DESIGN IN LINEN DAMASK.

BY GEORGE TROBRIDGE, HEADMASTER OF THE BELFAST SCHOOL OF ART.

THE cause of the localisation of particular industries is an interesting subject of inquiry. Why, for example, should the lace manufacture flourish in Nottingham, jewellery in Birmingham, silk-weaving in Macclesfield, managing flax. As early as the sixteenth century there appears to have been an export trade in linen yarns, for Leland tells us that “Irish merchants cum much thither (to Liverpool), and moch yrish yarn that Manchester men do by there.” It was not, however, until the middle of the following century that linen became an important article of commerce. Yarn continued to be exported, but much was now woven in the country and sent out in the finished state.

Sir William Temple recognised the great possibilities of the Irish linen manufacture. In his “Miscellanies,” published about 1681, he wrote: “No women are apter to spin linen thread well than the Irish, who, labouring little in any kind with their hands, have their fingers more supple and soft than other women of the poor condition amongst us. And this may certainly be advanced and improved into a great manufacture of linen, so as to bear down the

FIG. 1. DESIGNED BY ROBERT J. WOODS FOR J. S. BROWN AND SONS.

or cutlery and electro-plate in Sheffield? In some cases the growth of a manufacture is traceable to an evident cause, such as proximity of raw material, or favourable situation for land or water carriage; but in many instances the remarkable localisation of trades seems unaccountable.

For many years Belfast has been the principal centre of the linen manufacture, and the history of its growth to its present position is full of interest. To relate it would be to tell not merely of the commercial energy and inventive genius of her sons, but to recall sad episodes in the history of the “distressful country” and in that of lands beyond the sea.

Linen has been made in Ireland from time immemorial, and was used for articles of dress by the ancient inhabitants. The Brehon laws enjoin the Brughlaids, or farmers, to acquaint themselves with the method of cultivating and

trade both of France and Holland, and draw much of the money which goes from England to those parts upon this occasion into the hands of his Majesty’s subjects of Ireland, without

FIG. 2. DESIGNED BY ROBERT J. WOODS FOR J. S. BROWN AND SONS.
crossing any interest of trade in England, for besides what has been said of flax and spinning, the soil and climate are proper for whitening, both by the frequent brooks and also winds in that country.” The climate of Ireland is still recognised as possessing peculiar advantages for the bleaching of linen, and large quantities of goods are sent there from other countries to be bleached and finished.

The woollen trade of Ireland, “crossing the interests of trade in England,” was ruthlessly extirpated by repressive laws; while the linen industry was encouraged by allowing free exportation to England, by large grants of money for the promotion of flax culture and linen manufacture, and in other ways. In reply to a memorial from both Houses of Parliament in 1698, King William III said: “I shall do all that in me lies to discourage the woollen manufacture in Ireland, and encourage the linen manufacture, and to promote the trade of England,” a promise which was amply fulfilled. While the woollen trade languished almost to extinction, the exports of linen increased a hundredfold in the following half-century.

Another circumstance which gave a stimulus to the linen manufacture at this time was the settlement in the north of Ireland of Huguenot refugees, who introduced improved methods of production. At this early period, of course, both spinning and weaving were carried on by hand, but during the eighteenth century new machinery was invented to diminish the amount of labour required, and to hasten the processes of manufacture. More recent improvements have revolutionised the trade; hand-spinning has entirely disappeared, and the power-loom has superseded the hand-loom, except for the finer qualities of cloth. The bulk of the output has proportionally increased. There are now in Ireland nearly 900,000 spindles in operation, and more than 30,000 power looms; while some 60,000 persons find employment in connection with the linen manufacture. Not all of these are engaged in the weaving of linen damask, which nevertheless forms a very important branch of the trade.

In dealing with the subject of design in relation to any material, we have to take into consideration (1) the capabilities of the material, (2) the machinery employed in its manipulation, and (3) the suitability of the design applied to it.

The flax fibre is capable of being spun into a thread of great firmness and tenacity, and woven into a cloth of exquisitely fine texture, to which intricate patterns may be applied. The effect of these patterns depends upon the gloss of the fibre, which reflects the light variously, according to the direction in which the rays fall upon it; thus upon the contrast of several shades of white (or, rather, delicate grey) with one another. The fineness of the material in the best qualities makes it possible to produce
almost any design; even an appearance of relief can be obtained by varying the texture of the cloth so as to give the effect of shading. “Anything you can draw, we can make,” said a manufacturer to me on one occasion; and such being the capability of the material, there is a temptation to put forth elaborate but unsuitable designs, just as a tour de force. Some time ago I was shown a beautiful silk and linen table-cloth of French manufacture—the property, I believe, of H.R.H. the Duchess of York—on which was woven a pictorial design, illustrating the story of Demeter and Persephone, the numerous figures being most carefully drawn and elaborately shaded. Beautiful though it was, one could not help feeling that the treatment was quite unsuitable to the material and purpose to which the cloth was to be devoted. As another example of how not to do it, I may mention a table-napkin that was illustrated—I cannot say decorated—with a carefully drawn elevation of the manufacturer’s newly-erected six-storey retail warehouse.

Linen damask is woven on a Jacquard loom, and its decoration is subject to the same limitations as that of other textiles similarly produced. The pattern is brought out by an elaborate arrangement of machinery, the directing agent being a series of perforated cards, every hole representing a thread which is to be raised for the passage of the shuttle. In an extensive design many hundreds of such cards will be used; but in the cheaper classes of goods the expense of production is lessened by making one series of cards control several sets of threads, thus repeating the unit of the design. In Figure 1 I have given an example of an ingenious design, in which a satisfactory effect is gained by the use of very limited machinery. It will be observed that the ornament of the side main border (the broad border belongs to the ends of the cloth) is constructed to repeat both in length and width, the unit (9 in. by 1\frac{1}{2} in.) going twice into the width, and as often as necessary into the length; one set of cards serving for the whole of the repeats. In the same way the narrow framing border repeats four times in the breadth of the cloth; and the centre “filling” is composed of a recurring unit, nine inches by six. The end borders are eighteen inches deep, so as to fall in with the centre and make even measurements of yards and half-yards in the length. The side borders are necessarily compressed to allow of variation in width by increasing the number of repeats in the field of the cloth. The design is by Mr. Robert J. Woods, a former student of the Belfast School of Art, and now principal designer to Messrs. J. S. Brown and Sons, of Belfast. Figure 2 is another cloth by the same designer, adapted to a finer quality and wider range of machinery.

Many beautiful designs are produced by Belfast manufacturers; but it must be confessed that the general run of them are devoid of interest and lacking in true decorative feeling.

FIG. 5.—DESIGNED BY EDWIN A. MORROW. SILVER MEDAL, NATIONAL COMPETITION.

Purchased by the Hungarian Government.
been bold enough, now and then, to commission eminent designers, such as Mr. Walter Crane, Mr. Lewis F. Day, Dr. Dresser, and others; and have produced patterns that have been real works of art, but these are the exceptions. Mr. Crane executed an important design a few years ago for Messrs. John Wilson and Sons, the subject being "The Five Senses," which were illustrated by decorative figures and animals, designed in his facile and charming manner. The cartoon was exhibited in the Arts and Crafts Exhibition of 1896, and reproductions of portions of it have appeared in several Art magazines. The same firm has produced several of Mr. Day's designs, a portion of one of which is shown in Figure 3. It is treated with his customary delicacy and sympathy with his material; the small scale of the illustration, however, does not do justice to the beauty of the design.

Figure 4 shows a portion of a cloth manufactured by Messrs. Ireland Brothers and Co., from a design by Mr. James Ward, Headmaster of the Macclesfield School of Art, who received his early training in the Belfast School, and who has from time to time given his native city the benefit of his wide experience in decorative matters.

Recognising the need of reform in the matter of designing for damask, the Board of Managers of the Belfast Government School of Art have lately turned their attention to the subject; and, stimulated by the offer of substantial prizes by local firms, the students have produced some excellent designs in recent years. Last year Mr. Lewis F. Day was engaged to adjudicate upon the designs for local competitions, and also to deliver two public lectures on decorative art, which aroused a considerable amount of interest. Two examples are given of students' works which received awards in the National Competition last year. Figure 5, by Edwin A. Morrow, gained a silver medal, and was selected for exhibition at Buda-Pesth, being ultimately purchased by the Hungarian Government. The other one is given as an example of a common, and sometimes effective, treatment of linen damask, in which an interchange takes place between the ground and the pattern.

It will doubtless be a long time before the old popular designs disappear from manufacturers' pattern books. Every good design, however, which is commercially successful will help to oust them. With the general growth of taste we may hope that by degrees mere imitation of natural forms will cease to be regarded as the test of excellence in design, and that imagination, beauty, thought, and invention will be looked for instead. Linen damask is a beautiful material, capable in the hands of a true designer of interesting and characteristic treatment, which hitherto it has rarely received.