## THE CALVER MILL BUILDINGS

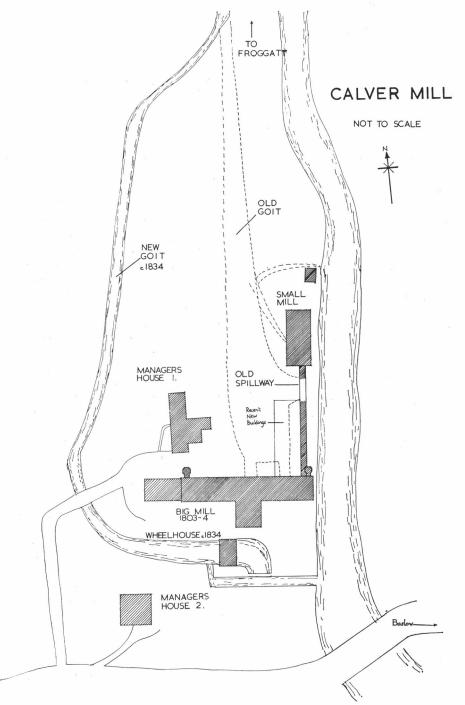
## By VANESSA PARKER

THE mill lies just to the north of Calver Bridge, on the west bank of the river Derwent, and is approached by a short drive from the main A623 road. The buildings are grouped on three sides of a square (Fig. 6), with the large mill across the south end. The small mill on the east side lies parallel to the river, joined to the main mill by a retaining wall pierced by the original spillway arch. A covered way on top of the wall connected the two buildings. On the west side of the square was the manager's house, a two-storeyed building in plain Regency style facing west. Originally it extended some distance further south across the present entrance to the vard, and part of this additional building was probably a warehouse. When it was pulled down, the two-storeyed extension westward from the main mill was probably substituted. The north side of the square was open, admitting the goit bringing the water from Froggatt Bridge to the water-wheels situated in the large mill. The present yard was thus partly under water and the mill orientated with its long axis in an east-west direction, presumably because of the direction of the flow of water and the situation of the wheels.

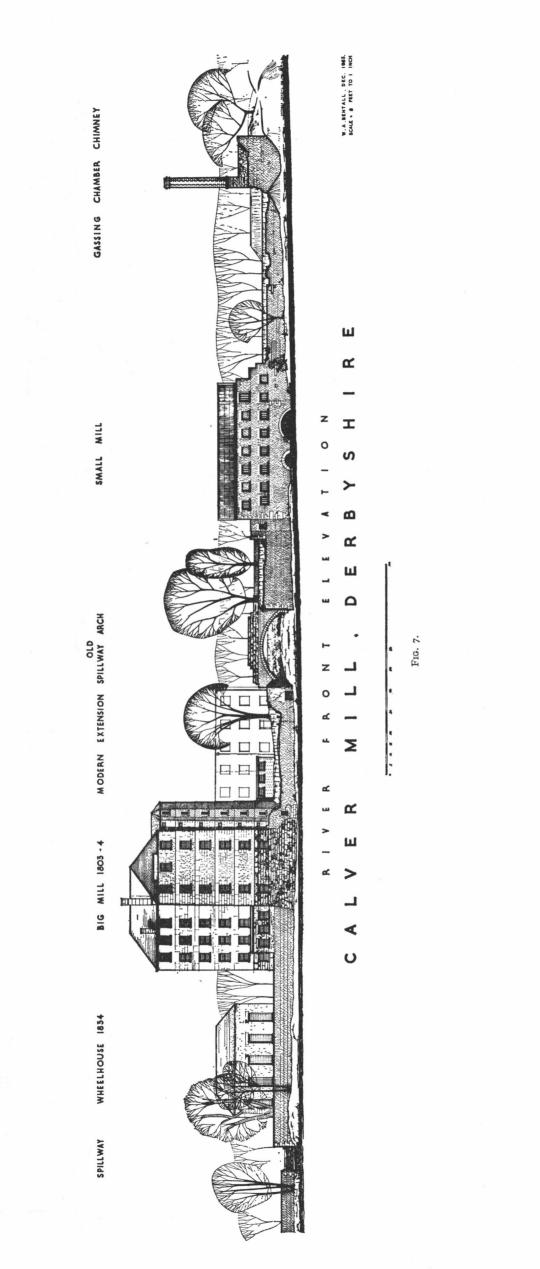
Other buildings belonging to the Calver Mill Company included a schoolhouse in Tudor style now part of the farm buildings across the fields to the west, Newburgh Terrace and London Terrace both built c. 1848-50, and a few cottage properties in Calver village. A second manager's house was also built at Calver Bridge beside the road. There seems to have been no attempt to found a factory village in the area.

Reasons for choosing this site have been mentioned by Miss Mackenzie, in particular the availability of labour from the surrounding villages, and the turnpike roads used to transport raw and finished materials to and from the area. In addition the river Derwent supplied the necessary water-power to the mill, and there was in 1778 a powered mill already on the site. This was the corn mill, shown on a survey of the Eyre estate in 1752, which probably occupied the site of the present small mill.

Water was taken from the river Derwent about half a mile upstream at Froggatt Bridge and brought down to Calver in a goit, maintaining the head of water at about 20 ft. Originally this water appears to have been used in the small mill, the head-race entering about half-way down the long side, and the spillway taken off some way upstream (Fig. 6). When the large mill was built in 1803, the small mill must have been abandoned, and the water diverted to drive the two wheels inside the new building. The traces







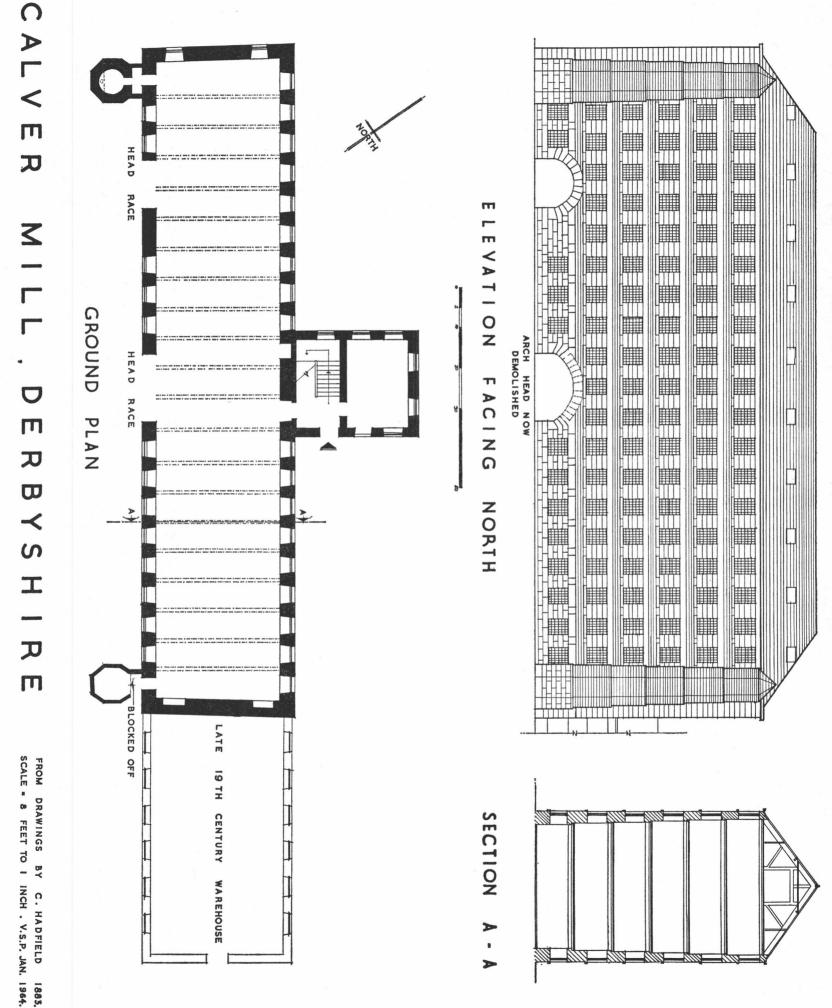


Fig. 8.

of two arches admitting the head-race in the north side of the big mill are still visible, and so is the spillway arch in the east wall of the yard (Fig. 7). In 1833-4 a goit was built to divert the water to a new, detached wheelhouse on the south side of the big mill. This still stands, although the two wheels went for scrap during the Second World War.

The large mill measures 170 ft. by 38 ft. externally and is six storeys high with an attic. A short wing projects from the centre of the south side and houses the staircase and offices; the mill bell hung at the top of the stairs. At the east and west corners of the north face are octagonal "turrets" joined by a short passage to the main building. These were the closets. The east one drained through a shute into the river; both were apparently added after the main building was complete. Each long side is divided into twentyone bays with rectangular, vertical hung sliding sash windows on each floor. The end two bays on the north face are taken up by the closets, and on the south face the three central bays lead into the staircase wing. At ground floor level the rhythm is further interrupted by two segmental-headed openings on the north wall, one in the middle and the other to the east, which admitted the head-races to the two water-wheels (Fig. 8). Each gable end is three bays wide with dummy blocked windows on the west side, and the centre bay blocked on the east. Chimneys are built into the thickness of the wall, but the stacks are unobtrusive, barely rising above the level of the gutter.

The building is of local gritstone, probably from Froggatt Edge, and had until recently a stone slate roof with nine skylights on each side. The ground storey is rusticated as are the voussoirs of the head-race inlet arches. The rest of the wall surface has been given a varied texture by alternating deep bands of dressed stonework round the heads and jambs of the windows, with narrow bands or rougher, smaller stones under the sills. The sills themselves project slightly from the wall surface and are rusticated. There is a neat stone gutter under the eaves, continued round the staircase wing, but not round the closet turrets. Both the turrets are built with narrow bands of rough dressed stone and taper slightly at each floor towards the top. Their narrow window openings east and west have monolithic sills, heads and jambs.

Originally the mill must have been entered from the south through the door on the west side of the staircase wing. The main door is round headed with a narrow rusticated band round the head and jambs, and raised impost and keystone blocks. A second door to the south appears to replace a window and must have been put in to make a separate entrance to the ground floor office. The "country bank" may have been accommodated here.

The entrance opens straight into the wide stone dog-leg stair giving access at each floor to the working area from alternate half-landings. Entered from the opposite sides of the half-landings are the single offices, thus effectively insulated from the dust and noise of the cotton spinning process, and with the additional gain of maximum unobstructed floor space in the main floor. A small hoist was incorporated in the thickness of the north s'aircase wall.

Nothing is now known in detail about the organization of manufacture

in Calver Mill, but it seems likely that a close parallel could be drawn with the methods of production in other cotton mills on the basis of practical necessity; for instance, the vibration of machines, difficulty in moving bulky goods up and down and so on. Strutt's mill at Belper, illustrated and described in Rees'*Cyclopaedia*, was also six storeys high with an attic. Here the spinning frames were situated on the first and second floors because of the heaviness of the machinery and the amount of vibration. On the third and fourth floors were the carding, roving and drawing frames, and on the floor above the reeling, doubling and twisting. The upper floors were used for preparing the raw cotton, batting and opening, and the attic was the schoolroom. Calver had in fact a separate school building and there are traces of machinery having been used in the attic, but the mills were probably substantially similar otherwise.

The earlier mill at Calver was burned out, but no attempt seems to have been made in 1803-4 to erect an iron-framed fireproof structure. The floors are carried on thick wood beams at 8 ft. intervals which originally spanned the building, thus limiting the width to a little over 30 ft. At Strutt's Mill the horizontal turning shafts ran along the centre of each floor at just below ceiling height, but this was an iron-framed structure and it is not known whether the timbers at Calver would have supported the shafts in this position.

Calver Mill must have been an uncomfortable place to work in, too hot in summer and poorly heated in winter. There were no traces of steam heating in the mill, and the only warmth seems to have come from one small fireplace on each floor in the gable ends.

Since this article went to press, more material relating to Calver Mill has been found in the records of Quarry Bank Mill at Manchester Central Library and in the Pares Papers at Derby Borough Library, which it is hoped to use in a later article. M.H.M.