

A REPORT
on the
ARCHAEOLOGICAL RECORDING
of the
CORN MILL, BARNOLDSWICK

In two parts

Part 1

The text and plates

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1.0 INTRODUCTION

The Corn Mill is sited to the north of Barnoldswick on Butts Beck, and is centred at SD 878471 (pl. 1 & 2; fig.1). A mill lodge, now filled in, ran south to Gisburn Road and was fed by means of a goit from the beck. A row of houses known as Corn Mill Cottages is positioned to the side of the mill with a stable being sited at the north end. The roads around the mill and cottages are unmade, and vehicular access is gained from West Close road.

This report looks into the background history of the mill and relies considerably on unpublished local sources. The study of the building looks at its phased construction and attempts to identify features representative of its former use. A measured survey of the building was undertaken, and drawings also illustrate the phasing of the building, together with its internal layout during the latter part of its use as a mill.

The building is at present occupied by West Craven Electrical Services and is used as a workshop for motor repairs.

2.0 METHODOLOGY

A measured survey of the second and third floors, together with full elevations and a section through the two upper floors was undertaken by the Fowler Partnership, architects of Blackburn. The remainder of the building was measured by STSP, architecture of Burnley. With digital information supplied by the Fowler Partnership, STSP have prepared, using computerised techniques, a full set of plans, sections and elevations of the existing building. In addition, drawings showing phasing and the internal layout in the 1950's have been prepared. The survey was undertaken using a 30m tape and a 2m measuring staff.

Black and white and colour photographs were taken both internally and externally.

SI units of measure are used as the recording standard, and the metre and millimetre are used exclusively in accordance with BS 1192: Part 1: 1984. The centimetre is not used so as to avoid confusion.

The building was occupied as well as undergoing repairs and alterations at the time of the survey. The second floor was used largely for storage. It was not possible to examine in detail all parts of the building. In particular, the inspection of the former boiler house was limited to its northern end.

The Corn Mill is orientated with its north elevation facing approximately north-north-east. In order to simplify the text the four cardinal points have been used to refer to the main elevations and therefore the north-north-east elevation is referred to as the north elevation, with the other elevations being referred to in a similar manner.

3.0 OUTLINE HISTORY OF THE SITE

Prior to the changes brought about by the Industrial Revolution and the introduction of textile manufacturing in the district, Barnoldswick was self-sufficient. Most riverside land would have been farmed and there is plenty of indication, viz. ridge and furrow, of the growing of grain in previous centuries on the lower ground, in spite of the unsatisfactory natural conditions (Long 1969, 51). Much of the land

around the town is below 500 feet (152m) above sea level. Corn mills are found at much higher altitudes, examples at Malham and Gunnerside in Swaledale both being 700 feet (213m) above sea level (ibid. 51). These conditions were experienced by the Cistercian monks, who founded a monastery at Barnoldswick in 1147. After six years they abandoned their lands, one of the reasons being stated that the climate did not allow their crops to ripen (Whittaker 1812, 61). It is probable that the monks erected a corn mill close to the monastic site during this time as they were committed to self-sufficiency. Whittaker (ibid., 61) records that the channel for the mill-stream was still very conspicuous in the north-east of the site.

The first possible mention of the mill refers to a court case in 1591 between Tempest of Bracewell and Bannister who owned Coates Hall. This may have been when the mill was built because Tempest owned a corn mill at Bracewell, and he would see another mill at Barnoldswick as competition. However, the population was rising rapidly at this time and there is little doubt that the Bracewell mill was unable to cope with the demand.

Bannister must have won this case, as on 20th December 1617 the Bagshawe Papers record that Richard Heber of Flasby and Martin Dickonson and Christopher Ellis of Barnoldswick relinquished their rights in the mill, and returned them to Richard Bannister of Coates.

The Corn Mill was built on lands forming the Coates estate, which at one time belonged to Salley Abbey. The estate passed to the Drake family soon after 1600 (Carthy and Lancaster 1990, 29). By 1640 the owners of the Coates Estate seem to have been Lawrence Halstead of Sonning in Berkshire and John Hartley of Coates. They sold the mill and all rights appertaining to George Halstead of Hague on 20th November 1640.

The Bagshawe family owned the estate between 1758-1883 (ibid., 29). A further record of the mill is on 20th October 1763 when an entry in the Barnoldswick Manorial Court roll records that the owners of the mill were instructed to repair a road 1000 yards long and 9 feet wide between Brogden and the mill. This would be the route along which the local inhabitants brought corn to the mill to be ground.

John Bagshawe to whom the estate passed from his brother William in 1785 lived at another property the Oaks in Castleton, Derbyshire and rarely visited Barnoldswick. As he had no agent to oversee his tenant farmers or the mill it could be that his properties fell into neglect. He died in 1791 and John Bagshawe (1758-1801) inherited the estate. In an undated rental book of early years of the nineteenth century Sir William Bagshaw is shown as being the proprietor of the mill which was let to Sam Sunderland for £14 per annum (Yorkshire Archaeological Society Archives, MD 353). The details of the entry showing the lands associated with the mill, with their areas and rentals, are set out below:

	A	R	P	£	s	d
Bowker	3	1	28	6.	17.	0
Little Ing	1	1	15	3.	7.	2
Mill field east		3	18	2.	3.	1
Mill field wet		3	4	1.	18.	9
	6	1	25	14.	6.	0
Farm house					17.	0
					15.	3.
Corn Mill with goit and outbuildings					14.	0.
					14.	0.
					£29.	3.

William Bracewell moved to Barnoldswick in 1845 and lived in Newfield Edge. Apart from owning Butts Mill, Ouzledale Mill and Wellhouse Mill, he also owned a colliery at Ingleton, together with the Corn Mill. In addition he also owned residential property in the town for his workers to live in, and had various interests outside the town, including a foundry in Burnley. His nickname was 'Owd Billycock' due to the hard hat similar to a bowler which he wore (Fozzard n.d., 40).

The 1851 census shows that Robert Waite is recorded as the corn miller and that he employed two men. It is probable that at this time he was working for the Bagshawes. William Bracewell leased the mill in the early 1850s from the Bagshawes and later purchased it in 1857. By this time a steam engine would seem to have been installed.

On the 13th March 1885 William Bracewell died leaving an estate of £18640 gross £nil net. He left considerable debts and the trustees of William Metcalfe deceased, together with the Craven Bank, put the Corn Mill up for sale by order of the Chancery Court of the County Palatine of Lancaster. The building itself was put up for sale in 1887 and the contents in 1888. A catalogue of the sale by auction of the contents on 31st May 1888 is included in the Appendix. The auctioneers were Edward Rushton and Son of Manchester.

Before he died, Bracewell had begun to construct a gas works on land adjacent to the Corn Mill to serve the town. The eventual buyer in 1890 of both the gas works and the Corn Mill following Bracewell's death was the Barnoldswick Gas and Light Company. In 1892 the gas works was sold to the Local Board and with the passing of the Barnoldswick Gas Act on 17th July 1893, it became a municipal undertaking.

Moreland Hoyle came to Barnoldswick around 1880 from Whitley Bridge to find work due to a slump in trade. He began working for William Bracewell at the Corn Mill. The 1881 census shows Moreland Hoyle, aged 39, living in Wellhouse Cottages with his wife and six children; these cottages were owned by Bracewell. The 1891 census shows him living in Corn Mill Cottages. Moreland Hoyle took a lease on the Corn Mill from the new owner. Presumably on the death of Bracewell, the connection with Ingleton colliery was severed and a decision was taken to revert to water power. A water turbine was installed in 1896 to supply electric power. Moreland Hoyle's son Crampton subsequently took over the business, now called C. Hoyle and Son, after the death of Moreland Hoyle in 1905. In 1916 a gas suction plant was installed when the water lease ran out.

James Moreland Hoyle the subsequent owner of the business and a grandson of Moreland Hoyle, subsequently took his son Maurice Crampton Hoyle into partnership. In 1939 full electrification of the mill was carried out to provide power for the machinery. The mill closed down about 1963, and a photograph of that date shows the mill chimney being demolished. The Corn Mill cottages were sold off in 1974.

4.0 THE CORN MILL (figs. 2, 3, 5, 6, 7, 8, 9, 10)

The Corn Mill comprises a four-storey block, with a two-storey block with under floor space built onto the south elevation. A single-storey extension in two bays was built onto the east. The ground slopes from south to north with the ground level being equal to the ground level at the north, and the second floor level being equal to ground level at the south. A loading bay is formed at this higher level.

The building is divided into six bays with the four northerly bays being built onto an earlier structure forming the southerly two. The original wheel housing rises up from the ground floor through the first floor. Two rows of cast iron columns support the structure at second floor level, the number of columns being reduced on the lower floor due to the wheel housing. The roof is supported by five king post trusses, with purlins to each side supporting lathes and blue slate. A half truss supports the single storey extension to the east. The roof to the southern block is supported on purlins.

The external walls are constructed of roughly coursed stonework with evidence of earlier rubble walling to the west wall on the lower part of the southernmost bays and possibly part of the southern wall. The walling at ground floor level to the extension to the east is of better coursed stonework built of larger stones. The reveals to the window openings are rounded internally. The extension to the south is built of rubble walling with the upper section built of brickwork

The former stone chimney to the boiler house of the mill was sited some thirty metres to the south. The chimney was square and is said to have stood to a height of approximately 110 feet (33m). The chimney was taken down in 1963, having been redundant for at least seventy years. A former owner, Mr M. Hoyle considered in 1951 that it was probably the oldest chimney in the town (Craven Herald 1951, 7). The chimney was connected to the former boiler house by a brick flue, which ran under the unmade road between the mill and the chimney.

At the time of demolition, as the chimney was sited close to many terraced dwellings, it had to be carefully taken down by hand. Only a single large exposed stone presently marks the site.

4.1 EXTERIOR

Elevations

North Elevation (pl. 1; fig. 7)

The four floors of the main building are expressed on the elevation by means of window and door openings below a single gable wall. At ground floor level the opening for arched loading doors measures 2.620m wide by 3.020m high with the springing for the arch set at 1.800m (pl. 3). The dressed voussoirs and quoins to the opening have chamfered edges. Two windows were formed to the east side of the doorway, each of six panes. The present easternmost window is now a modern doorway.

The two single-storey bays to the east are later additions in coursed masonry, built when steam power was installed in the building. The bay nearest the four-storey block housed the steam engine and the adjacent bay housed the boiler. The fronts to the single-storey sections are later additions with metal shutter doors. These conceal the original frontage. The first bay was originally built with a full height narrow window running from close to ground level. The upper part of this window is still extant above the modern front and is reflected in the rear elevation by a matching window with a lower sill height (pl. 4). A modern concrete platform has been built up against the south elevation at some height above the original ground level.

The upper floors are similar, with a loading door central above the ground floor arched loading door. To the east side of these openings are three six-pane windows to each floor. A further loading door was later cut on the first floor in the window opening adjacent to the loading door; this has now been closed up. It is probable that the timber doors to the loading doors are original as, being on the north elevation, they will have had least exposure to the elements (pl. 5).

East Elevation (pl. 6; fig. 7)

The ground floor elevation to the single-storey bays is faced with coursed stonework; this formed an extension to the original four-storey building. There is a double break towards the top of the elevation, alongside the access road, presumably to support the concrete slab at loading bay level; this is a recent addition. To the south of this is the retaining wall to the access road to the loading bay. The coping to this wall includes much reused stonework. The line of this section of stone wall is modern as it now encloses an area used to house some outbuildings belonging to Corn Mill cottages.

The fenestration to the upper floors mirrors the later extension to the north. Four regularly spaced six-pane windows are positioned in the building reflecting the later four bays with one irregularly spaced window to each of the floors in the southerly offset position. This offset reflects the east wall of an earlier phase of the building. The size of the quoins diminishes from just above the head height of the second floor windows (pl. 7). This probably reflects an earlier phase of the building best seen on the west elevation.

South Elevation (pl. 2 & 8; fig. 8)

The gable wall is constructed of coursed stonework; this appears to have been built on earlier masonry at second floor level seen below an earlier window head to a blocked up window to the side of the loading door. The height to the underside of the lintel is 1.760m above ground level (pl. 9). The present loading doors have been widened, the extant threshold shows that the earlier width was 1.620m. One window and two blocked up openings are positioned at third floor level. In the southern retaining wall to the loading bay is part of a stone lintel 1.880m long by 450mm high by 280mm deep. The vertical face of the lintel had a curved surface over the opening (pl. 10). This lintel could have been built into the north wall of an early phase of the building. The present external loading area has been raised by approximately 1m in recent times.

Extension to South Elevation

The two-storey southerly extension has an enlarged door in its east elevation. The upper portion of the first floor is brick built with black mortar, above stone built walls, which walls extend to ground level. There is an indication that the top of the stonework rises at an angle of approximately 45 degrees about a metre from the south wall of the four-storey block (pl. 9). On the west elevation there is a matching six-pane window at first floor level, with a smaller window at second floor level. Two vents at low level from the chaff store in the underfloor space are positioned close to the four-storey block.

West Elevation (pl. 11; fig. 8)

The west elevation runs alongside Butts Beck. The full height of the building can be seen and the fenestration to the four northerly bays is expressed in four six-pane

windows to each floor, with the exception of the ground floor where they have been blocked. A row of quoins can be seen between the fourth and fifth vertical rows of windows running from ground level to midway up the second floor line of windows (pl. 12). This break matched the break in the wall to east elevation represented as an offset. A stepped horizontal break in the masonry to the west elevation can be seen at this level, dropping to below the sill of the southernmost window on the second floor. This is matched by a slight offset in the return wall to the two-storey extension (pl. 13 & 14). The earlier masonry is of uncoursed rubble walling and differs from the later coursed masonry. The quoins to the south-west corner of the four storey block differ above and below this point, as does the masonry up to the line of quoins between the fourth and fifth windows indicating an earlier phase of the building.

At first floor level part of a small blocked up window is evident alongside the lower part of the southernmost window. This comprises sill, head and single piece jamb. At the break between the main block and the southernmost block, the left-hand chamfered jamb of a doorway is evident. The right hand jamb of this doorway in the former external wall can be seen internally at first floor level. A further phase in the building can be identified as there is another slight offset seen just above the door jamb (pl. 14). The quoins at this point differ from those below the offset suggesting that the building was raised in height.

4.2 INTERIOR

Ground Floor (fig. 3, 4)

The ground floor has undergone much alteration and this is reflected in the fabric of the building.

Evidence of an earlier first floor level can be seen in the south-west corner of the present main workshop area. At high level the threshold of a door opening can be seen 2.230m above the present floor level (pl. 15; fig. 9). The right hand side of this doorway can be seen on the first floor, with the left-hand jamb being seen externally. The first floor level has been raised by some 880mm, above the earlier first floor level. The bearing for this earlier first floor can be seen as an offset in the west external wall. Evidence of the line of a former external wall butting into the present external west wall can be seen at the fourth column line from the south and is represented by uneven masonry (fig. 3, 5). The line of this wall coincides with a break in the eastern workshop wall, and quoins for a return can be seen in the roof space of an internal stone (pl. 16). This wall line represented the external north wall of an earlier phase. A small opening 700mm high at low level in the southernmost bay could be a former window opening, with sill level 700mm above present floor level.

The arrangement of columns on the ground floor is similar to that of the upper floors, with larger columns being built in the southernmost two bays. The columns to these bays differ from those to the northernmost bays in that the bearing plate on top of the column is more substantial, and fixing lugs have been formed at the end of terminal brackets at the top of the columns (pl. 29, 30; fig 11). The inner wall to the water wheel housing is on the line of the easternmost row of columns on the second floor, and these are omitted on the ground and first floors. The differing design of the columns is unlikely to reflect the phasing of the building as their positioning does not reflect the earlier phasing. One possible explanation is that the larger columns were at the rear of the building as this area was designed to take the greater floor

loading. The columns to the first and second floors are slenderer than those on the ground floor.

The ramp from ground level into the workshop is modern. The difference in level between ground level and ground floor level at the north loading door of 550mm, could reflect a raising of the present ground floor level. A series of blocked up openings with substantial stonework around them to the east wall of the workshop reflect the position of the main bearing of the water wheel and the drives off it. The stonework to the opening nearest the south wall is known to have been soaked in oil some fifty years ago.

The cast iron mill frames run north-south and number eight (pl. 17; fig. 4, 11). Each millstone housing was supported mid-way by a cast iron column. There is no evidence of any drive shafts to the millstones. It is significant that the stone floor directly under the millstone is slightly raised and more uneven than elsewhere (pl. 18). Several of the millstones are still in position. Many of the columns supporting the frame have been removed, and only the fourth and eighth columns are now extant. Remains of a cast flange is evident to the northernmost column.

Two wooden chutes, 230mm square, empty from the underfloor void below the two storey block, into the workshop (pl. 19). These came from the chaff store in use in the 1950's. A blocked up window opening can be seen in the rear wall with its sill 2.040m above floor level. The opening is c. 1.120m wide and 1.700m from the south-east corner. The concrete block partition walls were extant in the 1950's, with the exception of the present store to the side of the loading area. A well formed opening in dressed stone (pl. 20) passes from the present office into the space behind. Several cut outs have been made in the stone surround.

A horizontal cast iron frame is positioned at ceiling level in the northernmost bay of the present office, corresponding with a timber frame directly above at first floor ceiling height, and now removed (pl. 21; fig. 4, 10). This feature is bolted through the external wall where fixings are still extant.

The present entrance into the office was formerly a window, the sill wall having been cut out. A blocked up opening opposite the present doorway gave access into the water wheel housing.

The water wheel housing is situated in the centre of the building and is c. 4.800m long by 2.500m wide (this includes the recent partial lining out with brickwork). Two walls have recently been lined with brickwork. The bearing for the wheel is evident and is seen as a blocked-up opening with substantial stonework surrounding it (pl. 22). There are indications of the wheel itself seen as a curved groove in the stone lintel over. The estimated size of the wheel is c. 4.5m diameter. The corresponding openings in the other side of the wall can clearly be seen, however, the other bearing is not visible due to recent brickwork. To the north of the wheel housing is a narrow space c. 7m long by 1.200m wide. This space shows evidence of mechanical activity with many cut outs for machinery being formed. There is an indication of oil staining to some of the stonework. A well-formed opening on the opposing wall matches that seen in the office. A machine axle bearing is extant at low level adjacent to the doorway into the workshop (pl. 23; fig. 11). This area was probably a machinery area used in connection with the steam engine and the later gas induction engine. It is probable that this area was open up to first floor ceiling level, and used as a vertical duct for drive belts or shafting at the time. There is no indication of any former ground floor levels or the outfall from the water wheel.

The area to the east of this is on two levels and was formerly the engine house. Part of the inner area is an enclosed store with a false ceiling over. The lower area has been extended to the north by the removal of the external wall, and the fitting of a metal shutter door. The slated roof over is supported by a half truss. Above the extended area to the front, where the whole of the external wall has been removed, can be seen the upper part of a round headed window. This window used to extend to almost ground level. The upper portion of a matching window in the south elevation can be seen from the concrete platform abutting the southern wall of this area. A large part of this window can also be seen within the ceiling void over the internal store (pl. 16). Also in this void can be seen metal bearers and openings at high level into the adjoining spaces. Blocked up openings can be seen in the wall to the lower area backing on to the area adjacent to the water wheel housing (pl. 24).

The adjoining space to the east, formerly the boiler house, is roofed by a half truss and continues the roofline. This area has also been extended to the north, although originally there were large doors to the former opening. Examination of this space was difficult due to it being full of vehicles and equipment. Evidence of a flue was seen at the southern end at high level, which extended in the form of a duct to the chimney adjacent to the lodge. A finely formed opening at high level, midway down the length of the internal wall, leads through to the adjoining area and could have been for the steam pipe leading from the boiler to the engine (pl. 25).

First Floor (fig. 5)

The rear portion of the floor, made up of the lower floor to the southern block, has been divided up to form a self-contained flat. The right-hand part of a doorway is extant in the original external wall between the two-storey-extension and the four-storey block (pl. 26). The doorway is formed with rebated and chamfered jambs facing outwards to the south. Metal gudgeons are built into the external face, and a latch fitting can be seen on the inside. There is evidence that the doorway has been raised by a course of jamb stones of 700mm. The original external doorway was probably composed of five stones to each jamb. This doorway is also described above on the west elevation.

Heavy masonry divides the former water wheel housing from the remaining open floor area. The water wheel housing measures 5.350 long by c. 2.650m wide. A wall 675mm thick, with a very large stone lintel over measuring 675mm wide by 380mm deep, divides the wheel housing from an adjoining area 6.150m by 2.050m overall. This was originally on the line of the external wall to an early phase of the building. The water entry point from the leat can be seen in the southern wall, made up of a channel c. 1m wide and c. 1.200m high with a brick arch over, with its lowest point c. 2.900m above floor level (pl. 27). From the position of the entry point of the leat the water wheel would have been centred c. 700mm from the inner wall. The stone flagged floor over is supported on slender cast iron shaped beams set at c. 900mm centres. These measure 190mm deep at their bearing points and 220mm in the centre (pl. 28; fig. 10).

The upper section of the mill stone frame has been covered with concrete. However, there is the upper surface of a mill stone exposed (pl. 31). This stone measures approximately 1m in diameter.

There is evidence of a straight joint down to the floor level of a blocked up opening adjacent to the new partition against the west external wall. A timber beam is built into the west wall adjacent to the north west corner, presumably to strengthen the external corner. This feature is seen elsewhere.

Two shaped cast iron brackets (pl. 32) are positioned in the second and third bays from the north, over the edge of the cast iron millstone frame, on the line of the present stairwell. The purpose of these is not known. Evidence of fixings 1m apart can be seen either side of columns to the third bay from the north; these brackets supported a hopper in use in the 1950's. Evidence of two substantial timber beams (now removed) can be seen in the most northerly bay. The beams were built into the external wall and housed in a main cross beam frame. These timbers are over the cast iron frame at ground floor ceiling level, and probably formed part of a hoist. A cast iron bearing housing is built into the external wall, 2.330m above floor level, adjacent to one of the wall bearing points. A further cast iron bearing is built into the east wall in the northernmost bay, 2.600m above floor level (pl. 33).

Second Floor (fig. 6)

The floor space is undivided and is constructed with six unequal bays. There are two cast iron columns on each bay line, although the easternmost column to the southernmost bay is missing. The northernmost two bays are slightly under 3.000m wide whilst the third, fourth and fifth bays measuring from south are c. 2.500m wide and the northernmost bay is the same width as the southernmost two. This spacing is reflected throughout the building. It is clear that the width of the two southernmost bays is dictated by the projecting eastern offset, reflecting an earlier phase of the building. The columns to the southernmost two bays differ from those to the three northernmost bays in that they have lugs at the end of the bearing plate at the top of the column as seen on the lower floors. The size of the columns is similar to those on the first floor. A timber beam is built into the east wall adjacent to the north-east corner at approximately floor level. A slight break in the level of the third floor can be seen on the line of the second column line from the south. This could be brought about by this column line being founded on the external wall of an earlier phase of the building.

The external loading door to the south elevation has been reduced in size by 410mm. Evidence of this can be seen on the threshold. Evidence of sealed up openings can be seen on the south wall. Slightly to the west of the loading door, a lintel can be seen c. 1.730m above floor level to the underside to an opening c. 740mm wide. In the mid-position of the wall, lengths of lintels can be identified c. 1.830m above floor level to the underside. The small opening in the wall adjacent to the staircase could be a former doorway with its head 1.350m above floor level. The lintel to this opening can be seen in the adjacent two-storey block.

The timber floors could only be seen in a few areas and some positions of openings in the floor were recorded. The stone flagged floor adjacent to the loading door is formed over the former water wheel housing. Some access traps have been formed in timber.

Two purpose-made cast iron brackets, with two fixings support the end of the timber beam in the southernmost bay over window openings. The brackets 2m by 340mm by 340mm (pl. 34) were probably made locally. A cast iron bearing is positioned in the south wall slightly to the west of the loading doors.

Extension to South Elevation

A two-storey extension is attached to the south side of the second floor and is separately entered at its upper level. The upper floor is presently used as a joiner's workshop. The lower floor is entered off the first floor and has been described above. An underfloor area is accessible from the ground floor workshop.

The upper part of the building is constructed of external brickwork built off stone dwarf walls 740mm high above floor level, with a slated roof on spars and purlins. The brickwork is bedded in black mortar, and raised the building in height by another floor. The walling below this to ground level is in rubble masonry and pre-dates it. The later addition can be seen to post-date the erection of the four-storey block.

The south wall of the mill is exposed within the building. Evidence of a doorway can be seen close to the west external wall. The underside of the lintel is 1.660m above floor level. This is in the same position but higher than the height of the opening seen internally. The lintel to the window seen alongside the loading doors to the second floor extends for 1m into the joiner's shop. A possible section of window can be seen at high level within the building.

Third Floor (fig. 6)

The floor space is undivided and divided into six bays as the second floor. A king post truss is placed on the line of each bay. A steel beam supports the western end of the northernmost truss where the external wall is offset. Evidence of two built-up openings can be seen in the southern external wall and one in the southern end of the east external wall.

Timber beams have been built into the external wall just above floor level to the north east corner. These beams extend from the corner to the second window on the north and east elevations. A beam is also built into the eastern offset section of walling in its mid section. A further beam is built into the southern end of the western wall, extending the length of the first bay.

Many trap doors and openings in the floor have been seen and recorded. In addition, the outline of two machines can be identified in the west of the northernmost bay.

The roof trusses are substantial and are based on a king post with a post to each side, together with struts (fig. 9). The lower edge of the tie beam is chamfered. The trusses are numbered from the north wall. There appears to have been an error in the fixing of some of the numbered components to the second and third trusses. A brace in truss no. 2 refers to truss no. 3, and the tie and a post to truss no. 3 are positioned on no. 2.

A length of shafting and a drive wheel are positioned in the second bay from the north. A pulley is positioned in the same bay over a trap door, with a smaller pulley alongside (pl. 35). These fixings operated the lifting gear over the trap door in the building and are further described in section 6.0. A plate on the floor close to this anchors a hook below the floor level on the second floor.

There is evidence of a loading beam above the loading door to the north elevation. An opening has been formed above the doorway, but this is now built up. On the line of the opening a block is placed on the northernmost truss as if to secure the end of a loading beam.

4.3 THE MILL LODGE

Dam Head Bridge on Gisburn Road at the end of the enlarged lodge existed in 1796 (Warner 1934, 84). Prior to the mid-nineteenth century, the small round mill lodge was served by a goit extending from Gisburn Road to within some thirty yards of it

where it then widened out (Atkinson 1917, 56). Some time before 1850 a new dam was constructed, enlarging the dam up to Gisburn Road with a goit extending up Butts Beck as far as the line of East View. The enlarged dam is shown on the 1849 OS map.

At this time the Corn Mill used steam power to drive the machinery, so it is probable that the additional water was required to serve the adjacent Wellhouse Mill, also owned by William Bracewell and built in 1854. There is evidence of a 150mm diameter pipe running from the lodge to Wellhouse Mill. The use of water power resumed in 1888 when a new wheel was installed, but this was discontinued in 1939 when the water lease ran out and Council by-laws prevented its continued use (Craven Herald 1951, 7). After that the Corn Mill had no use of the water in the lodge and the small circular lodge was finally filled in during the mid-1950's. The extended lodge had been filled in sometime earlier.

The control of the water sources in the town was very important for the cotton and other industries and it would seem that William Bracewell used this fact to put his cousins out of business at Old Coates Mill. This business was run by the Bracewell Brothers, who relied on the ample water supply of Butts Beck to serve the mill. When William Bracewell enlarged the lodge he not only put a supply in for Wellhouse Mill but put in a pipe that took water from the lodge to a point below Old Coates Mill. As he could control water into the lodge he could effectively deprive that mill of water. His actions would appear to have been successful as the mill closed down around 1860.

There is evidence of a built-up opening in the north wall surrounding the former lodge (pl. 36). This probably gave access to the sluice to the mill.

4.4 CORN MILL COTTAGES (pl. 2, 36 & 37)

The cottages are shown on the 1839 OS map. The 1853 map is much clearer and shows the cottages with a building, presumably the stable, at their northern end. No sub-division of the buildings is shown, but a small enclosed area is shown to the west with the land to the east divided into two parts.

The access road is shown running down the side of the mill lodge and between the cottage and the mill lodge, as at present. A wall or change in level was formed between the north of the mill lodge to a point on the Corn Mill buildings, approximately on the line of the south gable wall of the cottages.

The 1896 OS map shows the row of cottages divided into three dwellings, with a probable stable at the northern end. The land to the east is sub-divided, with two dwellings to the south and one to the north of the building. A similar sub-division appertained in 1909. Access from the lodge to the front of the mill is as before, but the road would appear to have been narrowed to allow access to the south of the mill.

The present terrace is sub-divided into two dwellings, the larger one to the south being approximately twice the size of the other. The property is modern in appearance, and was probably constructed in the second decade of the twentieth century. The two dwellings are three storeys high, with the rear west elevation being accessible from ground level, and the front east elevation being entered at first floor level. The external walls are built of coursed stonework with dressed quoins and a slated roof.

4.5 THE STABLE (pl. 39 & 40)

The stable has undergone much alteration in recent years. The internal walls have been removed and a new first floor installed. The roof truss has been strengthened and the roof covering renewed. The ground floor has been covered in concrete. At the time of the inspection the building was being used as a store, and examination of the external walls from inside was very difficult. There is evidence of probable early masonry to the south-east internal corner, but close inspection was not possible.

The stable is constructed mainly of rubble masonry with quoins and a blue slated roof. There is some evidence that the north gable wall has been extended or rebuilt at its upper level as the stonework to the upper courses is of coursed stonework (pl. 41). The south gable wall seen internally is of uncoursed masonry and built with black mortar. A new enlarged external door has been formed at the north end of the ground floor where there was the doorway into a double stable. The outline of several openings in the east elevation can be seen externally.

A building, almost certainly the present stable is shown on the 1894 OS map. This building incorporates a small square unit in the north-west corner, approximating to the size of the former double stable. This small unit is shown on the 1853 and probably the 1839 OS map. It would be logical to think that the present stable was enlarged at the same time that the four-storey block was built, incorporating the earlier one

5.0 DISCUSSION

It is probable that there has been a corn mill on the present site for considerably longer than the present extant remains. The Corn Mill is sited a considerable distance below the oldest part of Barnoldswick, around Townhead, and there are many sites closer to this centre of population where the mill could have been sited. The reason for its siting would appear to be that it was on land belonging to the Coates estate, and that its initial purpose was to serve the estate.

From the extant remains, the earliest recognisable phase (fig. 15,1) is a two-storey building with its long axis running east-west. The building would have measured c. 12.000m by 6.500m, with the wheelhouse probably being sited at the eastern end of the building. The first floor doorway, with the chamfered jamb, would suggest a seventeenth century date. The door is positioned very close to the south-west corner of the building, and it is not possible to ascertain the planning arrangements to the south of the building at that time. From the existing levels at ground floor level, it is clear that the present dimension of 2.230m between the threshold of this door and present floor level would be inadequate. It is likely that ground floor level would have been set at roughly the present ground level, which would have given a floor to threshold height of c. 2.780m, which could have been effectively reduced by c. 300mm to take into account the floor thickness and supporting beams. It is probable that the ground floor level was raised at a later date due to the occurrence of flooding.

Some fenestration of this phase can be seen in the small window on the ground floor in the west wall of the workshop, together with a blocked up window at first floor level to the same elevation close to the south-east corner. A window head in the south wall adjacent to the loading doors on the second floor, probably relates to

this phase, as do the window heads seen adjacent to the internal face of this external wall.

At some later date the building was raised by a floor (fig. 15, 2), as can be seen in the offset on the west elevation and in the difference in the quoins adjacent to the two-storey extension. These quoins are somewhat larger below the present first floor window head level. At the same time or perhaps later the extension to the south was added, probably made up of two floor levels matching the first and second floors of the three-storey building.

The subsequent phase (fig. 15, 3) saw the building of the present four-storey block with the subsequent addition of the boiler house and engine room (fig. 15, 4). At some time later the boiler house and engine room were extended to the north (fig. 15, 5) and the extension to the south was raised by another storey (fig. 15, 6). It is not possible to say which of phases 5 and 6 was the earliest.

It is not possible to date the present four-storey mill (phase 3) from documentary records, but economic factors might give an indication. John Darlington draws attention to the depopulation of the local rural area, and the rise in the population of Barnoldswick during the 19th century (Darlington 2003, 80-3). He points out that the township of Stoke had a listed population of 185 in 1811, which, had fallen to 176 by 1821. Barnoldswick by contrast, had increased in size from 892 inhabitants in 1811 to 1334 in 1821. Farming and weaving were seen to sustain the local economy. The Leeds Liverpool canal was completed by 1811, the length at Greenber Field being the last section to be completed. By 1838 there were five small water powered cotton mills in Barnoldswick.

From the size of the roof timbers, it is likely that the roof was designed to take the lighter welsh slate rather than the traditional heavy stone slates. The availability of welsh slate only became available with the introduction of the trade of heavy materials on the canals. The enlarged mill is shown on the 1849 OS map with what appears to be the engine shed and boiler house. These last two features do not seem to be present on the 1839 map. It is suggested that the mill was extended to its four-storey form (phase 3) during the second or possibly the third decade of the 19th century, as a result of the increasing population. Although it was initially designed as a watermill it is probable that the steam engine with the subsequent extension (phase 4) was added some time between 1839 and 1849.

The size of the mill, with its 8 millstones in the cast iron frame, is considerable and reflects both its importance and the growing population of the mid 19th century. The sale of the mill in 1887 and the contents in 1888 were brought about by the death of William (Billycock) Bracewell, and pressure from creditors to pay his debts. There is no evidence that the mill was unprofitable.

From the present extant features within the building, it is not possible to establish the position of the fixtures and fittings set out in the sale particulars of 1888. It is perhaps significant that the heading of these particulars is a "Catalogue of New Roller Milling Machinery" suggesting that the machinery had recently been installed. However, it is clear that the mill ran as steam power at that time, as the contents of the engine house and boiler house are described.

It is not known if Hoyle acquired some or all of the machinery, which was for auction, or if he leased the mill and acquired new machinery. Neither is it known when the Corn Mill started producing animal feeds as opposed to milling corn. It is significant that the railway was constructed through to Barnoldswick by 1871. This could have

resulted in the increased population, which in 1879 was 3578 people living in 741 dwellings (Byrne 1980, 10). The railway would have enabled basic foodstuffs to be delivered quickly and cheaply to the town. The Co-operative Society, which was established in the town in 1907, obtained its flour from outside the district (Carthy, D. and Lancaster M., n. d.). It is probable that around this time it became uneconomic to mill flour, and animal feeds became the mainstay of its business.

6.0 THE CORN MILL IN THE 1950s (fig. 12, 13, 14)

Harry Smith, as a young man aged 16, worked in the Corn Mill in 1956, and for many years previously had been familiar with the building. Below is his account of the mill at the time.

The Corn Mill was transferred in 1948 by James Moreland Hoyle of 62 Skipton Road, Barnoldswick, to himself and his son and business partner, Maurice Crampton Hoyle and run as an animal foodstuffs business. The conveyance dated 7th January included "plot of land situate near to Cornmill Terrace and containing 342 yards Together with premises known as the Barnoldswick Cornmill with the boiler house, engine house, chimney, two dwelling houses, piggeries, stable and other building erected on the first mentioned plot of land". The partnership was dissolved in 1962.

Animal feed was bought in and re-sold, but a large quantity was prepared and bagged on the premises. The workforce of the time numbered 9, and working hours were 8.00 am to 6.00 p.m., Monday to Friday, and 7.30 am to 1.00 p.m. on Saturday. Often it was mid-afternoon before work finished for the drivers on a Saturday, as Hoyle would send them on a delivery round that was impossible to complete by the finishing time. There were no formal breaks for meals or other refreshments; these were taken when opportunities occurred. If a wagon arrived with a delivery during a meal break, its unloading became a priority. Holidays were taken during the July wakes fortnight, with a day being granted for both Christmas and Easter; Boxing day was worked. Harry's weekly wage was £5. 2. 6d when he began working there.

The main mill building was sited alongside Butts Beck, and during periods of heavy rainfall the land to the north regularly flooded up to a depth of approximately 1m. The surrounding access roads were unmade, and on many occasions disputes arose with the neighbours over blocked or restricted access, as deliveries were regularly being made to the mill. Harry Smith remembers that many times when he arrived for work there were 5-6 vehicles waiting to be unloaded, and this was done by the morning break time. However, it must be recalled that wagons then were smaller than those of today.

Two large cast iron pillars were positioned on the access road to the mill from West Close Road. On the main road side there was a pit c. 4' 0" (1.200m) wide by 8' 0" (2.430m). In this were two valves connected to the gasometer in the yards of the gas works, one sited to the east across the beck and the other within the main works. A wooden bridge crossed the beck where the present concrete bridge is now sited. The brick building on the other side of the beck was the Barnoldswick CWS dairy and slaughterhouse.

The strip of land to the west of the mill between the building and the beck was used as a gentlemen's toilet. Motor tyres were often washed down the beck and James Hoyle, anxious to save money, would send his junior workers into the beck to

retrieve these and use them on his wagons. The building was frequented by a large number of rats, which James Hoyle shot with a shotgun at times when he saw them by the water. He would then throw them into the beck. A wooden sluice gate was sited on the beck on the southern line of the lodge. In times of drought the sluice was closed and water pumped up to the lodge when the water wheel was in use. The oats husk blower bag discharged onto the strip of land by the beck, from the fourth window from the north on the third floor. Some seed was often in this and oats grew on the beck bank. The contents of the discharge were a strong irritant resultant on the crushing of the oats.

To the north of the mill, up against the retaining wall to the land formerly owned by the Barnoldswick Gas and Light Company Limited, was a garage alongside the road leading to West Close. In the garage James Moreland Hoyle kept his Austin motor car. There was also a hand operated petrol pump to supply the Company's 3-4 wagons. These wagons delivered the animal feed to the customers.

To the side of this were three stone piggeries. In the first pen pigs were kept which were fed on spoil from the wagons. In the centre pen straw was kept and in the right hand one some poultry was reared. These were not fed directly but had to rely on spilt feed. At the end of the return wall was a muck midden. At one time Maurice Hoyle decided to grow mushrooms in the piggeries for which his father demanded a rental. On asking his son for a few of the mushrooms he received them, but was then asked for payment!

The stable is positioned at the northern end of Corn Mill cottages. The present large sliding door was formerly a stable door leading into a double stable. The right hand door led into a stable for four horses with their heads facing towards the cottage. A hayloft was on the first floor, and the feed for the horses was dropped through the floor into their feeders. The floor to this stable was made up of fine river cobbles. The horses were not well looked after and some were vicious.

In 1956 the stables were used as a peat moss store. The peat moss came from Swinefleet near Doncaster in 5 ton loads, and each bale weighed up to 2¼ cwt (114kg). The peat came stacked four rows high on the wagon and the top two rows went into the hay loft, with the bottom two rows being stored in the stable. Only one man carried each bale, and it was a job requiring considerable physical effort.

At this time Maggie Brown leased the cottage next to the stable. The lower ground floor was a wash house entered from the rear passage; there was no internal access to this room. The adjoining large house was built as a single dwelling and then occupied by the Jackson family.

The levels between the mill and the mill lodge have been changed in recent times. The former level, by the present loading doors was much lower so that the tailgate of a wagon equalled that of the floor of the loading area. The level of the concrete slab to the side of the loading bay has been raised from just below the top of the stone wall seen to the side of the passage between Corn Mill house.

In 1956 the mill lodge was much reduced in size from its previous extent, extending approximately to Powell Street. This was the size of the original circular lodge. The walls within the lodge were well built of stone with an applied render. There were railings on top of the surrounding wall. The lodge was drained sometime in the mid-fifties. There were two sluices leading from the lodge, traces of the first can be seen in the surrounding wall, which was in line with the waterwheel house. The second was closer to the corner and ran under the area to the side of the loading area, and

probably fed Wellhouse Mill. The mill chimney to the side of the lodge was some 110 feet (33m) high.

The two-storey building at the south was used for the storage of the best oat and best pea straw. The straw was broken open and fed down a chute to the lower floor and chopped into small lengths from one inch to minimum to make chaff. The chaff was then fed into the chaff store below, the underfloor space, and then bagged for sale or fed into the mixer on the second floor. When mixed with bran it became 'trotting feed'. This was supplied by the mill to local horse owner's such as the Dickinsons and Bannisters. It is possible that an engine was housed in this space at one time, as Harry Smith recalls much of the stonework to the walls being soaked in oil. The external doors have been enlarged in width.

The main building itself is four-storeys high with an entrance and loading area at ground level on the north elevation. The archway to this entrance was low and restricted the size of the loads on the wagons. A further loading area was on the second floor at the rear of the building, as the land rises to the rear of the building. The principle of working was that manufactured goods entered the ground floor of the building and were stored on the top floor. The manufacturing processes relied on gravity for their preparation, with the grain being passed down to machinery on the second floor, bagged and stored on the first floor and checked and loaded on vehicles for delivery on the ground floor. In 1956 all machinery was electrically powered. Gas was previously used for lighting and power, but due to an earlier dispute with the Barnoldswick Gas and Light Company Limited was subsequently disconnected.

The grain grown in the York and Selby district, comprising wheat, barley and oats, was raised by a hoist to the third floor. The grain came in sacks owned and leased to the growers by British Rail or Chisholme, Fox and Gardner. The weight could vary due to water content but varied between 2 cwt (101kg) and 2.7 cwt (137kg) for wheat. On arrival, the weight of all sacks was checked by James Hoyle.

The hoist, the shaft and drive wheel, which are still extant, extended through a series of traps in each floor to the ground floor loading bay. A small rope running vertically to the side of each trap operated a lifting beam, which tightened a belt and caused the shaft to turn. On the end of the lifting rope was a bull ring and chain which was passed around the neck of the sack. The large pulley over the trap was for the lifting rope and the small pulley for the operating rope. On occasions, if a paper sack was being lifted, the bottom would burst if it had become wet and lost its strength. Sometimes if a very heavy sack was being lifted, the belt would slip and a paste would have to be applied to provide friction. When this occurred the sack could suddenly shoot up to the pulley.

When the sacks were raised they were stacked on the floor with two rows set upright and five laid flat over the lower two rows. The whole floor was stacked like this with the height of the sacks extending about the ties to the roof truss. This would have applied an immense loading on the floor.

Four hoppers opened onto the third floor; the one closest to the staircase was for the corn splitter with that for the oats alongside and next to it the grinder to make meal. This machine could grind anything and occasionally even rubbish was fed into it. A third machine between that and the hoist was to receive oats, which were crushed to make crushed oats. A fourth on the other side of the floor was to receive mixed grain for poultry and other feed.

On the second floor were the machines themselves. The corn splitter and adjacent to it the grinder, the latter received grain from the hopper, which was ground by a wheel c. 1.500m in diameter. The oat crusher consisted of two rollers, each about 1m long by 150mm diameter. These rotated at a tremendous speed and the dust was extracted through a window towards the beck as already described. The fourth machine was a drum of large diameter c. 2.200m wide, with an archimedes screw within it. This mixed the grain by drawing it up the centre and then forcing it down the outside. The remainder of the second floor was used to store high quality prepared feed stuffs. These were bought in from firms such as Bibbys.

On the first floor the four products were drawn from the machines via a hopper c. 2m square and then bagged. They were then weighed and stacked against the walls and at the southern end of the floor. The only stock stored on this floor was that manufactured at the mill. All the bags used were second hand, and nothing was produced with the name of the company identified on any bag. Sometime later a bulk grain store of three large hoppers was formed within the former water wheel housing. Evidence of the dividing channels can be seen. This was filled by means of trap doors in the stone floor at second floor level.

The ground floor was used for loading and unloading of goods, the majority of which went to or came from the upper floors. Some goods were stacked on this floor such as grit for poultry which came from Boston, Lincolnshire, nine tons of which was stored under the staircase leading to the first floor, and milk powder in 28lb bags. The hessian sacks were stored below the old millstone frames.

The chaff store was under the two-storey block, and chaff was forced by air through two wooden vents into bays against the rear wall. Vents leading to the store can be seen in the external wall close to the junction of the main north wall.

The office was in the front of the building alongside the loading bay and had windows overlooking it. Most deliveries, both in and out, were checked by Hoyle. He would weigh incoming goods and if he found that short weight had been delivered he would ring the farmer concerned and demand compensation. More often than not the farmer was the loser. A part time book-keeper was employed called Frank Cowgill. He could add up columns of figures at a phenomenal speed, faster than any calculator and with greater accuracy.

By the standards of today, the Corn Mill was an unpleasant and dangerous place to work. James Moreland Hoyle could be a hard taskmaster. Heating was virtually non-existent and if an employee said that it was cold his answer was to 'get some bloody work done'. Work came before everything, and when a wagon arrived it had to be loaded or unloaded immediately, even if a lunch break was being taken. He had a habit of chewing small quantities of grain, a supply of which he kept in his coat pocket. Many farmers at the time were finding the going hard and some went to Hoyle for advances on their forthcoming grain sales or for loans. If advances were made they were on the basis of a much lower figure than that which would have been obtained at harvest time, which made a farmers financial position even more perilous. Often loans could not be repaid and farmland was taken to clear them. In this way James Hoyle became a landowner owning several farms.

7.0 CONCLUSION

The Corn Mill together with the mill lodge, Corn Mill cottages and the stable represent a still recognisable self-sufficient industrial unit, known to be extant in 1839. Although much altered and extended part of the mill, from the existing architectural detail, can be seen to be seventeenth century in date. However, the incomplete documentary record suggests a much earlier date. This record has not been fully researched, and it is possible that there is further documentary evidence relating to the building.

Although evidence of the working arrangements of the mill has been recorded showing its last use as an animal feed supplier and manufacturer, there is very little evidence for the internal arrangement when it was used as a flour mill.

8.0 ACKNOWLEDGEMENTS

The help of the present owners of the Corn Mill, Mr Mrs P. J. Howarth is gratefully acknowledged for allowing unlimited access at all times and the loan of papers. Both Harry Smith of Fleetwood and Stanley Graham of Barnoldswick have supplied much of the historical background of the site, and their willingness to share their memories and historical research is greatly appreciated.

The plans of the second and third floors together the elevations and upper sections are reproduced by permission of the Fowler Partnership, Architects, Blackburn.

9.0 BIBLIOGRAPHY

Atkinson, W. P., 1917, Old Barlick. (privately printed, Barnoldswick).

Byrne, S., 1980, Barnoldswick Jottings. Pendle District.

Carthy, D. and Lancaster, M. (n. d.), A Way of Life Gone By in 'White Rose' Lancashire. Settle.

Craven Herald, 28th December 1951. Skipton.

Darlington, J., Identification and Rural Desertion: 'Some Examples from 19th and 20th Century Lancashire' in M. Nevell (ed.) *From Farmer to Factory Owner: Models, Methodology and Identification*, 79-85.

Long, W. H., 1969, A Survey of the Agriculture of Yorkshire. London.

Warner, J. H., 1934, A History of Barnoldswick. Skipton.

Whittaker, T. D., 1812, History of Craven, second edition, London.

Yorkshire Archaeological Society Archives, File MD 353, Leeds.

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Pl. 1 North elevation of the Corn Mill with Corn Mill cottages on the left.



Pl. 2 The Corn Mill from the north with the former mill lodge in the foreground on the left and Corn Mill cottages in the centre.



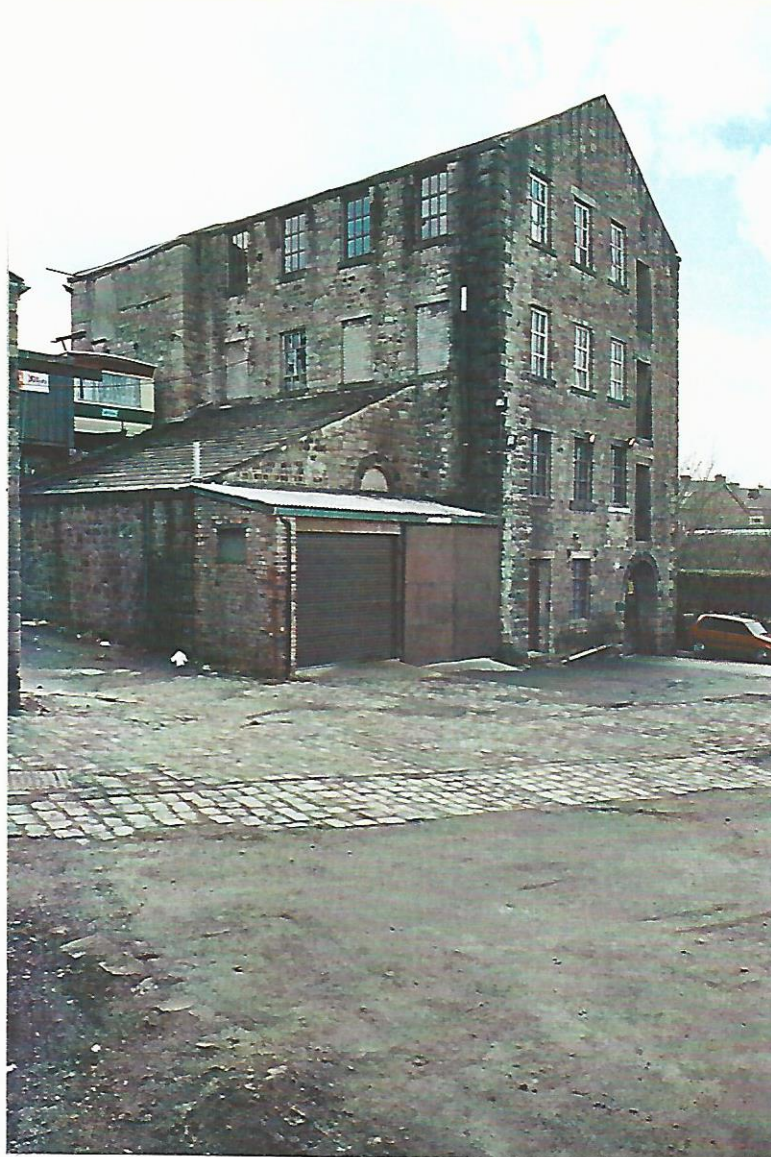
Pl. 3 North elevation, the main arched entrance to the ground floor.



Pl. 4 The upper part of the single storey section to the east showing the top of an arched widow



Pl. 5 North elevation, a typical loading door seen from the inside.



Pl. 6 East elevation.



Pl. 7 East elevation, detail of offset showing quoins to the external angle.



Pl. 8 South elevation. The edge of the dam wall to the mill lodge is shown in the foreground.



Pl. 9 Lintel to side of loading doors to second floor south elevation. Note the angle of the stone work of the two-storey block up against the four-storey block.



Pl. 10 South elevation of the loading bay, part of a lintel built in to the retaining wall.



Pl. 11 West elevation



Pl. 12 West elevation, line of quoins to former external angle.



Pl. 13 West elevation showing the junction of the four and two-storey blocks.



Pl. 14 West elevation showing position of offsets and edge of seventeenth century doorway.



Pl. 15 Ground floor workshop with threshold of seventeenth century doorway at high level in end wall, and offset showing earlier floor level.



Pl. 16 Ground floor former engine house, line of quoins to former external angle seen in ceiling void together with part of the arched window to the rear elevation



Pl. 17 Ground floor workshop, cast iron millstone frame.