type in the country. **The entire brick making plant is all-electric. ??**

Special attention has been to transport facilities in choosing the site, which is central for supplying such towns as Derby, Nottingham, Loughborough, and Burton-on-Trent. A railway siding at the works allows for rapid loading and dispatch of bricks to all parts of the country.

After inspecting the works, a party of officials sat down to a luncheon. Mr. J. W. Farmer of Coalville, proposed the success of the new brickworks, to which Mr. Frank Hodges, chairman of the company and chairman of "The Leicestershire Colliery and Pipe Company ([owners of New Lount Colliery](#)) responded.

RISK - MR. HODGES REPLY

Mr. Hodges said that some of his friends had criticised him for risking too much in these new works. His reply was he saw no grounds for excessive caution with brick imports at the rate of 400 million bricks per a year, and of a quality which ought never to be permitted to go into buildings - at any rate, those intended for human habitation, even if after the next 5 years, the building boom came to an end. His experience taught him that a good article would sell in a time of depression and the works producing it stood a better chance of carrying on, than the one whose product could only sell in a boom. There was a strong demand for high grade as well as common bricks. At Newbold they are fortunate in their supply of raw materials. The clays were

varied, accessible, and extensive. With this background he had conceived it only a matter of prudence to install the very latest type of plant or kilns.

Among those present were Major H. E. Roberts, chief goods manager of the L.M.S., Mr. R. Hardy, Mr. E. D. Hardy, Mr. T. Gray (Manager of the "Glasgow Iron & Steel Company"), Mr. W. Allison (General Manager) and Mr. E. Martin (Manager of the "Newbold Brick Company")

ALTERNATIVE REPORT - SURPRISINGLY SIMILAR - CONSIDERING THEY ARE FROM TWO DIFFERENT NEWSPAPER COMPANIES

**Transcribed from the Nottingham Journal -
Wednesday, 7th November 1934**

MODEL VILLAGE FOR WORKERS MR. FRANK HODGES AND LEICESTERSHIRE ENTERPRISE EIGHT MILLION BRICKS A YEAR

Visions of a "Model Village" to house the workers concerned were glimpsed by Mr. Frank Hodges, presiding at a luncheon at Newbold, near Ashby de la Zouch yesterday to inaugurate the opening of a new "Brickworks Enterprise" which is capable of turning out 8 million bricks a year.

HUGE IMPORTS NECESSARY

Mr. Hodges, speaking as the chairman of the new venture - "The Newbold Brick Company" - said he had been told, that the building boom "could not go on forever" - that he was risking too much.

His reply was that he saw no ground for excessive caution with brick imports still growing at the rate of 400 million bricks per annum, and of a quality which ought never to be permitted to go into buildings, at any rate, those destined for human habitation. Even if after the next 5 years, the building boom came to an end, his experience taught him that a good article would still in a time of depression and the works producing it stood a better chance of carrying on than the one whose product could only sell in a boom. There was a strong demand for high grade as to do his best to meet it.

HUGE CAPACITY

The capacity of their first kiln was approximately 8 million bricks a year. As they developed they would be able to build other kilns with their own bricks, as part of a plan for which the layout was specially designed.

One of the things he would like to accomplish as a permanent reminder of his work in the area, would be to construct a model village, near this very spot in which a good number of the work people, in all the concerns over which he had control could be happily and comfortably housed at cheap rentals, but under conditions as near the ideal as possible. In a year's time he hoped to see the village materialise.

TWO KEY POINTS FROM FRANK HODGE'S SPEECH

- The entire brick making plant is all-electric !
- The works have been built on the most modern lines with the "Hoffman" 22 chamber continuous kiln having a capacity of 220,000 bricks (per day?)

Frank Hodges states (according to the news reporter) that the new "Newbold Brick Works Company Ltd" is all electric. The author only has experience of coal fired kilns, so this publication is based on that principle only, and it seems unlikely that with New Lount Colliery being only a stone's throw away, that slack coal would not have been supplied from there. The author assumes that the all electric plant would have been referring to the clay preparation and brick pressing plant etc.



Date of photograph not known but was probably taken in the 1950's after ceramic pipe making had become established on the site. All the round kilns shown in the photograph and the two 22 chamber elliptical kilns adjacent to the tall chimney are continuous burning Hoffmann type kilns

THE LETTER "W" INDICATES THE SITE OF THE OLD WORTHINGTON COLLIERY BUILDINGS WHICH CLOSED IN 1919

THE HOFFMANN CONTINUOUS BURNING PRINCIPLE

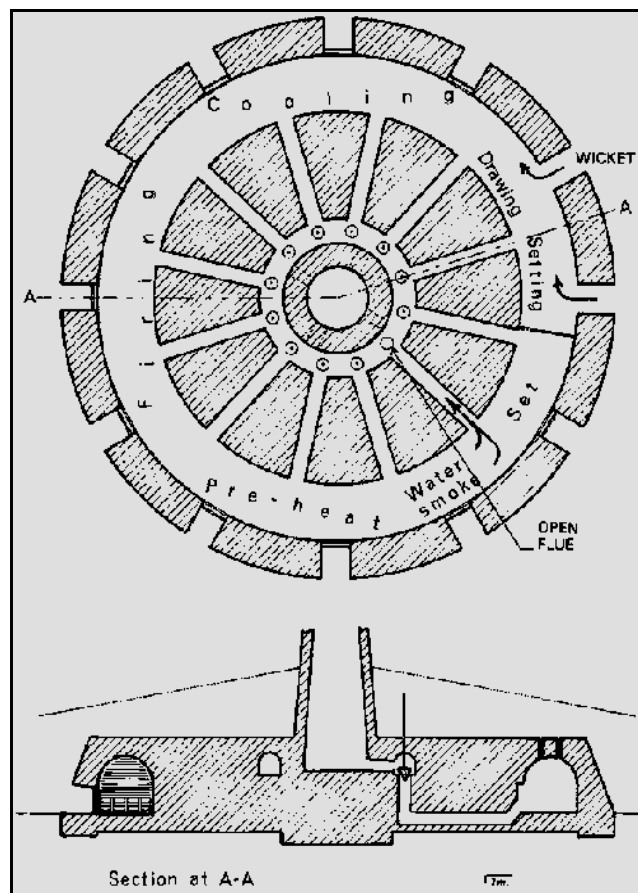
The following two types of Hoffmann continuous burning brick making kilns were used by the Newbold Brick Making Company Ltd. It is not proposed to go into detail on how these kilns operated, as information can be found on the internet for those readers interested in finding out more, but it is useful to understand the basic principal workings of these kilns.

CIRCULAR KILNS

Examples of fairly advanced limestone burning kilns built by the Romans in England were of the down-draft type shown earlier, which demonstrates how advanced they were. Examples of Roman Kilns unearthed in the UK are featured in the author's publication entitled a "A History of Limestone burning in NW Leicestershire".

This principle was used in the earlier circular kilns at Newbold in the firing of bricks as described previously.

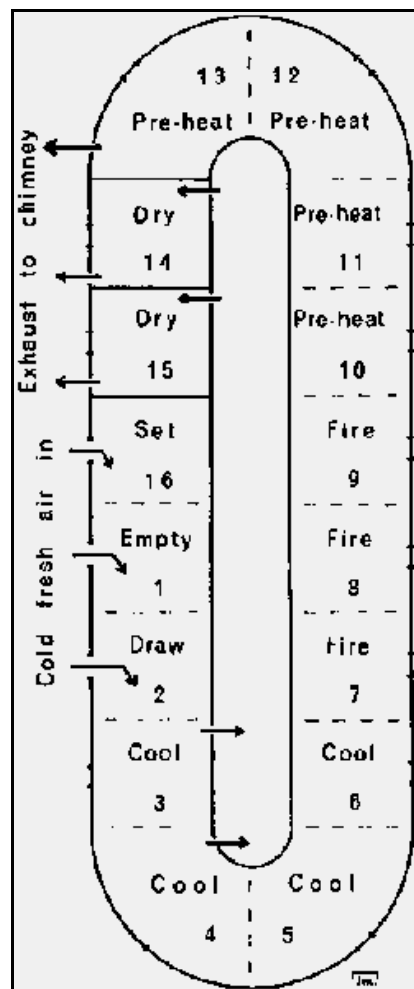
A major change to improve the efficiency of the firing of bricks came about when the Hoffmann principle of a continuous burning kilns was patented by the German, Friedrich Hoffmann in 1858, and became the most common and efficient kilns used in the future firing of bricks. All the circular kilns in the preceding photograph, appear to be of that design, with a centre flue chimney.



The original circular Hoffmann kiln was built around a central chimney. An arched-top tunnel surrounds the chimney at a distance of a few metres, and is connected to it by 12 flues passing through the brickwork between the tunnel and the chimney. Each flue can be closed off by dropping a damper. Entrance into the tunnel is through any one of 12 wickets (entrance arches). During operation, most of the kiln's tunnel is full of bricks either warming, being fired or cooling, hence the description "Continuous burning".

ELLIPTICAL KILNS

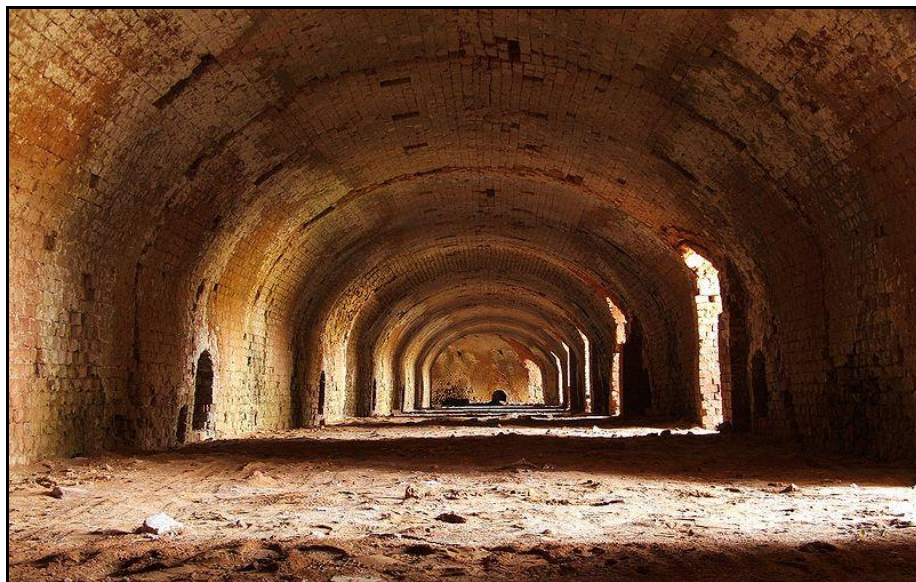
The 22 chamber kiln referred to by Frank Hodges in his opening speech was still based on the Hoffmann principle of continuous burning but would have had an elliptically closed circuit tunnel shaped as shown below in an example of a 13 chamber kiln. As there are two kilns shown in the preceding aerial photograph of the Newbold site adjacent to the tall flue chimney then another one must have been built at a later date to support increased production including presumably the firing of sanitary pipes.



A Hoffman elliptical kiln is a continuous, **moving fire kiln** in which the fire is always burning and the hot gasses are drawn forward through the bricks stacked in the elliptical closed circuit with arched roof. The fire / hot gas movement is maintained via flues leading to the flue chimney as was the case at Newbold. Any description of the working of a continuous kiln must, necessarily, appear complicated, but in reality these kilns are quite simple with fire heated gasses travelling round and round the

kiln in a perfectly regular and continuous manner in order to fire the bricks to the required quality level. Bricks are continuously set in the kiln and removed as firing and cooling is complete. These kilns operated 24/7, and were never allowed to cool down, hence the description continuous.

The operating principle of the Hoffmann style elliptical kiln is exactly the same as that of the circular design. The main difference relates to the larger number of chambers available in the elliptical design which provides for greater efficiency and increased production.



Views of the elliptical tunnel with an arched roof. The arched chamber entrances, known as wickets facilitated the continuous loading of green bricks and removal of the fired bricks, setting the fires, and drawing of fresh air in to the kiln.

SUPPLEMENTARY INFORMATION

The following newspaper advertisements provide useful information, by the way of dates and company names including "NCB Brickworks", "Newbold Pipe Works", "Newbold Fire Brick Company" and Newbold Refractories Ltd. These requires further research :-

Leicester Evening Mail - Wednesday 29th June 1949

"Continuous Kiln Burners" wanted - for NCB Brickworks - Apply NCB, Clay Working Dept, Newbold Pipe Works, Coleorton, Leicestershire.

Leicester Evening Mail - Tuesday 9th June 1959

The facing bricks used on the "Herald of Peace", Melton Rd, Leicester were Whitwick 2 5/8 inch Dark Stone hand made Sandstock facings

**manufactured by
the NCB**

East Midlands Division, Clayworks Dept, Newbold, Coleorton, Leics

Tel : Osgathorpe 302 (3 lines)

Manufactures of

Desford Multi Rustic Facings, Whitwick Golden Brown, Handmade Sandstock & Garden Brown Rustic Facings, Pressed Commons, "Lescel" Brand Stoneware Pipes and Fittings



Opened in June 1959, with a licence from the *Joiners Arms*, Highcross Street. It ran for many years by the Miles family, when it had the reputation of serving one of the best – if not the best – pint of mild (Shippo's) in Leicester.

Leicester Chronicle - Friday 15th May 1970

NEWBOLD FIRE BRICK COMPANY LTD - Newbold, Coleorton, Leicestershire - Works Foreman required - Successful applicant should have experience in:-

1. Quality Control of ground and graded refractory materials
2. Technically sound refractory background.
3. Experience in control of labour.

Company specialises in production of monolithic refractories and pre-casting of shapes. Good prospects for right man - applications in writing to - The Newbold Firebrick Company Ltd, Imprefac House, Roman Ridge Road, Sheffield.

Leicester Chronicle - Friday 5th January 1973

SHORTHAND TYPIST - Young lady required with some commercial experience for busy office between Coalville and Ashby. Must be able to work on own initiative. - Apply in first instance to Company Accountant, **Newbold Refractories Ltd.**, Newbold Works, Newbold, Coleorton, Leicestershire. Tel - Osgathorpe 694

ROBERT STEWART



A Photograph of Bob Stewart who worked at "Newbold Pipe Works" for 52 Years. He was the great uncle of the author. He started work there after leaving Staunton Harold School in 1907 at the age of 13 and by 1910 became a pipe-finisher, a job he retained until his retirement. The above photograph was taken at his retirement whilst training an apprentice on the art of pipe finishing.

Bob was the youngest of the large Stewart family of Lount and brother of Bill (snip) Stewart of Stewart's shop at Lount. The 1911 census shows Snip to be working at the Sanitary Pipe Works.