Embroidery on Book Covers.

The art of embroidery is probably the oldest of all the arts, and its existence during the earliest ages has been frequently attested by the discovered remains of the most primitive races, as well as of the more cultured peoples, such as the Assyrians, Egyptians, and Chinese. The Greeks and Romans practised it very extensively, and the early Christians considered it one of the most useful and refining of women's pursuits. The Emperor Theodosius I. framed laws concerning the importation of silk for embroidery into the Byzantine Empire, and laid down regulations for the employment of labour in the gymnasium, or public weaving and embroidery rooms connected with the women's apartments in great houses. During the middle ages embroidery was carefully exercised as a fine art, and regularly taught in almost all conventual establishments; indeed, it is to the church that the credit must be given for keeping the art alive up till the end of the twelfth century, when it was almost wholly in the hands of cloistered women. England, especially from very early times, was celebrated for the fineness of her embroideries, and Rome frequently had recourse to this country for the choicest ecclesiastical vestments, which she could not procure of such a splendid character elsewhere.

When the art was first applied to book covers is not known, but the oldest known specimen of embroidered work is English—a Latin Psalter worked in chain stitch, which belonged to Anne de Felbrigg, a nun in the convent of Brusyad, Suffolk, in the early part of the fifteenth century. This curious old piece of pictured work lies in the British Museum, let into a leather cover for preservation. The next earliest is the cover of "Fichetius Rhetoricorum," printed in Paris, 1471, which bears the coat of arms of Pelice Peretti, Cardinal de Montale, afterwards Pope Sixtus V. A magnificent English embroidered binding is that of a folio Bible, 1607, from the collection of the late E. H. Lawrence, Esq., depicting the temptation and fall of Eve in the Garden of Eden, the work being filled in with birds and animals, among which is the unicorn; the design is called "A Drame." One of the finest patterned embroideries on books is that on the plum-coloured velvet cover of "Opera Francisci," (Bacon’s works) 1623, which has a fine border, corners, and centrepiece, worked in "couchings" of cord and "purl.

With such specimens of ornamental, pictorial, and heraldic work, the suitability of embroidery for book ornamentation is apparent, and it only needs a proper consideration of the best materials to enable any lady ordinarily skilled with the needle to produce for herself some choice and dainty book cover, or loose case, for the reception of a cherished book. The great difficulty nowadays is to get any material which can compare with the stuffs used in bygone times, at once stout, firm, soft, and pure, free from the artificial muck that is commonly used for dressing. Velvet, silk, and linen are the best materials for the ground, and perhaps nothing is at once so suitable and so rich in appearance as velvet. Where it came from at first is not known, but the earliest known in England came from the south of Spain, though it was little employed here until towards the end of the thirteenth century. Hand-woven linen is next best, especially where the surface is to be covered over with silk work, and a very good quality is that woven at Langdale, though commonly a coarser kind, more loosely woven, was used, with a semi-bleached, creamy tint. Silk should be quite free from any artificial stiffness, and that of the hand-loom is always to be preferred to the machine-made article; even a piece of a good old dress will work up better than most new material. Satin looks well, but is very difficult to work without puckering.

For threads, silk should be used—pure floss silk, which, though more difficult to handle than twisted silk, gives better results than other kinds; but beware of the more delicate shades of modern make, that look very beautiful when new, but which will not stand exposure to the light; the fewer the tints of intermediate hues the better, as only the stronger colours are enduring. Gold and silver thread is also used, but silver tarnishes very rapidly, and should be left out of consideration. The gold thread, called "passing," used also for "purl," a material imported first from Italy in the sixteenth century, consists of a gilt, or sometimes silver gilt thread wound round silk or flax, and can be bought ready drawn. Sometimes Japanese gold paper is twisted in the same way, but this does not last, and even the silver gilt tarnishes unless specially lacquered. The best plan is to use gold "passing." Another form of gold, known as "plate," is that of thin strips of metal, which is either stitched down on to the ground by threads of silk of the same colour, or of other colours, arranged in zigzag or waved patterns, forming a sort of diaper device, this is called "laid work"; or the "plate" may be stitched through the material used for the ground, but this is only successfully done on an open texture such as linen or canvas. Sometimes tiny rings of gold are sewn on, or spangles, supposed to be of Saracenic origin.

For book covers it is generally advisable to embroider in frames, as a more equal tension of stitch and squareness of design can be secured than when the work is held loosely in the hand; no small consideration when we consider the close inspection to which it is subjected, and the necessity for it corresponding with the outlines of the boards. Very few stitches other than those in ordinary use are required, the most effective being the "orphreys," or raised stitches, such as "chain," "couch," and "tent," which give a broken looking surface called "cushion work." The flat stitches, that is, those that pass or overlap one another, and are used for flat surfaces of even colour, are called "feather work," and include the "satin," "stem," and "twist" stitches, which need no
counting, and the “crewel,” or long and short stitch, which is especially good for graduated tints. Relief embroidery is secured by stitching over cords, or pads of stuff or cotton wool, with “purl,” or by “couching,” in which cords are laid side by side, and either silks or “plate” fastened down upon them with silks of various colours. A special style sometimes found in Persian embroidery is obtained by the withdrawal of threads and button-hole stitching, which gives a very delicate and beautiful effect, and beside these there is the “tapestry” stitch for covering up all the ground so that no part appears.

A general knowledge of the art of embroidery is common enough to enable anyone to commence the work; what is more needed is the ability to design. The copying of floral forms is all that ladies usually attempt, and most of the older embroideries have been either pictorial or armorial. If we could only get designs, new and fresh arrangements of beautiful and harmonious forms with a relationship to each other, embroidery on bookwork would not be a thing of the past. Some few are doing this, but it is an occupation deserving of pursuit by many more whose time is occupied with far less delightful tasks, which afford none of the satisfaction of creative effort.

The specimens chosen for our illustrations are, first, Spanish of the seventeenth century on a pale-brown gauze, worked with shades of red, yellow, and blue, with a trace of Moorish style.

The Persian is on canvas in two shades of blue silk, with a narrow strip of gold worked into the texture of the cover.

The Venetian is of coarse linen, with sprays of rose-coloured flowers, pale blue, black and white, with fine gold and silver thread.

The Indian design was worked by Mrs. Archibald Constable on “oole” calf. The outside lines or frame are of old gold and green silk. The scroll border in violet, with crimson quatrefoils and amber dividing lines, the leaves green. The vases are wine coloured, holding deep crimson flowers. The inner frame of wine colour and amber.

The English velvet is of a rich maroon colour, with raised silk embroidery in various shades, rose and blue predominating; the intersecting lines and dots of raised gold-coloured silk.

The other English embroidery is on cream satin. The whole pattern is outlined with fine gold thread, and the ground is studded with tiny gold rings. The flowers are worked with graduated colours and raised, the calyxes being worked with “purl.” Both the English books are by Mrs. Brownlow, of Cambridge.

Chinese Imports of Paper, 1890-91.—Shanghai imported 6,019 tons of foreign paper of the value of £79,703 taels in 1891, and 3,801 tons of the value of £84,017 taels in 1890, thus showing an increase in 1891 of nearly half as much again as during the previous year. This port also received 104,136 tons of the value of £1,654,437 taels of native manufacture in the latter year, and 145,752 tons of the value of £1,825,609 taels in 1890. The increase is not so notable in this case, and there is a decrease in the value. The English value of a tael is 4s. 11d.

How Paper is Made.

In none of the mechanical arts has greater progress been made in recent years than in the manufacture of book and magazine paper. Years ago, though not too long to endure in the memory of the trade, the process of converting the raw material into the hard-fibred and smooth-surfaced paper essential to the needs of the higher class publishing houses was a task involving many days of constant care and much manual labour. To-day the process is extremely rapid, the paper is infinitely better than before, and much of the manual labour that was employed in the days of our fathers has been supplanted by labyrinths of swift-moving machinery.

It would be difficult to imagine a more surprising metamorphosis than that by which the native timber on the Pennsylvania hills is converted, in seven hours, to a sheet of clear white paper ready for the press. Yet this, in brief, is the process that is going on every day at the New York and Pennsylvania Company’s mill at Johnsonburg in western Pennsylvania. This mill is the largest book-paper-making establishment in the world. It covers several acres of ground, and almost as many acres of machinery. Sixty cords of timber are thrust into the choppers, and 90,000 pounds of paper are shipped from the yards every day to be cut, printed, and placed in countless libraries throughout the land.

This chopper, where the conversion of wood into paper begins, is so a sort of guillotine. There is a sharp blade of massive proportions, moving swiftly in a groove. Everything that comes beneath the knife is severed. Occasionally a tough knot that has withstood the blasts of many a winter is tossed in, only to suffer the fate of the sapling that went before. Every stick that goes in comes out in the shape of chips no larger than the palm of a man’s hand. The wood does not lose its identity, however, until the next stage in the process, which is known as “cooking.” There are several large digesters, containing caustic soda, in which the chopped wood is placed and cooked for five hours, this being the longest single process to which it is subjected. From the digesters it is blown into a large tank, its consistency being thick and heavy, and its colour an ugly brown.

The soda having been run out, the pulpy cooked wood in the tank is washed down with hot water and thoroughly cleaned. Then it is dumped into a large chest, cleaned again, and having been pumped into a screen, which removes splinters and débris, it is run into wet machines and in a measure dried. The “stock” emerges from these machines an unbroken sheet of light-brown pulp, resembling soaked birch bark. As it falls from the machines, it is taken on carriers to four bleachers, each holding 4,000 pounds. Here it is treated with chloride of lime liquors until the desired whiteness is obtained.

By this time one begins to see how it is possible to make paper from wood, for the “stock” has already assumed a beautiful white colour, and its consistency is of a soft pulpy sort, very much like boiled starch,