

HISTORIC ORNAMENT
Treatise on
DECORATIVE ART
AND
ARCHITECTURAL ORNAMENT

*POTTERY; ENAMELS; IVORIES; METAL - WORK;
FURNITURE; TEXTILE FABRICS; MOSAICS;
GLASS; AND BOOK DECORATION*

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CHAPTER VI.

TEXTILE FABRICS.

WEAVING is an art that has been practised from pre-historic times. Grasses, shreds of bark, rushes, bast, &c., were at first woven, and used as articles of dress and coverings such as we see in use to-day among the uncivilised tribes of the world. The loom is also a very ancient invention, and must have been used much earlier than we have any record of it.

One of the oldest varieties of fabrics made in the loom is that of linen, the threads of which are prepared from the fibrous parts of the flax plant stalk. We have not only Biblical evidence of the weaving of linen by the ancient Egyptians, but the actual material itself, which has been proved by the strictest scientific analysis to be the product of the flax plant.

The oldest kind of Egyptian linen was that used for the swathing bands of the mummies, and was formerly known under the erroneous name of *bysus*, the latter being a material woven from the filaments or beard of the *pinna marina*, or sea-caterpillar.

The various methods and processes used in the manufacture of linen are well illustrated in the Egyptian paintings and bas-reliefs, such as the beating of the flax, combing, spinning, and weaving in the loom. Some of the Egyptian linen was exceedingly fine in texture and perfect in workmanship: a piece of linen found at Memphis had 540 threads to the inch in the warp.

Linen yarn and the raw flax were exported from Egypt

by the Phœnicians and Carthaginians to Greece, Italy, Germany, Spain, and probably to the British Isles. The Greek women wove linen for their garments, as the women of most European countries have done in the ancient and Middle Ages. Germany, Holland, and Belgium have from early times been the chief countries for linen manufacture in Europe. Perhaps at the present day the city of Belfast in Ireland is the most important seat of linen industry in the world, and Dundee in Scotland might claim the second place. For the last two hundred years the linen trade of Ulster has been in a flourishing condition. The English Parliament from the days of William III. to the present time have encouraged and promoted the trade, but the initial success of this industry was owing in a great measure to the skill and energy of Louis Crommelin and the Huguenot colony, who came to the North of Ireland from France after the Revocation of the Edict of Nantes (1685), and in the year 1699 finally settled at Lisburn, near Belfast. A similar colony of French Protestants, who were weavers by trade, settled in Scotland in 1727 under their leader, Nicholas d'Assaville.

A great epoch in the history of weaving dates from the time of the invention of the Jacquard machine, which caused a revolution in nearly all branches of weaving. Jean-Marie Jacquard (1752-1834), the inventor of this machine, was a native of Lyons and a silk weaver by trade. The Jacquard machine is attached to any ordinary loom, and its work consists in mechanically selecting and raising the warp threads, when the shuttle passes across the loom, the action being regulated by means of cards with pierced holes through which the lifting cords or needles pass, the holes in the cards being arranged or cut in accordance with the preconceived pattern that ultimately figures in the woven cloth.

The first Jacquard machine used in England was set up in Coventry in the year 1820.

Silk and its manufacture by the Chinese was known and

understood from a period anterior to the date of 2700 years before the Christian Era.

Perhaps the first knowledge of silk products in Europe was due to the conquest of Persia and portion of India by Alexander the Great, who came in contact with the Chinese, or some people who lived beyond India, and who had probably worn silken garments. To these people the Greeks gave the general name of the *Serics*. This name was not only given to the people beyond India by the Romans, but to the silkworm itself. Aristotle, Virgil, Dionysius the Geographer, and later Pausanias, mention the *seer* or spinning-worm, from which the rich and valuable Oriental garments were made. Pliny says that the Assyrians made silk from the *bombyx* and taught the art to the inhabitants of the island of Cos. Pamphile, the daughter of Plates, made the finest woven silk in the island of Cos. It is supposed that in the first instance the raw material found its way from China, through India, Persia, and Arabia, to the Grecian Isles, and eventually to Italy and Western Europe. In European countries silk at first was mixed with wool or linen, and garments of this material were worn by the Romans.

The thin gauze-like silken garments of Cos were of a pure quality and were imported to Rome in the second century and were reckoned worth their weight in gold. About this time great quantities of the raw silk were brought from the East by the overland route and by sea, and in the end of the fourth century silk had become so cheap as to be within the reach of the common people (Marcellinus, A.D. 380). Tyre and Berytus were the chief seats of silk manufacture from which the Roman markets were supplied.

In the year 552 an event is recorded that revolutionised the manufacture of silk in Europe. The story is related that two monks, either Greeks or Persians, were sent as ambassadors to China, and there learnt the arts and methods of silk production from the natives. They suc-

ceeded in secretly conveying in their hollow cane walking-sticks a quantity of silkworms' eggs which they brought to Constantinople, where they were hatched in warm manure, and the grubs were fed on the leaves of the mulberry-tree. Very soon after this a royal factory was set up in the palace at Constantinople. Women weavers were pressed into the Emperor's service, and a state monopoly was set up for the manufacture of silk fabrics.

The introduction of the silkworm did not cheapen the price of silk; on the contrary, the production of the royal looms were sold at excessive prices, and far beyond those paid for the material before the silkworm rearing period in Europe.

The court of the Eastern Empire did not hold the silk-weaving monopoly long, for very soon after the secret of the rearing of the worms spread to the Peloponnesus and the isles of Greece, where, from the sixth to the middle of the twelfth centuries, Europe was supplied with nearly all the silk it required.

In the year 1130 Roger I., the Norman King of Sicily, brought a colony of silk weavers from Athens and induced them to settle in Palermo, where an extensive silk industry was already developed under the former Saracenic rulers, who were vassals of the independent Fâtimy Khalifs of Egypt, during the ninth and tenth centuries.

After the introduction of the Greek weavers into the Palermo workshops we find the Siculo-Arabian designs altering from the older circular panels of Saracenic ornament, which consisted of the designs of birds and animals placed back to back, or *vis-à-vis*, of Mesopotamian origin, to bands of birds, animals, and fishes, grotesque and otherwise, mixed with foliage and scrolls containing mock Arabic inscriptions.

To trace the analysis of patterns in silk fabrics is to trace the historical development of the fabrics themselves, for pattern and manufacture, historically considered, have developed side by side.

When we consider the varieties indicated by the names of Byzantine, Saracenic, or Arabian in its various forms, Italian and French, we shall find that in the order mentioned the chronological development of material and pattern run concurrently.

Silk, in its raw state, during the first few centuries of our era arrived in the principal towns of Asia Minor, in Alexandria in Egypt, and in Byzantium (Constantinople), from China, by the way of the Indian Ocean and the Red Sea, and overland by caravans.

The Persians and the Byzantine Greeks, from the first to the eighth centuries, monopolised the Western silk manufacture, as they already possessed the looms on which they had made linen, woollen cloth, and carpet tapestry. It required very little adaptation to convert them into silk looms, and towards the early part of the seventh century the new material had firmly established itself in Persia, Syria, and Constantinople.

The patterns for the most part were symbolic and large in character, and nearly all of them had their origin in the "Homa," or sacred "Tree of Life" (Figs. 259, 260), with the worshippers on either side consisting of kings or other personages in the act of adoration, such as we find as a common theme engraved on the Assyrian cylinders, wall decorations, and bronze platters, which had its origin in the older Egyptian forms. Where the Sacred Tree, with animals instead of human forms, was made a feature of in the silk fabrics, the stuff had a Persian development derived from Babylonian sources, but the Greeks or Byzantines used this pattern for the sake of expediency, and not in a symbolic sense.

There is a piece of very old Byzantine silk in the Kensington Collection, and also a piece of the same material in the Silk Museum at Lyons, which consists of a design of winged personages wrestling with lions; the pattern is woven in strips, and the colour is a red ground with white, gold-coloured, blue and green figuring. The style of the

design and peculiarity of the weaving prove it to be of a date anterior to the eighth century. This particular Byzantine tissue has the red weft of the ground executed in five different shades of the red colour thrown crosswise (*lancé croisé*), each shade alternating in three threads by three; the warp is thick, and the shuttle passes right across the width, all the material being pure silk—these are the marks by which Byzantine fabrics are known.

It is only in genuine examples of Byzantine Greek fabrics

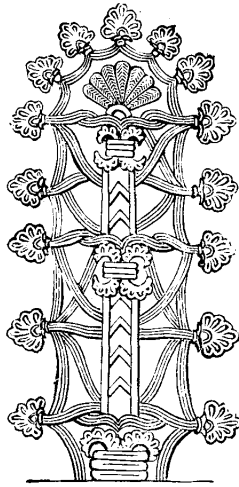


Fig. 259.—Assyrian Homa
or Sacred Tree.

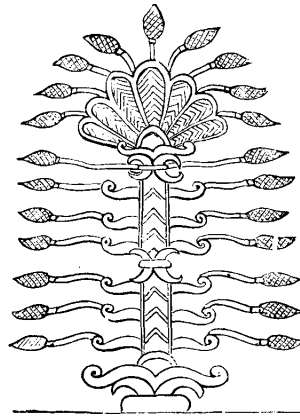


Fig. 260.—Tree of Life, Assyrian.

where we find the human figure is used in the design, or animals of a free and natural type, as the Byzantine silk designs were invariably taken from Greek mythological sources and scriptural subjects. Genuine examples of Byzantine fabrics are very scarce, and the one described is a genuine example of great value.

When the Arabs under Mohammed had conquered the countries of Persia, Syria, and the countries south of the Persian Sea, they found already in these places the manufacture of silk in a flourishing state. From this time—the

ninth century—until the fourteenth, we find that from the borders of China and India in the east to Africa and Spain in the south and west—which embraces the countries conquered by the Saracens—the silk industry was carefully fostered under the Mohammedan rule. Next to precious stones in importance and value the chiefest treasures of the Khalifs of Bagdad, Cairo, Fez, and Cordova were silken goods. The bazaars of the chief towns were filled with the precious material, and silk fairs or markets were held periodically, chiefly at Antioch, Rey, Erzeroum, Ispahan, Jerusalem, and Mecca. The Mussulman laws forbade the faithful to negotiate with the (Christian) infidels, but there was a saving clause that helped them out of this difficulty, which allowed them to bargain with the Jews, and these middlemen did not scruple to do business with either the Christian infidel or Mussulman.

The Jews were then, as they are now, the bankers, merchants, and dealers in silk and precious stones, and even before this date they were the purveyors of all kinds of articles of luxury to the wealthy Romans of the south, the Gallo-Romans of the west, and the Goths of Northern Europe.

Notwithstanding the laws of excommunication then in force, Italian Christian merchants, as well as Jews, traded with the Mohammedan world, and both Jews and Italians travelled over Asia Minor, North Africa, throughout Italy, Sicily, Spain, France, and England, distributing the products of Saracenic looms, and establishing silk manufactories in Christian countries, notably in Sicily and Italy. Shawls, dress goods, and hangings were then the principal articles of silk manufacture.

Persia was the original place from whence came the best patterns and materials ; it was really the fountain-head of textile designs, and from thence they spread over Arabia into North Africa, Sicily, and Italy, the patterns being modified according to the popular taste of the different countries and by the introduction of various symbolic features.

TEXTILES OF INDIA.

The textiles of India form an important section of the industrial arts of that country. The materials used in the woven and embroidered fabrics are silk, cotton, wool, hair, coloured grasses, jute, gold, silver, and various tinsels.

Among the chief artistic productions in textiles are the *kincobs*, or silken brocades, made at Ahmedabad and Benares, the embroidered muslin of Dacca, the pile carpets of Malabar, the rugs of Madras, and the shawls of Cashmere.

The native excellence, however, in the design, colour, and manufacture that has characterised these textiles for centuries past is now in danger of extinction—and great mischief has been done already—from the influence of European designs, the introduction of magenta and aniline dyes, and by the competition with European markets, resulting in the production of cheaper forms of Indian goods. It is only in the case of a few instances where the textiles are made to order, or under the patronage of some of the remaining Indian princes, that the traditional superiority of manufacture is still maintained. Another exception is the production of the silk brocades, or *kincobs* (Fig. 261); this is owing in a great measure to the demand for these goods by the Chinese and other Orientals, who have not yet adopted the Western ideas of imitating the European style of dress.

Some of these *kincobs* are highly ornamented with interwoven gold or silver-gilt patterns of floral form, others are ornamented as in the “happy hunting-ground” patterns of Benares manufacture, with flowers, birds, and animals. This particular form of fabric is no doubt a survival, through Persian channels, of the embroidered garments of the ancient Babylonian monarchs.

In the production of cotton goods the trade of the native caste of weavers has suffered very much by the great importation of Manchester cottons, and by the establish-

ment of monster cotton power-loom factories at Ahmedabad and elsewhere. Many natives of the weaver caste have been obliged to take to agricultural and other less lucrative

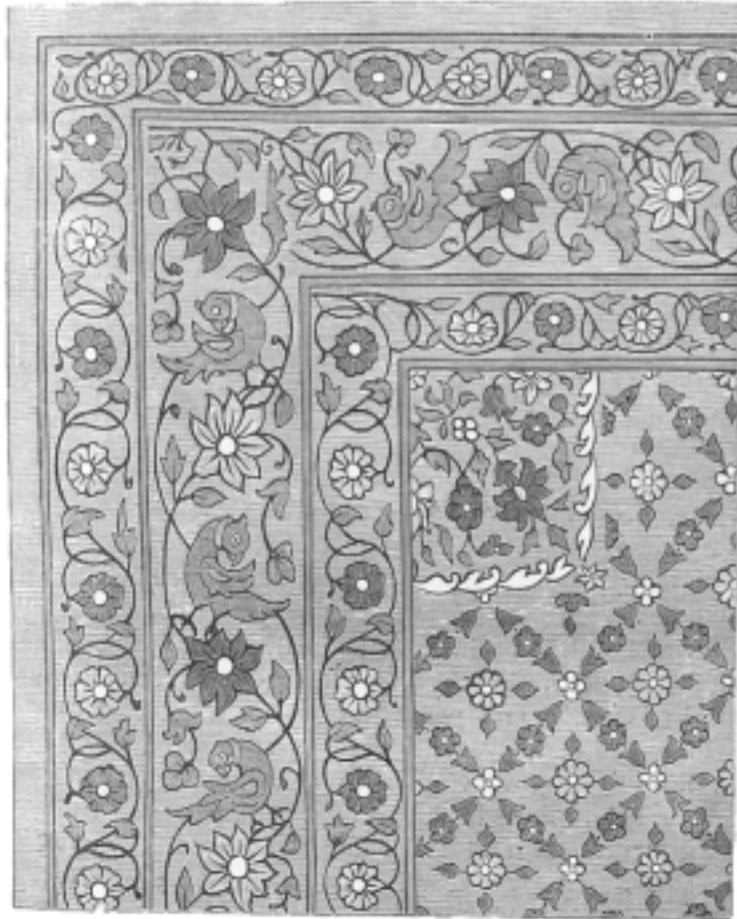


Fig. 261.—Kincob of Ahmedabad. (B.)

pursuits, owing to the partial ruin of their trade by English competition.

Cotton-printing is still, however, an important native

industry, especially in the city of Lucknow, where the colouring and design are still superior to that of the English or French chintzes. Some of the best Indian, or rather Indo-Persian, ornament is found on the printed calico *palampores*, or bed-coverings, made at Masulipatam and other places. Calicoes woven in varying stripes of coloured threads, checks, and tartans of all hues, are among the specialities of Indian textiles, the material being used for trouserings, skirts, and petticoats.

The once-famous Dacca muslins, that on account of their gossamer-like appearance have been known under the names of "evening dew" and "running water," are now almost non-existent, a cheaper and coarser variety taking their place. Muslins from Dacca and other places embroidered with silk are still greatly used in India, and are largely exported to the surrounding Eastern countries, including Turkey and Egypt.

Cotton fabrics interwoven with golden thread were formerly made in great quantities to meet the wants of the once-powerful native rulers and the Court retinues, but now, since the English rule in India, this kind of fabric with many others of a sumptuous nature are much less in demand.

Printing patterns in gold and silver foil is a common method of decorating dark purple or deep green cottons; muslins are also stamped with patterns in gold.

Fine gold and silver-gilt wire is used very much in India for lace-making, weaving, and embroidery. The natives excel all Europeans in the art of wire-drawing and in the making of gold and silver foil, tinsels, and spangles. These industries are carried on chiefly in the cities of Delhi, Lucknow, Ahmedabad, and Lahore.

Silk manufacture is still a flourishing industry in many parts of India, but, on the other hand, in some places it has declined very much owing to European competition. The *tasar* or *tusser* silk is a native wild silk, from which a coarser variety of silk is now manufactured in increasing

quantities, and is exported chiefly from Bengal. It is a useful material, but has not the brilliancy or sheen of the ordinary silk. Plain silk cloth is made in the Punjaub, and the damasked or figured variety is made chiefly at Bhawalpur.

Cashmere has been famed for centuries past for its beautiful woollen shawls made from *pushm*, the wool of the Cashmere goat, and from camel's hair wool; the woven material of the latter is known as "camlet."

The principal design on the Cashmere shawls is the cone pattern decorated with a mixture of small flowers, the fillings between the cones being also a diapering of small floral forms. The cone patterns are also found on metal work, enamels, and carvings from Cashmere and its neighbourhood. On the genuine shawls the ornamentation is embroidered in wide borders, centrepieces, and corner groups of flowers. The Cashmere shawls have been imitated in woven shawls by the French and in the Paisley shawls of Scotch manufacture. Some of the costliest Cashmere shawls are embroidered with a "terrestrial paradise" of singing birds, flowers, animals, and figures.

Indian ornament or decoration, from its mosaic-like or flattened-out character, is extremely well suited to the decoration of textile fabrics. The native ornament consists of a variety of flat renderings of the daisy (*sventi*), the lotus, the shoe flower (Figs. 91, 92, 261), knop and flower patterns, parrots, peacocks, lions, tigers, elephants, men on horseback, hunting or fighting, &c., and is always rendered in flat tints of alternating colours on flat grounds, in such works as enamels, tiles, pottery, wall paintings, lac-work, and textiles of all kinds. Though at times the vice of Indian ornament is illustrated in a riotous use of small detail, on the whole it is well suited for the decoration of flat surfaces. In the artistic products of the Mohammedan people of India, or descendants of Persian settlers, the ornament invariably consists of Persian or Saracenic types; the former is distinctly seen in the Masulipatam

rugs, carpets, and *palampores*, and the latter in the various art work of the Mogul period, as, for instance, in the inlaid marbles and other work of Agra. (Fig. 293.)

The Sassanian Persian designs in silk, as we have seen, were derived from the more ancient Assyrian and Babylonian embroideries, the motives of which were invariably the Tree of Life, or "Grove of Ashareh," with divinities, priests, or royal worshippers on either side, the whole usually enclosed in circles.

In the Persian and in the later Mesopotamian Mōsil-work animals took the place of the human figures, and were often placed back to back, divided by a stem or piece of floriated ornament—a reminiscence of the sacred tree—and still enclosed in a circular band. The animals were generally lions, cheetahs, or were griffin forms, all treated as ornamental abstractions, and the intervening spaces between the circles were filled up with forms of parrots or other birds, conventionally treated.

The early Saracenic designs were copies of these (Fig. 262). Later Saracenic designs had less of the bird and animal forms, and more of the purely Arabian ornament, with the addition of horizontal bands of Kufic inscriptions such as texts from the Koran, laudatory compliments to and names or titles of Sultans and Khalifs for whom the fabrics were made (Fig. 263).

It is singular that the rich silken fabrics made for and by the Saracens had nearly always representations of animals in the designs, although this was contrary to the laws of their faith; but this may be accounted for by their practice of copying or adapting the forms of decoration already in use in the countries they had conquered, and their lack of originality in design during their earlier days was, perhaps, the strongest motive in causing them to adapt ready-made inventions to their own uses.

The wearing of pure silken garments was also forbidden by the Mohammedan religion, but the Saracens got over that difficulty by the mixture of a few cotton threads with

the silken web. The Egyptian Mamlūks (1250-1390) were very prodigal in the use of silk for dresses, banners, tent hangings, carpets, and horse clothing, supplied from the looms of Cairo and Alexandria, and imported from the Eastern centres.

In the thirteenth century the silk industry of the Saracens was in its greatest vigour, with designs mostly in



Fig. 262.—Silk Damask; Eleventh Century; Early Saracenic (L. P.)

imitation of the Persian school, and in the fourteenth the same motives were used, but arranged in rows of horizontal bands—which is essentially a Greek method—and was due to the influence of the Greek and Christian Coptic designers. A good example of this style may be seen in the peacock design, Fig. 264.

On account of the seaboard of Asia Minor having a mixed population of Jews, Christians, and Saracens, silk

fabrics from that country were decorated with imitations of Persian designs, having the "homa" or "tree of life," Christian elements, such as the cross, seen in the "tree of



Fig. 263.—Silk Fabric of Iconium; Arabian; Thirteenth Century. (Lyons Museum.)

life" (Fig. 265), and also imitations of Arabic writing. The Syrian examples of textiles are not so good in material or workmanship as the Byzantine or old Persian.



Fig. 264.—Arabian Silk Wall Hanging of the Fourteenth Century. (J.)

The most interesting development in the design of silk fabrics is that which took place in Sicily. The Sicilians were first taught the art of spinning and weaving of silk and the rearing of the silkworm by their rulers the Saracens of Egypt, and the early designs of the Siculo-Arabian style have, in addition to the Persian cheetahs, Indian parrots, and antelopes, such animals of African origin as the giraffe, elephant, gazelle, and other fauna of that continent. Gold, silver, and cotton threads were used with the silk in these fabrics.

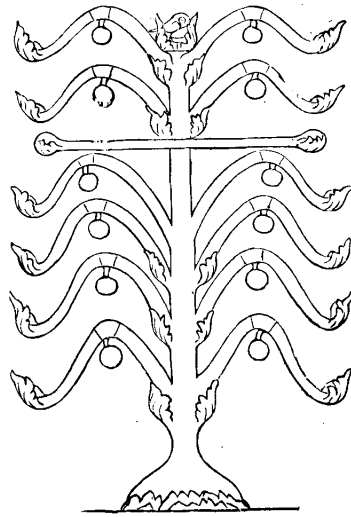


Fig. 265.—Apostolic Tree of Life, with the Cross Emblem.

Mention has been made that in the twelfth century, when the Normans conquered Sicily, of their bringing silk weavers from Athens and from other parts of Greece to work at Palermo. Here and at this time (1130) a distinct alteration of the design took place by the introduction of the Greek classic and Christian elements of ornament in mixture with some of the older Saracenic forms.

Mock Arabic inscriptions were also used very much in these Sicilian fabrics; this may have been done by Christian designers ignorant of Arabic, in order to give to the fabrics an appearance of Saracenic work, which, perhaps, made them sell better when exported (Fig. 266).

Another peculiarity of the Palermitan silks is the multitude of elements found in the designs. All kinds of fabulous animals and birds are used as in heraldic blazoning: sunbursts, cloud-forms, Christian emblems and elements occurring as forms of angels with swinging censers, initials

of sacred names, and emblematic plants. The use of these heraldic and Christian elements was in a great measure due to the influence of the Crusaders in the Middle Ages. The favourite colouring of the Sicilian silks was dark red grounds and green foliage; the birds, animals, and mythological



Fig. 266.—Silk Damask ; Sicilian ; with Imitated Arabic Characters. (R.)

elements were usually woven in gold threads as in the example given (Fig. 267).

Towards the end of the fourteenth century and during the fifteenth the designs became more floriated, the vine and pomegranate, with vase forms, were used and were really

developments from, and did duty for, the sacred tree of the early patterns, and instead of a circular framing the flamboyant or ogival diaper lines were introduced. This repeating framework was derived from the Saracenic Pointed



Fig. 267.—Silk Damask ; Sicilian ; Fifteenth Century. (L. P.)

architecture and adopted in the ogival Gothic at this date (Figs. 268, 269).

During the sixteenth century the pineapple was used very much under a variety of modifications as an ornamental form in fabrics (Fig. 269), and often in company with the pomegranate. This came about after the discovery of the West Indies, from where the pineapple had been

imported into Europe (Fig. 270). Large-pattern damask diapers, brocades, and velvets were now made in many places in Italy, with patterns based on waving lines or ogival forms enclosing bilateral schemes of ornament, all of which were reminiscences of the "tree of life" patterns, and

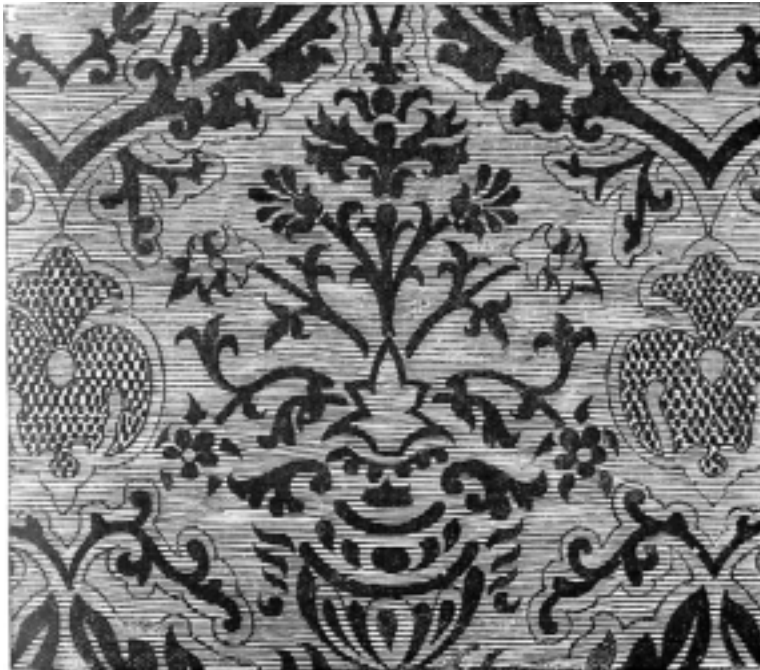


Fig. 268.—Silk Damask; Florentine; Fifteenth Century.

in all may be traced the strong influences of Saracenic design.

From the fourteenth to the sixteenth centuries, and even later, Lucca in Tuscany, Genoa, Florence, and Venice were celebrated for the manufacture of silken brocades and velvets, which have been used for the dresses of priests, kings, and noblemen, as well as for hangings.

The dress patterns of those days were all of a very large size of diaper, such as are now only used for hangings and

furniture coverings. The Venetian and Spanish pictures



Fig. 269.—Diaper in Velvet Brocade; Italian; Sixteenth Century.

of the period contain many illustrations of these patterns on the dresses of the figures and hangings of the chamber.

In France the silk weaving industry was first established

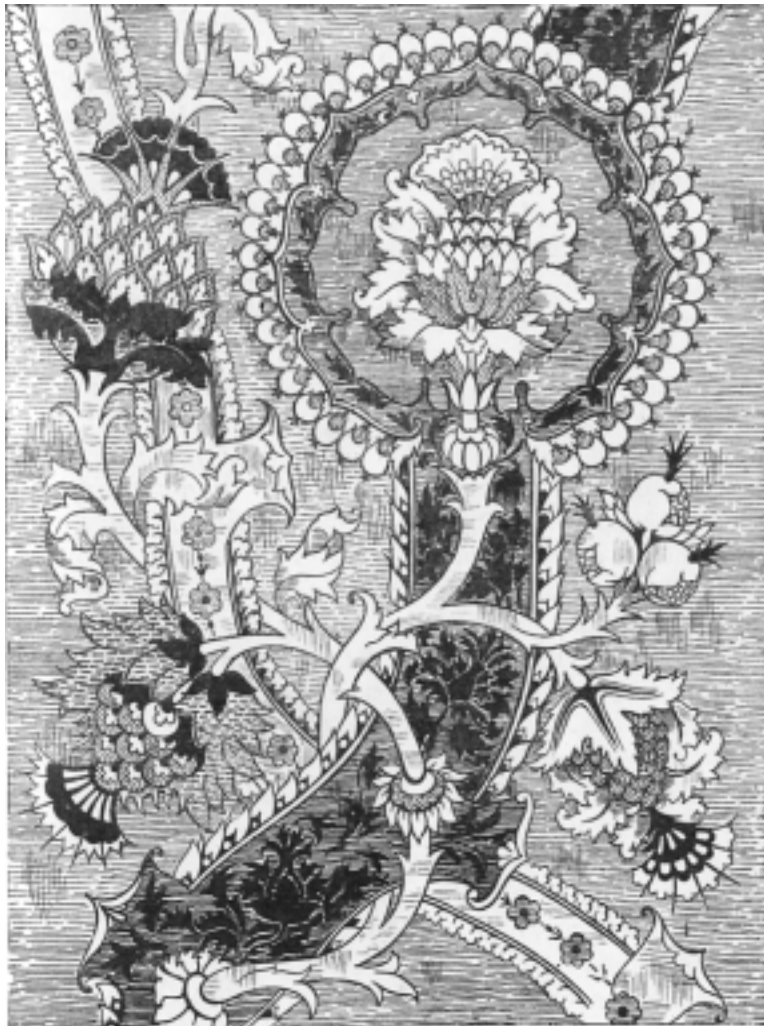


Fig. 270.—Velvet Brocade; Italian; Sixteenth Century.

at Lyons about the middle of the sixteenth century. The designs of the first efforts of the French weavers were very

similar if not copies of the prevailing Italian school, but soon after became more floral in character, and more and more realistic renderings of flowers and foliage, until about the eighteenth century, when they partook of the same character as the pottery and furniture decoration, which has been already described. During the Mediæval and Renaissance periods France, like England, imported silks and velvets from Italy and the East, and their linen and drapery from Flanders and Germany.

Bruges in Flanders was especially famous during the sixteenth century for its silks and velvets, and Yprès was even more so for its fine linens and damasks.

Very little silk was manufactured in England prior to 1629, when about this date a company of silkmen was formed in London. The Revocation of the Edict of Nantes in 1685 had the effect of firmly establishing the manufacture of silk in England by the colony of French refugees who settled at Spitalfields, St. Giles's, and Soho in London, and at Canterbury, Norwich, and Coventry. The trade soon afterwards spread to Manchester, Macclesfield, and Paisley in Scotland, and the first silk mill for spinning and throwing was erected at Derby by John Lombe in the year 1717, which was worked by water power.

The designs for the patterns of English silks have always been more or less imitations of the prevalent French styles, and, in fact, England depended largely until late years on the efforts of French designers for nearly all of its textile patterns. This is not the case, however, to-day, for very few foreigners are now employed as designers by English manufacturers.

The chief seat of the velvet manufacture in Germany at the present day is Crefeld; Switzerland produces great quantities of silk, which is made chiefly at Zurich and the villages on the banks of the Lake of Zurich, at Bâsle, and other places.

China, the birthplace of silk, and younger Japan are still

famed for their delicate fabrics in this material, from whence the raw products are imported extensively into Europe. In America the silk industry has made great headway of late years, the principal seat of the manufacture is the town of Paterson in New Jersey.

England has always held its own in the manufacture of woollen goods of good material, mostly of plain cloth, but sometimes inwrought or woven with designs of figures, animals, and foliage patterns. At Bath, Norwich, Worcester, and in the abbeys and great religious houses during the Middle Ages the monks employed a good deal of their time at the loom, and considerable quantities of their work were exported to the Continent during the fourteenth century. The town of Worsted in Norfolk has given the name—worsted—to a cloth made there from a new preparation of the woollen yarn, which consisted of a special twisting of the threads so as to make the yarn of a harder texture. This cloth has been used for church vestments, hangings, and bed coverings.

Cotton, the woolly product of the cotton-tree, and the cloth made from it, has been known in India and the East from the earliest times.

Pliny mentions cotton under the name of a fabric called *oxylina*, made from the cotton that grew about the branches of the *xylon* or *gossypium* tree, or shrub, which grew in India, Upper Egypt, and Arabia.

The Romans imported cotton fabrics from India, and the priests of ancient Egypt used it for their dresses.

The cotton plant was cultivated by the Moors in Spain about the beginning of the tenth century, and they were the first people in Europe to make cotton fabrics. They are also credited with the invention of fustian-making (Spanish, *fustes*), a cotton material woven and afterwards cut precisely like velvet; it is generally thought that as fustian preceded the manufacture of velvet, the making of the latter may have been suggested to the Italians by the Spanish fustian.

In the year 1585, after the sacking of Antwerp, some Flemish weavers settled at Manchester—now the great seat of cotton manufacture in England—and commenced the new industry of cotton spinning and weaving. Before this date Manchester and its neighbourhood were noted for the weaving of linen. The linen yarn was imported from Ireland, woven at Manchester, and the cloth sent back for distribution and sale in Ireland and other parts of the kingdom.

The power of production in cotton goods was enormously increased by the inventions of Arkwright with his water-frame spinning machine, Hargreaves, who in 1770 invented the spinning-jenny, and by Compton, who improved on the latter by his invention of the mule-jenny in 1779.

In 1785 Dr. Cartwright invented an automatic loom, which others improved on, when finally Horrocks, of Stockport, in 1803 brought to a successful issue his invention of the power-loom now in general use.

Cotton printing and dyeing in colours have been successfully practised in India, Asia Minor, the Levant, and in the East generally from the earliest times. The patterns found in the commoner prints and chintzes of to-day have still reminiscences of Indian and Persian ornament.

Most of the English designs in cotton prints of the more important classes have a strong tendency to floral patterns of a naturalistic type, the outcome of the imitation of French silk patterns that were common in the early part of this century.

Calico block-printing was introduced into England about the middle of the eighteenth century by Robert Peel—the grandfather of the first baronet—who cut his own blocks. Printing by means of cylinders was invented in 1785. Previous to the invention of calico printing “painted cloths” of linen and other fabrics were used as hangings and in the general furnishing of English apartments.