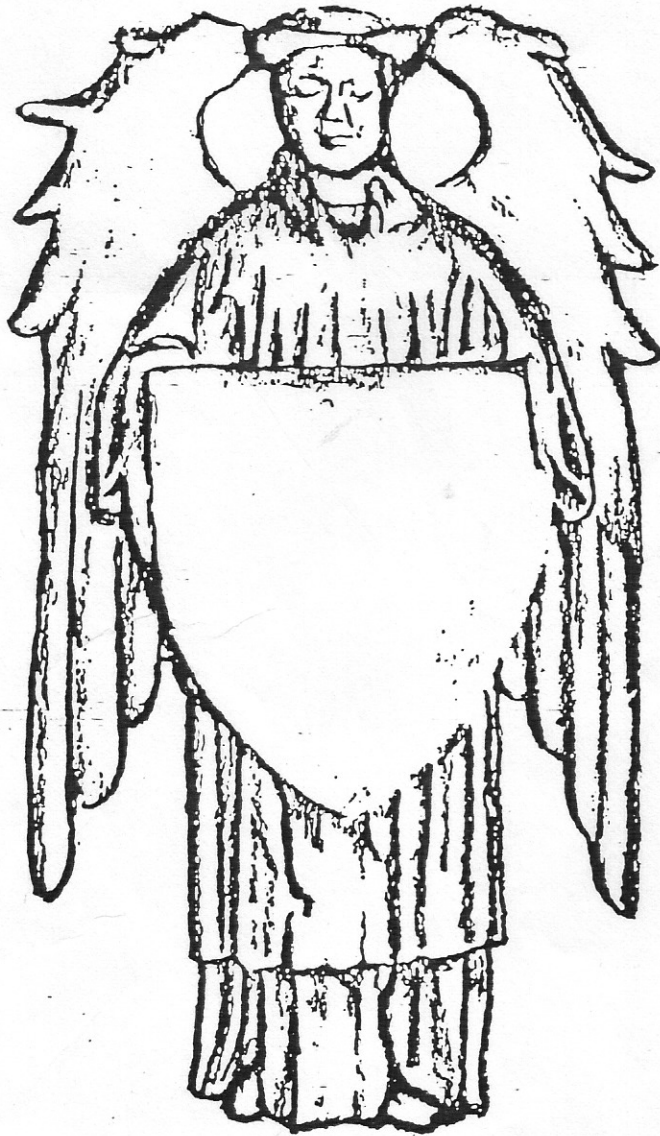


Chellaston History Group

CHELLASTON BRICKWORKS

BY TOM FARNSWORTH



*Alabaster, Chellaston, Standing Angel
c. 1419*

CHELLASTON BRICKWORKS.

Introduction.

"The Chellaston Brickworks are a fine example of a kind of industry that is rapidly disappearing - the rough personal industries of the past and the sight of these red chimneys standing in a clearing among ivy-covered trees is particularly impressive". So wrote Robin Smyth in 1953 for a Derby Evening Telegraph article on Chellaston, (1*) a quarter of a century later, a change in the economic situation and ownership resulted in the end of this local industry.

Origin.

The manufacture of bricks at Chellaston owes its inception to the alabaster and gypsum industry, since these minerals were extracted from a substantial mass of keuper marl (clay). For centuries the clay had been removed and very little use made of it until the latter part of the 19th century when access to relatively cheap coal was assured by the railway. With plenty of raw material and the necessary fuel it wasn't long before the main activity at Woodlands Quarry was the manufacture of bricks.

It is difficult to identify exactly when brickmaking started in the quarry but the 1836 Ordnance Survey map shows the area as a Plaster Pit and it is not until a directory of 1871 (2*) that a reference is made to brick making. This entry indicates that Birch and Ryde were engaged in the business of Plaster Merchant and Brick Manufacturers. However, bricks have been found with the name of Chellaston Mines which we can assume to have been made by George Wooton's mining company (3*) prior to Birch and Ryde. By 1882 the Ordnance Survey map (Appendix 'A') shows an established brick and tile works with four circular kilns and several other buildings. However, it had changed ownership by this time since Kelley's 1881 directory records Thomas Porter Stableford as the owner.

During the working life of the quarry and works, gypsum, alabaster, bricks and tiles were produced. However, good quality alabaster was not found in large quantities after the last war and tiles were not produced after the first World War but gypsum was extracted and marketed until the final closure in 1978. The 1967 Ordnance Survey map (Appendix 'B') shows the works virtually as it was in its last years of operation.

Description of Works and Production.

The 1882 Ordnance Survey map (Appendix 'A') shows the works in its sylvan setting hemmed in by trees on all sides. The tramway from Swarkestone Road passes Woodlands Farm and terminates at the most northerly of the large buildings. This site was occupied by the drying shed in contemporary times but may have had a different function in 1882. The connection to the tramway could indicate the emergence of finished products from this building, possibly gypsum as well as bricks and tiles. The only railway track shown is the tramway so we can assume that there were no rail lines

radiating out to the quarry face. In this case the clay must have been brought to the works by wheelbarrow if the face was adjacent to the buildings or by horse and cart if the quarry was more distant.

Wherever the clay was excavated, it would ultimately be carted to the pan mill after the raw material had been sifted of undesirable constituents such as stones, fossils, gypsum or alabaster. The two latter materials were valuable when separated but would ruin any bricks if they were left in the mix before firing.

Probably the most well known features of a brick works are the kilns, these are shown in Appendix "C", Fig.1 and Fig.2. photographed in the 1920's. The circular beehive kiln at Fig.2 is the type indicated on the 1882 Ordnance Survey map. Although kilns are immediately obvious as to their purpose, the exterior appearance of the mill house does not indicate the vital functions performed within the gaunt two story building illustrated at Fig.3. This structure housed the all important pan rollers in the top floor and the pug mill on the floor below.

Clay was hauled to the top floor and then fed into the large pan (any foreign matter being removed first). The two heavy rollers horizontally mounted rotated continuously crushing the clay to the correct consistency, water being added as required. Chellaston village water was not suitable therefore the necessary supply was channeled from the well known spring on the top of Tuppa Field. Fine moist clay was forced through a mesh by the pan rollers. It was then rolled into a plasticine condition by the pug mill (Appendix 'D' Fig.1).

The next stage of manufacture depended upon the product. Named bricks and tiles require moulds but plain bricks can be wire cut. By 1882 there were numerous machines available for brick making (4*). Chellaston works would be fairly well mechanised in this respect, power being provided by a steam engine. (The pan rollers in use in 1978 were made by Wootton Brothers of Coalville in 1894) Clay for tiles and facing bricks would have sand or other additives introduced to the mould to give variations in colour and texture. Plain bricks would be extruded as a wide slab of clay to be cut into a uniform set of brick shapes by a grid of piano wire (Appendix 'D'. Fig.2)

All clay products would then go to the drying shed until they were sufficiently dry for loading into the kilns. In 1882 2 pairs of circular kilns are shown on the map with what appears to be one chimney for each pair. The fuel would be coal and a steady production of bricks could be obtained by firing one set of kilns whilst the others were cooled and then unloaded. However production would probably not be continuous since firing and cooling takes several days.

Expansion and Modernisation.

Over the hundred or so years life of the brickworks there was a gradual expansion of production as more modern equipment was introduced. However the works sometimes experienced reduced output and occasionally ceased production entirely when the building industry was in the doldrums. During the First World War whilst the Company was in the ownership of John Stableford of Woodlands Farm, there was a considerable increase in brick making.

One of the largest contracts being the supply of bricks to build the huge Spondon Factory for the Ministry of Supply which eventually became Celanese.

After the war John Stableford modernised the works by adding a new Hoffmann kiln and replaced the steam engine with a gas engine, no doubt encouraged by the war time boom and anticipating a profitable future. The gas engine was of 80 Horse Power rating and ran on fuel made in the works by burning anthracite producing gas via a scrubber. The engine was believed to be made by Peter Brotherhood Ltd.(5*) and was much more efficient than the steam engine which it replaced, although its function was the same, i.e. to drive the pug mill and 2½ ton pan rollers, operate the winch hauling the clay waggon up from the quarry, drive the wire saw used for cutting out the occasional huge block of alabaster when revealed and to power any other miscellaneous mechanism.

Unfortunately the improvement in trade was not sustained and John Stableford suffered from a shortage of liquidity. This problem was resolved when F.W.Gilbert provided a loan which enabled the business to continue. However, Mr.Stableford was soon in deeper trouble when the loan was foreclosed. The result of this manoeuvre was that F.W.Gilbert took over the brickworks and Woodlands Farm, John Stableford becoming manager and remaining at Woodlands House. Even this situation was soon to change for in 1922 he was made redundant, the works were closed and Woodlands Farm sold. (He then moved to a house in Hartington St. which his two sisters managed as a guest house). Thus ended the Stableford's long involvement with brickmaking at Chellaston.

By 1923 the works was back in business under the ownership of John E.Williamson of The Balconies and F.W.Gilbert and was now operating under the name of Chellaston Minerals. During this period the transportation of bricks moved out of the horse and cart era. T.W.Napper was contracted to convey bricks with his three lorries. However, it was considered that efficiency would be improved if the Company had its own motor vehicle and a Leyland lorry (CH 5389) was purchased from T.W.Napper in 1925. This motor expanded the sales outlets by delivering bricks as far afield as Lincoln, Northampton, Wolverhampton and Chapel-en-le-Frith to name but a few of the destinations.

The production of bricks remained very much the same until the final few years. Tiles were no longer made but brick output was continuous since 3 or 4 chambers were fired at a time and the Hoffmann kiln had sufficient capacity to support this type of production. Appendix 'D'.Fig.3 shows the kiln and Fig.4 shows bricks being unloaded through a wicket.

Wartime again gave a boost to brickmaking and during the 1939-45 War, Chellaston Minerals were required to have sufficient bricks for a major re-building of Rolls-Royce in case it was seriously

damaged by enemy bombing raids. After the war business remained buoyant and brickmaking continued without the problems experienced after the 1914-18 war.

In 1948 Sissons of Langley Mill took over the works and the name was changed to Chellaston Brick Company. This name remained for 30 years until the closure in 1978 after Granwood Flooring of Somercotes took over in 1976.

Activities and Workers' Experiences.

In the latter years of its existence the works produced mainly common bricks since they are much cheaper than moulded facing bricks which are generally textured and possess a frog. In 1953, 120,000 common bricks per week was the normal output (6*). In contrast with these large quantities Chellaston named bricks were hand pressed. Being facing bricks they were textured with a special red sand from Lincolnshire and approximately 200 per day would be made.

Many Derby Council Houses were built with Chellaston bricks especially in the 1930's. Examples of local buildings constructed with Chellaston bricks are the houses in Chadwick Avenue, Allenton and Glenwood Road. The latter houses being faced with London Brick Company bricks, Libra on Swarkstone Road and the two semi-detached houses on the south side of Snelsmoor Lane at the Chellaston end were built completely of local bricks. The two Snelsmoor Lane houses were owned by the brick company whose employees resided there. For many years the occupants were Mr. Henry Smithurst and Mr. Harold Hawkins and their families.

No record of the brickworks would be complete without mentioning the long service of the Smithurst family. In 1896 Henry Smithurst started work making bricks at Woodlands Quarry at the age of 10, his father was by that time the manager and his grandfather also worked there. Eventually Henry took over the reins when his father retired. His father (William Henry Smithurst) was extremely industrious as he also found time to manage the Red Lion from the end of the last century until 1928 (6*) by then he was 69 years of age.

The Smithurst dynasty did not finish when Henry retired since his nephew, Mr. Frederick Smithurst became the Brickworks Manager and continued in this position until closure in 1978. Fred Smithurst was a keen sportsman, playing cricket for Ingleby before the club moved to Swarkstone, he also played football for Chellaston when the club ground was next to the Rose and Crown (the site that the Sherwin Centre now occupies). In those days quite a few of the players worked at the brickworks.

Several families had long connections with the works, Mr. G. Sault came to drive the company's first lorry in 1925 and remained until his retirement in 1970. As well as driving many thousands of miles delivering bricks he also had the unusual task of driving a lorry load of luggage and provisions to the North Wales coast each summer for Mr. J. Williamson's holiday home, however this annual journey ceased with the outbreak of the 2nd World War.

One of the loneliest jobs must have been that of tending to the kilns during the night. When they were coal fired it was necessary to stoke up at any time during the day or night since there were always bricks being fired continuously throughout the year. Mr. George Foster worked at the brickworks from 1924 to 1944 and for

much of the time he tended the kilns. If one considers the relatively isolated site of the works surrounded by woodland, the approaches being through a wooded cutting, then one can imagine the solitude of a single workman at night firing the kilns by the light of the moon or in almost total darkness on a cloudy night. During the Second World War he had to be especially careful because of the 'blackout' precautions. When a wicket is opened for a fresh charge of coal, the 1,000°C temperature inside the kiln produces a bright glow at night which would be visible to enemy aircraft. The intense heat also provided a warm shelter in winter and it has been known for tramps to make their way through the woods to find a cosy sleeping spot. Mr. Harold Hawkins was the next night furnaceman from 1944 to 1964 and was once attacked, the assailant escaping into the darkness.

Summary of the Last 50 Years.

In the 1920's the price obtained for gypsum was 25/- per ton and for common bricks it was 45/- per 1,000. Modernisation had resulted in new kilns, new equipment and a gas engine to provide the power. In the 1930's electricity was installed and the gas engine became obsolete.

The next milestone occurred in the 1960's when a Fiat digger was purchased and the network of lines which radiated out of the quarry faces became redundant, being reduced to a single line to the mill house. The digger was able to extract the harder clays and therefore the quarry became deeper. The map at Appendix 'B' shows the layout of the works buildings and the extent of the quarry workings in 1967. The single rail line to the pugmill remained in use until closure, also the two familiar chimneys.

In 1970 the last improvement took place as a result of Chellaston becoming a 'smokeless zone'. The sight of smoke issuing from the chimneys above the tree tops ceased when the kilns and drying shed were converted to operate on liquid butain gas.

When the new owners, Granwood Flooring, decided they could realise a better return on their capital by selling the quarry as a rubbish tip than by continuing as a brick works there were approximately 25 workers and three 7 ton lorries in use.

Once the brickworks closed in 1978 the brickmaking machinery was offered to Derby Industrial Museum but unfortunately, they had no storage available. It was soon obvious that a working museum on the site was out of the question since the works was immediately vandalised beyond description. The horrific destruction which included 2 arson attacks was fitting testimony to the youth of Chellaston involved. Consequently the machinery went for scrap and the buildings were levelled

With the closing of the brickworks, Chellaston not only lost a source of employment but a working community was dispersed and the last link with the alabaster and gypsum industry of the past was severed. It is to be hoped when tipping is completed in 1986 that the site will provide a park which will be an asset to Chellaston.

Addendum.

Whilst the brickworks and quarry were in existence it was possible to find very old named bricks. The following is a list of company titles/owners and brick markings where applicable:-

<u>NAMED BRICK</u>	<u>Co. OWNER/TITLE</u>	<u>DATE.</u>
CHELLASTON MINING CO. NEAR DERBY.	GEORGE WOOTON.	19th Century
BIRCH & RYDE. T. P. S. C.	BIRCH & RYDE. THOMAS PORTER STABLEFORD. JOHN STABLEFORD	1860's-1870's 1870's-1905 1905-1921
CHELLASTON MINERALS	JOHN E. WILLIAMSON & F. W. GILBERT.	1921-1928
CHELLASTON MINERALS	JOHN E WILLIAMSON SISSONS(CHELLASTON BRICK CO) GRANWOOD FLOORING (CHELLASTON BRICK CO).	1928-1948 1948-1976 1976-1978

References.

- 1* Derby Evening Telegraph 16 February 1953.
- 2* Commerce and Industry in Chellaston - 1800 to Present Day by A & R Hilliard - Chellaston History Group publication 1982.
- 3* White's 1857 Directory of Derbyshire refers to George Wooton as proprietor of Chellaston Mines extending to 70 acres of gypsum.
- 4* Bricks and Brickmaking by Martin Hammond - Shire Publications Ltd.
- 5* Mr. Smithurst remembers replacement parts being ordered from Peter Brotherhood Ltd.
- 6* Derby Evening Telegraph 16 February 1953.
- 7* Commerce and Industry in Chellaston - The Public Houses by A & R Hilliard - Chellaston History Group publication 1984.

Acknowledgments.

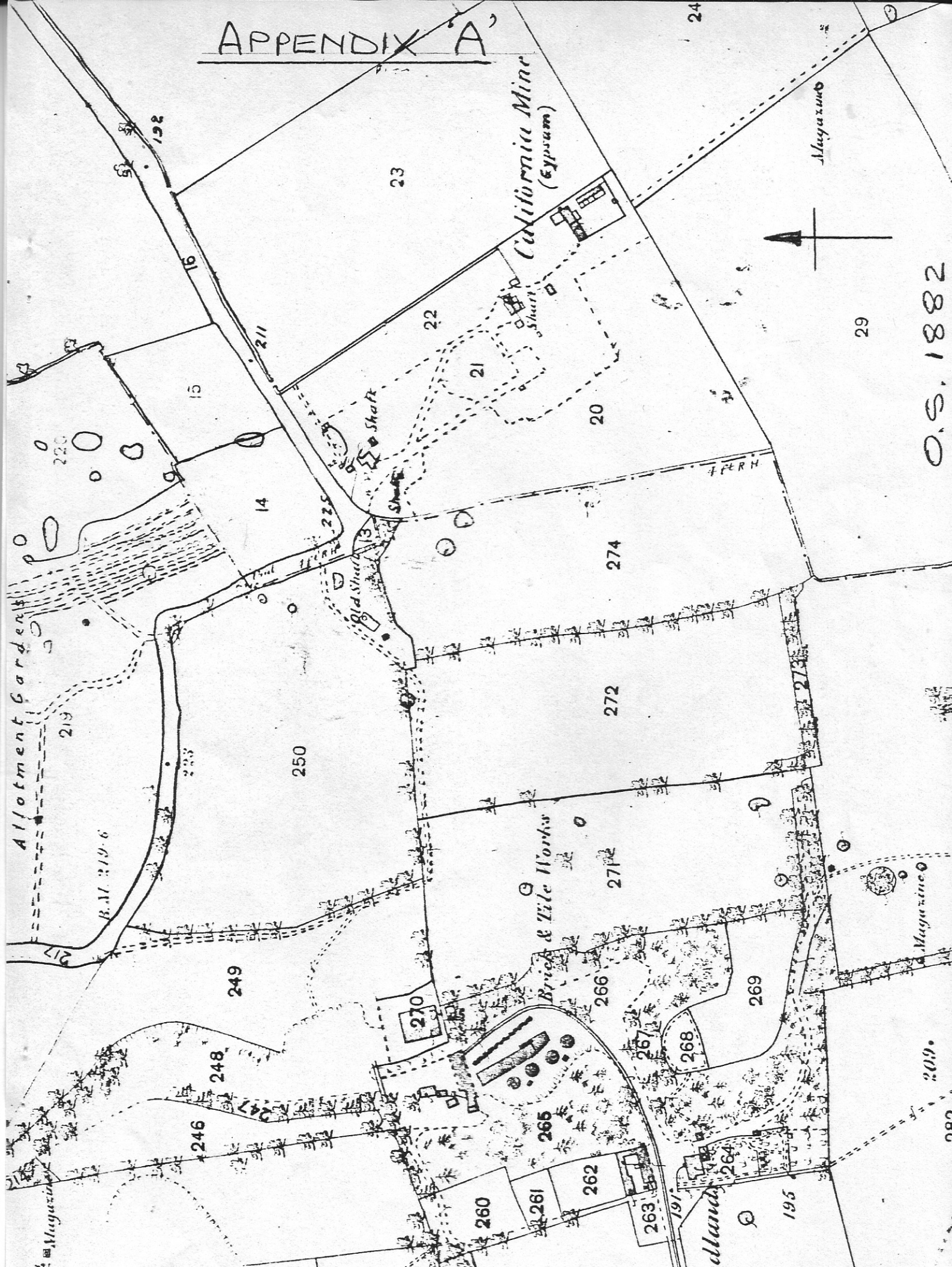
Much of the detailed information was gained from the following ex-employees of Chellaston Brickworks:-

Mr. G. Foster.
Mr. G. Sault.
Mr. F. Smithurst.

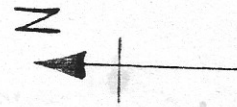
Additional information was also given by:-

Mr. & Mrs. A. Faircloth.
Mr. R. Silverwood.

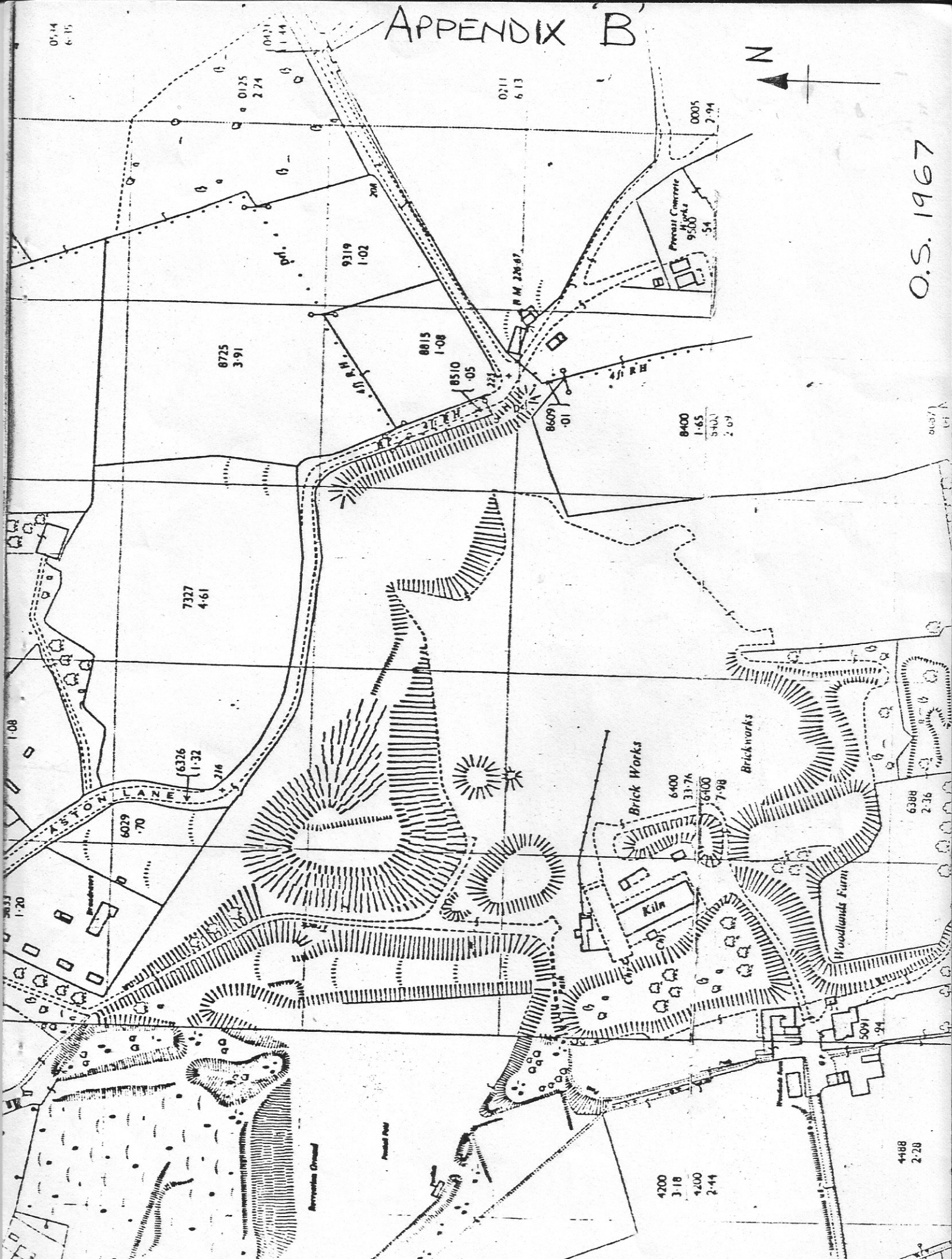
APPENDIX A



APPENDIX B



O.S. 1967



APPENDIX 'C'

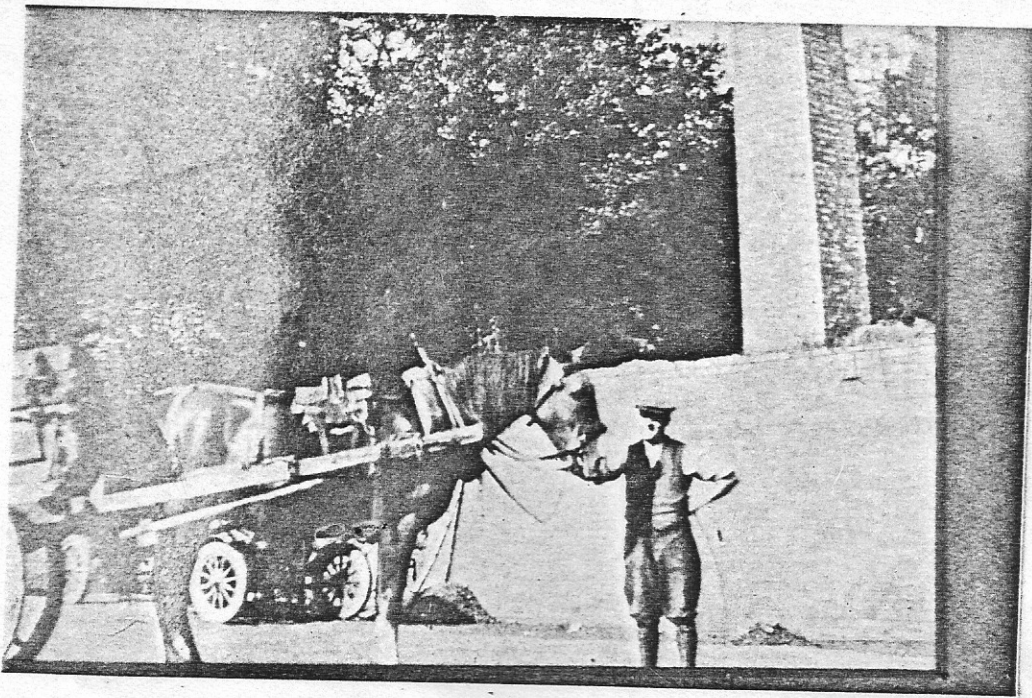


Fig. 1
(Happy)
Jack Kirkland

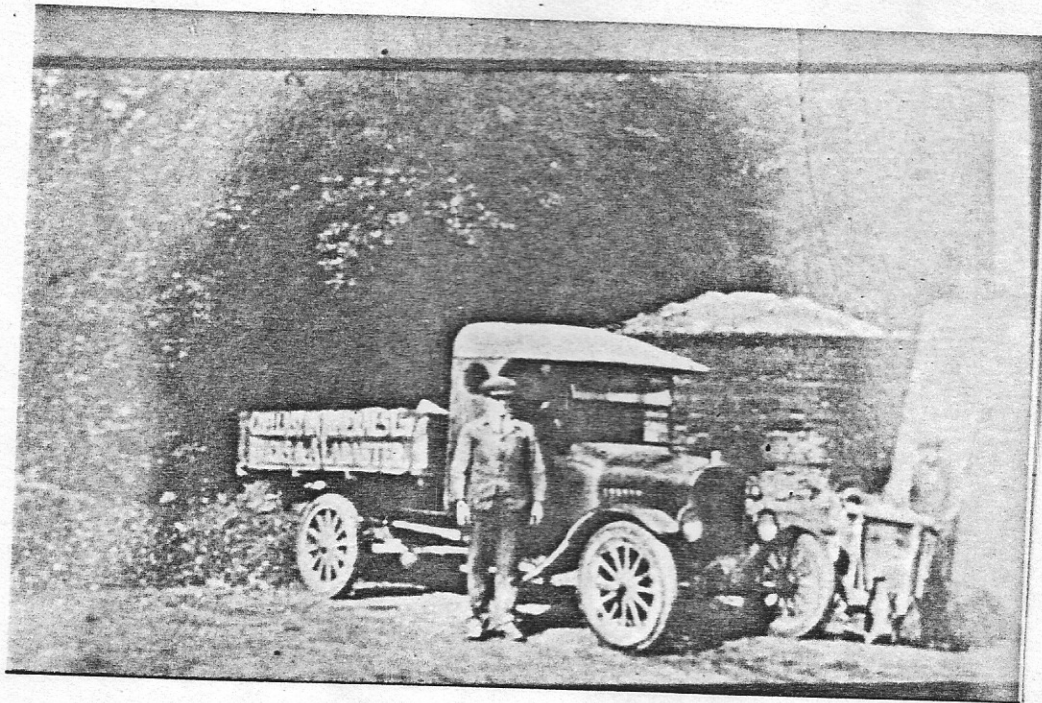


Fig. 2
Ford lorry

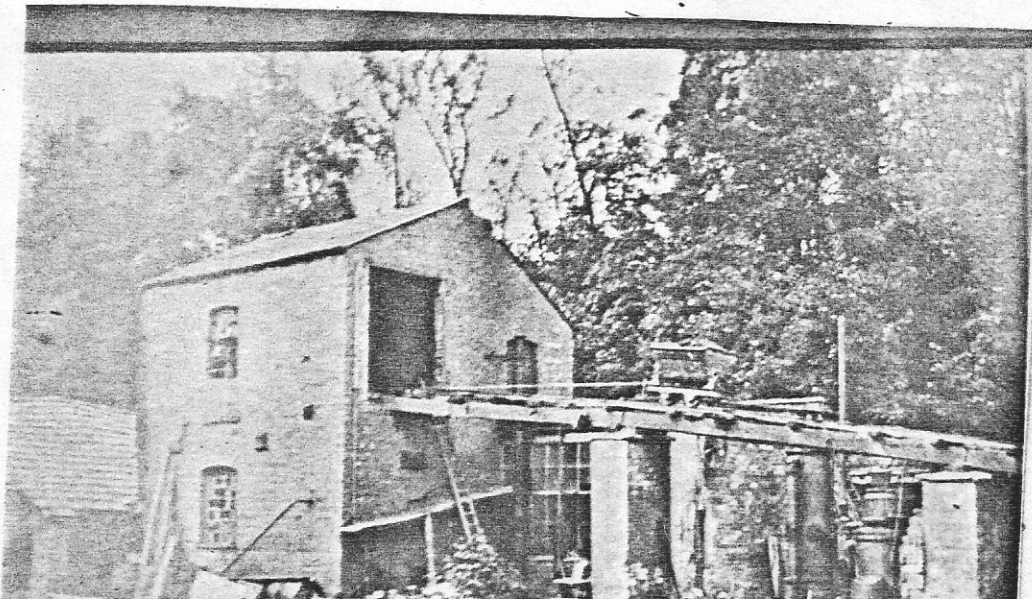


Fig. 3
Mill house

APPENDIX 'D'

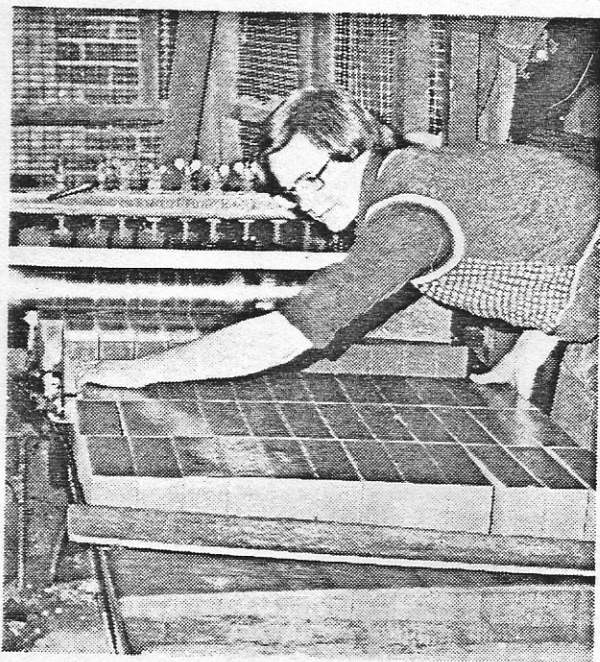


Fig. 1

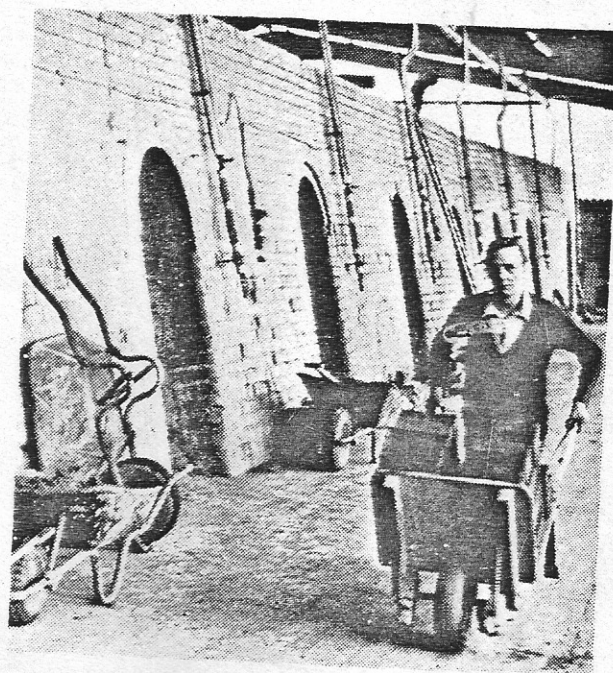


Fig. 3

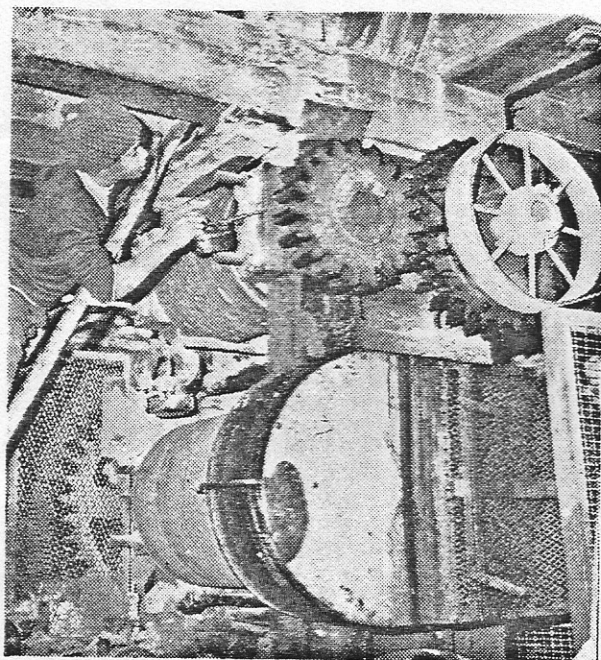


Fig. 2

