Industrial Archaeology Notes

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Lincolnshire's last smock mill
Jon Sass

Standing on a low mound behind Mill House High Street, Dyke, near Bourne is 'Sprightly Old Lady'. Windmills were always termed female by those who worked and cared for them. She is the last remaining smock mill in Lincolnshire where formerly many could be seen at work. Large numbers of varying size were built in the fenland district of south Lincolnshire, and the adjoining counties, as pumping engines. Others, often former drainage engines, ground grain throughout the county.

The term 'smock' mill refers to the fancied resemblance to the countryman's antique linen smock frock 'overall'. One can see the resemblance in the accompanying illustration taken in the early twentieth century. She looks very elegant with her white-painted, weather-boarded tower flared out like a skirt at the base and her white bonnet or cap. This old lady is of venerable age and has witnessed great changes in the fenland and agricultural scene of southern Lincolnshire.

She was built in the eighteenth century as a pumping station, one of many in Deeping Fen lifting water off the fen into the higher drains. Having been made redundant by more efficient steam-powered pumps she was moved to her present site in about 1845. Some parts of the old paddle-wheel were even reused as floor joists. The mill was then fitted out to grind grain. It originally had two pairs of imported French Burr stones for making high quality wheat meal and a pair of Peak stones from the Pennines for producing animal feed. These were all four foot six inches (132cm) in diameter and housed on the first floor. To refine the flour further a dresser was installed. The mill was originally powered by four old-fashioned, hand-clothed sails, having canvas sail-clothes spread over a latticed sail frame. When the mill was refurbished in the late nineteenth century, two patent sails were installed which had canvas covered shutters (shades) which could be opened and closed in unison like a Venetian blind. These shutters could be regulated to open and close automatically depending on the strength of the wind and were far safer and less time-consuming for the hard pressed miller in a changeable wind. The wooden boat-shaped cap together with the sails could be turned into the eye of the wind once the change in the wind direction was confirmed by the weather vane above the rear of the cap. Winding was achieved by a braced tailpole with a chain and winch at the base. There were sixteen posts set around the mill mound to which a chain could be drawn from the winch and secured. The winch was then used to draw in the chain and draw in the cap. The twenty foot (5.9m) wooden tower is mounted above the twelve foot (3.5m) high octagonal, tarred-brick base. The sails each thirty-two feet (9.4m) long, came within two feet (59cm) of the ground, a constant hazard for young children or animals.

In 1878 the mill came into the possession of the Somerfield family. John Thomas Somerfield took great pride in his mill and gradually restored her to pristine condition. The tower was clad with new weather-boarding and new sails were fitted.

Fig. 1. Dyke Mill, Bourne c.1910 with miller Mr Somerfield (Museum of Lincolnshire Life).

The mill continued to work by wind until 1923 when a patent sail was shed which brought to an end its working life. The machinery was removed and sold by 1927. The cap was removed to be replaced by corrugated iron. In its later years a portable steam engine or tractor could also drive the internal machinery by belt and pulley.

In recent years the owners have carried out extensive repairs to the wooden structure and fitted new weather-boarding which will ensure a secure future. The mill is a valuable part of the county's milling heritage, once possessing many features not found on the later more advanced tower mills, examples of which still grace our landscape. It could be a tremendous asset to the county if restored to something of its former glory.

Manor Farm, Langworth
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Manor Farm, Barlings Lane, Langworth was built in 1847 on land that was part of the Turnor estate. Christopher Turner was one of the largest landowners in Lincolnshire in the mid nineteenth century, and was a great farm improver, in particular constructing several new farmsteads, farmhouses and cottages throughout his estates. The main farm buildings at Manor Farm, Langworth (originally within the parish of Barlings) have survived largely unaltered. Estate records show that they were originally outfarm buildings for Grange Farm, Barlings, and that they cost £500 to build. Conversion to a dwelling is currently taking place (Autumn 2001).
Fig. 2. Manor Farm, Langworth, isometric view and plan (K. Redmore).
The entire complex at Manor Farm is built of Langworth brick, a distinctive pale yellow brick made from clay which was almost certainly quarried and fired within a few hundred metres of the site. The buildings form a rectangle, enclosing a yard. The main barn and one other side of the rectangle are constructed using English Garden-Wall bond (with rows of headers separated by three rows of stretchers) and are in excellent condition. The two remaining sides are in a form of Flemish Bond, with two or three stretchers to one header in each course. These are less robust and show structural weaknesses in several places.

The buildings are orientated with the barn on the north-west and the crew yard facing south-west. It was customary for planned farmsteads of the nineteenth century to have the barn and wagon sheds on the north side and the crew yard facing south. This ensured that the wagons avoided exposure to the full sun, which would make the timber dry and thereby possibly loosen wheels and other joints. At the same time, the cattle in the yard during the winter months would get as much sun as possible. There were variations to this general rule where the lie of the land, or the road layout, dictated. The latter may have influenced the orientation in this case since the main elevation of the barn lies parallel to the adjacent Barlings Lane.

The barn is approximately 12.4m long, 6.2m wide and 4.6m high to the eaves. It has conventional opposing doors for the threshing floor, though it is not certain that it was ever used for hand threshing. There are two opposing air vents, in the form of simple vertical slits, and two small internal recesses designed to hold candles or lanterns. There are no other surviving internal features apart from a wooden open-tread staircase up to the granary. The roof of the barn is underdrawn with lath and plaster between the rafters, as are several of the other buildings in the complex.

To the north-west of the barn is a two-bay cart shed with granary above. As well as the wooden steps from the barn there is also a brick and timber staircase leading up from the crew yard. Under this staircase is a small space which probably housed a dog to deter rodents and other unwanted visitors.

The north-western range of buildings originally included, along half of its length, an implement shed with open external access. At some date, probably in the early twentieth century, one bay (about a third) of this shed was bricked in to form a stable, later a cowhouse, with access to the internal crew yard. The second part of this range was constructed as a large open-sided shelter shed for cattle, but this too has been enclosed at some date with timber boarding to provide protected spaces for the animals. At the extreme western end of the range is a small fully enclosed animal house with both internal and external access.

In the centre of the south-western range is the original stable for five horses. Some original wooden harness pegs survive, as do the hay rack and feed trough. To one side of the stable was a passage through to the outside of the building, but this was bricked up at an early date. To the other side is a space recently, and possibly always, used as a workshop and store for hand tools.

The south-eastern range consists entirely of accommodation for cattle, with shelter sheds fitted with hay racks and feed troughs. There are passage-ways to the crew yard on either side.

In the crew yard itself the original wooden pillars supporting the shelter sheds survive, though they have had concrete 'feet' inserted where the bottoms of the posts have rotted. The biggest change from its original appearance has been created by the insertion of a 'Yorkshire boarded' roof over the northern half of the yard in the 1970s.

Throughout, the original buildings are plain but well constructed. There are no unnecessary architectural niceties, which would have added to the cost without adding to the efficiency of the farm. The main visible decoration is a dentil course at eaves level around all the buildings. The openings to the shed are attractive depressions or three-centred arches which make use of rounded and specially shaped bricks. This is a common design feature in vernacular buildings throughout Lincolnshire and is found in many of the Turnor farmsteads. The original doors at various points around the buildings have long blacksmith-made hinges, hasps and locks.

In summary Manor Farm is a good example of a carefully designed mid nineteenth-century stading of medium size. It is worthy of study alongside the larger farmsteads developed elsewhere in Lincolnshire by Christopher Turnor.

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