

TAPESTRY, or TAPISTRY, a curious kind of manufacture, serving to adorn a chamber, or other apartment, by hanging or lining the walls of it.

Some use tapestry as a general name for all kinds of hanging, whether woven or wrought with the needle; and whether filken, woollen, linen, leathern, or of paper, (in which they are countenanced by the etymology of the word, formed from the French *tapiffer*, to line; of the Latin *tapes*, a cover of a wall or bed, &c.) But, in the common use of our language, the term is now appropriated to a kind of woven hangings of wool and silk, frequently raised and enriched with gold and silver, representing figures of men, animals, landscapes, &c.

The invention of tapestry seems to have come from the Levant; and what makes this the more probable is, that formerly, the workmen concerned in it were called, at least in France, *Sarazins*, or *Sarazinois*.

Some have supposed that the English and Flemish, who were the first that excelled in it, might bring the art with them from some of the croisades or expeditions against the Saracens. Accordingly they say, that those two nations were the first who set on foot this noble and rich manufacture in Europe, which afterwards became one of the finest ornaments of palaces and churches, &c. At least, if they be not allowed the inventors, they have the honour of being the restorers, of this curious and admirable art, which gives a kind of life to wools and silks, in some respects not inferior to the paintings of the best masters. However, it does not appear at what precise era this manufacture was introduced into Europe; nor is it certain to whom it was owing.

Guicciardin, in his "Description and History of the Netherlands," printed at Antwerp in 1582, ascribes the invention of the art of making tapestry hangings to the Netherlanders, but he does not assign the time of the invention.

The art of weaving tapestry was brought to England by William Sheldon, esq. about the end of the reign of Henry VIII. See Dugdale's Warwickshire in Stemmatæ Sheldon, p. 584.

In the reign of king James, the manufacture of tapestry was set up at Mortlake, in Surrey. Aubrey, indeed, in his history of that county, dates its institution in the subsequent reign; but Lloyd (State Worthies, p. 953.) is not only positive for the former era, but affirms, that at the motion of king James himself, who gave two thousand pounds towards the undertaking, sir Francis Crane erected the house at Mortlake for the execution of the design; and this is confirmed by authentic evidence; for, in Rymer's Fœdera, vol. xviii. p. 66, there is an acknowledgment from king Charles in the first year of his reign, viz. 1625, that he owes six thousand pounds to sir Francis Crane for tapestry; and he grants to him two thousand pounds yearly, for ten years, towards the maintenance of the said work.

These works at Mortlake, which at first had been conducted after old patterns, were afterwards formed from

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designs, both in history and grotesque, furnished by Francis Cleyn, and thus carried to singular perfection.

From the deed above recited, it is plain that the manufacture was then arrived at great perfection. See Mr. Walpole's *Anecdotes of Painting in England*, vol. ii. p. 36.

In the year 1663, a statute was enacted (cap. 15.) for the encouragement of the linen and tapestry manufactures of England, and discouragement of the very great importation of foreign linen and tapestry.

The first establishment of a tapestry manufacture at Paris was under Henry IV., in the year 1606 or 1607, by means of several excellent artists, whom he invited from Flanders.

But this fell with the death of that prince. Under Lewis XIV. the manufacture was retrieved by the care and address of the great M. Colbert, to whom is owing the establishment of the Gobelins, a royal tapestry manufactory, which has produced works of this kind scarcely inferior to the finest English or Flemish tapestry, either with regard to the design, the colours, or the strength.

In this manufactory both wool and silk are used, and sometimes gold and silver. The finest paintings may be copied in this work, and the greatest masters have been employed in draughts for the tapestry weavers.

The weavers of the Gobelins work behind, or on the wrong side of the loom, which stands upright, and the pattern is placed on either side of the workman.

As the tapestry of the Gobelins is made of pieces of a certain breadth only, there are other workmen, called *ren-trayeurs*, or *fine-drawers*, who are employed in sewing or fine-drawing the several parts together, so that no seam is discernible, but the whole appears as one design, like a piece of silk from a loom. These workmen are also useful in mending and cleaning tapestry when damaged or sullied.

The tapestry-men distinguish two kinds of work; *viz.* tapestry of the *high* and the *low warp*, though the difference is rather in the manner of working, than in the work itself, which is, in effect, the same in both, only the looms, and consequently the warps, are differently situated; those of the *low warp* being placed flat, and parallel to the horizon, and those, on the contrary, of the *high warp*, erected perpendicularly.

The French have had three considerable tapestry manufactories besides that of the Gobelins; the first at Aubusson, in Auvergne; the second at Felletin, in the Upper Marche; and the third at Beauvois: they were all equally established for the high and the low warp; but all laid aside the former, excepting that of the Gobelins.

There are admirable low warps in Flanders, generally exceeding those of France; the chief and almost only Flemish manufactories were at Brussels, Antwerp, Oudenard, Lille, Tournay, Bruges, and Valenciennes.

At Brussels and Antwerp they succeeded both in human figures and animals, and in landscapes: and that both with respect to the designing and the workmanship. At Oudenard their landscapes and animals were good, but their human figures not well executed. Lille, and the other cities named, came behind Oudenard. The French manufactory of Felletin has done tolerably well in landscapes, Aubusson in figures, and Beauvois in both.

The usual widths of tapestries were from two ells to three ells and a half, Paris measure.

The manufacture of tapestry of each kind (though less fashionable and in use than formerly) is too curious to be here past over without a short description. We shall give each under its separate article.

*Manufacture of Tapestry of the High Warp.*—The loom

on which this is wrought is placed perpendicularly: it consists of four principal pieces; two long planks or cheeks of wood, and two thick rollers or beams. The planks are set upright, and the beams across, one at top, and the other at bottom, a foot distance from the ground. They have each their trunnions, by which they are suspended on the planks, and are turned with bars. In each roller is a groove, from one end to the other, capable of containing a long round piece of wood, fastened in it with hooks. Its use is to tie the ends of the warp to. The warp, which is a kind of worsted, or twisted woollen thread, is wound on the upper roller; and the work, as fast as woven, is wound on the lower.

Within side the planks, which are seven or eight feet high, fourteen or fifteen inches broad, and three or four thick, are holes pierced from top to bottom, in which are put thick pieces of iron, with hooks at one end, serving to sustain the coat-stave: the pieces of iron have also holes pierced in them, by putting a pin in which, the stave is drawn nearer, or set farther off; and thus the coats or threads are stretched and loosened at pleasure. The coat-stave is about three inches diameter, and runs all the length of the loom; on this are fixed the coats, or threads, which make the threads of the warp cross each other. It has much the same effect here as the spring-stave and treddles have in the common looms. The coats are little threads fastened to each thread of the warp, with a kind of sliding-knot, which forms a sort of maff or ring. They serve to keep the warp open, for the passages of broaches wound with silks, woollens, or other matters used in the piece of tapestry.

Lastly, there is a number of little sticks, of different lengths, but all about an inch diameter, which the workman keeps by him in baskets, to serve to make the threads of the warp cross each other, by passing them across: and that the threads thus crossed may retain their proper situation, a packthread is run among the threads above the stick.

The loom thus formed, and mounted with its warp, the first thing the workman does, is to draw, on the threads of this warp, the principal lines and strokes of the design to be represented on the piece of tapestry; which is done by applying cartoons made from the painting he intends to copy, to the side that is to be the wrong side of the piece; and then with a black-lead pencil following and tracing out the contours of them on the thread of the right side; so that the strokes appear equally both before and behind. As to the original design the work is to be finished by, it is hung up behind the workman, and wound on a long staff, from which a piece is unrolled, from time to time, as the workman proceeds.

Besides the loom, &c. here described, there are three other principal instruments required for working the silk, or wool of the woof within the threads of the warp. These are a broach, a reed, and an iron needle.

The broach is of hard wood, seven or eight inches long, and two-thirds of an inch thick, ending in a point, with a little handle. It serves as a shuttle, the silks, woollens, gold, or silver, to be used in the work, being wound on it. The reed, or comb, is also of wood, eight or nine inches long, and an inch thick at the back; whence it usually grows less and less, to the extremity of the teeth, which are more or less apart, according to the greater or less degree of fineness of the intended work.

Lastly, the needle is in form of a common needle, only bigger and longer. Its use is to press close the wool and silks, when there is any line or colour that does not fit well.

All things being prepared for the work, and the workman

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man ready to begin, he places himself on the wrong side of the piece, with his back towards the design; so that he works, as it were, blindfold, seeing nothing of what he does; and being obliged to quit his post, and go to the other side of the loom, whenever he would view and examine the piece, to correct it with his pressing-needle.

To put any silk, &c. in the warp, he first turns and looks at his design; then taking a broach full of the proper colour, he places it among the threads of the warp, which he brings across each other with his fingers, by means of the coats or threads fastened to the staff: this he repeats every time he is to change his colour.

The silk, or wool, being placed, he beats it with his reed, or comb; and when he has thus wrought in several rows over each other, he goes to see the effect they have, in order to reform the contours with his needle, if there be occasion.

As the work advances, they roll it up on the lower beam, and unroll as much warp, from the upper beam, as suffices them to continue the piece: the like they do of the design behind them. When the pieces are wide, several workmen may be employed at once.

We have but two things to add: the first, that this high-warp tapestry goes on much more slowly than the low-warp, and takes almost double the time and trouble. The second, that all the difference the eye can observe between the two kinds consists in this, that in the low warp there is a red fillet, about one-twelfth of an inch broad, running on each side from top to bottom; which is wanting in the high warp.

*Manufacture of Tapestry of the Low Warp.*—The loom, or frame, on which the low warp is wrought, is much like that of the weaver's: the principal parts of it are two strong pieces of wood forming the sides of the loom, and bearing a beam, or roller, at each end: they are sustained at bottom with other strong pieces of wood, in manner of trestles; and to keep them the firmer, they are likewise fastened to the floor with a kind of buttresses, which prevent any shaking, though there are sometimes four or five workmen leaning on the fore-beam at once.

The rollers have each their trunnions, by which they are sustained: they are turned by large iron pins three feet long. Along each beam runs a groove, in which is placed a *wich*, a piece of wood of about two inches diameter, and almost of the length of the roller: this piece fills the groove entirely, and is fastened in it, from space to space, by wooden pins. To the two wiches are fastened the two extremities of the warp, which is wound on the farther roller; and the work, as it advances, on the nearer.

Across the two sides, almost in the middle of the loom, passes a wooden bar, which sustains little pieces of wood, not unlike the beam of a balance: to these pieces are fastened strings, which bear certain spring-staves, with which the workman, by means of two treddles, under the loom on which he sets his feet, gives a motion to the coats, and makes the threads of the warp rise and fall alternately. Each loom has more or fewer of these spring-staves, and each staff more or fewer coats, as the tapestry consists of more or fewer threads.

The design or painting, the tapestry-man is to follow, is placed underneath the warp; where it is sustained from space to space with strings, by means of which the design is brought nearer the warp.

The loom being mounted, there are two instruments used in working of it: *viz.* the reed, and the flute. The flute does the office of the weaver's shuttle; it is made of an hard polished wood, three or four lines thick at the ends, and

somewhat more in the middle, and three or four inches long. On it are wound the silks, or other matters, to be used as the woof of the tapestry. The comb or reed is of wood or ivory; it has usually teeth on both sides; it is about an inch thick in the middle, but diminishes each way to the extremity of the teeth: it serves to beat the threads of the woof close to each other, as fast as the workman has passed and placed them with his flute among the threads of the warp.

The workman is seated on a bench before the loom, with his breast against the beam, only a cushion or pillow between them; and, in this posture, separating, with his fingers, the threads of the warp, that he may see the design underneath, and taking a flute, mounted with a proper colour, he passes it among the threads, after having raised or lowered them, by means of the treddles moving the spring-staves and coats.

Lastly, To press and close the threads of the silk or yarn, &c. thus placed, he strikes each course (*i. e.* what the flute leaves in its passing and coming back again) with the reed.

What is very remarkable in the manufacture of the low warp, is, that it is all wrought on the wrong side; so that the workman cannot see the right side of his tapestry, till the piece be finished and taken out of the loom.

M. Le Blon, in endeavouring to fix the true harmony of colouring in painting, found that all visible objects may be represented by the three primitive colours, red, yellow, and blue; because out of these, all others, even black itself, may be compounded.

From the principle of producing any visible object with a small number of colours, and from observing the compounded colours which were reflected from two pieces of silk of different colours, placed near to one another, he arrived at the skill of producing in the loom all that the art of painting requires. In weaving, indeed, he hath been obliged to make use of white and black threads, besides red, yellow, and blue; and though he found that he was able to imitate any picture with these five colours, yet for cheapness and expedition, and to add a brightness where it was required, he found it more convenient to make use of several intermediate degrees of colours.

In his new way of weaving tapestry in the loom with a draw-boy, it may be performed almost as expeditiously as fine brocades; for when the loom is once set and mounted, any common draught-weaver, unacquainted with drawing or painting, and indeed hardly knowing what figure he is about, may exactly produce what the painter hath represented in the original pattern: and thus a piece of tapestry may be woven in a month or two, which, in the common way of working, would take up several years; and what in the common way costs a thousand pounds, may, by this means, be afforded finer and better for a hundred.

The main secret of this consists in drawing the patterns, from which any common draught-weaver can mount the loom; and when that is done, the piece may be made of any size, by only widening the reeds and the warp; and a reverse may be made with the same ease; which is done by the boy's pulling the lashes up again in the same order in which he pulled them down before: by which contrivance the tapestry may be suited to any room, whether the light comes in on the right, or on the left. The patterns are painted upon paper, on which are printed squares from copper-plates, and these subdivided by as many lines as answer to the threads of the warp, which run lengthwise of the piece; then they try how many threads of the shoot answer in breadth to every subdivision of the squares. Every thread

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of the warp goes through a small brass ring called a *male*, or through a loop in the leith, and hath a small long weight or lingoe hung below, to counterbalance the packthreads, which going from the top of the rings or loops, are passed over the pullies in the table directly over the loom, and are continued nearly in an horizontal position on one side of the loom to a convenient distance; where they are all spread on a cross piece fastened to two staples: these are called the *tail of the mounture*; and from each of these packthreads, just by the side of the loom, are fastened other packthreads, called *simples*, which descend to the ground; so that by pulling these simple cords, you raise any of the threads of the warp at pleasure: wherefore they fasten a loop or potlart to as many of these simple cords as there are threads of the warp to be pulled up at every shoot, or every throw of the shuttle; by which means the shoot shews itself on the right side, where the warp is pulled up: and in ordering this, they are guided by the pattern, on which they count the distances of the subdivisions, which contain the same colours in the same line, and can be shot at once: then they fasten potlarts to the several simple cords that draw up the rings, through which those threads of the warp run, which are to lie behind this colour; they tie all these loops together, and fasten a piece of worsted or silk to the knot, of the same colour that the workman is to throw; and the boy, when he pulls each loop, names the colour, that the weaver may take the proper shuttle, and so on for every colour to be thrown. Phil. Trans. abr. vol. vi. p. 469, &c.

In connection with this subject, we are naturally led to give a brief account of the manufacture of carpets. This is said to have been introduced into France from Persia, in the reign of Henry IV., where it has been distinguished by extraordinary encouragement. The most considerable manufactory of this kind was that of Chaillot, or the royal manufactory of La Savoniere, or the Soap-house, about a league from Paris. This manufacture was altogether of wool, and worked in the manner of velvet. All sorts of figures of animals may be imitated in this work, but fruits and flowers answer best; and it is most successfully applied to the manufacture of carpets and all sorts of screens.

The carpets are, in some respect, wrought by the upright way of tapestry. The two rollers are placed the same way: the warp is braced from the top downward; the chain, with its loops, keeps all the threads of the warp equally perpendicular; the stick, which facilitates their crossing, runs through them in the same manner, and separates the foremost threads from the rest; the lizier-pole holds all the strings, which serve to draw the fore-threads in their turns, and then the opposite threads, in order to insert the spindles of wool. But the method of working in this manufactory differs from the upright way of tapestry in the following particulars.

The warp is divided, both before and behind, into parcels of ten threads, nine white and one blue; which is regularly continued through the whole width of the piece. The weaver works on the fore-side, and consequently sees what he does. The design or pattern is traced in its proper colours on cartons, tied about the workman, who looks at it every moment, because every stitch is marked upon it, as it ought to be in his work. By this means he always knows what colours and shades he is to use, and how many stitches of the same colour. In this he is assisted by squares, into which the whole design is divided; each square is subdivided into ten vertical lines, corresponding with each parcel of ten threads of the warp; and besides, each square is ruled with ten horizontal lines, crossing the vertical lines at right angles. The workman having placed his spindles of thread near him,

begins to work on the first horizontal line of one of the squares. These lines marked on the carton are not traced on the warp, for this would be endless; because an iron-wire, which is longer than the width of a parcel of ten threads, supplies the place of a cross line. This wire is managed by a crook at one end, at the workman's right hand; towards the other end it is flattened into a sort of knife, with a back and edge, and grows wider to the point. The workman fixes his iron wire, or rod, horizontally on the warp, by twisting some turns of a suitable thread of the woof round it, which he passes forward and backward, behind a fore-thread of the warp, and then behind the opposite thread, drawing them in their turn by their leithes. Afterwards, if it be necessary, he brings his woof-thread round the wire, in order to begin again to thrust it into the warp. He continues in this manner to cover the iron rod or wire, and to fill up a line to the tenth thread of the warp, which is the blue one. He is at liberty either to stop here, or go on with the same cross line in the next division. According as he passes the thread of the woof round the iron wire, and into the warp, the threads of which he causes to cross one another at every instant; when he comes to the end of the line, he takes care to strike in, or close again all the stitches with an iron reed, whose teeth freely enter between the empty threads of the warp, and which is heavy enough to strike in the woof he has used. This row of stitches is again closed and levelled, by a dweet of blue thread doubled, which the workman puts into the warp, sliding his hand over the whole length of line he has wrought. He crosses the same threads of the warp, and then stretches through them another single blue thread. He beats in these two threads, one after another, with his reed; these dweets of cross thread, which are a support to each line, will be hid by the pile on the fore-side, and they indeed diminish the beauty of the wrong side; but this is of no consequence. This done, the workman draws the iron rod or knife out of the loops of the woof that covered it; and as it is wider towards its end, these loops resist its passage; but being edged at its fore part, it cuts them through. Then the workman with his left hand lays a strong pair of shears along the finished line, cuts off the loose hairs, and thus forms a row of tufts perfectly even, which, together with those before and after it, form the shag. One line of this sort comprehending the row of stitches and woollen pile, with the two blue threads which support them, somewhat surpasses in thickness the space between the first and second cross line of a square. By this means the workman always sees what he is doing. He follows, stitch for stitch and colour for colour, the plan of his pattern which he is at, and paints magnificently, without having the least notion of painting or drawing.

The manufacture of carpets, after the manner of Chaillot, was introduced into London in the year 1750, by two workmen who left the manufactory in disgust, and came here to procure employment. They were encouraged and furnished with materials by Mr. Moore, to whose assiduity and zeal the establishment of this sort of manufacture has been principally owing. However, these men afterwards connected themselves with a Mr. Peter Parisot, who, under the patronage, and by means of the pecuniary assistance of his royal highness the duke of Cumberland, pursued the manufacture of a carpet already begun at Paddington. This undertaking was soon removed to Fulham, and, under the munificence of the duke, promised to be durable and advantageous. In 1752, Parisot, the undertaker, proposed a plan of subscription, the nature of which it is now needless to recite; as the whole scheme, as far as he was concerned in it, soon came to nothing. But Mr. Moore, being provided

vided with the necessary materials, and engaging proper workmen, and risking a very considerable expence, succeeded in establishing this important and useful manufacture, infomuch that, in 1757, he obtained a premium from the Society of Arts, &c. for the best carpet in imitation of the Turkey carpets; and by his ingenuity and perseverance in bringing this manufacture to perfection, it is now arrived at a very high degree of reputation.

Mr. Whitby and Mr. Passavant were also honoured with premiums for carpets of their manufacture by the Society of Arts in 1757 and 1758. We have also manufactories for carpets that are much esteemed at Axminster and Wilton; not to mention those of Kidderminster and other places.