

# Merton before Morris

## Ray Watkinson

In 1851, at the Great Exhibition, Thomas Welch was awarded a medal for his Printed Table Cloths: printed at his works at Merton Abbey: the same works which thirty years later William Morris was to rent when, sole owner of Morris and Company, he needed to bring all his production as far as possible, to one site. Morris and Company now produced chintzes, carpets, stained glass.... Welch had had one product: Table Cloths.

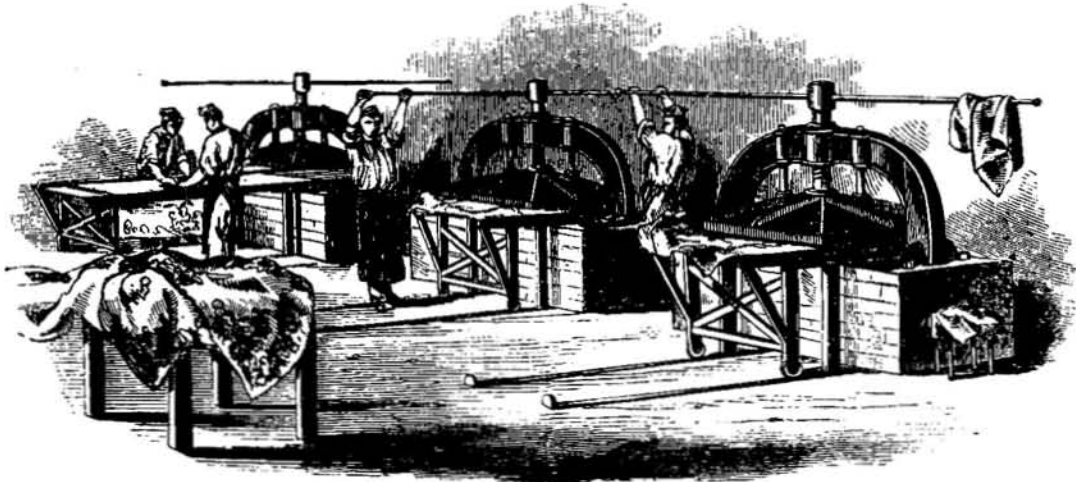
Welch bought his cloth mainly in Yorkshire; he wove no plain fabrics, indeed none at all. Forty-yard pieces came in, ready dyed to his order, usually green or crimson (keeping up the tradition of the Turkey carpets which had first been used here as hangings or table cloths – as in Holbein's 'The Ambassadors'). On these self-coloured grounds, designs not much like Morris's were printed from wood blocks, in no more than two colours: nor was any overprinting used to create mixtures. The dyes used were still, in the main, the ancient traditional dyes – mostly vegetable, though cochineal was not: but logwood, fustic, indigo were; and these would be used again by Morris. Some colours might be the 'new' 'chemical' dyes, which had come in as the eighteenth century turned into the nineteenth. But Mr. Welch, no more than Mr. Morris, used anilines: for in 1851 they had not yet been isolated from coal tar by the young chemist Perkin. Not until 1856 did he give us the bastard purple we know as Mauve. Most likely Welch bought his dye-stuffs from Skilbeck, the big drysalterns near London Bridge: Morris bought from them too.

Morris, of course, did not produce or print table cloths, though there was nothing to prevent those who bought his fabrics from making table cloths from them. He printed only in the piece, repeating patterns, richer and more splendid than Welch's designs, by the same process as Welch and in the sheds taken over after Welch's business had closed down; just as Welch had inherited buildings once used by French silk-weavers and dyers.

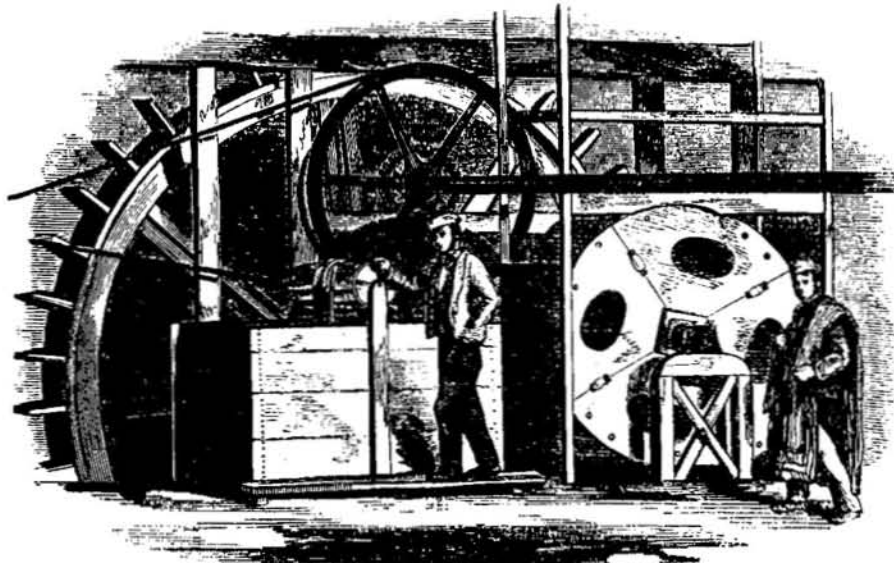
In the year when Welch won his medal at the Great Exhibition, John Cassell, former carpenter, now teetotal tea-and-coffee dealer and popular publisher, set up a new weekly, taking the tide created by the Crystal Palace: *The Illustrated Exhibitor*. Even those who could not avail themselves of the cheap excursion trains which brought working folk from all over the kingdom to Hyde Park, could for weekly coppers read about the wonders, and see them pictured in many wood engravings. This proved so popular that as the Exhibition became a memory, Cassell added a new title – *and Magazine of Art* – and under that title and long after Cassell's death it continued into this century.

In the issue of 3rd July, 1852, there appeared an article on the Merton Abbey works, a simple, illustrated technical account of the methods of Mr. Welch. It is interesting to see how much, as well as how little, they had in common with those used by Morris thirty years later.

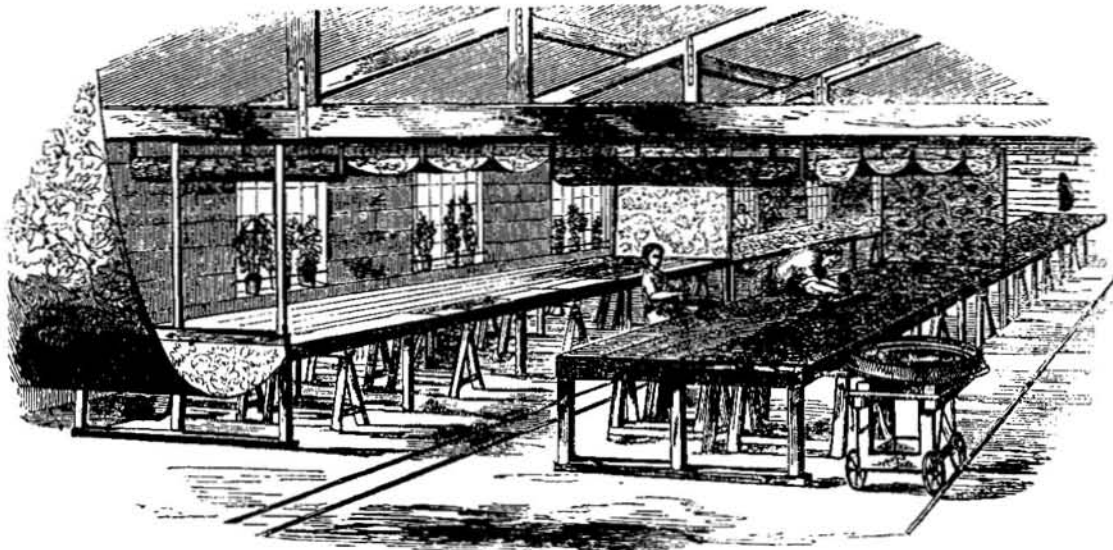
Before printing, the cloth had to be mordanted – passed through an aluminous



EMBOSSING PRESSES.



DYE WHEEL, BECK, &c.



SPINNING BY HAND.

solution which ensured that the dye should be absorbed by the fibres. The *beck* which held the mordant was in Welch's day a lead-lined wooden tank and the piece of cloth was fed into it over a skeleton cylinder, hand-cranked by a workman whose business was to make sure that the piece was thoroughly soaked. Dried, it was then stretched for printing on one of the four tables, each nine yards long, built of stone slabs covered with a triple layer of blanket over which was stretched oil-cloth. As much of the piece as filled the length of the table would be laid on the table, and the first colour printed from wood-blocks, usually of pearwood. When the first table-length had been printed all over with the one colour, it would be lifted and hung up above the table to dry while the next nine yards was laid in place, and so on until the whole piece was printed end to end, side to side. This whole process was then repeated for the second colour, from blocks cut with other shapes, meshing with the first. The blocks were positioned by claw-like metal pins at their corners to ensure regular repetition with neither gaps nor overlaps.

For each individual colour the face of the block would be lightly dipped onto, not into, the dye, which was held in a large deep tray or *tier*, mounted at table level on a wheeled frame so that the tier-boy could move it along by the side of the table as the printer worked. The block, thus coloured, would be pressed face down on the fabric by the printer and struck firmly on its back with the butt-end of the heavy leaden mallet. The weight as much as the blows ensured that the colour penetrated the fibres. The whole piece printed in both colours would then be rolled on a large perforated cylinder to be steam-washed in the wash-wheel, turned by the undershot water-wheel, moved by the water of the Wandle river – used also for mixing dyes and mordants. After this it would be stretched out to dry on the grass outside. One piece was reckoned as three days work.

This, with some variants, was the process later used by Morris. But the Welch table-cloths were also produced in other ways. If the whole forty-yard piece was printed as one, it had, after printing, to be cut into suitable lengths for table-cloths, oblong or square, each then hemmed or fringed. But the table-cloths might be cut before printing, and more elaborate patterns used. Firmly fixed to wooden frames, these pieces would be printed in different colours from as many blocks as colours were wanted – not in a continuous repeat, but arranged symmetrically along sides, from corners or from the centre, some to make a continuous border. All the colours printed, the cloth would be dismounted, washed and dried, to be hemmed or fringed. More sumptuous and tempting effects could be got by printing on a new mixture of silk and wool, a sort of velveteen made in Glasgow, which had to be finished by shearing after printing to restore the even surface.

But Mr. Welch produced cloths yet a fourth way – by embossing. This, though it allowed of few colours, produced a rich carpet-like surface with great appeal to mid-century customers. The cloth, dyed by the manufacturer to such self-colours as Welch ordered, had to be cut into squares. Large brass plates, each equal in shape and size to one quarter of these pieces, were deeply etched and engraved with a pattern meant to fill only one quarter of the square. The dye, thickened with paste, would be dabbed and pressed into the etched areas; the whole plate-surface would then be scraped absolutely clean of colour, dye remaining only in the etched area. The plate would be laid face-down on the first quarter of the cloth, stretched on a metal slab which was then run on wheels under the heavy screw-press which would be brought hard

down on it and the pressure kept up for a quarter of an hour, steam heated to a high temperature. This fixed the dye in the cloth, which was then withdrawn from the press, turned through ninety degrees, and the process repeated – and on the fourth printing, out it would come, a splendid patterned square of oriental magnificence. Or so no doubt Mr. Welch's customers thought. Washed and dried, it would still keep the differences of surface, due to the polished surface of the plate contrasted with the areas exposed to the dyes.

This was not a process that Morris would have contemplated, and even if the great presses had survived until June 1881 when he signed the lease for the works, he would have got rid of them immediately. But the simple printing on the traditional long tables went on.

It is possible that it was by some such plate process that the unsuccessful attempt had been made by Morris in the first days of the Firm, to print the Trellis wallpaper design. It would certainly have been much too cumbersome for that, and the wallpapers had to await the blockcutting and printing skills of Metford Warner.

#### NOTES

References to the taking of Merton Abbey will be found in *The Collected Letters*, ed. Norman Kelvin, Princeton U.P., Vol. II (A), 1987.

They begin with Letter 678 to Jane Morris, 23 Feb. 1881: "... we shall have to take to the chintzes ourselves before long and are now really looking about for premises..."

Letter 684 to JM, 3 March 1881: "... W De M is all agog about premises hunting now, and has just heard of some at Hemel Hempstead. Webb and Wardle are going on Saturday to walk up a stream that runs into Thames at Isleworth..." Letter 686 (parts of two to JM of 10 March 1881 and 17 March 1881): "I went with De Morgan to Crayford on Monday.... however it wouldn't do." and "... De M and I went to look at premises at Merton in Surrey, whereof more hereafter: they seem as if they would do."

Letter 688 to JM, 19 March 1881: "...it is already a printworks (for those hideous red and green table-cloths and so forth) so that the plant would be really useful to us.... the buildings are not bad: the rent (£200) can be managed.... water is abundant and good...."

Letter 696 to De M., 16th April 1881: "The fictionary sounds likely to become a factory. Welsh (sic) has practically accepted our offer."

Letter 701 to De M. 28 April 1881: "... you see virtue has triumphed: in other words Welsh (sic) agrees..."

Morris's Diary for 7th June 1881: "signed lease of Merton Abbey'.

For Morris's moving to the Abbey and his productions there, see Linda Parry, *William Morris Textiles*, 1983, pp. 43-53.