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CANTOR LECTURES

ON THE
ARTS OF TAPESTRY-MAKING AND EMBROIDERY.

BY
ALAN S. COLE.

DELIVERED BEFORE THE SOCIETY, APRIL 5TH, 12TH, AND 19TH, 1886.
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SYLLABUS.

LECTURE I.

Points of resemblance between Weaving, Tapestry-making and Embroidery—Special technical peculiarities of each process—Ornamental effects as characteristics common to Decorative Textiles—National Styles—Works by Cavemen and Eskimos—Types of Cosmopolitan Ornamental Devices—Coincident similarity between ornaments produced by different people at various periods—Imitation as a factor in production of Ornament—Leochare's group of Ganymede and Eagle compared with similar compositions in Sassanian Metal-work and Graeco-Buddhist Sculpture—Deterioration from, and aspiration to, a given standard of performance in Drawing and Composition—Types of New Zealand Ornament—Types of Scandinavian Ornament—Résumé.

LECTURE II.


LECTURE III.

Embroidery—Two Classes: Embroidery on one side of a material; on both sides—Indications of wide-spread use of Embroidery, and same form of stitches—Long practice of the Art by Mohammedans, Chinese and Japanese—Influence of Christian Ecclesiastical Establishments in developing Embroidery, and Designs for it, in Europe—Importance of considering Embroideries in respect of their workmanship and design—Analysis of Stitches—Simplicity of classification—The numerous names given to works of technical similarity—Specimens of Embroideries of different times in respect of Articles of Use and Costumes—Résumé.
THE

RTS OF TAPESTRY-MAKING AND EMBROIDERY.

BY

ALAN S. COLE.

LECTURE I.—DELIVERED APRIL 5TH, 1886.

The subjects of the Cantor lectures which the Society of Arts have kindly invited me to deliver are Tapestry-making and Embroidery. These are two branches of the comprehensive group of textile manufactures and ornamentation; and although we may perceive some resemblances in methods of execution between the weaving of textiles, the making of tapestries, and certain forms of embroidery, there are sufficiently marked differences to entitle each branch to be separately discussed.

The patterns and ornament of textiles also form a distinct topic, affecting both tapestry-making and embroidery. But in a necessarily limited and preliminary lecture I do not think that one could very usefully try to indicate the classes or groups of ornament peculiar to each process. The closer one looks into the ornamental character of things, the more the conclusion seems to present itself that all ornamentation, in whatever material it may be expressed, is to be viewed as a long chain of many links. The chief part of my lecture this evening will, therefore, relate to a development of pattern.

Certain processes of manufacture have undoubtedly affected the expression of ornamental effects; and, vice versa, the attempt to produce certain ornamental shapes and effects by methods which have not readily lent themselves to the attempt has sometimes brought about modifications of methods.

Sewing, as used for uniting furs and skins together, may, in some cases, precede weaving in a procession of human crafts; but weaving in a loom with a shuttle appears to be the senior of processes pertaining to textile manufactures. Embroidery, which is a development of sewing, comes as a handmaid to weaving. In fact, embroidery postulates weaving, as a rule, since it requires a woven foundation to start from, although the embroidery with horse-hair and beads upon leather, such as the wampam of American Indians, and other tribes in our own hemisphere, is an exception. That, however, does not diminish the significance of the fact that embroidery has been done upon a woven foundation from the earliest known times.

Tapestry-making, as applied to the production of large pieces, is, perhaps, a later process than weaving and embroidery. The apparatus for making tapestry is slightly more involved than that for simple weaving and embroidery. In a genealogy of processes, it would be hardly correct to assign to tapestry-making a position as the offspring of the far older process of carpet-making, which, however, it closely resembles. So far as one can trace it from actual results of the process, tapestry-making in respect of large hangings for use in tents, or buildings, may, perhaps, be considered to be European, and dating from about the 12th century. Before this time, hangings, but probably of light texture, had been put to uses like those to which tapestry came to be devoted. A process analogous to if not identical with that which we shall next Monday see is peculiar to tapestry, had existed for centuries, and had been employed by Oriental people like the Egyptians, Syrians, Tartar, and Tibetan tribes, and possibly Arabs. But distinct evidence that such a process is one of the earliest known to textile makers is not forthcoming in the same way as the indications that simple weaving was one
the necessary and primary human arts or processes amongst people in all parts of the world. As time went on, and goes on, modifications were, and are still, made in the weaving apparatus, the frame, the cylinders, the working of the warp, the number of the shuttles, and so forth; but the main principle of the process has remained the same from all time; and the primitive methods prevail amongst primitive people, as may be gathered from illustrations of weaving which are supplied to us from people such as the natives of Gabono, a place in that district of West Africa, between the Congo and Gaboon Rivers.

And now turning to the principal subject of my first lecture, I would say that, whilst the ornaments or patterns which have been expressed are very varied, reflecting phases of ingenuous and conventional fancy and rendering for thousands of years, the use of primitive and simple forms of ornament also survives. Not only are there these survivals, but there are recurrent appearances of more elaborate ornament, the elementary components of which are apparently to be traced to simple and primitive forms. It would be misleading were I to exemplify these ornaments merely in respect of tapestries and embroideries. I have, therefore, collected together a few diagrams from various sources, and with these I venture to very slightly suggest a development of patterns.

It is usual to display the history of art and its development by taking records of the earliest historic periods, and attributing to each of the famous nationalities of the world a credit for having produced some distinctive style. Under this method of treatment, we may first discuss that of the Egyptians, then of the Assyrians, then of the Greeks, whose rapid attainment to artistic supremacy seems to isolate them from the Egyptians and Assyrians. The Romans follow the Greeks, and a decline in quality ensues. A somewhat vague Romanesque and Byzantine nationality—though it might more properly be termed "period"—of art is then traced; after which the germs and their blossom of the Renaissance and Gothic styles in Italy, Germany, Flanders, France, England, and Spain are discovered, to be succeeded by developments of antecedent styles, as displayed in certain classes, under titles belonging to royal families and sovereigns, such as Tudor, Elizabethan, Jacobean, Louis XIV., XV., and XVI., Georgian and Empire. To this general scheme, types of Celtic and Scandinavian art, Moorish, Arabic, Syrian, Persian, Indian, Chinese, and Japanese art either form a sort of supplement, or are occasionally alluded to as circumstances may seem to invite; whilst art, as expressed by people like the natives of the Congo, the New Zealander, and the Toltec or the Aztec of Central America, is dealt with as though it were outside the pale, and possessed a peculiar interest of its own, having virtually nothing in common with the previously named styles.

The term art or skill can be applied to all branches of human work. And in its relation to expressions of form and colour, and to processes or handicrafts, rather than to countries or periods, I propose to consider it in the course of my lectures. For after all what is nationality in art? Is it possible to take any phase of art and maintain that its creation, as distinct from those features which one groups as pertaining to individuality of treatment, is peculiar and due to a single man, and its rearing to a single nation? The greatest geniuses could not have done what they did without work, and the influence of such work, having preceded them. Commerce, in a broad sense, between peoples has from undatable periods distributed the works of human labour and ingenuity, sometimes where wit was keen to act under their influence, sometimes where wit was slow. The rare individual genius carries the art, whatever it may be, a stage further than has previously been reached; whilst others of less ability emulate some chosen example, and in so doing either maintain or obscure the influence of traditions. So far, then, as history of art may be written, and especially perhaps of art in Europe, this practical handing on and modifying of its traditions through retrogressive as well as progressive stages of emulation involves a cosmopolitan survey. Circumstances of isolation, stagnation in custom, and interruption of social arrangements and habits, have been contributory causes to the stereotyping of certain level standards of performance in productions which, through likeness on to another, are subsequently regarded as components of a national style, such for instance as the Assyrian, Egyptian, and Romanesque styles. But national style of art in this sense might be held to be demonstrated by cognate works showing more often a comparative absence than predominance of complete ability. Consequently, to detach and consider by itself some one or other national series of emulative works, impairs the view of development of art for its own sake.

Carlyle writes that the first spiritual want of man is decoration, a statement involving
a cosmopolitan aspect of man, and implying a common want and a common response, throughout the period that man has been in the world. Similar conditions of life, according to authorities upon climate, geology, and biology, repeat themselves during the course of hundreds of thousands of years. The climate, for instance, of the lower miocene stage prevailed in Europe long before signs of man can be traced; and yet a similar climate now prevails at Louisiana, North Africa, and South China, where man exists. The antiquity of geological records, from which such facts I believe are deduced, is overwhelming in contemplation, as compared with that of the records of human art. Still, if one could adopt a similar view as to the recurrence or succession of marked phases of artistic decorative and ornamental work, the demonstration of an evolution of such work would be possible, although it would, I expect, be a matter of nice discernment to select normal types to fully illustrate it.

Now, decoration as the response to "the first spiritual want of man," may for our present purposes be divided into two broad divisions, the one in which the representation of actual things occurs, the other in which abstract forms are displayed. A line and a dot I may suggest as simple abstract forms, elements that we might expect to find in the first works of decoration. Nevertheless, it is, I think, a striking fact that, chronologically taken, the first specimens of graphic art at present known to us gives us not only representations of animals but also of human habits, like hunting.

These were scratched on bones of animals by cave-men many thousands of years before the Egyptians, of whose skill in representing actual things and abstract forms we have records going back to more than 5,000 years ago.

The art or skill in the drawing, as we see by these diagrams thrown on the screen, indicates a facility and fidelity of representation which belong, according to our notions, more to a trained draughts-man than to so presumably barbaric a creature as a cave-man. As Mr. Boyd Dawkins points out, a somewhat similar graphic skill displays itself in engravings on bone by the Eskimos of the present time, and it would seem that the conditions of their life are not far removed in likeness from those of the cave-men. But I think it will be allowed that the graphic skill of the cave-men takes a higher position in an evolution of skill than that of the modern Eskimos. From the evidences furnished by the cave-men, we are not, I think, forced to conclude that pattern making with abstract forms did not co-exist with the power of sketching animals.

And here I would show you a series of simple abstract forms taken from various sources, from the combination of which patterns have arisen.

First we have repeated lines (Fig. 1, A) graven on pre-historic pottery; the zig-zag (B, C, H.), the square (E), the square within a square (F), the cross (G), and what is commonly known as key pattern (J1), (Fig. 2, 1, J, K, L), are

![Fig. 1](image-url)

**Fig. 1.**

A Universal. Prehistoric. In various countries.


G Universal. Tibetan, Grecian.

**Fig. 2.**


L Pimos Tribe, Gulf of California. M Assyrian, Bronze age.


used as simple abstract forms by people of primitive and advanced culture. Certain elaborations of patterns with straight lines are seen as admirably carried out in the fine plaitings and well-ordered carvings of savages as they are in the geometric patterns of the Chinese, Japanese, and those people grouped as Saracenic. Ornament based on circular and curved lines.
seems to be as early in its appearance as that made with straight lines. The circle and concentric circles are elements in primitive ornaments (14). By the introduction of a curved line between a pair of double concentric circle forms (X) we have the suggestion of a spiral, and this suggestion is carried a stage further by so primitive a being as a native of New Guinea (O). The origin of the spiral (Fig. 3) has, I believe, been a subject of profound discussion, and it seems to be a form not so purely abstract as those we have previously looked at. Some spirals resemble those in shells or the fronds of ferns, others again may have arisen from imitating coils of string or wire, and others from the convolutions on the flesh of fingers. This latter class of spiral is used by New Zealanders for their tattoo ornaments.

Thus the variety of actual things, from representing which an ornament like the spiral may arise, is sufficient probably to account, if need be, for a number of independent appearances of apparently the same ornament. The same sort of remark applies to many other ornamental forms. As the study of ornament proceeds, forms having an apparent likeness to one another can be grouped together as generic types in one large family; and the influence of dimensions of space—length and breadth—is seen to have affected the use of such types in the making of patterns. A sense of length has operated in producing horizontal patterns, whilst breadth or height has assisted in producing perpendicular ornament. A sense of surface, limited by length and breadth, has helped to generate the scattering of forms in horizontal and perpendicular series, an arrangement very noticeable in diapers, such, for instance, as we observe in this Assyrian King’s costume. The diagram shown on the screen is taken from a drawing of a sculpture done about 800 years B.C. Another example of the use of ornamental diapering is to be seen in a sculpture from the Usumacinta River, in Central America, possibly carved by an Aztec artist of the 13th or 14th century.

I hope that these suggestions may have been sufficient to establish the fact that schemes of arrangement are to be deduced from the simplest of patterns, and that although these schemes have a relationship one to another, they may possibly and probably, like the representation of forms, have grown into usage quite independently of any such factor as imitation.

But a vast quantity of patterns has been made which have been imitated and adapted from one to another. The opportunities of imitation, such as those furnished by intercourse, whether arising from peaceful or warlike conditions, have recurred from the earliest of times. It is, therefore, an almost hopeless task to discover absolute originality in any production. Theorising upon the development of pattern, one seems to see that monotonity of symmetry, for instance, educes a desire for contrast of some sort. Both symmetry and its contrast are conspicuous in elaborated details and masses of ornament compounded of abstract forms and quasi-representation of actual things. When certain ornamental effects are attempted, the unconstrained representation of the actual appearance of things is affected by conditions such as those which arise from the nature of the material in which these effects are to be rendered, the use of the object, and the shape of the whole or that part of it which it is intended to decorate. For instance, from the method of cross stitch embroidery, which is usually regulated by the rectangular lines of the woven material upon which the embroidery is done, rectangular rendering of things ensues, as in this specimen (Fig. 4, p. 5) (made perhaps in Germany during the 16th or 17th centuries), where it was suggested that some Persian characters were depicted. The suggestion, however, does not bear the test of close scrutiny, since we trace bird forms in the device, which is repeated and scattered in a diapering pattern over the main portion of the specimen. We see that the device itself is made up of an oblong body resting on two feet; a neck with square head and straight beak, is bent backwards over the body—as in the gait of a waddling duck—whilst from the extremity of the back rises a device suggestive of an upturned tail. This, then, whatever may be its origin, is no mere arrangement of lines to produce an abstract form; it possesses a distinct meaning, notwithstanding that its value in representing a bird is somewhat obscured. Similar rectangular renderings of animals is furnished by tent stitch embroidery from
Anatolia. Many shapes in woven textiles and carpets from Tartar tribes have become so contorted by the special process in which they have been rendered, that one loses trace of their having started originally from abstract forms or from the representation of actual things. The same characteristic is observable in certain classes of ornament made by strict Mohammedans, whose reverence for religious doctrines prevents them from actually depicting living objects. The orderly arrangement of the odd-shaped details, however, predominates, and gives them value as patterns.

But reverting to the monotony which makes one wish for change, and applying this feeling in respect of a primitive ornamentist who had got as far as making a pattern like A of Fig. 5, we might fairly, I think, suppose that he would seek to make some change by introducing some additional lines. In such a pattern, then, as B, his pleasure in radiation of lines evidently rules him. But the slight alteration he had thus made might not satisfy him; and as his power of drawing might not be limited to straight lines only, he might use curved lines; and by adding curved lines to the ends of his radiating lines, he might make a more complete looking figure, such as C. Palm trees spread their leaves out in a radiating manner; so that a pattern maker, dominated by the pleasure of seeing radiations, might, in his ambition to make forms, be influenced by the appearance of the palm. From very early times the palm has been venerated in the East as a holy tree. An early Assyrian symbolical ornament, simple or primitive in construction, was produced by a pattern maker who may or may not have been able to analyse his sense of radiating shapes. The likeness between the radiating motives in this symbolical ornament and the pictorial representation of palms may be seen if we refer to an Assyrian bas-relief from Nineveh, in which a row of palm trees appears at the back of a procession of water-carriers. Some centuries earlier Solomon uses the palm as an ornamental detail for adorning the Temple (see 1 Kings, vi. 29).

The veneration of symbols such as the palm ornament with its radiating lines, helped to fix the use of such symbols for many centuries (quite apart from sense of their aesthetic fitness). The same condition occurred in Egypt, in regard to the lotus plant and flower, of which ornamental renderings became fixed by religious discipline. Thus types of ornament pervaded such countries; and it was not until desire for variety went beyond a conservative power of religious doctrine, as for instance in the Greeks, that new shapes, apparently based upon a perception of those previously used, arose, and the "anthemion," or honeysuckle,
as it is termed, was designed (Fig. 6). In this the essential feature of radiating lines is prominent, no matter whether the forms are like details in the honeysuckle blossom or not.

Another example of motive and arrangement of motive in design, which was adhered to a good deal in consequence of an associated religious value, has been discussed by Sir George Birdwood. This motive consists of a bud and blossom in repeated alternations, and is known as the knop and flower ornament. A sense of alternation, as an effective and simple means of contrast, seems to be universal amongst ornamentists, so that such a motive as this blossom and bud arrangement may spring into existence and be adopted, apart from the influence of sectarian doctrines.

The pine cone, the Jerusalem artichoke, the pineapple, and such like, have a common resemblance to one another, in appearance of successive diamond shapes, presented by the overlapping of their leaves or scales within a tapering oval shape. And this device, which relies for its effect upon a sort of radiation, has educated inventiveness in pattern makers. The vogue which this cone or pine motive with radiating cross lines has had in a long series of variations, may no doubt have been influenced by the religious significance with which it was invested thousands of years ago in the East. But I venture to think that the attractiveness of radiating lines has had as much to say to its later adoption as its symbolism had to its earlier wide-spread use.

Such motives are well known in patterns for surfaces, for European costumes and hangings of the 15th and 16th century, as well as for woven fabrics, some of which, nominally made at Venice, are evidently very close reproductions of similar stuffs, if not the originals, made in the East. Here, again, are a few diagrams of ornaments in which the radiation of lines upon the plan of the Greek anthemion is an essential feature common to them all.

The ornament from Ispahan (C of Fig. 7) of the 5th century, with a central fruit form, may in some distant way be related to D, the Italian ornament of the 16th century in which the fruit form is more pronounced, whilst B, the so-called English ornament of the 14th century, seems also to be connected in likeness with them and with A, the Chinese specimen as well.

Coincidences like these are interesting. We find counterparts of them in other results of human labour and thought, such as literature, or the art of writing and telling about things as distinguished from the art of depicting them; and a small book, entitled "Customs and Myth," written by Mr. Andrew Lang, abounds with them. Mythology and history have had a considerable effect upon producers of works of art. Scarcely a Greek sculpture exists that is not discovered to illustrate some event or personage of mythology and history. Here, for instance, we have a photograph of the group of Jove's eagle carrying off a youth—Ganymede—to serve as cup-bearer to the gods. It is considered to be the work of Leochares, the famous Greek sculptor, about 350 years B.C.

Here is evidently another version of the same sort of story. This, as we see, is part of the decoration of a golden jug or vase, which, with other
treasures, was discovered in 1799 in Hungary, in a district associated with the warlike tribe of Gepidre, which settled on the banks of the Danube. But whether this vase was the work of an artificer working under the influence of Perso-Roman or Sassanian ideas, of Scythic or of Graeco-Asiatic thought, it has not yet been decided by the learned in these matters. Still, there is a justifiable feeling that this jug was made about the third or fourth centuries A.D., though somewhat similar style and design appear in European works of later centuries.

Now, on another vase of the same time we find a somewhat similar group of a human being in the clutches of an eagle; but the human being, upon inspection, is a woman, so that this second incident depicted clearly does not relate to Ganymede.

From this specimen I pass to a photograph of a sculpture lately discovered with many others at Sanghao, in a north-western district of India. I have taken this from one of a series of interesting monographs beautifully illustrated, published, under the supervision of my brother, Major Cole, R.E., by the Government of India. According to archaeologists, the event here shown belongs not to Greek mythology but to that of Buddhism. The woman is said to be the mother of Buddha Sakya Muni, who was carried up to the Trayasrinsha heavens, to be there regenerated after her death. This sculpture may perhaps be regarded as the work of a carver about on a par, in quality of design and workmanship, with the producer of the Scythic or Graeco-Asiatic vase. Both workers are removed from each other by great lapses of time. The carver of the Buddistic episode presumably worked about the beginning of the Christian era, and, as I have said, in a north-western corner of India, at Sanghao. This place is some three or four hundred miles from the ancient Sogdiana, where Alexander the Great 300 B.C. settled for a few months, during his expedition into Bactria. Architectural remains and pieces of sculpture have been found in north-western districts of India, and are often spoken of as Graeco-Bactrian, and Graeco-Buddhist. As evidences in expounding a development of art, the Graeco-Asiatic and Graeco-Buddhist figures might fairly be classed together as illustrative of a phase of attainment much in the same way as we classed the simple ornamental arrangements we looked at during the earlier portion of the lecture. Both indicate a lower level in performance than that of Leochares' work, and might be regarded either as deteriorations from that level or as aspirations to attain to it.

Deterioration from or aspiration to something better, are extremely interesting qualities to detect in a development of art, and in this connection I propose to refer to samples of the artistic expressions of the New Zealander; not, however, that I can in any way suggest the stage of development to or from which this type of ornament may be ascending or descending. Broadly speaking, two foremost motives in ornament from New Zealand are the human figure and spirals. But the New Zealanders, like many other people whose condition of life and habits is different from our own, make both realistic imitations of things and ornamental devices based on abstract and other forms. The quality of their realistic works is shown in carved heads like these (Fig. 8) which have, I believe, the prime purpose of displaying portraits, the one of a man not tattooed, the other of one tattooed.

We may look at a piece of ornamented pierced work in which spirals are alternated with human figures, and therein detect how the New Zealander's appreciation of contrast and of balancing forms affects his patterns. And now we pass to a canoe prow (Fig. 9, p. 8). * The main lines of the prow are emphasised, and separate the various portions which are ornamented. Two spirals corres-

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* This specimen belongs to H.R.H. the Duke of Edinburgh, who kindly allowed it to be photographed.
ponding with one another are so arranged as to give another proof of the New Zealander's sense of balance of form. Between them are other shapes, also arranged in an orderly manner, and again expressing his sense of balance of form. Below is a narrow space filled in with curves producing contrast with the rigid boundary lines of the space itself. It is evident, I think, from the way in which the curvings and other forms are grouped into this space of irregular shape, that the limits of space have affected the arrangement of the details in such a way that the meaning of them is well nigh lost. This squeezing in of details to fill a given space is a practice often demonstrated in other varieties of ornament. Beginning with this lower right hand corner of the prow, we may distinguish a grotesque human figure. Its head is set nearly at right angles to its body. Its eyes gleam from beneath two angular brows—the forehead is low—the nose small. A large broad lipped oval forms the mouth, into which is thrust three fingers which do duty for the whole hand. Then comes the arm of this hand, starting abruptly from a plum-shaped body. Across the body we see three fingers like those in the mouth, and the arm belonging to them is set a-kimbo, the two legs are straddled outwards. This odd rendering of the human figure constantly recurs in New Zealand ornament. The pattern on its surface perhaps represents tattoo marks. Beyond the human figure are horn-shaped and twisting details, also covered with tattoo marks. Upon some of them we see the three fingers. Now, if we look at the device set between the two spirals in the upper part of the canoe head, the three finger device, thrust into an open oval and a pair of eyes will be found; thus indicating—obscurly perhaps—that the motive of this open pattern is the human head. In a second similar New Zealand prow we find the human figure in the lower space more grotesque through distortion than in the corresponding space of the first prow we looked at, and this distortion in the second prow arises no doubt from the artist of this piece being less skilful than the artist of the first. Nevertheless, in this second piece we recognise the same general characteristics which, as it were, give a style to this method of using and depicting forms. It is likely that both were wrought during the present century, though I am not aware of any circumstances why they might not have been produced in previous centuries. It is allowable, I think, to conceive that, in the course of years, as other New Zealanders imitate with variations what has gone before, at the same time developing their compliance with rules as to balance of forms in arrangement, contrast, and so forth, a perfectly different style of ornament may arise in which there will be little, if any, trace of the distorted human figure.

Now distortion in representing figures and their arrangement may be observed in other phases of ornament with which New Zealanders have apparently no connection, and by way of illustration we may refer to one or two examples of Scandinavian design emanating from the earlier iron age, which for convenience one may roughly date between the 4th and 11th centuries of the Christian era. Here is a specimen of ornament (Fig. 10) from Scandinavia, the grotesqueness of which is not very remote.
from that of the New Zealander's. The subject here is animal form; two figures with goggle eyes, pointed snout, and almost human paws, are figured opposite to one another. The tail of each curls up towards the back of the head. The shape of the space into which these details have been grouped has affected their general arrangement. The idea of animals placed vis-a-vis is very ancient in its connection with pattern, and long before this grotesque rendering (Fig. 10, p. 8) of that idea was made, other more perfect renderings had been produced. It may not, therefore, surprise you to hear that Dr. Hans Hildebrand, Royal Antiquary of Sweden, considers this pattern to represent two lions couchants. Lions couchants and vis-a-vis often appear in Roman ornament, as well, indeed, as in many other types of ornament, and this motive has been adopted by Teutonic tribes, who have remodelled it according to the exigencies of their taste, or as far as their limited skill permitted them.

A further transformation of the lion motive, gives us the so-called lion shapes intersecting one another, and, as it were, squeezed up to fit a square space (Fig. 11). The corrupted representation of the animals has become still more

Fig. 11.

sort of imitation or trace of inter-influence between the 11th century Scandinavian work and New Zealand work of the 19th century. It seems to demonstrate that gradual developments of pattern-making may be apparently independent of one another, and yet exhibit in a remarkable way a common similarity of perceptions, cosmopolitan in existence, but with variations in growth and application.

Briefly recapitulating the points in this matter of ornament and pattern-making which I ventured to bring before you, we find, first, that a graphic power in some degree is an attribute of man; next, that this power exhibits

FIG. 12.

show further developments of the two lion subjects. The increased elaboration in inter-lacing the forms marks a still further developed skill on the part of the designers in symmetrically arranging forms in a given space (Fig. 13)

FIG. 13.

Before leaving such Scandinavian types of ornament and their kinship to New Zealand types, I wish to recall the detail in the New Zealand ornament, which we found to be three fingers clasping a body or a curved form. Here is a diagram (Fig. 14) of a Scandinavian clasp, buckle, or fibula, which dates from after the 11th century. In it is a motive of three fingers or claws clasping forms. This is repeated in an orderly way, so that a well-devised pattern is the result. I do not suggest that this coincidence of the three fingers confirms any
itself in rendering imitations of actual things, abstract forms and forms compounded from a mixture of both. These are then repeated to fill a space, and the placing and distribution of them are subject to an appreciation of length and breadth. From this grow repetition and contrast, balance of forms and symmetrical arrangement. The actual expression of patterns varies with the ability of the pattern-maker. If one takes note of such factors as these in a development of ornament and pattern, I think that one learns to perceive the intrinsic charm in works of art, and to become proof against those alluring incidents relating to country and period which have little to do with the cultivation of our respect for skill in performance.

I can but feel sensible that there must be many deficiencies in my attempt to cope with my subject this evening. If any value attaches to my remarks, it has certainly been very much enhanced by the diagrams I have shown. These have been made in Captain Abney's laboratory, and to him both you and I are, I venture to think, equally indebted. For myself I have to thank you for your patient attention.

Next Monday evening my lecture will be about tapestry-making, and I propose then to speak about the special process and its employment in the production of other things than great hangings, as well as about patterns which have been made with it, and their relationship to similar patterns wrought by other means.

[This lecture was illustrated by a series of diagrams thrown upon the screen by means of the electric light].
My lecture this evening is to be upon tapestry-making. The word tapestry has grown to be used in two senses, from which a good deal of confusion and some uncertainties have ensued. From a general and non-technical point of view, the word tapestry has been used to indicate any sort of decorated hanging. Thus early mentions of tapestry have been accepted as proofs positive that the special process which is now identified with tapestry-making was in question. But this assumption is not, I believe, correct. The special and technical meaning of the word "tapestry," in its indication of a peculiar process, will, I hope, become clear as the lecture proceeds.

Various books upon tapestries and textiles—and one or two have lately been published in France of remarkable completeness—contain abundant quotations from old writings to prove the use of decorated textile fabrics for hangings and curtains, at the times of the Egyptians, the Assyrians, the Greeks and Romans. And as this particular branch of the investigation seems to have been pretty fully dealt with, I do not propose to further follow it. It may probably be taken as certain that actual specimens are not likely to be forthcoming of the curtains with cherubs' heads, used for the Tabernacle of the Ark, of the cloths adorned with animals and episodes which are mentioned in the Iliad, or of the hangings decorated with illustrations of Greek myths and victories which Apollonius of Tyana is said to have seen at Babylon. Whether these were embroideries, or woven and painted cloths, it is impossible to say. It is, however, I think, more than probable that they were not made as tapestries, say from the 12th century, have been.

Remains of other textiles, mummy cloths, portions of costumes used in ancient Egypt, and woollen stuff of the Bronze Age in Scandinavia prior to the Christian era, have been discovered, and their methods of production duly verified. The majority, if not all, of such witnesses to the antiquity of well-wrought weavings and sorts of embroidery, have been preserved for centuries in subterranean burial places in coffins of wood and stone, whence they have been exhumed by the modern explorer; but hangings and large pieces of stuff to decorate buildings have not, apparently, been so deposited as to insure their existence for long periods. Other causes, too, have helped to efface traces which would be of value in demonstrating an evolution in the use of decorative hangings. The depredations of fanatical iconoclasts, not only in Europe, but also in continents like India, are too well known to now require more than a note. The effects of earlier sectarian repugnance for decorative works may be inferred from such letters as St. Epiphanius, Bishop of Salamis, wrote to John, Bishop of Jerusalem, in the 4th century. Although this letter has often been quoted, I venture to give an extract from it. The bishop writes:

"On my journey through Anablata, a village in Palestine, I found a curtain at the door of the church, on which was painted a figure of Christ, or some saint, I forget which. As I saw it was the image of a man, which is against the command of the Scriptures, I tore it down, and gave it to the church authorities with the advice to use it as a winding-sheet for the next poor person who might have occasion for one, and bury it."

Speculations, however, as to the probable recovery of this curtain, or any earlier decorated wall-hanging or curtain, need not perhaps occupy our attention.

The question what then is tapestry seems to me to require an early answer. To the French word *tapisserie*, an off-shoot of *tapis* (carpet) we are no doubt mainly indebted for our word,
in which, however, we have a second "t" deriving it from the Latin word tapētum, a source common both to French and English words. As early as 1250, French regulations of the artisans of Paris contain mention of tapissier sarrasinois and tapissier nostrez—and sixty years later, "tapicers" are named in ordinances concerning such craftsmen established in London. Last Monday I suggested that tapestry-making was more like certain forms of carpet-making than any other special branch of textile manufacture. It is possible that the 13th and 14th century tapissiers and tapicers were men engaged in producing coverings and stuffs for use as carpets and hangings—woven either in the ordinary way, or done according to the special processes of carpet and tapestry-making. Although there is scarcely any evidence to show that tapestry hangings, in the technical sense, were made in Europe before the 12th century—the actual process which came to be identified with such articles was well known in the Saracenic countries of that and earlier times. It would appear that this process was used in respect of trimmings to dresses. On the other hand, Tartar and Turcoman people appear to have used an identical process for making carpets and such like. I do not think anyone has been able to decide the question as to the actual difference in craft between the tapissier sarrasinois and the tapissier nostrez. The latter is thought to have produced some home manufacture as distinct from an imitation of Saracenic manufacture. However this may be, I will now submit certain diagrams by which I hope to show the difference in process between weaving and tapestry and carpet-making.

Woven fabrics made by hand are produced, as this diagram indicates, by passing a shuttle charged with thread, thrown across and in between alternate threads stretched in two ranks. The two ranks can be raised above or brought beneath one another by two frames, each of which operates in respect of one rank of threads only. These frames are moved by pedals. When the shuttle with its thread has been thrown across the width of the two ranks of warp, a comblike instrument is brought against the interweaving thus made, so as to compact the thread of the shuttle between those of the warp. The textile as made is wound round a cylinder, and the weft and the warp threads are equally visible on both sides of the fabric.

Now for carpet-making by hand, a stretched rank of warp threads is also necessary. But these warp threads play no visible part in the face of the carpet. They are covered round with weft threads. Instead of a shuttle with a weft, as in weaving, you use various sets of thread, which you loop, knot, and intertwist on the warp threads. In making carpets with a pile, you cut the ends of the threads which have been knotted on to the warp. From above these knotted threads, and across and in between the warp, a stout thread is thrown. This is pressed down with a comb, so as to compact the whole fabric. A fresh series of knottings is then made, and the above-named operations repeated. The weaving diagram showed that the warp-threads lay in a horizontal position. In carpet-making the warp-threads are usually in an upright position. Here I show a sketch of some Indian workmen making a carpet upon upright warp-threads. On an upper cord, above the heads of the workmen sitting in front of the warp, are hung bunches of thread, which may be of silk, wool, goats, or other hair. The sticks within easy reach of the workmen are attached to a set of strings which are fastened to alternate warp-threads. By moving the sticks, half of the warp threads can be pulled forward so as to divide the warp into two ranks, between which the cord may be thrown above each series of knottings. To the left of one worker is a small pronged instrument, like a comb with a long handle. This is used for pressing down the work. To the right of the other workman is a pair of scissors, with which he clips the ends of the knotted threads and trims the piled surface of the fabric. This method and apparatus has probably been in use for many centuries in the East. And rough and ready as they appear to be, highly finished carpets with one side of close sheeny pile, lovely in pattern, colour, and texture, have been made with them.

But there is another closely-allied process for making carpets and hangings. This is one in which no stout cord is thrown across and in between the warp; no scissors to cut the ends of knotted weft-threads are used, and no pile is produced. Both sides of the textile so made are often alike. This process requires that the variously-coloured wefts shall be intertwined between groups of the warp-threads. In this respect it is almost identical with that particular process which is known as tapestry-making; tapestries, however, are finished for display on one side only.

By the help of a few plates which have
been photographed from a standard French Dictionary of Manufactures, published in
the last century, I hope to present you with the leading features of tapestry-making. My
first illustration gives a considerable framework, containing a wide range of warp-threads,
upon the lower portion of which is seen the face of the tapestry, with completed parts of
the design. The workman is at the back of these warp-threads, and his design is placed
upon the board, leaning outwards, in front; this he sees through the warp-threads. Here
he is at work. The numerous pegs or slays are wound round with coloured threads; the attach-
ments of strings, some of which he is pulling, operate upon the warp-threads. He can thus
pick out and pull forward the particular warp-threads between which he has to intertwist
the thread of a particular slay. In the pile carpet-making processes slays are not used. Another
diagram gives us an idea of how the comb is used.

Tapestries are made not only upon vertical threads, in the manner roughly described, but
also upon horizontal threads. These two illustrations indicate the use of the process in its
connection with horizontally ranged threads. In the upper one we have the worker inter-
twisting his slay of weft-threads, whilst in the lower he is using the comb to compress his
work. Tapestries made upon vertical warps are termed high warp, or haute lisse tapestries.
Those made on horizontal warp are called low warp, or basse lisse. But the results of both
methods are virtually identical, so that it is almost impossible to detect any peculiarity
which shall distinguish the haute lisse tapestries from those of the basse lisse. In weaving,
you may have, as I mentioned, the warps either vertical or horizontal; and this is not
unimportant in regard to the conclusions which some inquirers have arrived at, that the men-
tion of high and low warp, haute and basse lisse, must imply one or the other of the tapestry-making processes.

Sir Gardner Wilkinson gives a drawing from sculptures 3000 B.C., of Egyptians at
work upon a small high warp frame, and the arrangements for pulling forward the vertical
warp-threads establish an idea that a tapestry-making process is being used by them. This
process is, as I have said, of great antiquity, and of wide-spread employment. As to its
antiquity, I have a specimen, Fig. 15 (p. 14), now preserved at the British Museum. It was
exhumed from some tomb near Sakkarah, an Arab village near Memphis. I believe that the

late Dr. Birch considered that it was pre-
Christian in date, possibly belonging to the
period of Greek colonisations in Egypt. It is
possible that the corselet mentioned by Hero-
dotus as having been captured by the Samians,
in the course of its transit from Amasis, King
of Egypt, who sent it as a present to the Lace-
demonians, was ornamented with such work
as that now before us. The date of that
corselet was probably about 530 B.C. Herodotus
describes it as made of linen, "with many
figures of animals inwrought and adorned with
gold and cotton wool, and on this account,"
he says, "each of its threads make it worthy
of admiration. For though it is fine, it con-
tains 360 threads, all distinct." These 360
threads might be the warp-threads. In the
specimen before us there are, in the width of
8½ inches, upwards of 184 warp-threads, and
the number of crossing wefts on each warp-
thread of 11 inches long, is 600. Possibly
that portion of the linen corselet which excited
the admiration of Herodotus may have been a
panel of ornamental work about 17 inches in
width, which would not be too large to serve
on the front of the corselet. It might, indeed, have
been a sort of ephod—like the linen ephod,
perhaps, which David wore when he danced
with all his might. I make these suggestions
with much deference, relying very much
upon what I have gathered to be the opinion of the
late Dr. Birch as to the date of the actual
specimen before us. He has described it as
a rectangular fragment. In the centre is a
square of green ground, upon which appears
in white with red outline, blue eyes and arm-
lets, a nude figure of Aphrodite, in front of
whom is a swan flying. This compartment is
about 3½ inches square. Round it is a broad
border, on which in red, blue, and white are
decorated female figures standing—the left
hand and arm of each is raised—whilst the
right arm hangs pendent. The four figures on
the upper and the four on the lower part of
this border are full face; the figures at each
of the other parts appear to wear head dresses
and face to the left. The drapery of the
figures exhibits on the skirts a pattern of three
diamonds, in one of which is a cross in the other
two are circles. The ground above these figures
is strewn with blue and white spots or flowers.
The whole rectangular fragment has been sur-
rrounded with a blue and red border between
white lines. The outer edging of all is a rude
rendering of the bud and blossom device. As
may have been noticed, the drawing of the
various forms is quite archaic or primitive.
It is evidently done by someone possessing but little skill in realising and depicting the subject. Similar quality of drawing is to be seen in other relics of this class of work, which have recently been rescued from tombs, probably of Christians of the Coptic sect. In such, the figures portrayed wear nimbi like those of Christian saints. Specimens of these robe ornaments have recently been acquired for the South Kensington Museum from Egypt. From some parts the coloured threads have completely disappeared, leaving, however, the warp-threads, thus furnishing a key to the manner in which the work was done. It is probable that small slays were employed, the warp-threads being stretched in a handy frame of some sort. When the work was finished, it was stitched to the coarse linen robe. This tapestry-making process for making costume ornament, upon a small scale, has not, I believe, been used in Europe. It is known, however, to Peruvians and natives of Borneo. Specimens of tapestry-making, in which the weft is silk throughout, are made, on a small scale, in the public school for females at Kiyoto Fu, in Japan. The Japanese seem to regard them as displaying a new sort of work which they have lately invented, and accordingly named Tsu-zu-re-ori. But this specimen, which is about a foot high, shows that the process is identical with tapestry-making as already described. I have little doubt that the Japanese adapter derived his idea of the method, perhaps, from some bit of European tapestry, or from a Turcoman, Central Asiatic, or Mon-
golian carpet, produced in this way (Fig. 16). So much, then, for the process of tapestry-making and some of the peculiar uses to which it has been put.

Its celebrity, however, in Europe, arises from its use in connection with hangings, the larger quantity of which has been made with strong warp-threads or strings, usually over-worked with worsted, sometimes with worsted and silk. In such form we seem to have no data upon which to found a statement that this class of work appears in Europe before the 13th century. But at this date we get indications of the special application of the process to the production of stuffs to be used as hangings, and such like.

Of hangings, without regard to their particular make, we have representations such as this diagram furnishes. It is engraved in Oriental connections, which had been protracted through centuries, affected the adornment of palaces long before the times of Theodoric. And as the organisation of the Christian Church, with its ramifications in the East, spread itself about Europe, fashion, in the use of decorated textiles, was widely disseminated. One or two instances will suffice. Withlaf, a king of Mercia, in 833, presented a cloth of gold displaying the destruction of Troy to the Convent of Croyland in England; and in 992 Abbot Egelric (the second of that name) gave the same establishment two large foot cloths, woven with lions, to be laid before the high altar on great festivals. Possibly these articles were of wool. Now from the first century "coarse wool, woven in Belgium, found a greedy market in Rome," according to Signor L. Brentano, and the industry was extensively practised during succeeding centuries by the noted weavers of Flanders and Brabant. We have little to guide us as to the sorts of patterns which may have been wrought in these fabrics, but I hope I shall not be charged with overtaxing your credulity if I suggest that perhaps in the 10th and 11th centuries some such patterns of lions like this specimen may have been used. This character of pattern appears also in more delicate textiles, which are generally thought to have emanated from Greece and Sicily between the 10th and 13th centuries.

Besides indicating conditions consequent upon the desire of the rich and powerful to be supplied with the best obtainable articles produced by artistic man, history also points to the effect which has followed upon the efforts of handicraftsmen from the earliest of times, to perpetuate a supply of wonder-stirring works, the sight of which gave birth and life to demand. Commerce in such works ensued. To instance early commerce, I need not go so far back as the almost prehistoric amber trade of the Phoenicians with North Europeans; but as the period when the patterned stuffs of which I last spoke belongs to years between the 9th and 13th centuries, of which we are generally considered to know but little, I thought I might place before you a few items illustrative of the spread of commerce, the specialising of crafts in the formation of craft gilds, and the establishment of organised factories about that time.

The constitution of craft gilds is said to have been adopted from the more ancient religious gilds. The late Mr. Toulmin Smith's book on "English Gilds" gives much informa-
Accordingly, years weavers. Noble Saracens. Tribute and importance. Heraclius, supposed fine sors century. Flanders, craftsmen and the bond craftsmen. Whilst the other craftsmen worked to supply mere local demands, the weavers' manufactures found markets in the most distant countries, which fact naturally invested them with greater personal importance.

Accordingly, in all the manufacturing countries of that time, in England, Flanders, Brabant, as well as in the Rhenish towns, the most ancient guilds were those of the weavers. The Gild of London Weavers was chartered by Henry I., and so was that of the Oxford weavers. In Germany the Woolweavers' Gild of Cologne arose as early as the 11th century. At Spire, the Gild of the Woolweavers existed at the beginning of the 12th century. At Mayence, the weavers are mentioned as early as 1099. Corresponding organisations in the East—in Persia, in Syria, and Byzantium certainly existed at these times and earlier. Apart from the indications one finds in the Bible, dating from hundreds of years before Christ, the fact that splendid textiles were made in Syria particularly is brought out in Washington Irving's "Successors of Mahomet"—and, of course, by Gibbon previously. The Saracens or Moslems at the beginning of Mohammedanism levied from the towns of their early conquests in Syria, tribute which in great measure consisted of fine textiles. Damascus, famous in the 7th century for its silk weaving, was taken by the Saracens. These conquerors allowed the supposed daughter of the Roman Emperor Heraclius, who was married to Thomas, a noble Greek in Damascus, to leave, taking with her three hundred boxes containing costly silks and cloths of gold. Nevertheless much similar booty was left for the Moslems when they entered and sacked the town.

How far the Persians, who were subsequently vanquished by the Saracens, had encouraged costly productions, may be inferred from the detailed description of a large and sumptuous carpet used in the palace of the king, Yezdegird. This carpet was of silk. In design, suggestive of Vathek's mountain paradise—it represented a parterre of flowers embroidered in their natural colours, and overlaid with jewels; the fountains playing amongst the flowers were wrought with diamonds and sapphires, to represent the sparkling waters. The value of the whole was beyond calculation. The carpet was taken from the palace at Madayn, and brought to Caliph Omar at Medina. The caliph ordered it to be cut up and a piece given to each of his chiefs, one of whom sold his portion for eight thousand dirhems of silver. It was at this time that the port of Amalfi in Southern Italy grew to importance. According to Gibbon, it was for 300 years a principal centre for supplying the Western world with the manufactures of the East. Before the 8th century, even, we get an idea of the wide scope of Oriental commercial relations with France, in the mention of certain Greek and Syrian merchants who established a centre, for their operations in the silk trade, at Paris during the 6th century. That they gained popularity is attested by one of them becoming Bishop of Paris.

A mention of the establishment of silk-weaving looms in Sicily may illustrate my reference to organised factories. In the 11th century, the Normans from the north of France came in contact with the Saracens, who were then in Southern Italy and Sicily. A Norman expedition went to Greece. Under the domination of chiefs like Robert and Roger Guiscard, the manufacture and weaving of silk were developed in Palermo. Gibbon relates that, after sacking Corinth, Athens, and Thebes, Count Roger despatched his lieutenants for Sicily "with a captive train of weavers and artificers of both sexes. A stately edifice in the Palace of Palermo was erected for the use of the industrious colony; and the art was propagated by their children and disciples to satisfy the increasing demand of the Western world." This establishment is mentioned by contemporary writers as the Hotel des Tiraz. "The decay of the looms in Sicily may be described to the troubles of the island and the competition of the Italian cities."

From these foregoing indications we may perceive that, at the 8th century, in Europe there was considerable activity in producing articles of artistic manufacture cognate, in their use at least, to that of tapestry-made work. Now the earliest piece of hanging made by the method corresponding with that of the old Egyptian costume trimming we looked at dates probably from the 12th or 13th century. It is comparatively narrow, and was of some length. This character of shape is distinctive in hangings of lighter stuff, as well as with early tapestry hangings. Larger and squarer tapestries are of later
date. There is much discussion as to where this early piece of tapestry, a portion of which I show, was made. Some have thought it was made in Syria, others in Germany, and this latter country, I think, establishes a better claim to it, though, in some respects, France might prefer an equally strong claim to having produced it. The larger portion of it is preserved in the museum at Lyons. Another piece is in the museum at Nuremberg. And a bit of the border is in the South Kensington Museum. Here is a photograph of this bit, in which the twisting of the threads may be clearly followed. The tapestry is made of woollen threads, chiefly greens and blues, twisted around stole flax strings or warps. When intact, the whole piece belonged to the Church of St. Gereon at Cologne. The scheme of the pattern consists of a series of repeated ornamental circular bands, within which are figured chimerical birds and beasts. This device occurs in Oriental ornament, and is frequent in ivory carvings, metal works, and embroideries of the 12th and 13th centuries. But here is an earlier example of the principal motive in the pattern. This gold vase is considered to be Scythic, Perso-Roman, or Graeco-Asiatic work of the 4th century A.D. A scheme of pattern in which the repeating circular bands surrounding birds and creatures are used, may also be noticed in the chasuble of Pope Boniface VIII. This is a photograph of the back of it. The chasuble is entered in the inventory of the Pope’s possessions, dated 1294. This character of ornament is vaguely called Oriental and Byzantine. But imitations of it have been produced far and wide. We may find it in modern Japanese weavings, and what may strike us as even more remarkable, we have it in Icelandic embroidery which dates from the 16th century. Through the kindness of Mr. William Morris, I am able to show you a diagram of the Icelandic specimen (Fig. 17). This is a coarse linen hanging, composed of two bands of linen joined together. It is embroidered with wools in a running or darning stitch. The scheme of repeated circles enclosing chimerical creatures plays as we see the principal part of its pattern. The indications of the circles are indistinct, though sufficient for the purpose of tracing the use of this character of design. The legends are in a sort of Gothic black letter. Kindred pattern is to be seen in weavings of the 12th or 13th century from Sicily or Italy. So much, then, for this particular motive and pattern, the modifications of which could furnish matter enough for a single lecture.

Returning now to the length and narrow width of the early tapestries, it is to be noted that they were used as frieze-like decorations or bands to be hung along the walls of churches and buildings. A remarkable instance of such long hangings is given us in the famous linen band embroidered in wools, with over seventy different scenes connected with the Norman conquest. Mr. Fowke’s book on this precious relic of 11th century art exhausts all that has to be said about it. The portion I show displays a part of the king’s palace; then comes a view of an interior, where Edward the Confessor, seated, is in conversation with two personages, of whom one—the taller one at the back with the moustache—is probably Harold. Then we have a troup of horsemen led by Harold, upon whose left hand is a hawk. Harold is riding, as the legend tells us, to Bosham. In front of the cavalcade are hounds. The building they approach is a church, with two men kneeling at its entrance. Along the border we have repeated pairs of beasts and birds, reminding us of the like devices which occurred in some of the roundels previously seen. This long linen hanging—measuring some 230 feet by 20 inches—is celebrated as the Bayeux Tapestry. But the term tapestry applies solely to its use, and not, of course, to its make, which, as has been said, is of embroidery. That it may have been wrought at Bayeux is

![Icelandic Embroidery in Worsted upon Linen; probably of the 16th century.](image)
possible. The earliest mention of it occurs, I believe, in an inventory of the contents of Bayeux Cathedral, dated 1476, where it is accurately described as a "tente très longue et étroite a broderie." In the 16th century it is again entered as a toile à broderie; but the name tapisserie having been given to it, has caused occasional misapprehension as to its technical character.

The next few bits of real tapestry I have to show, further demonstrate the long and narrow shape of early tapestries which survived into the times when larger and squarer specimens were produced. Here is a strip of the early 15th century tapestry work, made perhaps in South Germany. It represents the wooing of a princess by two suitors; comparatively rude in drawing—it must have been rich in colour. The threads in it are of wool, but small portions are also worked with gold thread—now almost black. A conventional treatment of rendering is marked, in the use of black threads out-lining many of the details—a characteristic of many early tapestry designs. Scrolls with legends upon this are introduced amongst the various groups of figures. This feature constantly recurs in tapestry designs of the 14th century. Examples of it are in the Church of Saint Laurent, at Nuremberg, and in the National Museum, at Munich. Here again we have a frieze-like tapestry, in which is figured the admission of a young lady into a sisterhood.

Tapestries such as these, then, form the connecting link, as it were, between the circular band and animal pattern of the Cologne 12th century tapestry, and the patterns of figure subjects depicted from the 14th century onwards. The tapestries of early times, i.e., 13th and 14th centuries, are thought to have been almost exclusively made in small frames, in which the ranks of warp were stretched horizontally—and this, as I have previously mentioned, is known as low warp, or basse lisse process. There seems, however, no particularly good reason why upright frames with vertical warp (haute lisse) should not have been in use concurrently. But this is a point of anxious dispute amongst those to whom it is of importance. One fact may be noticed here, and that is that in the evolution of the method of tapestry-making, the production of larger pieces than those we have seen as types of early European tapestry, necessitated the use of wider and better constructed high or low warp frames. In these larger frames designs of correspondingly increased size were wrought in tapestry.

From the 13th century, the decoration of walls in Italy and the South was reviving and becoming wide-spread in the use of fresco-painting. And to some extent one traces in the tapestries of the northern and more weather-wearing countries a companion fashion to that of the southern frescos. There can, however, be no doubt that, without the revival of painting in Italy and its necessary influence, painting in the North would not of itself have put forth the great figure-designs for tapestries, such as began to appear in the 14th century. From this period onwards, we have frequent indications and evidences of notable bodies of craftsmen known as "tapisiers," and in England as "tapicers." In the first instance, they may not have particularly identified themselves with the tapestry-making process. Their business was always in connection with stuffs like carpets and hangings, which were originally woven. Subsequently some were made according to the special process, by which the workman was able to produce a wider range of effects. I believe that the number of colours of the earlier tapestries was restricted in a way which reminds one of the limited number of tones at the disposal of the water-colour painter a hundred years ago. And it is not until the tapestry-making craft is well established, that the employment of a more generous scheme of colours occurs. This has developed in such a way that it is a boast now at the famous Gobelins factory that they have upwards of 14,400 tones of colours in dyes for threads. But 300 years before the establishment of the Gobelins factory, under the patronage of Henry IV., the peculiar process and its practice had been encouraged very considerably by the Dukes of Burgundy. The far smaller number of colours available for use engendered a simpler rendering of designs than that which marks the tapestries of late 16th and succeeding centuries. Although the Dukes of Burgundy, early in the 14th century, are historically conspicuous as promoters of tapestry-making, it should not be inferred that the manufacture secluded itself solely under their auspices. Amongst the mysteries of craftsmen there are records of some applying to "tapicers" in England at this time. These workmen were influenced by works possibly more splendid than they themselves were accustomed to make. The French Sovereign presented handsome tapestry...
tries, made in Paris and Angers, to Edward II. and Edward III., and no doubt many other foreign specimens were imported into England.

Monsieur Guiffrey has cited some interesting facts concerning a prominent tapestry worker of whom he has found records dating from the 14th century. This craftsman was named Nicholas Bataille. At one time he was valet to the Duke of Anjou, and in the cathedral of Angers there are specimens of the tapestry hangings produced under his supervision when he was in the service of the Duke of Anjou. The Register of the Treasury of the Duke of Anjou shows that in one case the Duke borrowed from his brother, Charles V. King of France, a MS. illuminated with scenes from the Apocalypse. An artist of repute, Hennequin or John of Bruges, was charged to make enlarged copies of these illuminations. These enlargements were then worked out by Nicholas Bataille and his staff. That the Duke of Anjou should have had the perception to cause an illumination to be thus enlarged, marks a taste no doubt inherited from his ancestor Charles of Anjou, who, on his journey in 1266 to assume the kingship of Naples, is said to have stopped at Florence, and visited Cimabue, then at work painting a Madonna for the Church of Santa Maria Novella.

The more notable tapestries of the 14th and 15th centuries appear to have been worked after designs from Flemish artists, who, as a group, were more able and distinguished at that time than their brethren in France. Gold and silver threads and silks were frequently and lavishly intermingled with woofs for such hangings—with effects on a large scale similar to those of the small golden and glowing missal illuminations. We lose the effulgence and splendid colour of such works in photographs of them, which, however, give us the means of obtaining an impression of the careful study and drawing of the faces and draperies, as for instance in this diagram taken from a tapestry of the late 15th century. In this group we have a variety of faces displaying different expressions, depicted within the limits of this phase of art, as well almost as one could expect. Inequalities in scale and absence of perspective need not of course be particularised. Such features belong to the phase of work. They are often spoken of as elements giving the stamp of style; it should, however, be remembered that the designers did not work differently. They probably had no thought for "proprieties of style" such as we sometimes pretend to insist upon. Style, indeed, is a term which has grown into a respectable usage, through its repetition by persons belonging to a much later date. Good style or bad style serves as a general term to sum up excellencies and deficiencies in groups of kindred works.

At the time that such a piece as this was made, the practice of tapestry-making had taken root in many parts of Europe—in France and Flanders especially, as well as, in a less degree, in England, Spain, and Italy. Flanders, however, seems to have been the district to which great patrons of art looked for the best work. A friend of mine has kindly referred me to Gaye's "Carteggio inedito artisti," &c. This contains reprints of interesting documents, amongst which is a letter written by Frueoxino, apparently a travelling agent of the Medici merchants. Dated from Bruges, 22nd June, 1448, it is addressed to Giovanni de Medici, a son of Lorenzo de Medici, who, with his brother Lorenzo, had, as leading members of the firm, carried on a very extensive trade. This letter relates to the efforts which the agent had made to buy some tapestries for his employer. The agent had been to Antwerp, but had met with little success there in getting what was wanted. He had seen a set of tapestries illustrating the story of Samson, but these, he says, would, from their size, be difficult to "hang in your chamber." The tapestry-makers worked, as a rule, to order; so Frueoxino advises Giovanni de Medici to send the exact size of the hanging he wants, and to name the subject which may be specially designed and worked for him.

It would not be possible for me to attempt giving you a brief account of all the known tapestry-making centres which flourished, with varying fortunes, during the 15th century. Sovereigns, pontiffs, and nobles did what they could to stimulate competition in the art. Paris and Arras had rivalled one another, and after the overthrow of Charles the Bold, Brussels came to the fore; Lille, Tournay, and Bruges, had also been and were to the fore. M. Muntz's excellent book on tapestry is replete with incidents of the rises, falls, and migrations of the art. From 1420 to 1500, swarms of tapestry workers, natives of Arras, Lille, Bruges, Tournay, and Brussels, swooped (as he says) down on the territories of the Marquis of Mantua, the Duke of Ferrara, the Duke of Urbino, on Venetia, Tuscany, and Umbria. The oldest Italian workshop hitherto known is
that of Mantua. From 1419 a French tapestry worker remained in the service of the Gonzagas till about 1442. He was succeeded by other French and Italian workers. Thus, to a large extent, tapestry-making in Italy was indebted to an influx of Flemish and French workers.

On the other hand, an interchange of talent is indicated when cartoons by Cosimo Tura, Mantegna, and Leonardo da Vinci, were sent by the Medicis and others to be wrought in tapestry by the workers at Bruges. Vasari gives a minute description of a cartoon by Leonardo da Vinci for tapestry, which was to have been worked in Flanders, and presented to the King of Portugal. This intention was not fulfilled, and the cartoon alone was produced.

M. Muntz has closely tracked his subject. He gives much that is interesting about Italian tapestry works. He puts at rest a frequently accepted idea that Pope Leo X. caused Raphael’s cartoons displaying the Acts of the Apostles to be worked at Arras; the fact being that the Arras works had collapsed some 36 years before the artist received his commission.

Before offering any remarks upon changes in design which developed soon after the commencement of the 16th century, I would show you a diagram of a closely filled design of the late 15th century, the tapestry worked from which is preserved at Rheims. We have here the coronation of Clovis, King of the Franks, in 481. The second incident represented is the siege of Soissons, five years later. This city was in the possession of the Roman King Syagrius. Further on is Clovis, with uplifted sword. He is no doubt engaged in combat with Syagrius, who was defeated and fled. The splendour of knightly panoplies, rich with resplendent armour, jewels, and sumptuous stuffs can almost be taken for granted even from this diagram. The composition with all its elaborated details reflects the later 15th century ideal of such feats of arms—performed by warriors led by Clovis; of whom, however, with a closer regard for truth than romance, it is written, that, “when he first took the field, he had neither gold and silver in his coffers, nor wine and corn in his granaries.” Sets of great pieces like this of the Siege of Soissons, which is some 10 ft. or 11 ft. in height and 20 ft. in length, were taken about from place to place when their royal or noble owners changed residence. A waggon drawn by five horses carried the tapestries of Louis XI. on such occasions. The tents of Charles the Bold, Duke of Burgundy, were hung with great tapestries. Some of them are now preserved at Berne, having been captured in 1486 at the Battle of Gransons.

The quality of flatness, due to comparative absence of perspective, and the fullness of details so arranged as to produce a complex pattern, are features in finished designs wrought in tapestry during the later 15th and early 16th centuries. But these features rather quickly disappeared after the entry of Raphael and other Italian artists, upon the scene as designers for tapestry.

Henceforward, an impulse was given to the production of designs which the tapestry worker should render with as near an approach to realistic effects of light, shade, relief, and distance, as his fixed warps and bunches of coloured threads would allow him. This tendency to give tapestries a likeness to paintings has been, and is still developed, at the Gobelins factory. The steps leading to it from the simpler and flatter-looking designs of the 15th century are many, but not, I think, peculiarly interesting. Here, however, is a type of design which found much favour when produced in the 16th century. And here is another sort of type specimen of the 17th century. At the famous Mortlake tapestry factory, which was founded by James I. early in the 17th century, designs after Raphael, Rubens, and Vandyck, were worked, in which pictorial, as distinct from Gothic, effects predominate.

In conclusion, I return once more to the designs of the late 15th century, in order to place before you diagrams of a few remarkable specimens illustrative of the Triumphs of Petrarch. In connection with them I may refer to one or two specimens of other decorative work. These indicate the adoption by designers of allegories in illustration of which they made compositions of stately processions rich in ornamental detail. Mantegna’s cartoons of the Triumph of Cæsar are preserved at Hampton Court, and are pre-eminently interesting in this respect. Here, taken from the Aldine print (of 1499) known as the dream of Poliphilo, are two cuts displaying the Triumph of Europa. From a decorated wedding robe chest or cassone (1486), I have taken the front panel, upon which, in the original, are painted the Triumphs of Love, Chastity, and Death.

As is well known, Petrarch wrote a series of allegorical triumphs, about the middle of the
14th century. The subjects of these are, the Triumphof Love, Chastity, Death, Fame, Time, and Eternity. They are full of suggestions, but are much too long to quote on the present occasion. They, and the designs made a full hundred years later, are replete with detail; and the designs indicate that the poems were certainly known to the designers. Cupid is invariably represented as Petrarch describes, in a fiery chariot drawn by four snowy steeds. Chastity, in her white robe, bears "a fair pillar." Death is spoken of by the poet as a "lady clothed in black," and designers select Atropos to represent her.

The scheme adopted by the designer of the tapestries of which I have two diagrams, gives two episodes to each tapestry. These episodes mark the triumph of the particular virtue or fatality which is preceded by the overthow of the alien fate or antagonistic influence. These hangings measure 26 ft. in length and 14 ft. in height. In the case of the Triumph of Death, we have the overthow of Chastity by Atropos. Then comes the actual Triumph of Death as typified by the "three fatal sisters of Destenyce" seated in a car in which lies, dead, Chastity. Bullocks draw this car over a mass of dead and dying. A knight heralding the extinction of life and bearing two lances, one labelled Fortitudo and the other Malheur, cleaves a path through the crowd of illustrious defunct.

The second diagram is of the Triumph of Time (Fig. 18, p. 22). This is rather different in treatment from that of the previous tapestry. Massed in groups without much indication of feeling for perspective, the magnificence of terrestrial glories, historic facts, and ingenious materialisations have been pressed into the service for that; but now the designer, for his Triumph of Time, draws upon his imagination of animal entities, and as a salient feature of the upper part of his composition uses a semicircular arrangement of figures robed in white flowing folds typical of the hours, and floating before the zodiacal signs Gemini, Cancer, and Leo, into which the sun is entering. The first group on the left indicates Fame overthrown, whilst the second near the centre of the design is the triumph of advancing Time, an old winged cripple supporting himself with a crutch; the left crutch he carries in his hand, and he stands in a bent attitude over Fame vanquished. Both figures are on a car dragged by winged horses, into air over a wide-spread ing landscape.

Late 15th century tapestries of the Triumph of Chastity, Death, and Fame, are in the South Kensington Museum. Corresponding tapestries of the Triumph of Death, Chastity, and Time, are at Hampton Court Palace, and have lately been admirably repaired. There are other very remarkable tapestries in the palace, but I cannot venture to speak of them now. Besides those at Rheims and Berne, to which I have referred, examples of these closely filled figure compositions are to be found at the Cluny Museum in Paris, and in great splendour at the Museum at Madrid. Some very remarkable specimens of the middle 15th century, which had belonged to the Chevalier Bayard, are in the collection of the late M. Achille Jubinal, whose writings on tapestries must always command respect. The tapestries in the Uffizi Palace at Florence, at the Vatican at Rome, and in the Garde Meuble in Paris, are extremely numerous, and generally of a later period. Scriptural, ecclesiastical, and natural history, classical mythology, middle age, and Provençal romance, poetry, and allegory, have influenced designers for tapestries from the 14th century onwards. Whilst pastoral, domestic, and sporting scenes have, in the 17th and 18th centuries, been reproduced in tapestries, sometimes even from the small cabinet paintings of artists, who probably had no idea that the perpetration of such doubtful compliments would be contemplated, much less carried out.

Now the points which I have endeavoured to establish are, briefly, that the term tapestry may be read in two senses; the one in which at all times it refers to hangings generally; the second in which it implies a special method of producing a textile fabric. The earlier hangings, although pains have been taken to prove that they were in a large degree made by this special process, appear, on the whole, to have been of lighter material than that of the special fabric; and the ornamentation on them was rendered by weaving, embroidery, or painting. Indications that the special process was known in early times have been given, but it was then applied to making small ornamental trimmings of costume. The application of the special process to the making of works on a much larger scale than that of such trimmings, seems to occur in the 12th or 13th centuries, although in old Asiatic civilisations it had probably been employed for carpets, the patterns of which were composed of formal, somewhat geometric devices, arranged symmetrically. The fame of tapestry hangings made by the special process rests
upon the renderings of great figure subjects designed in the 15th century. The drawing, arrangement, and colouring of such, invest their application to textile hangings with an appropriateness of surface pattern. This cannot be conceded in respect of the later results of the special process when the rendering of subtle painting effects are attempted by the tapestry maker. In such phases of the art, regard to the peculiar use of the textile hanging, as well as to the limitations in employment of materials, is probably as unconsciously put aside as it was equally unconsciously displayed in the antecedent works of the 15th century.

It was out of my power to get my diagrams coloured; but to make up for this grave deficiency, the authorities of the South Kensington Museum have kindly lent the specimens exhibited in this room. Each is labelled, and I hope that the sight of them, coupled with the information I have had the honour of laying before you, may lead you to recognise the high interest which attaches to a study of tapestry in respect of its use, its designs, and its method of production.
Lecture III.—Delivered April 19th, 1886.

It will, I think, be convenient for me to commence my lecture this evening by shortly stating what I understand by the term "embroidery." In the first place, it applies to the ornamental enrichment, by needlework, of a material. Such enrichment may be produced with various materials, similar to or quite different from that into which it may be worked. In many instances, the enriching material is more costly than that to which it is applied; though works beautiful in effect have been made in which the embroidery is of the same material as its ground or foundation. We may notice instances of these as we proceed. Under the definition just given, embroidery may be classed into two broad divisions; the one of embroidery done on one side only of a material; the other of embroidery done with equal finish and effect on both sides.

Ever since man has been known to exist, needlework of some sort has been done. The needle, as successively made of bone, wood, and metal, is many thousands of years old. When, therefore, we begin to investigate the embroidery of the first historic nation, it is not surprising to find it well established as an art, more or less, of common practice. As we proceed, we find that almost the same character of conditions which have favoured the practice of embroidery has repeated itself throughout the world.

Some notion of this repetition may, perhaps, be gleaned by comparing the work done by the civilised child with the work of an adult belonging to a race or nation in comparative primitiveness. The likeness which may often be traced between such work marks an approximate equality in ability. And, as we go through history, we seem to find that the habits and practices of the earliest historic nations more or less correspond with those of people at the present day who are regarded by us as being in a primitive stage of civilisation. But the small indications which I have hastily perceived, and inadequately followed up, in regard to this matter, convince me that it is far too large to be fitly discussed now. In illustration of the relationship which establishes itself between, say, the work of a school child under discipline and that of a peasant who has little or no instigation to rise above a certain standard of performance, I would suggest your looking at samples worked by 17th century school children of twelve and fourteen years of age, and 19th century peasant embroideries, say, from remote villages in Norway. The designs represented differ but slightly, whilst the quality of performance is fairly level. Again, we may examine specimens made by other people quite remote from one another, but apparently subject to one and the same sort of influence. And as exemplifying similar character of design, all of them suggestive in composition, stitchery and colour, actual specimens of Spanish, Persian, and Cretan embroideries are exhibited. In patterns on specimens from Crete we find signs of the influence of a mixture of ideas. Here (Fig. 19, p. 25) for instance is a border for a petticoat, of canvas embroidered, in the 17th century, with many coloured silks in various stitches—chief amongst which is a sort of long, cross, twisted-thread stitch. This stitch is much affected by the mixed races of the Grecian Archipelago.

The pattern of this border consists of a band with floriated scrolls springing from each side of a central device, above which is a series of vase or basket motives. Out of these come bunches of carnations; between these appear double eagles and symmetrical arrangements of variegated carnations. In the lower portion of the pattern are S shapes, terminating in carnation blossoms. Birds of an archaic type are also introduced. Incidentally, I may say that the double-headed eagle occurs as a device upon Karamanian coins of the 10th century, and
upon pre-Mohammedan coins. Mr. Purdon Clarke tells me that the bird with two heads is as often introduced into ornament in the south of India as it is in ornament from Tibet and in cloths from Yarkund. He believes its use to date from classic periods. The double-headed eagle of Charles V.'s time is thus comparatively quite modern. The same sort of motive of course appears in embroideries from Persia—of which there are designs wrought in a way similar to those of the specimens shown, wherein the carnation blossom is a prominent feature. Again, in Spanish embroidery of the 17th century, the double-headed eagle is naturally a usual device. In this specimen of Spanish work one may trace a kinship, its crowded and orderly arranged ornament, and its somewhat startling colours claim with those of patterns to be seen in work from Crete. The class of flowers, chiefly tulips, in the Spanish specimen, the real forms of which are somewhat obscured by ornamental treatment, is, however, quite different from that of the Cretan patterns. Still, carnation forms are abundant in patterns, not only Spanish, but also Italian and German of the 17th century, and the ornaments made with them recalls that to be noticed in Cretan, Syrian, and Persian specimens.

For the most part, the embroideries to which I have been alluding might be grouped as peasant work; and the facts I have suggested go towards confirming the likeness which exists between the works of similarly circumstanced people, who have produced works of similar ornamental character and needlework quality.

On the occasion of my first lecture, I attempted to bring forward some rather well-known points in connection with the development of designs and patterns. The specimens we have before us, and those I propose to show, will suggest a multiplicity of considerations concerning motives and their treatment in making patterns. Time will not permit me to do more than glance at such considerations, however, and I propose to devote the greater part of this lecture to an examination of the stitches.

Broadly speaking, the more complete and finished embroideries are such as have been made by workers who have given themselves up to the craft as to a life-long profession; at
the same time, specimens of needlework of great excellence often issue from the hands of those who possess a dexterity which they exercise for occasional enjoyment rather than from regular necessity. Groups of embroiderers, pursuing their art with regularity and under conditions of organisation—a natural necessity of thriving crafts—are to be met with in many countries and at various periods. With Eastern people like the Chinese, Japanese, and Mohammedan races, embroidery rises to a degree of perfected practice bespeaking a sort of second nature centuries old. In Western and Central Europe there seems to have been no such pronounced settlement of practice. Certain phases occur, as when a domination of ecclesiastical authority is apparent, and, later on, when a fashion was maintained in making imitations of the imported Oriental work, and again when embroidered costumes were in vogue. In Polynesia, Africa, and the New World, embroidery has been an art with tribes slow in changing their customs, or, so to speak, in passing up the ladder of civilisation. In this regard, they resemble the peasant peoples in other more civilised parts of the world. As a domestic or home industry, embroidery is frequently distinguished by admirable skill, although the patterns depicted may not indicate any corresponding quality of trained perception in drawing, selection of colours, and arrangement.

The constant regular employment which is possible in workrooms specially devoted to the purpose, in religious houses, or in Eastern harems, has naturally left its mark upon the work produced within them. So, too, has that conservative quality of keeping things in families, as with a tribe or village of peasants, who adhere to a particular sort of stitch or style of design, and acquire great skill in doing it.

But the modern system of human industry aided by machinery inevitably affects the recurrence or prolonged existence of such circumstances as those glanced at. As the modern system gradually extends its scope, people adopt new processes and new habits for the old, and, except under special provisions, embroidery by hand is not likely to be exempted from its effect. Such as perceive the charms of embroidery, and are willing to pay the rate of wages which shall induce workers to keep to the handicraft, may contribute to the maintenance of this art; but unless a revolution in the influence and spread of machine-aided industry takes place, it is hardly likely that embroidery will take such a position in the future as it has held in the past.

One usually associates women with the art, but it must not be forgotten that men have been, and still are, amongst its foremost adepts. In India, China, and Japan, the art owes its best expressions to men. In Europe, it probably owes more to women, though members of religious communities, like Benedictine monks in past times, have excelled in the use of the needle. Abbot Wygmore, of the 14th century, was a proficient embroiderer, and the brethren at Woolsthorpe, in the 16th century, wrought much excellent needlework. Similar instances could no doubt be quoted of other countries.

In dealing with tapestry-making last Monday, I adopted the method of chronologically showing a rise and development of that art. I might, perhaps, discuss embroidery somewhat differently, dealing with it as it appears in various countries. To do so, however, would, I find, involve duplication of remarks. I, therefore, propose to avoid this as far as possible, by grouping together similar features as we find them, and speaking of them without much digression as to country and period of production.

In the first place, stitches, I think, should claim attention, although designs and patterns are equally important; but the time at our disposal makes it impossible for me to fairly deal, even briefly, with both of them. Designs and patterns frequently conjure up a variety of interesting topics, apart from their demonstrating suitable selection of subjects, composition, drawing of forms, and mingling of colours. The subjects portrayed often attract one to enter into considerations of history; the probable date of production is usually a fertile source of discussion; whilst ethnography, in its attempts to determine national characteristics, perplexing and attractive as are its ramifications, not infrequently throws a cloak of excuse over absence of skill in craft and design, and a work of doubtful art becomes elevated to an importance the significance of which is not always intelligible.

The late Canon Rock, who has written with enthusiasm upon textile fabrics and embroidery, made out a classification of sketches by means of certain titles which he found in Dugdale's "History of St. Paul's." There, as well as in old records, inventories, and such like, he found mention of classes of work, such as opus anglicum, opus plumarium, opus
pulmarium, opus pectinum, and opus consutum. Following his suggestions, I adopted these classifications for a catalogue of a large and unique collection of decorative needleworks which was exhibited in 1873 at South Kensington Museum. Since then, however, closer scrutiny of the precise meaning of these Latin titles seems to me to have demonstrated their comparative uselessness in conveying definite technical information. No authorities clearly show what the opus anglicum, for instance, really was, whether it was a chain or a split-thread stitch, or, as Dr. Bock, of Aix-la-Chapelle, suggests, beadwork(!) and I say this with some deference in view of opinions given in a large book upon needlework recently written by Lady Marian Alford, who has done so much to further practice of the art. The term seems to imply that at a certain time—about the 13th and 14th centuries—English embroidery, especially on ecclesiastical vestments, was in high repute. But a number of specimens of the same character as that attributed to the opus anglicum were made abroad, and hence a doubt is thrown upon the peculiarly English nature or style of this embroidery. The temptation to closely investigate the special and technical distinction of opus anglicum is strong; but it would obviously take one far away from examining embroidery, and from arriving at a knowledge of stitches generally.

Earlier in my lecture I said that we might divide embroidery into two classes—the one in which the work is made for display on one side of the material; the other in which it is equally finished on both sides.

In respect of the first of these classes, I have diagrams of stitches (Fig. 20, p. 28) some of which are made for display on one side of a material. They are worked by drawing the needle with its thread in one sweep through two or more places along the surface of the material. The simpler of such stitches are—long and short stitch—as here. Then there is a stem stitch. This, as shown here, merely implies an oblique arrangement of short stitches. Feather stitch, or opus plumarum, is another term used in embroidery, but here again we find that it may mean an arrangement of long and short stitches, so taken as to completely cover a portion of the surface being worked upon. In plain needlework, however, as distinct from embroidery, there is another arrangement of long and short stitches for seams, to which the name of "feather" stitching has been also applied.

Running and darning (closely similar in effect on both sides of the material) may involve the use of long and short stitches, but instead of the needle passing at one sweep through two places only, it has to be stealthily worked through half a dozen or more. Chain stitching involves the looping of the needle's thread in the progress of the stitch. Sometimes, instead of making a loop, the point of the needle is made to split the thread, thus giving a looped character to the stitch. Knotting stitch is another development of the looped stitch. In this case the needle makes a passage down through the material, and not along it, and a knot is so formed on its surface. Tent, cross, and cushion stitches are often worked upon an open reticulated ground, such as canvas. They are supposed to constitute the group of opus pulmarium. But we find tent and cross stitch are the principal stitches used, with marvellous patience, by Mohammedan embroiderers in the intricate and richly-coloured ornamentation of leggings for ladies, the material of which is of closely-woven linen or canvas. Here, for instance, is an employment of red silk worked in cross-stitches to cover the ground about a pattern, the leading forms of which are of the linen fabric which the embroidery ornaments. This is sometimes called Italian work of the 16th and 17th centuries, sometimes Spanish. Specimens have also come from Albania, and from one or other of the Cyclades.

The making of tent, cross, and cushion stitches differs from that of the long, short, and looped stitches. The needle is passed up through the material, and then down again through its face. In cushion stitch the Germans have much delighted. Berlin wool work is often done with cushion stitch. The Swedish have distinguished themselves for some centuries in such work, the patterns or which are primitive in form and garish in colour. Such works are not, however, of such pretentiousness as the tapisserie au petit point of the French. Here is a specimen of such tent and cross-stitch work of the 16th century. The fashion for it found followers in Italy and England. The stitches we have so far considered are chiefly for decorating one side of a material only.

Now, the second class for obtaining equal effects on both sides, includes satin stitch and tapestry stitch, which latter is not to be confounded with the tapisserie au petit point previously named. As shown in the diagram (Fig. 20, p. 28), satin stitch may be of long and
short stitches. From Italy and the Greek Archipelago come specimens wrought with much finish in this stitch. This specimen is simple in its pattern of leaves and branches with horizontal, perpendicular, and oblique satin stitches worked across the

**Diagram of Stitches:** showing their effect upon the front and back of the material into which they are worked.

various forms. The colours, which I regret cannot be displayed, are of light blue, salmon, and golden-hued tones. The French speak of this satin stitch as *au passé*, and as *sans envers*. The owner of this specimen considered that it was of Venetian workman-

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**Fig. 20.**

<table>
<thead>
<tr>
<th>STITCHES</th>
<th>FRONT</th>
<th>BACK</th>
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<tbody>
<tr>
<td><strong>Short.</strong></td>
<td><img src="image1.png" alt="Diagram" /></td>
<td><img src="image2.png" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>Long.</strong></td>
<td><img src="image3.png" alt="Diagram" /></td>
<td><img src="image4.png" alt="Diagram" /></td>
</tr>
<tr>
<td><strong>Stem.</strong></td>
<td><img src="image5.png" alt="Diagram" /></td>
<td><img src="image6.png" alt="Diagram" /></td>
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**Arrangement of Short and Long Stitches.**

*Sometimes called Feather Stitch.*

Chain or Looped Stitch.

Running.

Darning.

Tent.

Cross.

Cushion.

Satin. *(Short)*

Satin. *(Long)*

Looped on edge or Button Hole.
ship, dating from the 16th century. But other authorities declared that it was Turkish of the 19th century. The controversy does not diminish the virtue of the specimen as a finished piece of work.

Returning once more to the diagram of stitches, I wish to direct your notice to the form of looped stitching which has been done upon the edge. This is called button-hole stitch. It may also be done upon a thread. Here is a diagram of it made upon a couple of threads. When used in this way to render a pattern, the result of the work is needlepoint lace.

We have thus briefly glanced at some thirteen or fourteen stitches, five of which classify themselves into a single group, as long or short stitches; four as looped stitches; whilst the three stitches known as tent, cross, and cushion are virtually the same, and so may come under one heading; satin stitch differs from all of them, and therefore takes a place by itself. Thus we have not more than four distinctive group of stitches. And now, turning to the tapestry stitch, it is, I find, supposed to be a peculiarity of the opus pectinatum, or work done in a loom or frame, and in the process a comb is used. This implement, as we noticed last Monday, is one of importance to the tapestry maker. Tapestry stitch, however, as wrought with a needle, does not require the employment of a comb to compress the intertwisted threads together. Here is a specimen of work from Skåne in Sweden. The original specimen, to be seen below, is square. Only half of it is shown. The specimen is made up of bands of needlework and lace called “Klutaband.” These are first used by peasants for the broad ends of cap-lappets, subsequently they are joined together into squares. The bands of geometrical pattern—flanking the lace insertion—are those worked in tapestry stitch; the threads, corresponding to the warp of regular tapestry, are such as have been left of a strip of linen from which a number of warp and weft-threads have been withdrawn in a certain space. The tapestry stitching has then been worked in and out and between these threads, and is so managed that both sides are alike. In regular tapestry-making only one side of the production is presentable. From Persia come squares dating from the 17th century, very often of extraordinary minute needlework, done on loosely woven linen or cotton, in which a tapestry stitch identical with the Swedish is done. Work for the decoration of robes by Egyptian Coptics was not needlework. It was done with a small “slay,” such as the tapestry maker uses. And this work is the same in process as that of tapestry-making. Here is a specimen of Egyptian Coptic work, probably of the 4th century of the Christian era. This, however, like tapestry, is presentable on one side only.

In connection with the Swedish and Persian needle version of tapestry making, I spoke of withdrawing threads from the material. There is a considerable group of embroidery known as drawn work, the essential feature of which is the withdrawing of threads in order to obtain open devices in patterns. Here is a specimen of such work taken from an Italian shirt of the 16th century.

A reversed counterpart of such drawn thread work is embroidery done with a darning or running stitch upon an open reticulated ground or net—as in this example, which is probably either French or Italian of the late 16th or early 17th century. A phase of this work survives in the embroidery on net of many countries; in Ireland, amongst others, where it is called Limerick lace or run-work.

Running, done in close material, results of course in quite a different effect from that of running on an open ground. Here is a specimen of worsteds run into a linen. It is an Icelandic work of the 16th or 17th century. Here is a fragment of similar work, very simple in pattern, which came from a tomb at Saš-karah, in Lower Egypt, and may be of the 4th century.

Thus from opus pectinatum we have been led to note certain ways of dealing with materials of close and open fabric into which embroidery is worked. We have not, however, increased the number of distinctive groups of stitchery, although their application has been varied. With some fancy, a Latin name has been assigned to the drawn threadwork, and it has been called the opus araneum or filatorium. But both denominations are valueless from a technical point of view.

The opus consutum has now to be referred to. The term applies to the cutting of materials into ornamental shapes, which are afterwards worked with stitchery of some sort. Here, for instance, is another part of the Italian shirt already referred to, in which simple details in a pattern are produced by cutting out bits of the ground.

Another sort of cut work consists of cutting away the ground about a pattern, first outlined
with a cord or thread, and, where necessary, inserting little bars or tyes between the portions of the pattern. This work has been done hundreds of years ago in Italy, and is done in Ireland at the present time, at Carrickmacross. Here is a specimen of the cut work from Carrickmacross. With your permission, I should like to digress here to allude to a movement which has been made towards the improvement of patterns used by the Irish lace workers. In a sense, this movement owes something, I think, to this Society, for having given me the opportunity, in 1881, of delivering some lectures on lace-making and lace patterns. In the following year I was called upon to give similar lectures elsewhere, and, amongst other places, I lectured at Limerick, Cork, Dublin, and Belfast. The outcome of these lectures in Ireland has been the movement I referred to. A competition amongst pattern designers was held last year. Prizes were awarded to the value of £74 for some forty designs. Of these, a dozen or more are now being worked at some six or eight lace-making centres, schools and convents in Ireland. One has been finished for her Majesty the Queen, who was graciously pleased to give a commission for it and other prize patterns. Here is a specimen of the new piece of Carrickmacross cut work made for her Majesty. In the course of a few months, I hope that a sufficient number of needlepoint laces, embroideries upon net, and cut works will have been produced by the Irish workers to form a collection for public exhibition, and, at least, to demonstrate that the sale of Irish lace need not be entirely dependent, as it too often has been, upon a sort of philanthropic patronage.

Returning now to our review of cut works, we may note a variety kindred to the last sort of work. Here, again, the ground has been cut away, and the pattern left. But the pattern is so planned that the details composing it touch one another in places, thus getting rid of any necessity for inserting bars or tyes. The edge in the original of this border is enriched with gold thread. The pattern itself appears in one of the numerous Italian pattern books of the 16th century, without a full reference to which no history of embroidery is complete. They are often held to be lace pattern books. This is a mistake; a great number of the patterns are for many classes of decorative work besides lace.

Two more groups of cut work have to be noticed. The oldest of these appears to be patchwork. This is often associated in one's mind's eye with quilts made of hexagons in pink, and white, and lilac, such as one occasionally sees in peasants' cottages, or floating upon clothes lines in back gardens. From these, however, I have now to take a great step. In 1881, excavations at Deir-el-Bahari, in Egypt, brought to light a canopy, of which Mr. Villiers Stuart, in his book entitled "The Funeral Tent of an Egyptian Queen," has given a highly interesting and large coloured plate. He speaks of this canopy as a perfectly unique example of Egyptian tapestry, using the term as implying a hanging or covering of some sort, and not as involving any technical process. For, of the actual technical character of this canopy, Mr. Villiers Stuart tells us it may be described as a mosaic of leather work, consisting of thousands of pieces of gazelle hide stitched together with coloured threads to match. It is, in fact, a patchwork. The colours of the pieces of leather thus stitched and patched together, consist of bright pink, deep golden yellow, pale primrose, bluish green, and pale blue. Vultures, hieroglyphics, with diaperings of daisy blossoms, and borders containing goats, scarabs, and repeated fringe device, are the principal details to which the bits of gazelle hide have been shaped. Arranged in formal order, they make the pattern of this canopy. Mr. Stuart was able, from various data, to fix the period, when this patchwork was made, at 980 B.C. It was wrought for a queen who was mother-in-law to the Shishak who besieged and took Jerusalem three or four years after the death of Solomon.

Made in a very similar way to the Egyptian queen’s canopy, but of different materials, is a French hanging of the 13th or 14th century. Here is a photograph of it. The design represents various incidents in a knight’s encounter with a dragon. The details are cut out of different coloured cloths. These have then been sewn or patched together, and then applied to the ground; the seams between the patches being overlaid with narrow strips of leather. These latter were whipped round with fine golden strips suggestive, as Canon Rock says, of the lead lines in stained glass. In stained glass, the leading is necessary to hold the bits of glass together, whilst in this patchwork the corresponding lines are used for decorative effect, and are not constructive necessities.

From Persia, at the present time (doubtless an inheritance of old practice) come gaudy patchworks (of Resht) done with much elabora-
tion in pattern. Here is part of a large cover wrought in this way. The enrichments to the simple patchwork are worked in chain stitch with silks.

Amongst the specimens exhibited you will find examples of Italian patchwork in velvets and silks, so used as to produce alternations in colour of the same pattern. A similar effect of alternation is to be seen in the cut brass and tortoiseshell work associated with the name of André Boule.

Another section in the class of cut work is to be seen in what is known as applied or appliqué work. In illustration of this, I have a diagram taken from part of an altar hanging belonging to Sir William Drake. It is of Italian origin, and dates from the 16th century, somewhat later than the period which Vasari assigns to the production by Sandro Botticelli of designs for cut work. Vasari speaks of the work as di comessso. It is not clear, however, that this expression should specially indicate either patch or appliqué work. It may apply to both. In any case an interest is aroused by the association of Botticelli with decorative needlework. Appliqué work differs from patchwork, since the details of the pattern to be worked by the appliqué method are cut out of a stuff and then stitched down to a ground of material, which latter plays a visible part on the ornamental effect of the finished work. As a rule, the cut pieces thus applied are edged all round with stitches or with a cord or thread, also applied and stitched down. Finished and clear definition is thus given to the different shapes. This stitching down is virtually identical with tent stitching. It is the principal stitch used in other variations of applied work, of which a few have become specialised, as in the case of gold thread enrichments or embroideries. As illustrating the method of stitching down, I have a diagram of Indians at work doing applied embroidery with gold threads.

The sumptuous heavy golden trappings and saddle cloths, canopies or howdahs, are frequently worked with gold threads "couchéd" or stitched upon a padded foundation or over stout threads. The essence of "couching," so far as needlework is concerned, is the up and down stitching. But it is not merely a question of holding the gold threads upon a surface, by means of such stitches; for "couching" involves display of skill in so taking the stitches (the threads of which show themselves upon the glittering gold threads lying close together) that patterns and diapering effects are produced by them upon the face of the gold threads. This group of Indians is at work upon a material stretched in a frame. The use of the frame for embroidery purposes is a matter which should, perhaps, have been mentioned sooner. The frame shown here is large; very much smaller ones are used by the domestic embroiderer. All embroidery is done upon material stretched in a frame, or held loosely in the hand. Frames are almost always used for appliqué work in its various classes, others of which we shall shortly notice. Returning, for the present, to gold thread "couching," we find specimens of such work intermixed with coloured silk embroidery, dating in Europe from the 12th century. Before then, gold threads were used more often for weaving than for embroidery. There are occasional exceptions to such a general statement, but, as a rule, the use of gold threads in embroidery is later than their use as wefts in weaving.

The specimen of gold "couching" of which I have a diagram, is taken from a funeral pall belonging to the Fishmongers' Company. This pall is supposed to have been used at the funeral of Sir William Walworth, in the reign of Richard II. But the character of some of the ornamental details in it gives it a later date, probably by some fifty years at least. A Pope in the act of blessing is seated upon his throne; on each side of him is an angel swinging a censer. Gold couching, done over layers of threads so as to increase the effect of low-relief, is used for the background and Pope's seat, the censers, and bands upon the robes of the figures. The other portions are, for the most, worked in long and short stitches with silk. Another specimen of similar work is to be seen in this portion of a Y-shaped orphrey for the back of a cope. The composition of the crucifixion is almost entirely worked with coloured silks in long and short stitches. Gold thread, to occasionally heighten the outlines of certain details is used. The bordering and the architectural canopy over the saint bearing a chalice are of gold thread couching. This specimen is considered to be Italian or Flemish in origin, and of the early 16th century.

Previously to this class of sumptuous enrichment of ecclesiastical vestments, came that which has been connected with the modern idea of the *opus anglicum*. The peculiarity of this work is thought to have been the use of a chain stitch or split stitch. The diagram now before us is of the cele-
brated Syon cope, preserved in the South Kensington Museum. The figures are worked in the chain or split stitch. It has been described by the late Canon Rock with very high antiquarian skill. When attributing it to a distinctively English nationality, I do not find, however, that he mentions that similar embroideries as I previously said are to be seen elsewhere, and are traditionally of other nationality in workmanship. Here, for instance, is a smaller specimen, but equally finished, in skill of chain or split stitch work. This is certainly later than the Syon cope. It is probably of early 15th century Italian work. The Syon cope is unquestionably of the 13th century, so, too, were vestments of the Popes, some of which are preserved at Anagni. The specimen (Fig. 21) before us is taken from a panel about 16 inches long by 11½ inches high, in which a female saint is represented at her prayers. A crowd of men are standing behind her near a belfry, and a few of the figures in the group are here shown on a large scale so that the

![Part of Panel, Embroidered in Gold Threads and Coloured Silks. The draperies and faces worked in chain stitch. Italian; 16th century.](image)

character of the stitchery may be noted. The saint was found by Canon Rock to be Santa Francesca Romana, of whom he recounts saintly and devotional acts. But the present and particular interest of the diagram before us lies in its expounding a skilful use of a supposed typical stitch of the *opus anglicum*. In Persian embroideries, representing hunting scenes, the same sort of stitch occurs, used much in the same way as in this specimen. In Abyssinian robes chain stitch is largely used. The Indians and Chinese have often produced chain stitch work.

For figure subjects this chain stitch in European ecclesiastical embroideries was preceded and succeeded by long and short stitch, the surface of which presented a more painting-like and less granulated effect. This smoother lying stitch was used especially for faces and hands, and we find such treatments in conjunction with draperies, which were rendered by means of fine coloured silken threads whipped around
gold threads. A rich golden glow or shimmer pervades such embroideries. Here, for instance, is a specimen of this kind of work, done from a design by Raffaellino del Garbo, in the 16th century. The shading of the drapery is done with blue, red, and green silks, whipped round the gold threads. A golden orphrey is exhibited, as well as a few coloured photographs of some remarkable specimens of this sort of work done perhaps in Spain or Flanders. From the raised "couching," gold thread work we pass to other sorts of "couching," in which the threads to be "couched" are laid flatly upon the under material, no padding being employed. Such work is also frequently done with floss silks, as shown here (Fig. 22). The details are outlined with a thick cord, about the flat couchings of floss silk. This is part of an extensive set of furniture trimmings and hangings, made possibly in Italy or Germany in the 17th century.

The use of cords stitched down to a material, and producing ornamental effect, is exemplified in this jacket of English 16th century. Of a different sort of work, in which long, short, and chain stitches are used, is this jacket, also of English work of the 16th century. The pattern consists, as we see, of an orderly distribution of pomegranates and roses, with slender twisting stems. It is wrought with black silk. This black silk embroidery on white linen, in certain cases, is supposed to be "Spanish stitch," the origin and special intention of which is not known. They furnish matter for antiquarian research.

To return, however, to the flat laying of threads and cord, we may look at a specimen of modern Japanese embroidery. The Japanese appear to excel in skilfully doing the flat gold and silver thread work. The clouds and sky in this specimen are done with gold threads, stitched down to the ground of black. Other portions of the panel are done by means of stuffs and silk cords, and stitched down in portions to padding interposed between them and the black velvet, as, for instance, in these two figures and the trunk of the tree, beneath whose spreading branches the man and woman are watching the approach of message-bearing storks.

We noted the use of padding in its connection with the gold thread relief "couching," and now these figures and the tree may introduce us to a class of English work which was done in the 17th century, in which curious modelling effects were attempted by the embroiderer. Intermingled with the relief were portions worked in long and short stitches flatly. Then there were details worked out in needle-point lace stitch. Silks, gold and silver threads, silken and metallic gimps were used. Here is a diagram of such work. Actual specimens may be examined in the room. This sort of work frequently decorated boxes and mirror frames. It was an ingenious, strange, and entirely malapropos class of embroidery. Its influence is to be seen in such insignia of state as a Lord Chancellor's bag. The different padded details were, as a rule, worked separately, and then applied to

Fig. 22.

Embroidery on Linen, with floss silks laid or "couched;" between outlines of black silk cord stitched down to the linen ground.

the place assigned to them in forming grotesque compositions upon a ground of silk or satin.

I think there is but one other distinctive group of stitchery which I have not yet named, and that is quilting. In this, again, the essential features are the up and down stitching, and the employment of two bits of stuff through which the stitches are taken. Sometimes, to obtain stronger accentuation of forms, especially in quilted work done with stuff and thread of the same colour, a cord or padding is inserted between the two bits of material to be quilted. The stitches are then
taken on each side of the cord or padding, and an effect of low relief is obtained.

But some of the more notable quilting is such as Indians have done with yellow silk on white cotton. This sort of work, usually embellished with sprawling flowers in rich red and gaudy green silks, gold threads "couches," flat, or in relief, was highly prized in the late 17th and during the 18th centuries, by Western Europeans.

More sober in effect, though not, I think, less surprising in workmanship, are the minutely quilted coverlets, or portières, made in the 16th century at Goa, and largely imported by Portuguese, Dutch, and Spaniards. Here is a small portion of a large quilt of this kind. Hunters, musicians, heraldic bearings, and fleets of vessels are depicted in thousands of minute up and down stitches, with red and yellow silks. The actual quilt is also exhibited.

I had hoped to have been able to have touched more fully than I have upon the use of embroidery in connection with costume. The limits of my lecture, however, prevent me from doing so. Neither can I enlarge upon those fanciful long and short stitch pictures in medallions, frequently done after compositions by Cipriani and Angelica Kauffman. Indeed, the representation of figure compositions by means of embroidery is a subject of itself almost—not, however, from the point of view of stitches that we should find that their production involved any special stitches not already referred to, or that on the whole any form of embroidery is well adapted to making representations of the human form.

The study of embroidery, even if we restrict it in the first instance as, perhaps, it should be, to examining stitches and the designs they appropriately or inappropriately depict, is wide in scope. It is, of course, essential to those who practice the art from natural inclination or from choice. It becomes simplified, I think, if one takes one thing at a time—as for instance a classification of stitches. The number of typical stitches does not exceed half a dozen, unless it be determined that the smallest variation in length, direction, or arrangement shall be held to constitute a new type—and then of course one may become quite bewildered with hundreds of new names. It is, however, easy, I think, to detect, in the apparently most elaborated of specimens, which of the dozen type stitches have been used, and to form some idea of how they have been used. It is also easy to separate off into another class of operations those methods of using various materials, such as withdrawing threads, cutting out forms, using paddings for effects of relief, couching, &c. Of course, they are all connected with embroidery, but the employment of them, while involving the use of one or other of the few typical stitches, does not create new ones. Having thus assured one's self that there is no cause to become confused by novel applications of well-established methods, one may take up the study of designs in embroidery. Here, I am free to confess that the field is altogether wider, for to intelligently appreciate designs in embroidery, it is necessary to equally appreciate them as wrought in other processes and materials. Moreover, the designer is generally distinct from the embroiderer. Many skilful needleworkers imagine that they are qualified to make patterns; this, however, does not at all follow. For us amateurs, after analysing and classifying stitches, and obtaining an insight into the composition of patterns, no doubt we may feel inclined to consider the historical side of embroidery and the possible meaning of old old terms; and this is perhaps the more attractive to those who are neither practical embroiderers nor designers. In this respect, I speak for myself; at the same time, I cannot but feel that it is more interesting to try and understand the technicalities of the art, and the constructive meaning of patterns.

I must apologise for the incompleteness of my remarks this evening. I hope, however, that I may have suggested a few topics worthy of your consideration, and whether I have done so or not, I gratefully acknowledge the encouragement in my efforts which your attention throughout these lectures has given me.

[These lectures were illustrated by a series of diagrams thrown upon the screen by means of the electric light.]