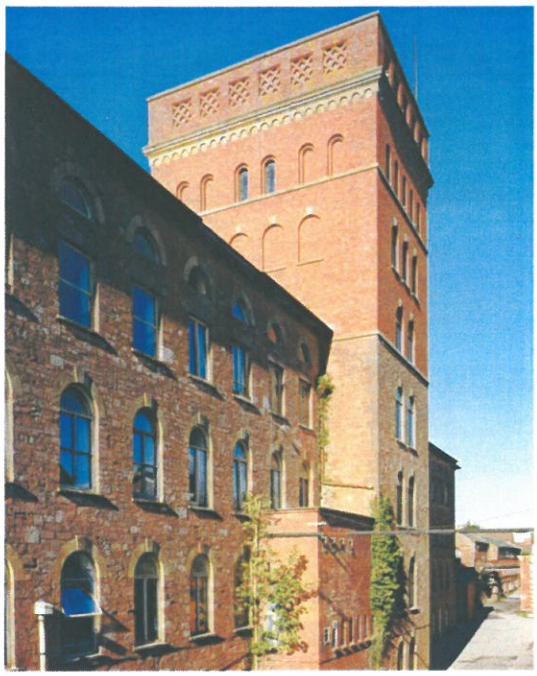
TONEDALE MILLS

SITE ASSESSMENT



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TONEDALE MILLS - SITE ASSESSMENT

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INTRODUCTION

This report aims to briefly summarise the sequence of development of Tonedale Mills and to help assess the significance of both the principal buildings and the site as a whole. It is largely based on visits made in the mid- and late 1990s, which resulted in three previous reports[1]. It should be noted that many buildings at the site have not been closely investigated, and that this interpretation might be updated following closer inspection of the physical evidence or further documentary research.

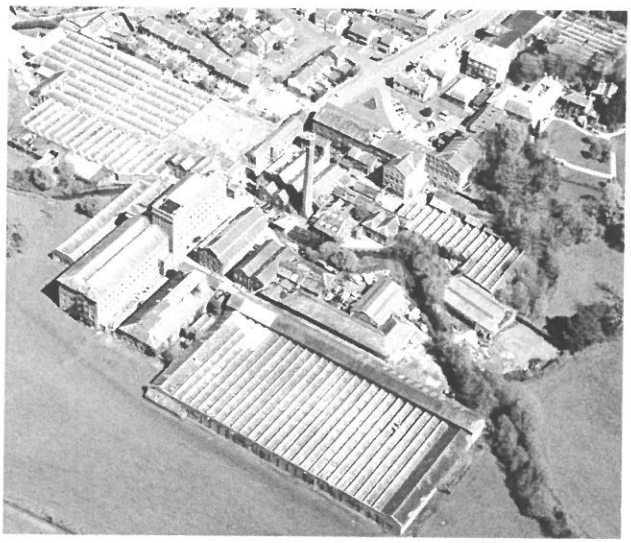

Figure 1. ***Tonedale Mills from the south-west, 22-6-1993 (photo NMR 4831/38).***

Tonedale Mills is an extensive complex of former woollen mills and related buildings located on the north-west outskirts of Wellington. It was established by Thomas Fox in the 1790s and later developed by other members of the Fox family, who lived at the adjoining Tonedale House. The mills were operated in conjunction with the nearby Tone Works, where cloth finishing and dyeing was carried out, and a number of other mills around the South-West region. Fox Brothers and Co. were a progressive firm who extended and modified the site throughout its working life. By the early 20th century Tonedale Mills had become the largest and one of the most completely-integrated textile mill complexes in the South-West. When two centuries of cloth production finally ended in the mid-1990s the site retained over 30 well-preserved buildings spanning an unusually wide date range (Fig. 1). Tonedale Mills now provides a comprehensive illustration of the development of the full range of building types associated with a highly successful integrated textile firm.

Figure 2. ***Tonedale Mils, showing main building groups described in text. Adapted from c1956 block plan, courtesy of Fox Brothers and Co. archives.***

SUMMARY OF SITE LAYOUT AND DEVELOPMENT

The location of Tonedale Mills was largely determined by the topographical requirements of a large-scale water power system. Most of the buildings are arranged on the valley floor of the Westford Stream (named the Back Stream on 19th century maps), a tributary of the River Tone, with the earlier buildings and the site entrance on higher ground to the east. The original early 19th century water-powered mill and warehouses were sited at the end of a leat, the Mill Head, which flows to the east of the Westford Stream through the gardens of Tonedale House.

The available block plan, dated 1956, lists over ninety separate structures at the site, but in summary the complex can be divided into seven main groups of buildings (Fig. 2); each group is described in turn below. The original powered mills and related buildings (7 – 28 and 83 on the block plan) were built around a yard to the north of Tonedale House. From the mid-19th century steam-powered weaving sheds were added in several phases to the north of the original mills (71 – 89). In the late 19th century a much larger steam-powered spinning mill was added to the north-west (65 – 70), and a group of smaller structures including boiler houses, engineering workshops, an electric power house and a fire station were added to the west of the original mill (30 – 46). In the same period office buildings were added to an earlier warehouse at the site entrance, including a boardroom and sheds for preparing the finished cloth (1 – 6). Toward the end of the 19th century a group of smaller factory buildings was built to the south of the late-19th century mill, probably for electrically-powered preparation and spinning (62 – 65). The last major addition, dating from shortly after 1900, was a large single-storeyed mill built for electrically-powered carding and spinning (50 – 59).

OVERALL ASSESSMENT OF SIGNIFICANCE : Tonedale Mills in a regional and national context.

In comparison with historic textile mill sites elsewhere in the South-West and in other regions, a number of key factors distinguish Tonedale Mills and contribute to its significance. The site retains a variety of well-preserved buildings which are clearly of individual significance, but the grouping together of such a wide range of buildings performing different functions at one site is itself of great interest. This diversity of building types is perhaps the most characteristic feature of Tonedale. It is a direct result of the

combination of an unusually wide range of processes, the continual development of plant and machinery by Fox Brothers and Co. and their unusually long occupation of the site.

Date range. Very few textile mill sites in England retain major buildings dating from c1800 up to the early 20th century. No other site is known which was established in the 1790s and then continually occupied by the same firm until the 1990s. The fact that members of the Fox family actually lived on-site throughout most of this period, at Tonedale House, seems to be unprecedented.

The size of the site. The area and quantity of buildings at Tonedale is greater than any other textile site in the South-West. In other regions, a very small number of sites were of similar size or larger but have since experienced more demolition. Tonedale Mills is certainly one of the largest surviving textile mill sites in England.

Association with an unusually successful and historically-significant textile firm. Fox Brothers and Co. originated as a successful clothier business in the pre-factory era and was one of the longest-surviving family-run businesses in the English textile industry. The firm remained competitive in the 20th century, and saw significant expansion, by introducing new products and processes. The production of both woollen and worsted cloths was also highly unusual. This contrasts with the gradual decline of textiles nationally and the increasing dominance of very large amalgamated firms in other regions. Tonedale became the centre of a regional textile "empire", with Fox Brothers building or acquiring other mills in Somerset, Devon, Oxfordshire and elsewhere. There are also significant links between the history of the firm and the development of Wellington.

The variety of well-preserved building types. In spite of the recent demolition of the loomshop and most of the weaving sheds, Tonedale retains good examples of most of the historic building types associated with the development of textile mills. Others are represented at nearby Tone Works. In the late 1990s, the extent to which historic details were preserved at both sites was exceptional.

Evidence of the development of processes and power systems. The great success of Fox Brothers and Co. was in part due to the technical expertise of the firm and its staff. To remain competitive machinery and processes would frequently need updating, and new products would require new types of machinery and possibly new buildings. Evidence of these changes is unusually well-preserved at Tonedale, including large-scale water- and

steam-power systems and the exceptional survival of the early introduction of electric power at the site.

BUILDING DESCRIPTIONS

The early 19th century complex

The buildings of the original factory, built by Thomas Fox from c.1800 and illustrated on the Tithe Map of 1839, comprise a range of powered mills, Tonedale House with an attached warehouse, a detached warehouse by the site entrance and a loomshop. The loomshop has been demolished but the other buildings are all well-preserved and probably form the most significant part of the site.

Figure 3. ***Tonedale House with the attached early 19th century warehouse and the water-powered mill on the right (BB94/21133).***

The powered mills show evidence of a complex sequence of building which has increased the range of historically-significant features. The original mill, of four storeys and eight bays, comprises the walls and water-power features of the factory built by Thomas Fox in c.1800, but with floors, staircases and a roof which date from a partial rebuilding following a serious fire in c.1820 (17 – 22). The rebuilt sections are probably the second-oldest[2] example of cast-iron-framed "fireproof" construction in the South West, with some unusual early design features. The roof appears to be the best-preserved of its type in the region. The north end of the mill contains a large internal wheel chamber, with the original cast-iron launder and sluice mechanism and later modifications for a water turbine. The slightly later full-height extension to the north end of the original mill, of eleven bays, has joisted timber floors which are more typical of the early-19th century (24). It was originally water-powered

from the earlier wheel chamber but was later steam-powered from the well-preserved detached beam engine house built alongside its west elevation (28).

Tonedale House has not been investigated but appears to have been built in several phases from the early 19th century (Fig. 4). The house is a significant survival and adds to the completeness of the early buildings at Tonedale. Its core is a Georgian or Regency-style villa which is very well-preserved and maintained in keeping with its historic character, including the gardens which contain the mill's head race. The house adjoins an early19th-century three-storeyed warehouse of nine bays (9,10); the adjacent siting of the clothier's residence and warehouse is a characteristic feature of early textile industries. The warehouse has joisted timber floors supported by timber props, notably similar construction to Fox's Coldharbour Mill at Uffculme (built c1800). The warehouse was later linked to the powered mills by a late-19th century fireproof addition of five bays (12) and two adjoining timber-floored additions (13, 14; Fig.3). A second detached three-storeyed warehouse of five bays, located to the north-east (3), is also shown on the Tithe Map and is significant as another component of the early complex (Fig. 7). The final part of the early site was a three-storeyed loomshop (83), which was located to the north of the powered mills until its recent demolition. It represented the concentration of hand-loom weaving at the site before the introduction of steam-powered weaving (shown in Figs. 6 and 8).

Figure 4. ***The entrance to Tonedale House (BB94/21136).***

Weaving sheds

North-light weaving sheds and engine houses were added to the north and west of the loomshop in several phases between the mid-19th and the mid-20th century, but most have recently been demolished (77 – 89). Smaller north-light sheds used for other processes still survive in various parts of the site. The only intact part of the sheds is a long rectangular building with two north lights, which was added after 1904 to the north of the 1863-73 mill (92).

The 1863-73 mill

The five-storeyed spinning mill is the largest late-19th century textile mill building in the South-West and is reminiscent of contemporary northern mills in its scale, power system, internal layout, floor and roof structure and its distinguished architectural treatment. It indicates that Fox Brothers and Co. were competing with the textile industries of other regions in a period when much of the industry in the South-West was in decline. It was built in two main phases. The first, of eleven bays (69), was powered by overhead shafting from an earlier engine house adjoining the weaving sheds (Fig.5). The second phase of seventeen bays (65-68) was added to the west end and included a large central engine house for a double-beam engine, creating a "double mill" layout similar to the largest northern mills. Physical evidence of the power transmission systems and machinery layouts is well-preserved, confirming that the mill saw at least two phases of steam power with upright shaft transmission followed by two phases of electric power.

Figure 5. ***The 1863 spinning mill, with the 1873 extension to the rear (BB94/21150).***

Centralised steam plant, maintenance facilities and wool-scouring sheds

A large group of one- and two-storeyed buildings was added from the early to late-19th century in a central location to the west of the original powered mills to provide a variety of services for the whole site. The extant structures were built in several phases in the late-19th century. They indicate that a major re-organisation of steam plant was undertaken towards the end of the 19th century. This included adding new boilers, re-siting existing boilers, the addition of electric generating plant and also a fire station. In the centre of the group are the engineer's and carpenter's workshops (37 – 42), which were both steam- and water-powered and built in four phases prior to 1889[3]. Attached to the south is a 15 bay north-light shed of

similar date used for the scouring and drying of raw wool (46)[4]. To the east of this across the yard is a related two-storeyed building which may have functioned as an earlier dry house

Figure 6. ***The fire station (flat roof) with the electric power house and c.1890 boiler house attached to the right. Buildings to the left of the road have been demolished (AA96/3935).***

(15). Attached to the north of the workshops are the boiler house with economisers and chimney (32 – 35), the electric power house (31) and the fire station (30), all of which were probably added in 1890 (Fig. 6)[5]. They replaced an earlier boiler house attached to the weaving sheds. The scale of the rebuilt steam plant and workshop facilities exceeded those of any other site in the South West, and should be seen as further evidence of the ongoing improvements to power and processes at Tonedale Mills in this late period. Remarkably, almost all the plant, machinery and fixtures in the workshops, steam plant and fire station were preserved intact in the late 1990s.

Offices, boardroom, cloth-preparation areas

Offices and buildings used for the preparation and warehousing of finished cloth were added in several phases to the site entrance in the late 19th century (Fig. 7). When they were photographed in 1996 the buildings were intact with a high level of preservation of historic interior fittings, including paneling, door and window fittings and furniture for the offices (4,5) and boardroom (6). Externally the offices are mostly of irregular cut stone with ashlar quoins and details. They display typical restrained embellishment for the period, with molded eaves, ornate barge boards, tall chimney stacks with intact pots and rusticated

window heads. A detached well-lit office or store of slightly later date was still used for storage of the extensive collection of Fox Brother's cloth samples and weaving patterns in the late 1990s (4). Adjoining the offices are a group of two-storeyed buildings (1) and an eight-bay north-light shed (2) which were used for finishing, cloth inspection, cutting and pressing. The shed was added sometime after 1904[6]. This part of the site was also used for the manufacture of puttees in the early 20th century.

Figure 7. ***Office buildings at the east end of the site, with the boardroom on the left and the early three-storeyed warehouse in the centre (AA96/3907).***

1880s spinning mills

A pair of distinctive two-storeyed buildings were built parallel to the south side of the 1863-73 mill (62 – 65; Fig. 8) and could be of additional interest as early examples of factory buildings designed specifically for electric power (further research is needed to confirm the date and original power source). Both were built before 1889 and lack the typical scale and proportions of a late-19th century steam-powered textile mill. They contained powered machinery used for preparation and spinning in 1916[7]. The western building has a broad-hipped roof and a segregated east end bay which contained large electric motors in 1916. The eastern building has an unusual lantern roof.

Early 20th century carding and spinning shed

The carding and spinning shed was built in two phases on former cloth bleaching grounds in the south-west corner of the site (54 – 57). It comprises a north-light roof of 24 bays with additional gable-roofed structures at each end, and a full-length two-storeyed service block

attached to the east side (Fig 8). It has the largest footprint of any structure at the site, covering one and a half acres, and was built for electrically-powered carding and spinning[8]. Its construction is further evidence of the progressive nature of Fox Brothers and Co. Single-storeyed factories became the norm in the early 20th century, especially in other industries, but many northern textile firms continued to build multi-storeyed steam-powered mills for spinning. A group of smaller single-storeyed buildings were built to the east of the shed at about the same time (48 – 53, 90, 91) and may have been functionally-related to the shed, possibly including electricity generating plant.

Figure 8. ***The west end of the site, with the c.1880s spinning mills in the centre and the roof of the carding and spinning shed to the upper left (AA96/3831).***

NOTES

[1] See NBR file 90889: General Site Report, June 1993; Buildings to West of Yard, November 1993; Former Loomshop, 1998.

[2] Stanley Mill, Gloucestershire, built 1813, is the earliest in the South-West.

[3]Shown on the 1889 1:2,500 OS map.

[4]Information from *Valuation of Machinery...*, June 1916, Fox Brothers and Co. archives.

[5]F.H. Fox, nd, Fox *Brothers and Co., Ltd., Fifty Years' History*, (unpublished report, Fox archives), p15.

[6]Not shown on the 1904 1:2,500 OS map

[7]Information from *Valuation of Machinery...*, June 1916, Fox Brothers and Co. archives.

[8]Ibid. Other details from a framed photograph in the company offices.

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