THE ART MOVEMENT.

SIR THOMAS WARDLE AND THE DECORATIVE TREATMENT OF TEXTILE FABRICS.

TN the revival of L the art of dyeing that began about twenty-one years ago William Morris and Sir Thomas (then Mr. Thomas) Wardle were mutually helpful; and each in his own way infused new life into the neglected art, bringing it back to its first principles of decorative truth and beauty. Morris, socialist though he was in theory, held himself aloof from the main current of national events, making his appeal to those wealthy classes that treated his genius either as a toy, or else as a sort of acolyte in their idolatry of mere physical comfort. Sir Thomas



THE "LILY" PATTERN.

Designed by T. Wardle, jun.

Wardle, on the other hand, while going to the past for his inspiration, kept a tightening grip on the present and its stern For we necessities. must bear in mind that every art, as Coleridge has pointed out, should be an ingredient in, and not a superfetation upon, the national character and life.

The aim that Sir Thomas Wardle set before himself was to improve the dyed and printed goods familiar to the general public. It was a bold thing for the aniline dyestuffs were in those days even more popular than, say, Lord Kitchener is now. He who spoke of their metallic lustre, of



DESIGN IN OUTLINE FOR EMBROIDERY

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their violence, their "horrors," was scorned as an enemy to the progress of true civilisation. Even in India, the home of the dyer's art, not a few native workers showed their loyalty by pandering to the bad new taste of their English customers. I have read, indeed, of one Englishman who found in Cashmere only two or three shawls which were not yulgarised with the aniline pigments.

It is true, nevertheless, that these products of the chemical factory had not a fair chance given them. They were much too popular to be used carefully by "the trade." This fact struck the attention of Sir Thomas Wardle, who thereupon began to prove that a man might take part in the fierce competition of trade rivalry and yet not work for the mere love of gain. What he did was to make innumerable experiments with all the artificial dyes employed by himself at Leek, so that even the cheapest work he turned out might be as good in quality and as beautiful in colour as was possible in the circumstances. And from this ideal of thoroughness he has never swerved.

The high value which Sir Thomas Wardle has always attached to good colour—colour, that is to say, as pleasing in tone as it can be made for a given price and with certain dye-stuffs—is a point to which I desire to call special attention, because there is great danger in our time that we fall into error by under-estimating the importance of

bringing bright and beautiful colours into every home in England. The colour-sense is an inestimable gift to us all, and yet we are apt to forget that its sensibility is now being dulled in the whole nation by the tyrannous browns, blacks, and greys which the eye rests on everywhere in the streets. Baudelaire, struck by the grimness of our life, said, "Nous célèbrons tous quelque enterrement;" and it must be admitted that ours is the age of smoke-blackened towns and cities. If I may use the expression, the industrial civilisation of our time has put the national colour-sense into the deepest mourning.

But there is, happily, as painters know, an education for this sense in the individual; and surely this education ought to be extended, in some form or other, to the whole generation now at school. I will not go so far as to say, like some writers, that nations have always been at their best, most vigorous and most lighthearted, when their favourite colours have been the most luminous of all—scarlet and crimson. But I do say, and everyone of us must feel, that all beautiful bright colours have a gladdening influence, like good news that comes to us unexpectedly.

It is to be feared, however, that the finest colours which dyes yield will never be so



THE "SYDNEY" PATTERN.

Designed by S. G. Mawson.



THE "RED ADMIRAL" PATTERN

Designed by T. Wardle, jun.

popular as we should like to see them, for they chance to be a great deal more expensive than colours of inferior charm and power. The best of all dyes are natural products, mostly vegetable; and their superiority over the artificial dye-stuffs is due, not only to their greater permanence, but also to the tenderness and repose of tone by which they are characterised. They have, also, other virtues; but I must refer you for information to Sir Thomas Wardle's monographs on the dye-stuffs, tannins, and silks of India.

An intimate practical acquaintance with the art of dyeing in India and in Persia has been of incalculable service to Sir Thomas Wardle. It has introduced him to many valuable methods, to many beautiful dyes; and it has enabled him to gather together a rarely fine collection of useful fabrics, Oriental designs, and ancient and modern blocks for printing purposes. By this means he has enriched the art of dyeing in this country; for we must remember that Sir Thomas Wardle has always appealed to the cultivated few as well as to the general public. In one dye-house he has worked to please himself; in another, and much larger one, the production of more popular goods has been attended to. Each dye-house has a special interest of its own; and to me it was most instructive to compare the old designs with those from the pencils of Lewis Day, John Sedding, Thomas Wardle, jun., W. R. Lethaby, Walter Crane, and other artists of well-known ability. As a general rule, I confess, the old designs seemed less selfconscious in their treatment than the new. The men who drew them worked, I should think, under an intuitive, rather than technical, guidance. Our own designers have usually an excellent technique, but it is sometimes laboured, and now and then mannered and mechanical. This it assuredly is not in the illustrations to this paper: the "Lily" design and the "Sydney" pattern being especially clever in conception and in execution. A little repose may be wanting in the second; but the absence of anything in the least degree pictorial in a design so full of leaves and flowers merits high praise.

From Sir Thomas Wardle's third son, Mr. Bernard Wardle, who is now superintending the well-known print works at Leek, I have received an interesting letter concerning the actual processes both of dyeing and of wax-printing on silk. The object aimed at in the process of wax-printing is to get a white design or a white spot on a coloured ground. The first step is to print the design on the white silk



THE "TIGER LILY" PATTERN.

with a "resist paste," composed of bees' wax and resin. This prevents the colouring matter from getting to the parts so printed, the wax not being soluble in cold water. The "resist" is allowed to harden for a day, and then the silk is taken to the dye-bath and dyed to shade. When this is done, and the wax has been removed by passing the silk through a large tank of benzine, the parts which were covered with the "resist" appear as a white design. The material is then taken to the clearing-room, where the remaining benzine is evaporated.

I should like to say much more about this technical side of the art of dyeing; but the limits of my space compel me to pass on at once to a subject of much greater importance to the reading public. It concerns the deplorable influence which the modern mania for cheapness has had on the decorative manufactures in silk. When we consider that 1,600 cocoons yield only 1lb. of silk, it seems incredible that any sane person should expect to buy pure dyed silk for next to nothing. Yet this expectation really is common everywhere; and for this reason, says Sir Thomas Wardle, "no dyer's education is complete without a large command of the domain of both organic and inorganic chemistry, not so much for tinctorial purposes, but for swelling the fibre of silk by chemical means." This is done by causing metallic salts in solution either to combine with the silk fibre, or else to surround it with a brittle crust. Each of these results is determined by the manner in which the silk is prepared for its bath of chemicals. If you leave the silk more or less in its raw state, without getting rid of its gum or

sericine, then the metallic salts combine with the gum, transforming it into a crust which breaks very easily, and which, when magnified 400 diameters, "resembles bobbins on a thin rod, set at intervals with each other." But this is a clumsy way of adulterating silk. The best thing you can do is to dissolve the sericine in a bath of boiling soap and water, so that the metallic salts may come in contact with the silk fibre itself. Thus, as Sir Thomas tells us, "the weighting matter is in direct chemical union with the fibroin, and is part and parcel of its substance, becoming a new and another product." And we are told, too, that the silk fibre absorbs the chemicals, expanding as a dry sponge does with water and acquiring a permanent increase of bulk and weight. Clearly, then, the heavier and the thicker the silk becomes, the less of it is required in weaving a generous-looking yard of fabric.

In a treatise on this important subject, published in 1887, Sir Thomas Wardle says that he is dealing with "deception the most refined, and of unspeakable fraudulent intent." His theme is "chemistry as misapplied to the industries," for he has to speak of "the application of chemical science to the opposite of economical purchasing." Since these words were written, I must add, the adulteration of silk has in some towns been modified. It is still greatly misused; and yet, for all that, it is much less dishonest than it was two years ago, when "silk was a mere conglomeration of mineral matter." In one case, according to Mr. J. Carter Bell, the dyer had weighted the silk so heavily that 100 lbs. of it had been made into 1,000 lbs.! WALTER SHAW SPARROW.