lumps of pale orange clay with the evidence of much included grass or straw.

Many of the sherds are glazed in colours which vary from chestnut to sage-green, but always with a tendency to brownish. One or two sherds are almost black. There are so many instances of sherds which have been completely covered with glaze on all surfaces, including fractures, that it seems likely that some of them may have been casually incorporated into kilns and re-fired.

The forms of vessel represented seem to be wholly jugs and bowls. Handles are all strap-handles, varying in width from 25mm. to 55 mm. Some bowls have an applied 'pie-crust' frill below the rim. Fig. 2 illustrates four sherds.

No serious attempt has yet been made to ascertain the distribution of the ware from the Silverdale kilns, but finds in Lancaster Museum from Arkholme, Lancaster and Quernmore (see fig.3) are visually similar, and may give some indication.

It is difficult, in view of the lack of comparative material from the North West, to give an estimate of the date, but this is unlikely to lie very far either side of 1600.

The writer's thanks are due to the following: Mrs. Prince, Mawdesley; Messrs. H. Mashitter and W. Moss, Silverdale; Mr. P.V. Webster, Cardiff; Dr. D.C.A. Shotter and Mr. A. White, Lancaster.

XII. THE WILLOW MILL, CATON by J.W.A. PRICE and I. TRIPPIER

"Another former Cotton Mill, Willow Mill was fed by the same stream as Low Mill". D. Ashmore. Industrial Archaeology of Lancashire[1]. Recent work has allowed us to say a good deal more about this Mill than Ashmore could in 1969.

Willow Mill in fact is one of a series of water-powered Mills at Caton which drew their power from the Artle Beck, a tributary of the River Lune. After providing power for Crossgill Mill and the Gresgarth Corn Mill a Millrace[2] taking water from the Beck powered in turn Forge Mill, Rumble Row, Willow Mill and Low Mill before discharging into the Lune. During their two centuries of working, these mills manufactured a variety of textiles - silk, flax, cotton - and in the case of Forge and Willow Mills, bobbins. For most of this time Caton

1. David and Charles 1969.
2. Mr. T. Hartley has suggested that the watercourse was constructed to serve the Low Mill, opened as a Cotton Mill in 1784, but formerly a Corn Mill. (The Forge Mill at the top end dates from around 1752.

was a busy industrial community within the Lune Valley.

Synopsis of the History of the Mill

Sometime before	1790	constructed as a Corn Mill
	1790-1795	Cotton Mill - Hodgson and Cooper, Liverpool
	1996-1804	Cotton Mill - Hodgson and Co.
	1804-1814	Flax Mill making sailcloth etc. Townson, Hadwin and Co.
	1814-1825	Silk Mill - Chorley, Noon and Co.
	1825-1861	Silk Mill - to 1851 Wm. Thompson and Co.
		- 1851-61 Wm. Stubbs (former manager of Wm. Thompson)
	1861-1872	Bobbin Mill - Mr. Wm. Haresnape?
	1872-1973	Bobbin Mill - T. Wildman and Sons

(Sources: various but mainly Miss K. Wildman).

Details of the Mill's History

The Mill probably started life as a Corn Mill about 1790 taking advantage of the Millrace between Forge Mill and Low Mill. Probably the eastern part of the existing buildings, containing the Mill wheel pit, is in fact the 1790 Mill[1]. In 1795 Willow Mill was advertised for sale as a "newly erected cotton Mill." The measurements given then, of 197 feet length and 25 feet width are approximately the dimensions of the Mill as we see it today. This includes the portion that had been added by 1795 to the west of the original Mill to make it into an L-shaped building (see groundplan). I suggest, therefore, that prior to 1795 the small Corn Mill was added to, in order to convert it into a sizeable manufactory.

The advertisement of the sale describes the Mill as being of four storeys, built of stone and slated, and having 36 carrying 5,292 spindles along with carding engines, drawing and roving frames. The Mill by this time was already part of a complex. 27 cottages, 2 weaving factories, a warehouse and joiner's shop were included in the sale together with land to build upon. The wheel was given as 15 feet diameter (5 feet 7 inches wide) with a fall of 14½ feet producing 20 h.p. as against 35 h.p. for Low Mill). Much of the labour would have been child apprentices who came from Liverpool and lived in the Apprentices House.

From 1794 until 1804 when it was sold, the Mill was run by the owners of the Low Mill. At the sale in 1804, a drying store, counting house, grocery and haberdashery shop and a large room for putting out calicoes[2] plus 25 cottages and a weaving shop were included with the Mill.[3]

1. There is a slight difference in height between the two parts of the Mill.
2. 200-250 calicoes were weekly brought to the Mill from far around.
3. Lancaster Gazette 20 October 1804 - found by Mr. I. Trippier.

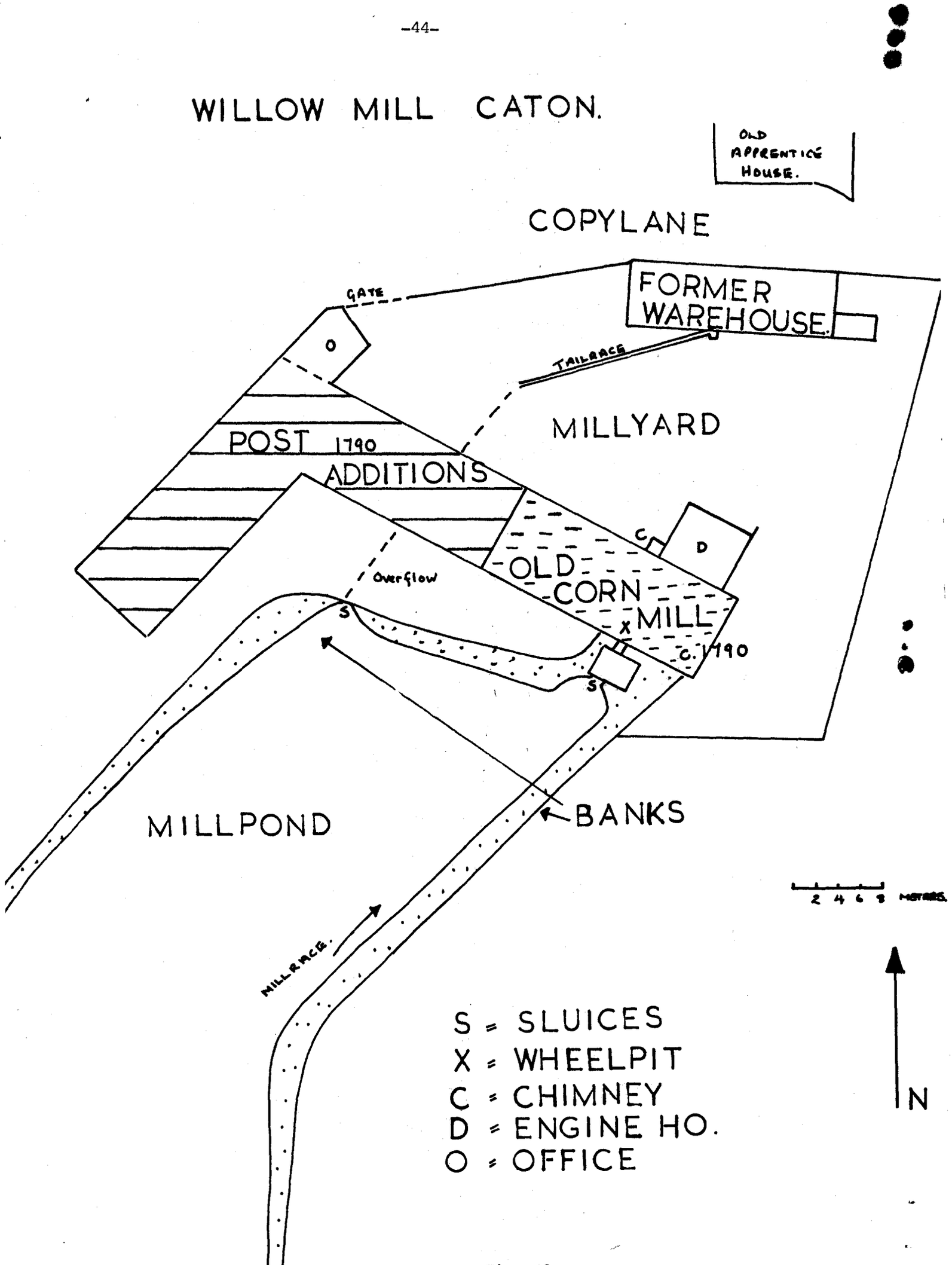
WILLOW MILL CATON.
OLD APPRENTICE HOUSE.
COPYLANE
GATE
FORMER WAREHOUSE.
O
TAILRACE
MILLYARD
POST 1790 ADDITIONS
C
D
OLD CORN MILL
Overflow
S
X
C. 1790
S
BANKS
MILLPOND
2 4 6 8 METRES
MILLRACE.
S = SLUICES
X = WHEELPIT
C = CHIMNEY
D = ENGINE HO.
O = OFFICE
N

Fig. 19

For ten years after this flax was produced, some of which was made into sailcloth. This probably accounts for the fact that the former weather vane of the Mill is a sailing vessel. During this time (possibly in 1811) an auxiliary steam engine was added, to give continuity of power supplies when water was short or the pond iced up.

Certainly when Willow Mill was sold in 1814, with over 10,000 sq. feet of working floorspace, it was after Dolphinholme one of the largest Mills in the area.

The period 1815-1861 saw the Mill spinning silk. In 1825 it was purchased by Wm. Thompsons of Galgate to replace the Moorside Silk Mill. Willow Mill was run in conjunction with the Rumble Row Mill and the two Mills employed 120 people (80 of them at the Willow Mill). Later Thompsons appear to have begun to concentrate on Galgate and first Rumble Row (1850's) and then the Willow Mill was sold off.

The 19th century witnessed a heavy demand by the Textile Industry of Lancashire for wooden bobbins. At first the demand had been met by Mills in Furness but later other areas joined in. For some years after 1861 the Mill was worked by a William Haresnape. In 1872 Mr. Thomas Wildman, a member of an old Tatham family who had been producing bobbins since 1859 at Millhouses, bought the Willow Mill. With the decline in demand for wooden bobbins the Mill moved over to the manufacture of brushes and this was continued until the death of Mr. G. Wildman in 1973.

Industrial Archaeology of the Mill

The Mill is of stone construction witha roof consisting of flags.[1] The newer portion has a prefabricated corrugated asbestos or concrete roof which replaced the older flagged roof quite recently. It is 3 storeys high but there is evidence of machinery below the roof making 4 storeys. The Mill has a large number of small-paned windows many of which were later blocked up. Externally a notable feature is the bell tower or cupola used for calling people to work. This is a common feature of early factories e.g. Wedgwood's Pottery at Etruria c. 1767. A boiler room attached to the north is probably the original steam engine house and the early square stone chimney is still standing.

Internally the still has wooden floors supported by cast iron pillars and wooden beams. A characteristic feature of Bobbin Mills is the long line shaft built into the framework

1. Thinnish layers of sandstone usually c. 1 inch thick.

of the roof beneath the ridge. At Willow Mill this is on the third floor. The power for this came from a water wheel and later after 1900, a water turbine (which though in situ ceased to work in 1960). No remains exist of the machinery from the wheel to the line shaft.

The complete water system still exists but the pond was drained after 1960. The Millrace now finds its way across the dry road and under the still to reappear in the yard.

Other features are the former warehouse (later a Congregational Chapel), the Counting House cum office and School which was at the entrance to the yard and the remains of the Apprentice House (now a garage) across the road. The former Silk Factor or Manager's house still stands as Greenfield House.

Today the Willow Mill stands derelict and is up for sale. In order that adequate records of it should exist in case of demolition a small group from the University Transport and Industrial Archaeology Society organised by Mr. I. Trippier measured and photographed it early in 1974. These records will augment the videotape of the Mill produced by Mr. Neil Birkett in 1972-3 with the help of the late Mr. Geoffrey Wildman and showing the latter at work.

The writers would like to acknowledge the help of Miss K. Wildman, Mr. T. Hartley and the active members of the T.I.A.S.

Ref. D.M. Clark. Economic and Social Geography of Rural Lonsdale 1810-61. M.A. Diss. Liverpool.

XIII. INDUSTRIAL ARCHAEOLOGY by J.W.A. PRICE

Industrial Archaeology is a term many people have come across but few know much about. A young subject, its name was coined as recently as 1955 by Mr. Donald Dudley. There are many definitions but the most comprehensive is that from a Liverpool Extra-mural course in 1962. This said Industrial Archaeology is "the study of the early days of industrialisation in terms of its machinery, buildings and the housing of its workers". If to this we add "and of its transport" we have a fairly good idea of what the subject covers. Its material is the often neglected remains of our industrial past. This